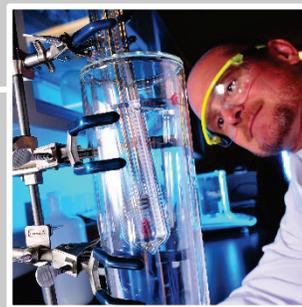
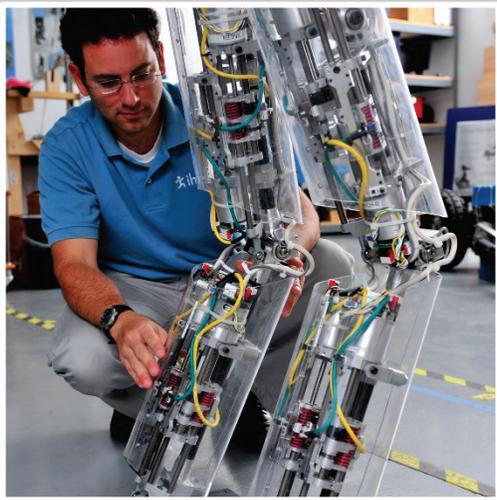


FEBRUARY 2017

# NORTHWEST FLORIDA FORWARD



A REGIONAL STRATEGY FOR ECONOMIC TRANSFORMATION





# ACKNOWLEDGEMENTS

TIP would like to thank the following members of the Northwest Florida Forward Steering Committee for their participation and guidance in this planning process. The committee-organized stakeholder input meetings, directed the planning process, and reviewed key deliverables throughout the development of Northwest Florida Forward.

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**TIP STRATEGIES, INC.** is a privately held Austin and Seattle based economic development consulting firm committed to providing quality solutions for public and private sector clients. Established in 1995, the firm's primary focus is economic development strategic planning.

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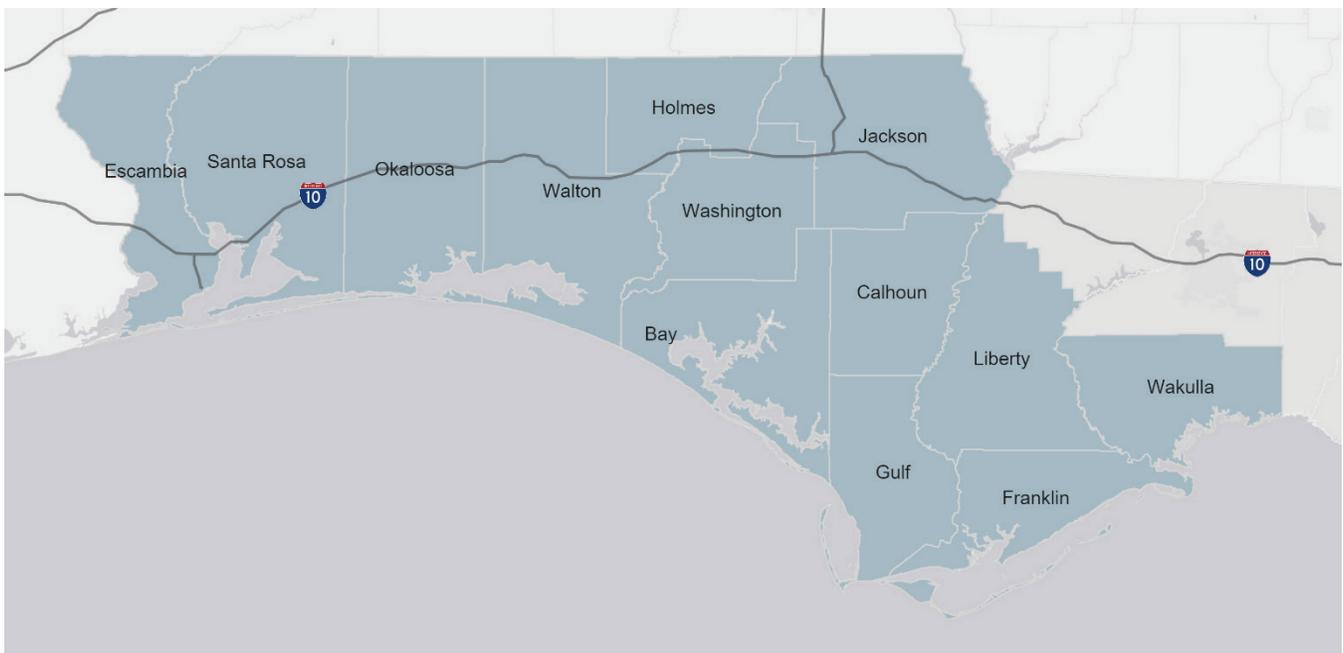


# EXECUTIVE SUMMARY

## INTRODUCTION

Northwest Florida Forward: A Regional Strategy for Economic Transformation offers a candid evaluation of the region’s economic development challenges and opportunities, informed by quantitative analysis, reviews of national best practices, and qualitative input from across the 13-county region. It articulates a set of guiding principles that reflect the values of the region’s residents and businesses, that define economic vitality in Northwest Florida, and that directly inform the goals and strategies. It provides a holistic set of goals, strategies, and actions designed to ensure economic vitality through new investment and job creation, as well as the enrichment of the region’s talent base, innovation ecosystem, infrastructure, and quality of place. The regional transformation strategy is not the responsibility of one organization to implement. It is a strategy for the entire region and will require many engaged partners for it to be successful.

### 13-COUNTY REGION



Sources: Esri, Bureau of Transport. Statistics, GeoSystems Global Corporation in assoc. with National Geographic Maps and Melcher Media, Inc.

## APPROACH AND STRUCTURE

Over the course of five months, the TIP Strategies consulting team worked closely with Northwest Florida’s business, government, and community leaders to identify the region’s most promising opportunities for transformative economic growth. The first step was to establish a common understanding of assets and challenges. This “Discovery Phase” included roundtable discussions and interviews with over 860 Northwest Floridians representing a broad cross section of regional stakeholders. Roundtable discussions were held in multiple locations in the region with groups representing important constituencies, including:

- Education and workforce development officials,
- Human resource professionals,
- Entrepreneurs,

- General business and target industry leaders,
- Manufacturers,
- Real estate developers,
- Economic development and chamber professionals,
- Minority community leaders,
- Infrastructure officials, and
- Government and elected officials.

In addition to roundtable discussions, interviews were conducted with the region’s delegation of state elected officials and key private employers.

During this phase, the University of West Florida’s Haas Center compiled a **Technical Report** that includes a wide range of data and analysis for the 13-county region, which is published under a separate cover. The Technical Report addresses topics such as economic indicators, labor force, commuting patterns, industry analysis, occupational analysis, and innovation indicators. It also includes a snapshot of key indicators for each of the 13 counties. A summary of key findings from the Technical Report is provided below.

The “Opportunity Phase” included two regional workshops that involved more than 100 stakeholders from throughout the region to discuss the key opportunities the regional strategy should be built around. Stakeholders provided direct feedback on a draft structure for the plan, including a vision, goals, and priority strategies.

During the “Implementation Planning Phase,” TIP incorporated all the input, data analysis, as well as our experience working with regions across the country to develop the **Strategic Action Plan**. Following the plan is an **Implementation Matrix** that outlines a proposed timeline for carrying out each of the strategies and actions. The matrix also assigns prioritization of strategies and suggests potential organizations to help support implementation.

Northwest Florida Forward should not be viewed as a static document, but as one that invites revisions and amendments as conditions change. For this reason, regional stakeholders should take a dynamic approach to implementation—one that revisits this plan on a regular basis to ascertain progress and to reprioritize strategies and actions as needed.

Appendix 1 contains the regional **Target Industry** analysis, recommendation, and profiles. It includes industry definitions and trends, occupational characteristics, strategic considerations, and industry intelligence for each industry sector. The targets outlined in this section were identified by TIP Strategies and the Haas Center.

## TECHNICAL REPORT KEY FINDINGS

Published under a separate cover, the Haas Center at the University of West Florida prepared a Technical Report detailing economic trends for the region. These findings drove many of the considerations for strategy development. Below is a summary of some of the key findings.

### DEMOGRAPHIC AND ECONOMIC INDICATORS

- Population in the region grew 6.5% from 2010-2015, which is 59% higher than the national population growth of 4.1% over the same period. The population of residents age 0-17 grew by 3.4% in the region over the same period that the national population age group decreased by 0.7%. Likewise, the working age population (18-64) in the region grew 4.1% while the same population segment nationally grew only 2.9%.
  - The population of the region's largest five counties has grown by 8.0% from 2010-2015, which exceeds Florida's 7.8% growth. These counties' population aged 0-17 grew 4.9%, which is significantly higher than Florida (3.8%) and the US (-0.7%).
  - The population of the region's smallest eight counties has declined by 0.7% from 2010-2015, primarily because of a decrease in children (-4.5%) and working age adults (-2.2%).
- The primary cause of the population growth has been domestic migration, i.e. residents who moved into the region from another U.S. county. Domestic migration generally accounts for 10,000-15,000 net-new residents in the region each year.
  - The region has also seen a significant increase in international migration, which for the most recent data added 2,572 net-new residents.
- The most recent median household income for the region (\$48,567<sup>1</sup>) is slightly higher than state level (\$47,212) but lower than the national median household income (\$53,482); yet, average earnings in 2016 (\$47,943) are significantly lower than state (\$53,376) and national average earnings (\$61,389).
- The percentage of the region's population with a bachelor's degree or higher (23.0%) lags percentages for both Florida (26.8%) and the nation (29.3%).
  - However, there are relatively more Associate degree holders in the region (10.3%), than the state (9.2%) and nation (7.9%).
- Between 2009 and 2016, job growth was slower in the 13-county region (6.6%) compared to state (14.1%) and national growth rates (9.0%); however, the regional unemployment rate (4.6%) was lower than state (4.9%) and national rates (5.0%).
  - Between 2009 and 2016, jobs grew by 8.0% in the region's five most populated counties. Over this same period, the eight least populated counties experienced job loss of 4.7%.
- The cumulative defense contract dollar amount for contract with a place of performance in the counties with large military population (Escambia, Santa Rosa, Okaloosa, Walton, and Bay) has been steadily decreasing since 2008. The total value of defense contracts in the region in 2015 (\$890M) is the lowest since 2002, and is approximately half of the value as recently as 2008.

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<sup>1</sup> Weighted average of each county's median

## COMMUTING PATTERNS

- In 2014, the 13-county region experienced a small net inflow of workers into the region compared to net outflows during the periods of 2004-2008 and 2011-2013.
  - Escambia, Okaloosa, Walton, and Bay counties experienced a net inflow of workers. The remaining nine counties each have a net outflow.
  - Regional residents who commute outside the region for the work are mostly employed in “Public Administration,” “Transportation & Warehousing,” and “Manufacturing.”
  - Non-residents who commute into the region for work are mostly employed in “Retail Trade” and “Accommodation & Food Services.”
  - Twenty-one percent of the region’s workers commute more than 50 miles to work in 2014 compared to only 13% in 2006.
- Labor is largely drawn towards three areas within the 13-county region: Pensacola, Fort Walton Beach, and Panama City. The main commuting destination outside the 13-county region is Tallahassee in Leon County.

## INDUSTRY ANALYSIS

- Federal Government Services (including military) (55,340 workers), Business Services (21,295), and Hospitality and Tourism (12,189) are the largest industry clusters in terms of total employment within the 13-county region.
- Several of the high performing industry clusters are essentially a single firm or single location:
  - 70% of employment in the Textile Manufacturing cluster is Ascend Performance Materials LLC in Escambia County
  - 60% of employment in the Financial Services cluster is Navy Federal Credit Union in Escambia County
  - 50% of employment in the Water Transportation cluster is Eastern Shipbuilding Group in Bay County

## OCCUPATIONAL ANALYSIS

- Within the 13-county region, the Military Occupations (35,708 workers) and Public Safety and Domestic Security (11,098 workers) occupational clusters have more than 20% higher concentration than the national average.
- Occupations that require minimal on-the-job training and education comprise 53% of total regional employment, which is the same percentage as the US but lower than Florida (56%).
- All six of the Purdue “Tech Clusters”<sup>2</sup> lost competitiveness between 2009 and 2015 (based upon shift-share analysis) and generate significantly lower median hourly earnings compared to Florida<sup>3</sup> and the U.S.

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<sup>2</sup> Information Technology; Engineering and Related Sciences; Health Care and Medical Science (Medical Practitioners and Scientists); Mathematics, Statistics, Data and Accounting; Natural Sciences and Environmental Management; and Postsecondary Education and Knowledge Creation

<sup>3</sup> One exception - the Engineering and Related Sciences cluster in the region has higher earnings than the state, but not the nation.

# SWOT

This figure below highlights Northwest Florida’s economic development strengths, weaknesses, opportunities, and threats, commonly referred to as a SWOT analysis. It was developed based on direct input provided by the regional stakeholders gathered from roundtable discussions and interviews conducted throughout the region. Data and quantitative analysis completed as part of the regional profile and the industry and occupational analysis also informed the SWOT.



## STRENGTHS

- Natural amenities, beautiful beaches, and a lifestyle attractive to all age groups and demographics
- Research & development, testing, talent, and technology development associated with the region’s military installations
- Supportive business climate for licensing, permitting, zoning, taxes, and regulation
- A growing commitment to strong regional cooperation
- A consortium of high quality post-secondary educational institutions
- Capable regional economic development organizations led by Florida’s Great Northwest and Opportunity Florida
- Strong economic analytics partner – University of West Florida’s Haas Center
- An emerging ecosystem of entrepreneurial programs, assets, and networks
- Areas of affordable rural land available for industrial/commercial development
- Industry specialization assets in Aerospace & Defense, Financial Services, Water Transportation, Cybersecurity, Advanced Manufacturing, AI/Robotics, and Unmanned Systems
- Transportation infrastructure: Interstate 10, three commercial airports, three deepwater seaports, CSX rail



## WEAKNESSES

- Employers report difficulty in attracting skilled talent to fill certain positions
  - Regional prevailing wages are not competitive with other regions.
  - While improving, the region still lacks many urban amenities sought by younger professionals.
  - The scarcity of similar career opportunities for certain high skill positions makes it more difficult to attract talent.
- Lack of vibrant industry clusters with supply chains: high performing industry clusters are essentially a single firm or location
- Lack of affordable workforce housing in certain areas and especially city centers
- Deficiency of industrial sites and buildings, especially in rural areas
- Limited access to startup capital for entrepreneurs and small businesses and lack of a formal process to obtain funding
- Generational pockets of poverty in some counties, especially in predominantly minority communities
- Limited access points in transportation infrastructure
- Lack of a region-wide transportation mobility system
- Limited/antiquated wastewater infrastructure
- Declining population, workforce, and tax base in rural areas
- Insufficient funding for workforce development and training
- Lack of funding for rural real estate product development and marketing
- Early childhood education



## OPPORTUNITIES

- BP oil spill settlement funds due to economic damages specifically allocated to the eight coastal counties of Northwest Florida
- Strengthening the regional economy beyond military and tourism
- Expanded and coordinated regional entrepreneurship support
- Leveraging federal and private R&D assets to stimulate new private investment and entrepreneurship
- Additional shared business retention & expansion efforts, especially in rural areas
- Further strengthening cradle to career education system
- Investments in public infrastructure
- Creating a demand-driven workforce development initiative able to accommodate large employers
- Creating informal and formal mechanisms to promote greater regional identity and collaboration
- Internal and external marketing and awareness campaigns
- Intra-regional and interstate partnerships, especially connected to Aerospace and Advanced Manufacturing



## THREATS

- Reduced military investment in the region
- Inability to align resources beyond traditional geographic boundaries
- External shocks that disrupt the tourism sector (e.g., hurricanes or environmental disasters)
- Uncertainty surrounding state economic development funding and support
- Reduced statewide incentives for economic development
- Legislative reallocation of BP oil spill economic damages settlement funding
- Close proximity to neighboring states/markets with significant resources to win competitive projects and to recruit Northwest Florida companies

## VISION

A comprehensive economic strategy must be driven by a clear vision. Meaningful vision statements should be bold, provide a clear direction, and differentiate the region from its peers and competitors. The existing vision for the region articulated by Florida's Great Northwest achieves those objectives and reflects its economic potential.

***A diverse and vibrant regional economy where Northwest Florida residents and businesses have a wealth of opportunities***

## GUIDING PRINCIPLES

Guiding principles reflect the values of the region. In the context of an economic strategy, they are a set of statements expressing how a community defines economic development. The overarching principle is to ensure economic vitality. These principles were crafted through input from regional stakeholders and embody values broadly shared throughout the region and its communities. For Northwest Florida, economic vitality encompasses the concepts below.

- **SUSTAINABLE AND ENDURING ECONOMIC BASE**
- **DIVERSIFIED INDUSTRIES AND HIGH WAGE EMPLOYMENT GROWTH**
- **GREATER ALIGNMENT OF PARTNER RESOURCES THROUGH REGIONAL COLLABORATION**
- **IMPROVING THE VITALITY OF ALL AREAS AND POPULATIONS IN THE REGION**
- **STRENGTHEN BEYOND TRADITIONAL ECONOMIC ENGINES**

For the regional transformation strategy to genuinely reflect the values of Northwest Florida, every strategy must be directly linked to at least one guiding principle.

## GOALS

Northwest Florida Forward is built around five aspirational goals that serve as the pillars of future economic vitality and growth for the region. They reflect a holistic view of economic development that addresses business vitality, talent, infrastructure, innovation, and place. Under each goal are a number of strategies and actions needed for implementation.

### 1. TALENT

***Connect the talent assets of Northwest Florida to key industry clusters and ensure a dynamic and diverse workforce for new and growing businesses.***

#### STRATEGIES

- Create a regional workforce training and development initiative designed to meet the needs of large employers relocating or expanding in Northwest Florida.
- Better leverage separated and retired military personnel as a key talent pool for target industry clusters.
- Explore establishing an employer-driven workforce training initiative focused on assisting underemployed and long-term unemployed residents.
- Develop a regional talent recruitment program.
- Expand work-based learning and career exploration opportunities for students.

- Further leverage the manufacturing academies model to expand the promotion of science, technology, engineering, and math (STEM) programs and technical skills development as early as grade school to build long-term talent supply in the region.
- Increase employability skills training programs to reduce employment barriers for all students and adults, with a particular focus on underserved populations.

## 2. BUSINESS VITALITY

*Strengthen the region's economy through targeted recruitment of new businesses and supporting existing business expansions.*

### STRATEGIES

- Ensure the growth of the region's key industry clusters.
- Create industry sector councils to ensure the critical workforce and business competitiveness needs of each sector are addressed.
- Market and promote Northwest Florida as a destination for new investment and employment.
- Increase shared Business Retention and Expansion (BRE) activities throughout the region.
- Expand and leverage tourism to support industry attraction.
- Support the growth of microenterprises and small businesses in the region, particularly in rural areas and minority communities.
- Streamline government processes across the region to help business start-ups, expansions, and relocations get up and running quickly.
- Market Northwest Florida as an investment location to full- or part-time residents who own a business outside of the region.

## 3. INFRASTRUCTURE

*Ensure that Northwest Florida's economic infrastructure is state of the art and connects communities in every part of the region.*

### STRATEGIES

- Use the Regional Planning Councils to address shared infrastructure needs and other economic development issues.
- Develop sites to accommodate business expansions and relocations.
- Support the development of industrial megasites, with a deliberate focus on rural areas of the region.
- Ensure that the necessary infrastructure improvements to ports and airports to accommodate new private investment and employment are funded and completed.
- Continue advocating for state and federal funding for improving the region's road infrastructure and explore new options to improve transportation mobility.
- Continue efforts to expand broadband infrastructure and adoption in rural and underserved areas of the region.

## 4. ENTREPRENEURSHIP AND INNOVATION

*Foster robust entrepreneurship and innovation ecosystems to drive future economic growth.*

### STRATEGIES

- Develop the region’s entrepreneurial hubs and connect them with industry clusters, assets, services, networks, facilities, tools, and expertise.
- Establish commercialization tools and programs connected to the region’s national security research and technology assets.
- Increase access to capital for Northwest Florida entrepreneurs and develop a formal mechanism to access funds.
- Encourage local entrepreneurs and innovators to tap into federal funding in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants.
- Promote rural entrepreneurship.
- Market regional entrepreneurial success stories.
- Support youth entrepreneurship programs at local school districts to foster a culture of innovation and cultivate an entrepreneurial spirit in the region.

## 5. QUALITY OF PLACE

*Make Northwest Florida a place appealing to existing residents and visitors as well as to a new generation of talented and creative individuals and companies.*

### STRATEGIES

- Encourage the development of vibrant downtowns, new town centers, and mixed-use developments in the region.
- Gain a better understanding of the preferences and needs of existing Northwest Florida residents.
- Invest in the amenities and infrastructure in underserved communities.
- Incorporate the site location needs of target industries into local and regional planning and placemaking strategies.

## OVERVIEW OF TARGET INDUSTRY CLUSTERS

TIP Strategies and the Haas Center sought to identify target industry clusters for Northwest Florida that will transform the region if successfully developed through business recruitment, retention, expansion, and entrepreneurial support. These recommendations, however, should not be viewed as the only viable industries in the region for attraction and development. Some counties and communities offer competitive advantages to specific sectors that may not be part of these recommendations. However, based on regional industry and occupational data, national and regional trends, as well as the consulting team's experience in identifying target industries for markets nationwide, the following regional targets are recommended for inclusion in the regional strategy.

- **Aerospace and Defense** is the region's deepest and most diverse cluster. While Aerospace employment has declined in the region in recent years, Northwest Florida's proximity to five major Aerospace OEM Assembly facilities as well as new commercial aerospace developments in the four-state region present opportunities for renewed growth.
- **Financial Services** plays an essential role in the economy as it interacts with virtually all other clusters via the banking industry. The recent and projected growth of the cluster in the region is being driven by the ongoing expansion of Navy Federal Credit Union in Escambia County. In addition to employing thousands of residents, the sector serves as an essential support service for other industries and contributes significantly to the regional economy.
- **Water Transportation** is poised for healthy growth in the region largely due the success of Eastern Shipbuilding in winning the significant U.S. Coast Guard Cutter shipbuilding contract. Targeting the shipbuilding supply chain presents opportunities for additional cluster growth in the region beyond Bay County.
- **Cybersecurity** is not considered a traditional cluster, yet presents promising high-wage growth opportunities due to unique assets and new supporting programs in the region.
- **Advanced Manufacturing** is an important target for growth as it impacts many other clusters and offers high-wage employment growth for all areas of the region. Since advanced manufacturing is an activity that cannot easily be grouped by industry codes for analysis purposes, it was not included in the target industry cluster profiles. Strategies and actions for promoting the growth of Advanced Manufacturing in the region are still included in the plan.

Finally, a region can be home to a cluster that is experiencing overall decline and, through spillover effects, can negatively impact an entire regional or state economy. The concentration of the U.S. auto industry in Michigan is such an example. The goal of the regional strategy, therefore, should not be solely to support a fixed number of clusters, but to foster a dynamic economy that can support a variety of industries, especially those that Northwest Florida is uniquely positioned to nurture.

## IMPLEMENTATION CONSIDERATIONS

Northwest Florida Forward is an ambitious plan that proposes numerous strategies and actions. It is not feasible for any one organization to lead and coordinate implementation in such a large region. Therefore, a new regional implementation partnership consisting of Northwest Florida Forward Councils is being proposed to lead, coordinate, and champion the regional strategy. The Northwest Florida Forward Councils will be aligned with the goals of the strategy. The councils will function as task forces charged with coordinating the implementation efforts for one of the goals. The proposed councils will include:

- Talent Council
- Business Vitality Council
- Entrepreneurship & Innovation Council
- Infrastructure Council
- Quality of Place Council

In addition, industry councils will be organized around each of the target clusters. A Northwest Florida Forward Steering Committee will be created to provide overall coordination of the effort.

Each council will be led by volunteer co-chairs, who will be responsible for recruiting members, organizing council meetings to discuss implementation tasks, and communicating progress to the larger partnership. The councils can take their sections of the strategy and reprioritize, add, and delete strategies and actions; adjust timelines; recruit organizations to participate; and set metrics to measure success.

Funding the strategies and initiatives recommended in the plan also cannot depend on any one organization or source of money. It will require the councils to pursue funds from a variety of public and private sources. Below are just some of the potential sources of implementation funding.

- U.S. Economic Development Administration
- Triumph Gulf Coast
- RESTORE Act funds
- U.S. Department of Labor
- Florida Department of Transportation
- U.S. Small Business Administration
- U.S. Department of Agriculture
- U.S. Department of Housing and Urban Development
- U.S. National Park Service
- U.S. Department of Defense Office of Economic Adjustment
- Federal Highway Administration
- Ewing Marion Kauffman Foundation
- National Endowment for the Humanities

# STRATEGIC ACTION PLAN

## INTRODUCTION

At the core of every economic development strategy lies the need for a vibrant and dynamic business environment. Northwest Florida is no exception to this need. The region’s traditional reliance on the presence of the U.S. military installations and personnel and on tourism to drive economic growth have obscured the importance of overall business vitality. However, in recent years the BP oil spill and reduced defense spending due to budget sequestration have illuminated the vulnerability of the region’s economy to external shocks and the need to diversify. This strategy – with its emphasis on transformational change – is dedicated to strengthening existing clusters and economic drivers as well as advancing emerging sectors. The need to go beyond the current strengths of the region reflects not just the importance of diversification, but also the need to generate higher paying jobs for all residents of the region, including those in minority communities and in rural areas.

### GOAL 1. TALENT

CONNECT THE TALENT ASSETS OF NORTHWEST FLORIDA TO KEY INDUSTRY CLUSTERS AND ENSURE A DYNAMIC AND DIVERSE WORKFORCE FOR NEW AND GROWING BUSINESSES.

Access to talent continues to be the chief site selection factor for companies planning new facilities, expansion, and/or relocation. Per Area Development Magazine’s 2015 Survey of Corporate Executives, availability of skilled labor was ranked as the most important factor for location decisions, surpassing highway accessibility by almost five percentage points. Access to talent was also cited as an important issue among Northwest Florida employers participating in regional interviews and round table discussions.

Talent availability is an even more pressing concern for the region’s rural counties, where loss of workforce due to outmigration and outbound commuting threatens the ability of some counties to supply and train workers. Pockets of generational poverty as well as inadequate workforce education and training opportunities in some areas have also resulted in high unemployment and underemployment, particularly in minority communities. Northwest Florida’s ability to build a first-class workforce development, retention, and attraction system that engages all communities and populations will be critical to enhancing the economic vitality of the region.

While access to talent is a chief concern, Northwest Florida does enjoy assets, organizations, and programs that offer unique talent advantages to the region. The extensive military presence in the region offers a pipeline of talent that can be further leveraged to benefit existing employers as well as marketed to new prospects. The region’s network of high quality post-secondary educational institutions are aggressively expanding education and training offerings, especially in emerging industry niches such as Cybersecurity and Additive Manufacturing. The region also boasts a growing number of K-12 education and training programs, including the Northwest Florida Manufacturing Career Academy Network and Robotics-focused education. Finally, the region’s beauty, natural amenities, and desirable quality of life make it an attractive destination for

### AREA DEVELOPMENT CORPORATE SURVEY 2015\* COMBINED RATINGS

SITE SELECTION FACTORS	2015	2013
<b>RANKING</b>		
1. Availability of skilled labor	92.9	95.1 (1)
2. Highway accessibility	88.0	93.5 (2)
3. Quality of life	87.6	62.1**
4. Occupancy or construction costs	85.4	87.4 (4)
5. Available buildings	83.7	83.3 (6)
6. Labor costs	80.8	90.8 (3)
7. Corporate tax rate	78.8	82.4 (7)
8. Proximity to major markets	76.3	75.6 (15)
9. State and local incentives	75.8	81.9 (8)
10. Energy availability and costs	75.3	80.8 (10)

\*All figures are percentages and are the total of “very important” and “important” ratings of the Area Development Corporate Survey and are rounded to the nearest tenth of a percent.

\*\* (2010 Ranking)

Source: AreaDevelopment, 30th Annual Survey of Corporate Executives, Q1 2016

talented executives, entrepreneurs, and younger workers. Because of these attributes, the region’s ability to marshal a large top-quality talent pool is within reach.

## STRATEGIES & ACTIONS

### 1.1. Create a regional workforce training and development initiative designed to meet the needs of large employers relocating or expanding in Northwest Florida. (High Priority, Short Term)

Northwest Florida faces intense regional competition for new investment and jobs. States and regions in the southeast U.S. have committed substantial resources to site development, infrastructure expansion, and financial incentives to gain competitive advantages in business site selection. Customized workforce training has also emerged as a crucial economic development tool for business attraction, retention, and expansion. States such as Alabama, Georgia, Louisiana, South Carolina, North Carolina, and Kentucky have highly regarded and nationally ranked workforce-training initiatives. These initiatives have been successful in helping to attract and retain multinational employers. The adjacent text box provides a brief description of a few such programs.

For Northwest Florida to be able to compete in such a highly competitive environment, especially with declining state resources available for financial incentives, the region should establish its own customized workforce-training program. This initiative should incorporate features of highly regarded state programs such as Alabama Industrial Development Training (AIDT) and Georgia Quick Start, as well as a regional initiative like the Charlotte Regional Collaborative for a Global Economy. The Presidents’ Coalition of Northwest Florida, which comprises the region’s state college and university presidents, can be a key partner in these efforts. However, the partnership should be expanded to include technical centers, school districts, and regional workforce boards.

**1.1.1.** Work with educational institutions and workforce boards to create an employer-driven workforce training initiative. Key components of the initiative should include:

- Regional centers that provide classroom and lab facilities and pre-employment selection and training services for regional businesses. Possible locations for these centers are properties adjacent to or on the region’s three commercial airports and/or in strategic locations throughout the region based on target industry concentration. These centers could also serve as regional economic development hubs that provide site selection and program information on the region’s workforce, transportation infrastructure, certified industrial sites, educational institutions, and entrepreneurship assets.

#### AIDT

Alabama Industrial Development Training (AIDT) provides a full range of customized technical training programs that are offered at no cost to employers and to the trainees. Training is conducted by AIDT staff or contracted instructors and delivered through classrooms or 38 Mobile Training Units (MTUs) customized to meet specific company needs. MTUs go directly to the employer site to provide classroom and hands-on training. AIDT also operates regional training centers (Huntsville and Mobile); centers of excellence (e.g., Maritime Training Center, Forest Products Development Center); and project-based training centers (e.g., Honda and Airbus training centers). ([www.aidt.edu](http://www.aidt.edu))

#### GEORGIA QUICK START

Georgia Quick Start is a free workforce training program customized for companies in numerous industries. A Quick Start training regimen is shaped specifically for the skills that a company is looking to develop in its employees. Training is conducted in classrooms, mobile labs, or onsite at the company. Quick Start is provided at no charge by the Technical College System of Georgia. (<http://www.georgia.org/competitive-advantages/training-hiring/quick-start/>)

#### CHARLOTTE REGIONAL COLLABORATIVE FOR A GLOBAL ECONOMY

The Charlotte Regional Collaborative is a consortium of the 15 community colleges serving the greater Charlotte region. Participating member colleges provide higher education, workforce development, and vocational skills training in 29 counties in two states (17 in North Carolina, 12 in South Carolina). The Collaborative’s purpose is to prepare, educate, and train workers in the Charlotte region to be and remain competitive. The work will be jobs-driven and will be closely aligned with state, regional, and local economic development efforts. The work undertaken by the Collaborative is funded through a gift from JPMorgan Chase. (<https://www.cpcc.edu/global/collaborative>)

- Mobile units for job-site screening and training
- Satellite locations in rural areas of the region
- Expansion of the advanced technology centers that support existing and emerging industries (e.g., Aerospace and Defense, Water Transportation, Cybersecurity)
- Replication of the Northwest Florida Manufacturing Academy Network for all target industries

**1.2. Better leverage separated and retired military personnel as a key talent pool for target industry clusters. (High Priority, Short Term)**

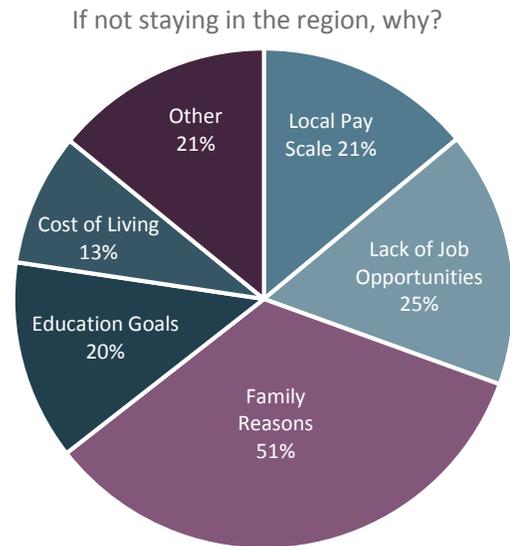
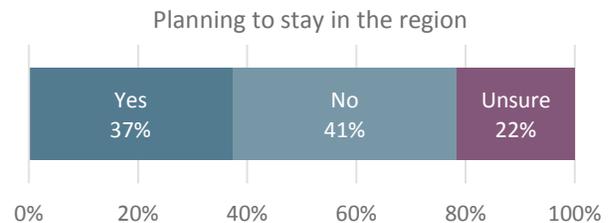
Florida is one of the most military-friendly states in the nation. It is home to 20 major military installations and over 1.5 million veterans. Indeed, one of Northwest Florida’s greatest economic development assets is the talent pool connected to the region’s military installations. This workforce consists of both the current population of retired military personnel and the potential labor pool of service members regularly separating from the military while stationed in the region. This pool of existing and potential civilian labor is further enhanced by family members, who themselves are often highly skilled and educated.

**1.2.1. Formalize a regional military talent pipeline survey and marketing program.**

Recognizing the tremendous importance of the military talent pool to the region’s economic vitality, local workforce and economic development organizations have initiated survey programs designed to capture and document the skillsets and post-military intentions of service members preparing to separate from service. These voluntary surveys are being offered to service members participating in mandatory transition assistance programs. Currently, CareerSource Okaloosa Walton and CareerSource Gulf Coast are piloting similar survey programs. These survey efforts are intended to increase workforce readiness, awareness of civilian employment opportunities, and regional quality of place awareness among transitioning military personnel. The data can also be used directly by local and regional economic development organizations for business retention, expansion, and attraction efforts. This is an especially important tool for demonstrating to employers the region’s ability to provide a quality pipeline of talent with specific skills and credentials.

The charts on this page show examples of survey data generated by CareerSource Okaloosa Walton through its partnership with Eglin Air Force Base and Hurlburt Field. Airmen preparing to separate from service were asked if they intended to remain in the region after their military service ends,

**MILITARY TRANSITION & WORK READINESS WORKING GROUP PROJECT SURVEY**



Source: CareerSource Okaloosa Walton  
 Note: Results based on 860 responses from military personnel preparing to separate from service at Eglin Air Force Base and Hurlburt Field (11/15/15-11/20/16)

and if not, why. Of the Airmen responding to the question, about 37 percent indicated they did plan to remain in the region. For those stating they definitely plan to leave the region, “family reasons” was the most cited motive, followed by lack of job opportunities.

To fully leverage the potential economic development impact of these survey tools, a formalized regional survey program should be established that aggregates local efforts into a regional military talent pipeline survey and marketing program. Such a regional initiative would seek to standardize survey questions, data tabulation, analysis, and presentation of the results. Florida’s Great Northwest should utilize the survey data for marketing the entire region to investment prospects or working with existing employers on expansion projects. The Heart of Texas Defense Alliance (Fort Hood) has coordinated such an initiative since 2007. The State of South Carolina is organizing a similar statewide survey program.

- 1.2.1.1. Expand the existing surveys to include all installations in the region where meaningful numbers of military personnel are separating from service.
- 1.2.1.2. The region’s CareerSource organizations should jointly develop a common set of questions across all surveys. Questions should address post-military career and residential intentions, educational level, skills, employment desires, and suggestions to improve the region’s quality of place. Questions could also address the skills and career desires of military spouses.
- 1.2.1.3. Tabulated and analyzed data should be shared with Florida’s Great Northwest and other local economic development organizations for business development purposes. An annual report summarizing the regional data should be produced and provided on the FGNW website and in prospect packets.
- 1.2.1.4. Survey data should be shared with existing regional employers seeking workforce assistance.
- 1.2.1.5. If needed, execute a regional MOU between the region’s CareerSource organizations, Florida’s Great Northwest, Veterans Florida, and other pertinent entities necessary to structure a regional survey program. The MOU executed between CareerSource Okaloosa Walton and leadership of Eglin Air Force Base and Hurlburt Field could serve as a template.
- 1.2.2. Partner with Veterans Florida to build an online portal designed to connect veterans with occupational opportunities in the region and to market Northwest Florida to veterans. Include a link to the Occupational Information Network (O-NET) Military Crosswalk Search website, which translates Military Occupational Classification (MOC) codes to civilian Standard Occupational Classification (SOC) codes. Understanding how military occupations translates to civilian counterparts is a challenge many service members looking for civilian career opportunities face.
- 1.2.3. Explore options for assisting service members and veterans obtain higher education credits and based on their military skills and credentials. The American Council on Education has been working with DoD to develop guidelines and recommendations on this topic. (See text box.)
- 1.2.4. Partner with Veterans Florida and CareerSource Florida organizations to address Northwest Florida veterans and spousal needs.
- 1.2.5. Build awareness among employers regarding the skill sets represented by personnel separating from service at installations in the region.

**COLLEGE CREDIT FOR MILITARY SERVICE**

The American Council on Education collaborates with the U.S. Department of Defense (DoD) to review military training and experiences and recommend appropriate college credit for members of the Armed Forces. ACE’s credit recommendations appear in the Military Guide and on military transcripts.

[www.acenet.edu/higher-education/topics/Pages/College-Credit-for-Military-Service.aspx](http://www.acenet.edu/higher-education/topics/Pages/College-Credit-for-Military-Service.aspx)

- 1.2.6. Encourage employers to participate in job fairs and related events at the region’s installations.
- 1.2.7. Work with the Florida Department of Economic Opportunity, CareerSource Florida organizations, and other relevant organizations to ensure that military training requirements match state licensing requirements.

**1.3. Explore establishing an employer-driven workforce training initiative focused on assisting underemployed and long-term unemployed residents. (High Priority, Medium Term)**

For the region to succeed in building true economic vitality, it must address chronic unemployment and underemployment among its most vulnerable residents. Underemployment refers to the condition in which workers are unable to find full-time or regular work or are working in jobs that do not meet their skill level or economic need. These include minority populations anchored in underperforming neighborhoods, as well as residents of rural areas suffering from population loss. Linking these populations with a demand-driven model for workforce training that matches with existing unmet hiring needs of local businesses is a potential solution. Unfortunately, private-sector engagement is typically the most difficult part of implementing industry-driven workforce strategies. According to a variety of studies, including a 2012 report by the US General Accounting Office, focusing on “urgent, common needs” and being responsive to specific employer requirements can increase the odds of success.

One model that is demonstrating success in matching existing hiring needs with qualified, unemployed, and underemployed jobseekers is Skills for Chicagoland’s Future (SCF). This organization can serve as a potential model for creating a new demand-driven organization in Northwest Florida or transforming part of an existing organization(s). SCF provides a playbook for creating such a model through its replication consultancy. Skills for Rhode Island’s Future is the first replication of Chicago’s demand-driven workforce model. Efforts are currently underway to expand the model nationwide through the launch of Skills for America’s Future.

- 1.3.1. Explore creating/transforming a workforce organization using the demand-driven model developed by Skills for Chicagoland’s Future.

- 1.3.1.1. Review the Demand-Driven Playbook offered by SCF to determine if such a model is feasible in the region.

- 1.3.1.2. If there is interest, reach out to SCF to inquire about obtaining assistance in developing a model in the region.

- 1.3.2. Engage employers and regional workforce partners in evaluating and prioritizing comprehensive, long-term strategies for improving access to economic opportunity for all residents. Programs that facilitate re-entry into the workforce for underrepresented populations should be emphasized.

Examples of other “ladder of opportunity” strategies include: increasing financial literacy; increasing the availability of high quality early childhood education programs; and connecting disadvantaged populations with local workforce training, employment centers, health care, and other vital services through improved transportation access.

**SKILLS FOR CHICAGOLAND’S FUTURE**

Skills for Chicagoland’s Future (SCF) is a public-private partnership that provides industry-driven recruitment, placement, and job training services in Cook County at no cost to the employer or the job seeker. It seeks to match businesses that have current unmet hiring needs with qualified, unemployed, or underemployed job seekers. SCF is funded by the City of Chicago, the State of Illinois, the Chicago Cook Workforce Partnership, foundation support, and multiple private sector donations. According to SCF, more than 3,300 unemployed job seekers have been hired through partnerships with over 50 employers since SCF launched in 2012.

([www.skillsforchicagolandfuture.com](http://www.skillsforchicagolandfuture.com))

**1.4. Develop a regional talent recruitment program. (Medium Priority, Medium Term)**

Not only is Northwest Florida engaged in a fierce competition for new businesses and investment, it is also competing with other regions (in the Southeast and nationally) for high skill, high quality talent. Northwest Florida is well positioned to attract and retain skilled talent. In addition to its natural beauty and beaches, the region enjoys assets that function as talent magnets,

attracting talent to the region and maintaining ties with that talent pool. These assets include the region’s higher education institutions and military installations.

**1.4.1.** Create a regional talent retention and attraction program similar to the Baton Rouge Area Chamber of Commerce’s (BRAC) talent development program, which utilizes a talent database, relocation resources, and an intern network. (See text box.)

**1.4.2.** Create an online talent portal that provides information about working, living, and relocating to Northwest Florida. The text box on the previous page profiles talent initiatives and websites developed for the Minneapolis-Saint Paul and Baton Rouge regions.

The portal should include a search function for job postings as well as information and data on topics of interest for prospective residents, including housing, education, industry data, entertainment, arts and culture, and recreation resources.

**1.4.3.** Design a “come home” campaign to inform former residents and alumni who live in other cities of the career opportunities, events, and quality of place amenities in Northwest Florida.

**1.4.3.1.** Assemble a network of local alumni associations—both college and high school—that are willing to relay information and content out to their alumni networks.

**1.4.3.2.** Use this network to communicate regularly with alumni. Share information such as job opportunities, arts and cultural events, notable economic development activities, and other types of information that will build awareness of the positive things going on in the region and draw the alumni back.

**1.4.4.** Create a Digital Ambassadors program that utilizes a network of “connectors” who share positive stories about Northwest Florida online and through social media. Social Toaster ([www.socialtoaster.com](http://www.socialtoaster.com)) provides a platform for structuring and managing such a program. Northwest Arkansas (text box) and the Charleston Open Source initiative are two regions that have established such a program.

**MAKE IT. MSP**

Make It. MSP is Greater Minneapolis-Saint Paul’s talent initiative that was developed and launched in 2015. The [makeitmsp.org](http://makeitmsp.org) website serves as the platform for the initiative, providing information on the initiative as well as information for individuals considering a move to the MSP region.

To heighten its impact, Make It. MSP has recruited more than 100 “Makers” to its “Makers Hub” network, in which community-minded individuals and organizations collaborate around four specific areas:

- Radical Welcomers – dedicated to personally welcome newcomers to MSP
- Career Acceleration – working to help more than 3,000 local professionals advance their career
- Leaders of Color – supporting leadership development opportunities that showcase rising leaders of color in the region
- Get Involved. MSP – connecting civic engagement opportunities with residents to help get them more deeply involved in the community

The initiative is focused on three target talent groups: newcomers, professionals of color, and tech talent. (<http://makeitmsp.org>)

**BATON ROUGE AREA CHAMBER OF COMMERCE (BACC)**

BACC’s Talent Development Program focuses on talent retention and attraction. It consists of a talent database, regional relocation resources (R3), and the Baton Rouge Area Intern Network (BRAIN). The talent database is a catalog of resumes of professionals seeking to further their careers in the Baton Rouge Area. To populate the database, BACC works closely with alumni associations from the region’s universities and high schools. R3 assists area employers with their talent attraction efforts by connecting them with out-of-market candidates, creating tailor-made regional awareness presentations to aid in talent recruitment, leading tours of the region for recruits, and making out-of-market recruitment trips. In addition, BACC recently launched [www.livecapitalized.com](http://www.livecapitalized.com), a resource for newcomers to connect and grow roots in the community. ([www.brac.org](http://www.brac.org))

- 1.4.4.1. Identify connectors and thought leaders and encourage them to be digital ambassadors for the region. Identify leading individuals within key stakeholder groups (e.g., young professionals, empty nesters) to serve in an ambassador or connector capacity.
- 1.4.4.2. Develop content that portrays a positive image of the regional business climate and highlights opportunities for business and talent to be successful in the region.
- 1.4.4.3. Create an incentive system that rewards digital ambassadors for actively participating.
- 1.4.4.4. Promote the program across the region through city, chamber, CVB, and other local existing communications channels, including traditional and social media.
- 1.4.5. Continue supporting the content growth and awareness of existing local and regional career pathways online portals. Online career pathways portals are an increasingly common way for communities and regions to educate and inform residents on the training and education needed to pursue specific career occupations.
  - Northwest Florida Career Pathways ([www.nwflcareerpathways.org](http://www.nwflcareerpathways.org))
  - Greater Pensacola Career Pathways ([www.greaterpensacolacareerpathways.com](http://www.greaterpensacolacareerpathways.com))

**NORTHWEST ARKANSAS COUNCIL: DIGITAL AMBASSADORS INITIATIVE**

The Northwest Arkansas Council created the Digital Ambassadors initiative as a way to improve the region’s image and to disseminate information about the region in a cost-effective way. The program currently boasts more than 400 individual Digital Ambassadors. Each Digital Ambassador receives emails with new, exciting content to share on Facebook, Twitter, Instagram, and LinkedIn. The content includes information about regional job growth, quality of life amenities, educational achievements, the local economy, and other ways the metro area stands out. Digital Ambassadors are encouraged to share the content so that they can have a positive impact on how the outside world views Northwest Arkansas. The ambassadors earn points based on how often they’re active and how they share their messages, and top participants are eligible to win monthly prizes. The program is a good avenue for enhancing the internal image of Northwest Arkansas. It also helps local residents and businesspeople become more aware of the positive aspects of living and working in Northwest Arkansas.

([www.nwacouncil.org/digital-ambassadors](http://www.nwacouncil.org/digital-ambassadors))

**1.5. Expand work-based learning and career exploration opportunities for students. (Medium Priority, Medium Term)**

Work-based learning is an educational strategy that helps students develop career-readiness through real-life work experiences. These experiences provide them with opportunities to apply academic and technical skills in a work setting, typically at an employer’s work site. They are often coordinated with school activities to help students understand why they are learning certain academic or technical skills and how they can be applied in the “real world.” In addition, the experiences provide students with opportunities to explore different careers and work settings and build basic employability skills. Work-based learning can include a range of activities, including apprenticeships, internships, job shadowing, mentorships, career days, work site tours, and service learning. Several educational institutions in the region offer extensive internship opportunities. For example, Florida State University Panama City has several internship programs in hospitality, computer sciences, and more. The U.S. Department of Labor (USDOL) is a strong champion and funder of apprenticeship programs throughout the nation. Per USDOL, 91 percent of apprentices remain employed after completing their programs, with average annual starting wages above \$50,000. Additionally, for every dollar employers spend on apprenticeship, they receive average of \$1.47 return in increased productivity.<sup>4</sup>

- 1.5.1. Work with existing workforce development organizations, education institutions, and the proposed sector councils to create an inventory of existing public, private, and nonprofit work-based learning programs. For

<sup>4</sup> [https://www.dol.gov/apprenticeship/NAW/pdf/Final\\_DOL\\_NAW\\_Factsheet.pdf](https://www.dol.gov/apprenticeship/NAW/pdf/Final_DOL_NAW_Factsheet.pdf)

example, FSU Panama City’s Dedman School of Hospitality has established a student internship program with top hotels, restaurants, and resorts throughout the U.S. and internationally.

- 1.5.2. Create a directory of companies and volunteers who are willing to provide these opportunities to students to help career counselors, instructors, and students identify the opportunities more easily. Promote the database.
- 1.5.3. Pursue funding from the Florida Apprenticeship Grant Program to expand apprenticeships in the region. Two examples are provided.
  - In October 2016, the Florida Department of Economic Opportunity received a \$1,498,269 grant from the USDOL’s ApprenticeshipUSA State Expansion Grant Program. The funds will be used to create 2,500 new apprentices over 3.5 years and will serve women, veterans, members of racial and ethnic minorities, individuals with disabilities, ex-offenders, and young adults.
  - In October 2015, the U.S. Department of Labor awarded a \$5 million grant to Florida State College of Jacksonville as part of the Florida Apprenticeship Grant Program, led by FSCJ, in partnership with St. Petersburg College and Broward College.
- 1.5.4. Develop a toolkit for employers to use to organize meaningful work-based learning experiences that will ensure the realization of benefits for both the employers and students. Examples include the USDOL’s ApprenticeshipUSA and New York State P-Tech Toolkit.
- 1.5.5. Work collaboratively with employers to target traditionally hard-to-reach populations such as minority youth and students in rural communities.
- 1.5.6. Continue to bring funds into the region to do more internships. UWF is managing one grant now for 76 internships throughout the region in IT.
- 1.5.7. Recognize, celebrate, and reward businesses that are engaged in talent development/offering work-based learning opportunities.

**1.6. Further leverage the manufacturing academies model to expand the promotion of science, technology, engineering, and math (STEM) programs and technical skills development as early as grade school to build long-term talent supply in the region. (High Priority, Medium Term)**

The Northwest Florida Manufacturers Council has done great work to embed a manufacturing academy career model in middle schools and high schools throughout the region. This effort both prepares students for post-secondary education and careers in advanced manufacturing and expands STEM education and technical skill development in the region’s schools. Expanding such programs and opportunities will better prepare the region’s youth to meet the education and skill requirements of existing and emerging key industries. According to the President’s Council of Advisors on Science and Technology, economic projections indicate a need for approximately 1 million more STEM professionals than the U.S. will produce at the current rate over the next decade if the country is to retain its historical preeminence in science and technology.<sup>5</sup>

- 1.6.1. Work with education, workforce development, private sector, nonprofit, and economic development partners to expand STEM education and technical skills development program throughout the region.
- 1.6.2. Partner with cradle to career efforts like Achieve Escambia and Alignment Bay County to ensure programming supports employability and technical skills development to support target industries.

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<sup>5</sup> President’s Council of Advisors on Science and Technology, Engage to excel: producing one million additional college graduates with degrees in science, technology, engineering, and mathematics (Executive Office of the President of the United States, 2012)

**1.7. Increase employability skills training programs to reduce employment barriers for all students and adults, with a particular focus on underserved populations. (Medium Priority, Medium Term)**

In addition to a need for expanded technical skills training and education, regional employers report a critical need to enhance soft skills training within the education and workforce development systems. Soft skills include such capabilities and traits as interviewing, communication, reliability, integrity, teamwork, time management, problem solving, and networking. A national survey of hiring professionals and human resource professionals conducted on behalf of CareerBuilder.com found that 77 percent of employers view soft skills to be just as important as hard skills when evaluating candidates for a job.<sup>6</sup> Soft skills training to improve employability is especially important for low income and minority populations.

**1.7.1.** Incorporate employability skills training in all schools across the region, including but not limited to career academies and business/education partnership programs. The Florida Jobs 2030 Report recently released by the Florida Chamber Foundation provides specific recommendations in this area.

**1.7.2.** Explore establishing other national programs and models in the region that address soft skills, employability, and leadership development in low-income populations.

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<sup>6</sup> The national survey was conducted online by Harris Poll on behalf of CareerBuilder from February 10 to March 4, 2014, and included a representative sample of 2,138 hiring managers and human resource professionals across industries and company sizes.

## GOAL 2. BUSINESS VITALITY

STRENGTHEN THE REGION’S ECONOMY THROUGH TARGETED RECRUITMENT OF NEW BUSINESSES AND SUPPORTING EXISTING BUSINESS EXPANSIONS.

The elements of business vitality include both the recruitment of new firms and the retention and expansion of existing companies. An aggressive economic development strategy, however, cannot rely on just one or the other of these approaches. For instance, it is not realistic or sensible to believe the region will be able to achieve long-term prosperity by recruiting large manufacturing operations only. For example, despite its success in luring high profile employers such as Airbus and ThyssenKrupp, the Mobile MSA experienced a net decline in employment between 2010 and 2015.

As the regional economic development organization, Florida’s Great Northwest (FGNW) is best positioned to lead and coordinate efforts to strengthen business vitality in the region. FGNW cannot succeed in implementing these efforts alone. It will require close partnerships with local economic development organizations. It will also necessitate further resources for FGNW, which does not have the existing staff support necessary to carry out all that is outlined in the strategy, in addition to the organization’s existing duties. Identifying a dedicated funding stream to support economic development at the local and regional level will also help the region remain competitive in attracting new businesses and supporting existing businesses.

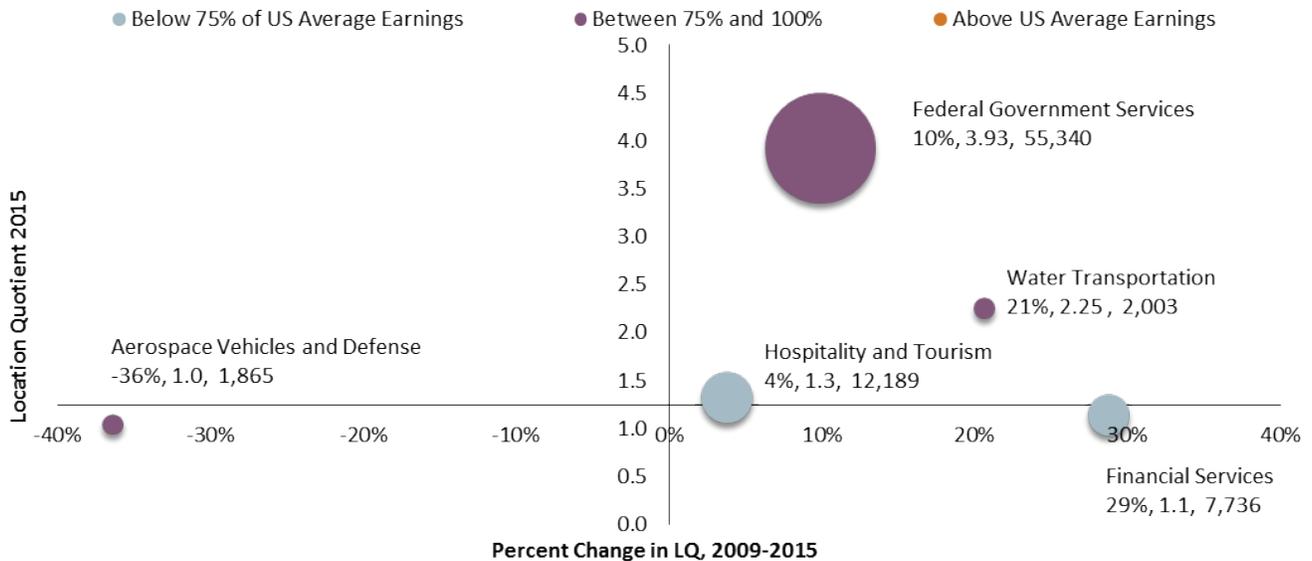
### STRATEGIES & ACTIONS

#### 2.1. Ensure the growth of region’s key industry clusters. (High Priority, Short Term)

For Northwest Florida to build a diverse and sustainable economic base, the region must develop *dynamic* industry clusters. Dynamic clusters are those that can positively affect employment, wages, innovation, and entrepreneurship. Beyond the traditional engines of Military and Tourism/Hospitality, the region’s best prospects for cluster development include Aerospace and Defense, Water Transportation, and Financial Services. While not strictly defined as an industry cluster, Advanced Manufacturing is an important target for growth as it impacts many other clusters and offers high wage employment growth for all areas of the region. Cybersecurity is also not considered a traditional cluster, yet presents promising high-wage growth opportunities due to unique assets and new supporting programs.

#### KEY INDUSTRY CLUSTERS FOR THE 13-COUNTY REGION

2009-2015



Source: EMSI 2016.4; QCEW, non-QCEW, Self-Employed

Note: Label includes cluster name, % change in LQ, LQ 2015, and employment 2015; Industry Cluster definitions by Michael Porter.

Supporting industry cluster development extends beyond traditional targeted recruitment and marketing strategies. It involves efforts tailored for workforce, incentives, commercialization, land use, facilities, and infrastructure support. Additionally, increasing support for Advanced Manufacturing presents a unique opportunity to further develop the Aerospace and Defense and Water Transportation clusters by maintaining and expanding the supply chains for these sectors. Nurturing existing efforts and launching new initiatives will help to ensure these clusters continue to grow and prosper in the region.

Appendix 1 provides detailed profiles for each of the recommended target industries.

- 2.1.1.** Strengthen and build on the Aerospace and Defense cluster, and leverage the presence of major regional employers in the Water Transportation and Financial Services sectors for economic growth.

#### **Aerospace and Defense**

Aerospace and Defense is the region’s deepest and most diverse cluster. As of the end of the 2016, the cluster accounted for 33 establishments and almost 1,900 jobs located in the region. Aerospace and Defense subsectors that employ significant numbers of workers include:

- Aircraft Parts and Auxiliary Equipment Manufacturing,
- Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing, and
- Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing.

While employment growth in the cluster has declined in recent years largely due to reduced defense spending, Aerospace and Defense remains a critical sector for the region due to its integrated supply chain, specialized talent base, and high earnings per job.

Northwest Florida is part of a larger regional four-state aerospace community that involves aircraft manufacturing, space flight, propulsion systems, military aviation, unmanned aerial vehicles, robotics, aerial weapons, high-performance materials, and RDT&E. Specific to Northwest Florida, the region enjoys unique assets connected to military aviation, unmanned systems, robotics, R&D, testing, and training.

In addition to the military side, the region is positioned to grow its commercial aviation and aerospace base. The recent attraction of VT MAE’s \$46 million maintenance, repair, and overhaul to Pensacola International Airport is a prime example of this potential. Other commercial aerospace investment opportunities, both domestic and foreign, are likely to arise as a consequence of the Airbus A320 final assembly plant in Mobile.

- 2.1.1.1.** Continue strengthening the region’s workforce education and training programs connected to aerospace and other STEM fields.
- 2.1.1.2.** Identify and attract suppliers of Airbus, Boeing, and other major aerospace and defense companies to the region.
- 2.1.1.3.** Build aerospace supply chain across I-10 from Pensacola to Jacksonville.
- 2.1.1.4.** Continue leveraging relationships with Aerospace Alliance partners in Alabama, Mississippi, and Louisiana to promote the Southeastern U.S. as a top location for aerospace companies.
- 2.1.1.5.** Build an online database of regional aerospace suppliers. Assist original equipment manufacturers (OEMs) in identifying and partnering with capable supply chain partners. A model for such a database is the state of Washington’s [www.aerospacevendors.com](http://www.aerospacevendors.com).

- 2.1.1.6. Create or attract a new center of excellence (COE) focused on Advanced Manufacturing in the Aerospace sector. Such a COE focused on both Advanced Manufacturing and Aerospace leverages two regional industry sector development priorities. It is also feasible given the growing concentration of Aerospace investment and employment in the Southeast. Paris-based Hutchinson Corporation is currently developing an Aerospace Manufacturing COE in Mobile. Hutchinson cited the proximity to the new Airbus facility as a

**STATE OF WASHINGTON CENTER OF EXCELLENCE IN AEROSPACE AND ADVANCED MANUFACTURING**

The State of Washington’s Aerospace Center of Excellence is one of 10 state-supported centers focused on sector strategies and economic development. The mission of the centers is to serve as statewide liaisons to business, industry, labor, and educational systems for the purpose of creating a highly skilled and readily available workforce critical to the success of the industries driving the state’s economy.

(<http://www.coeaerospace.com>)

chief reason for choosing the Mobile Aeroplex at Brookley for its location. In addition, Northrop Grumman is establishing two Aerospace COEs in Florida, including a Manned Aircraft Design Center at Melbourne International Airport’s Business and Industrial Park. Potential locations for such a COE in Northwest Florida are commercial/industrial properties on or adjacent to the region’s three commercial airports to take advantage of the proximity to commercial air service and runways.

- 2.1.1.7. Develop marketing campaign and materials to encourage aerospace and defense companies to locate and expand in Northwest Florida.

**Financial Services**

The Financial Services sector in Northwest Florida is largely dominated by Navy Federal Credit Union (NFCU) in Escambia County, which accounts for 60 percent of the 7,736 sector jobs in the region. By the end of NFCU’s phase 2 expansion, the company expects to employ 10,000 workers, occupy 2 million sq. ft., and have a capital investment of \$1 billion. NFCU’s expansion is driving much of the sector’s 35% projected job growth over the next 10 years. Broadening the cluster by leveraging NFCU can be achieved by targeting companies that support NFCU (including telecom providers).

- 2.1.1.8. Work with NFCU to conduct a supply chain analysis of IT vendors to identify suppliers and service providers located outside of the region. NFCU’s proximity to I-10 offers the potential for vendors and other Financial Services companies to locate in other areas of the region and still have convenient access to NFCU.

- 2.1.1.9. Develop a targeted marketing initiative to persuade NFCU vendors and other Financial Services firms to locate operations in proximity to the campus as well as other areas of the region.

**Water Transportation**

The Water Transportation cluster is poised for healthy growth due to expansion within the Ship Building and Repairing subsector. Indeed, the total number of the region’s 1,400 ship building jobs is projected to increase by 56% over the next 10 years. Much of the growth will be driven by the selection of Eastern Shipbuilding to finalize the design and construct the first series of nine Offshore Patrol Cutters (OPC) for the U.S. Coast Guard. The Coast Guard plans to acquire 25 of these vessels with an estimated contract value of \$10 billion. At full ramp-up of the OPC contract, Panama City-based Eastern expects to increase its workforce by hiring additional craftsmen, engineers, and administrative staff. However, the impact of Eastern’s expansion will be felt beyond Bay County. For example, Eastern currently leases a portion of the bulkhead at the former St. Joe Paper Mill site from the St. Joe Company in Gulf County, which is a potential location for new investment ties to the Coast Guard contract. In addition to Eastern Shipbuilding, the region is home to recreational ship building

companies, including Cape Horn in Santa Rosa County, which builds sport fishing boats. Supporting the workforce attraction and development needs of the region’s ship building companies, targeting Eastern’s supply chain network for recruitment, and investing in the region’s maritime infrastructure are the primary strategies for leveraging the OPC contract to grow the cluster.

- 2.1.1.10.** Work closely with Eastern and other ship building companies to identify future workforce development and attraction requirements and implement programs to address these needs.
  - 2.1.1.11.** Conduct a supply chain analysis of Eastern’s vendors and suppliers to identify candidates for recruitment to the region.
  - 2.1.1.12.** Develop marketing campaign and materials specific to the Water Transportation cluster.
  - 2.1.1.13.** Ensure the region’s maritime and industrial infrastructure can accommodate new facilities, employment, and investment.
- 2.1.2.** Support the ongoing expansion of Cybersecurity employment, investment, education, and training in the region.

Cybersecurity is one of the fastest growing and most sought after industry sectors across the nation. In response to ever-increasing demand from both the public and private sectors for cybersecurity capabilities, cities, regions, and states are rapidly developing economic development, education, and training programs focused on Cybersecurity investment and employment. Some parts of the country have well-established Cybersecurity sectors due to the presence of a large IT cluster, government/military facilities, or leading academic programs.

Northwest Florida is emerging as a mid-tier Cybersecurity hub among U.S. metro areas. Currently, the Pensacola and Crestview MSA’s are among a handful of medium-sized MSA’s with Cybersecurity employment location quotients (LQ) 1.21 and above.<sup>7</sup> The region is home to a number of government/military assets, including the Navy Center for Information Warfare Training, Navy Information Warfare Command, and the Department of Homeland Security Office of Cybersecurity and Communications. UWF has been designated by the National Security Agency and Department of Homeland Security as a National Center of Academic Excellence for Cyber Defense Education. Pensacola State College and Florida State University Panama City have or are developing bachelor’s degree programs in cybersecurity. Other colleges and schools in the region have developed cyber education programs. Competitions such as CyberThon attract national cyber officials and encourage students of all levels to pursue cyber training, education, and careers. There are also a number of private companies that have Cybersecurity operations in the region, including Raytheon, Northrop Grumman, and Navy Federal Credit Union.

**CYBERSECURITY SAN ANTONIO**

The San Antonio region has emerged as one of the most aggressive communities in the nation for developing and promoting its Cybersecurity cluster. The San Antonio Chamber of Commerce has developed an online platform and industry council focused on promoting Cybersecurity. Areas of emphasis include expanding defense related Cybersecurity missions, growing commercially focused companies, developing the startup community by assisting transitioning military personnel, and engaging industry and education partners in enhancing the talent pipeline. (cybersecuritysa.com)

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<sup>7</sup> Location Quotients (LQs) are ratios that allow an area's distribution of employment by industry to be compared to a reference or base area's distribution, which is typically the U.S. If an LQ is equal to 1, then the industry has the same share of its area employment as it does in the reference area. An LQ greater than 1 indicates an industry with a greater share of the local area employment than is the case in the reference area.

- 2.1.2.1. Develop a regional Cybersecurity business development strategy that highlights the collective assets in this sector. Many of the region’s Cybersecurity programs, companies, and workers are dispersed throughout the region. Therefore, an integrated regional approach to growing the sector is warranted.
  - 2.1.2.2. Identify Cybersecurity as a formal regional industry target and design marketing efforts and materials for its growth.
  - 2.1.2.3. Identify and promote niche specializations to build competitive advantages. With so many communities around the country competing for Cybersecurity investment and jobs, those that can develop unique capabilities are more likely to succeed. For instance, Port San Antonio is focusing on specialized capabilities and expertise in aircraft-based networks. The Cybersecurity academic, industry and government partners in Northwest Florida are working to develop a regional Cybersecurity strategic plan. Through this planning effort, specific competitive industry niches should be identified. Internet of things (IoT) security and critical infrastructure security have been initially identified as emerging opportunity areas.
- 2.1.3. Support the vibrancy of Advanced Manufacturing across clusters.

Advanced Manufacturing generally involves the integration of innovative technologies into production processes and manufactured products. It is innovation in the manufacturing process that assures the ability to survive and prosper. Simply put, virtually all manufacturers must become advanced manufacturers if they are to remain in business. In Northwest Florida, Advanced Manufacturing cuts across a number of clusters, including Aerospace and Defense, Chemical Products, Wood Products, Construction Products, and Textiles. Its importance stems from its capacity to support other key industries in the region, to help diversify the economic base, and to provide employment opportunities for a wide range of skill levels, ranging from middle skill production workers to engineers.

- 2.1.3.1. Support the efforts of the Northwest Florida Manufacturers Council to develop a robust marketing plan to raise awareness and perception of Advanced Manufacturing career (and other middle skills occupations) opportunities for students in Northwest Florida. This should be a branded initiative that offers physical and digital marketing materials to targeted audiences, including middle school and high school students, tech center and state college students, adults in the workforce system or enrolled in other training programs, high school and college dropouts, and veterans separating from service.
- 2.1.3.2. Pursue federal and private funding to establish new advanced manufacturing training centers in the region or to strengthen existing centers. For example, the National Science Foundation has financially supported advanced manufacturing training and education through its Advanced Technological Education program. (<http://www.atecenters.org/>)
- 2.1.3.3. Enhance the regional manufacturing supply chain by creating an online buyer-supplier database. Such a network can build local industry knowledge of regional suppliers of products, parts, and components. It can also help large firms and government agencies such as the Department of Defense identify and purchase from suppliers in the region.

**NWB2B**

NWB2B is an online sourcing platform that connects manufacturers with suppliers of products and services in the Pacific Northwest. The founding partners of NWB2B include the Portland Development Commission, the Pacific Northwest Defense Coalition, Impact Washington, OMEP, Business Oregon, and Portland Made. (<https://britehub.com/partnerships/nwb2b>)

- 2.1.3.4. Brand and promote the North Florida Manufacturing, Logistics, and Distribution Corridor along I-10 from Pensacola to Jacksonville to leverage the region’s access to Interstates 75 and 95. Work as a super region to drive legislative policy to make it easier for these targeted sectors to do business in North Florida.
- 2.1.3.5. Provide technical assistance, technology acquisition, and financial support to assist manufacturers transition from traditional production into more advanced upstream (e.g., research and development or design) and downstream segments (repair and maintenance or sales) of the manufacturing value chain. Research conducted by the Brookings Institute indicates that while employment in the manufacturing value chain decreased by 4 million workers between 2002 and 2010, the bulk of employment declines within the sector were concentrated in production facilities. Conversely, employment in upstream services expanded 26 percent for market analysis, 13 percent for research and development, and 23 percent for design and technical services.<sup>8</sup>

**2.2. Create industry sector councils to ensure the critical workforce and business competitiveness needs of each sector are addressed. (High Priority, Short Term)**

Hiring and training needs vary greatly by industry. Research of best practices for skills gap solutions revealed that the most successful were organized around industry sectors. Sectors identified and rallied around shortages or training needs in specific occupations and/or skills. They pulled together resources to better communicate their common needs and to offer solutions. Employers across sectors may not share common gaps and therefore would be less likely to work together to solve workforce problems. Also, addressing workforce issues by using existing sector organizations (previously organized to address other challenges such as environmental, regulatory, taxation, infrastructure, etc.) can reduce duplication of efforts and be more efficient.

The primary purpose of the sector councils is to identify each industry’s critical occupations and ensure that the region’s training programs and capacity can meet the demand for workers in those critical areas. They should coordinate directly with the Talent Council to ensure alignment and ability to leverage support. In addition, sector councils must also support and participate in industry-specific awareness initiatives to generate interest in careers in the critical occupations. Finally, sector councils must serve as advocates for improving business competitiveness issues specific to their industries.

- 2.2.1. Bring together primary decision makers in Northwest Florida’s key economic drivers and target industries to assess talent and business competitiveness needs.
- 2.2.2. Identify critical occupations and skills and quantify demand through employer surveys.
- 2.2.3. For critical occupations and skills that are shared across sectors, create a multi-sectoral group that could engage a wider community of employers.
- 2.2.4. Continue to update and expand the regional training inventory to meet the needs of those critical occupations through the training provider survey.
- 2.2.5. Determine if relevant curricula are teaching students the critical skills they need.
- 2.2.6. Work with educational institutions and training providers to define career pathways related to critical occupations.
- 2.2.7. Launch awareness initiatives to drive students/workers into training programs.

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<sup>8</sup> “Innovation and manufacturing labor: a value-chain perspective” Katie S. Whitefoot and Walter D. Valdivia. Center for Technology Innovation at Brookings. March 2015.

- 2.2.8. Monitor the needs of other industries and facilitate the launch of new councils as needed.
- 2.2.9. Work with regional CareerSource organizations to utilize data captured from military talent pipeline surveys to benefit employers in each sector and translate military occupations and skills to civilian sector career opportunities.

**2.3. Market and promote Northwest Florida as a destination for new investment and employment. (Medium Priority, Short Term)**

To compete for new business investment, Northwest Florida must increase its visibility among its target markets (Aerospace and Defense, Financial Services, Water Transportation, Advanced Manufacturing, and Cybersecurity).

- 2.3.1. Engage in a coordinated business attraction and marketing campaign with other local and regional economic development organizations.
  - 2.3.1.1. Provide data and information developed for Northwest Florida Forward to local and regional partners, especially the individual county profiles and the regional target industry profiles.
  - 2.3.1.2. Develop a package of regional marketing materials that highlight the unique assets of each county.
  - 2.3.1.3. Continue supporting Opportunity Florida's marketing efforts to promote rural Northwest Florida and coordinate those with FGNW's activities.
  - 2.3.1.4. Schedule economic development marketing pieces, such as email newsletters, to coincide with recent business attraction, retention, expansion, and creation success stories. Also, highlight successes around education/training programs, infrastructure developments, and quality of place enhancements.
  - 2.3.1.5. Leverage the Digital Ambassadors Network (1.4.4) and develop a coordinated effort to highlight targeted industry success stories to generate awareness and interest among out of state targeted business executives and site location consultants.
- 2.3.2. Cultivate relationships and networks with business executives for the recruitment of new businesses to Northwest Florida, especially in target clusters and sectors.
  - 2.3.2.1. Compile and maintain resource information for each target market cluster and key subsectors. This includes identifying trade and industry associations for each sector as well as following industry trends by monitoring trade publications or purchasing industry data and reports from private sources. This should also include a listing of existing companies in the region in each target industry. *(The Target Industry Profiles provide industry intelligence, including trade associations, for each of the sectors.)*
  - 2.3.2.2. Join and participate in trade or industry associations for the priority target sectors.
  - 2.3.2.3. Conduct domestic call trips/marketing missions to meet with company executives in regions where each target industry concentration is the highest.
- 2.3.3. Continue building awareness of Northwest Florida as a destination for investment among site selection consultants.
  - 2.3.3.1. Call on site consultants in targeted metropolitan areas, particularly the Atlanta metro area. Utilize a site selection database to identify targets and periodically set appointments to discuss the Northwest Florida market and development opportunities.
  - 2.3.3.2. Continue maintaining and updating information typically of interest to commercial and industrial site selectors on the FGNW website.

- 2.3.3.3. Periodically host events in Northwest Florida that showcase specific assets, such as available land and buildings or new projects.
- 2.3.4. Maintain database of company expansion/relations for tracking and marketing purposes.
- 2.3.5. Promote the region for new foreign direct investment. Due to the expense and complexity of international marketing, the region will most likely rely on leads generated by Enterprise Florida or through cooperative efforts with other regional organizations such as the Aerospace Alliance. However, regional and local economic development organizations can generate foreign direct investment leads and opportunities by working with existing companies and individuals with international relationships/connections.
  - 2.3.5.1. Identify individuals and organizations from the international community residing or working in Northwest Florida that could assist in marketing and recruitment efforts.
  - 2.3.5.2. Leverage the existing international connections of exporters and foreign-owned companies within the region. Within Business Retention and Expansion questionnaires/surveys, include a section addressing international trade, supplier, and investment linkages. Ask if companies would be willing to assist in the region’s international recruitment efforts.
  - 2.3.5.3. Leverage university/college relationships with foreign institutions and students.
  - 2.3.5.4. Build a regional international business alliance comprised of companies with international operations, foreign ownership, or trade relations.
  - 2.3.5.5. Strategically attend international industry events and trade shows in target markets, especially in Aerospace and Defense.
  - 2.3.5.6. Develop marketing materials to show benefits of a Northwest Florida location to international companies.
- 2.3.6. Build and maintain relationships with state economic development organizations, including Enterprise Florida, to ensure Northwest Florida remains top of mind for prospect leads. FGNW receives many of its prospect investment leads from Enterprise Florida. Maintaining strong relationships and lines of communication with Enterprise Florida and other state economic development agencies is important to sustaining that pipeline. It also requires keeping state economic development officials aware of new development opportunities in the region.

**2.4. Increase shared Business Retention and Expansion (BRE) activities throughout the region. (Medium Priority, Medium Term)**

A vibrant BRE program is the cornerstone of any economic development program. A BRE program helps to identify barriers that local businesses face, particularly during difficult times. BRE programs can also reveal existing businesses that need assistance in expanding investment and employment. Ensuring the long-term success of existing companies also aids business attraction, as firms considering moving will often talk to existing firms in the community. Many of the local economic development programs in the region operate their own BRE program. Regional economic development organizations such as FGNW and Opportunity Florida should assist local economic developers, if requested, with coordinating BRE activities regionally. Greater regional cooperation will help to facilitate the most innovative solutions and services to regional businesses.

- 2.4.1. Local and county economic development organizations should engage regional partners to assist in BRE support and visits with companies within the region’s target industry clusters.
- 2.4.2. Identify local businesses to gain competitive intelligence across the region on how we can help existing companies grow and remove common barriers for business across the region.
- 2.4.3. Encourage education on trade and exporting opportunities.

**2.5. Expand and leverage tourism to support industry attraction. (Medium Priority, Short Term)**

Expanding the region’s important Tourism sector also presents opportunities to diversify the economy. Northwest Florida’s well-known beaches are exceptional assets for industry and talent-attraction marketing. The region has an exceptional platform from which to engage visitors—whether in the region for business or pleasure—in a conversation about the benefits of doing business in Northwest Florida. Conferences and meetings hosted locally are also an excellent opportunity to engage talented professionals in a conversation about how they can pursue their careers, start a company, or relocate an existing business to the region.

**2.5.1. Establish a conference and meeting strategy linked to target sector opportunities.**

**2.5.1.1.** Identify a complementary theme for tourism attraction, business recruitment, and talent attraction.

**2.5.1.2.** Local and regional economic development organizations should work with the local CVBs to tie their conference and meeting strategy to targeted occupations, groups, and industries.

- In the Charleston, SC region, the Charleston Area CVB and the Charleston Regional Development Alliance (CRDA) have developed a strong collaborative partnership. Both organizations work to align messaging and audience focus. The CVB works to attract target cluster industry events to the region and invites the CRDA to have a visible presence.

**2.5.1.3.** Identify industry associations within each target industry and encourage them to consider Northwest Florida as a destination for annual events and meetings. *(See examples of relevant events/trade shows in “Target Industry Intelligence” section of Target Industries.)*

**2.5.1.4.** Coordinate with local EDOs the targeting of specific businesses and organizations holding conferences and symposia in the region.

**2.5.1.5.** Create a brief profile and coherent and coordinated marketing message to assist local economic developers in promoting Northwest Florida’s competitive advantages.

**2.5.2. Leverage tourism assets to get business marketing messages out.**

**2.5.2.1.** Prominently display positive information about the region’s economy and business climate at key visitor destinations (e.g., commercial airports, hotels, CVBs).

**2.5.2.2.** Encourage first points of contact to communicate positive messages about the region’s business advantages to visitors. Provide educational materials and talking points on the region’s economy to first points of contact.

**POTENTIAL SOURCES OF FEDERAL FUNDING TO SUPPORT TOURISM INFRASTRUCTURE**

- Federal Highway Administration’s Transportation Enhancements Funding, National Scenic Byways Grants, and Recreational Trails Program Grants
- Economic Development Administration’s Public Works and Economic Development Initiative
- U.S. Fish and Wildlife Service’s National Wildlife Refuge System "Preserve America" Grant Program
- National Endowment for the Humanities Preservation and Access Grants for Stabilizing Humanities Collections, Historical and Cultural Organizations Planning Grants and Implementation Grants, and We the People Challenge Grants in United States History, Institutions, and Culture
- National Park Service Preserve America Grants
- National Park Service and National Endowment for the Arts Save America's Treasures Grants

- 2.5.2.3. Work with tourism partners to learn more about the visitors traveling to the region on business, including information on the businesses they own or represent and the transportation routes used to get to the region.
- 2.5.3. Diversify and expand the Tourism sector to capitalize on the region’s historical, cultural, heritage, scenic, ecological, sports, and recreational assets, including those north of I-10.
  - 2.5.3.1. Build upon existing efforts to maintain a “trail and destination” guide that captures all the major outdoor recreation, adventure, scenic, historical, and cultural assets in the region.
  - 2.5.3.2. Work in conjunction with the UWF Historic Trust, the African American Heritage Society, and other organizations to identify underutilized historical and heritage assets that may need investment and/or additional marketing.
  - 2.5.3.3. Pursue federal and foundation grants to support the region’s tourism infrastructure needs. Potential federal funding programs are listed in the text box on the previous page.

**APALACHEE REGIONAL REVOLVING LOAN FUND (ARRLF)**

The Apalachee Regional Revolving Loan Fund (ARRLF) was established through a grant from the U.S. Economic Development Administration in 1984 to the Apalachee Regional Planning Council (ARPC). The ARRLF provides “gap” financing to small business startups, expansions, or relocations that include the creation and/or retention of jobs. The average size of an RLF loan is \$25,000. Potential borrowers must have received one letter or other documentation of denial for either partial or full funding from a traditional lending institution and also be located in the Apalachee Region.

(<http://www.thearpc.com>)

**2.6. Support the growth of microenterprises and small businesses in the region, particularly in rural areas and minority communities. (High Priority, Short Term)**

In addition to fostering fast growth entrepreneurship in the region, regional economic development partners must also support traditional small businesses and microenterprises. There are some basic characteristics that differentiate small businesses/microenterprises from entrepreneurial companies.

- **Small businesses** typically provide services locally or in some cases export their goods and services and employ fewer than 100 people. Examples include professional service firms, specialized manufacturing, and retail amenities.
- **Microenterprises** are often service oriented individual/family-owned businesses with no immediate expectation of expansion. They often do not qualify for bank loans and have limited space or lease requirements. Examples include home-based businesses, family-owned dry cleaners, and restaurants.
- **Entrepreneurial companies** tend to be capital intensive, IP dependent, technology driven, and export oriented. Examples include innovative tech companies serving national markets or bioscience companies creating new drug therapies.

Successfully supporting each of these three categories of businesses requires differing sets of strategies. Strategies for fostering entrepreneurial companies are detailed in Goal 4.

- 2.6.1. Review and catalog small business support at the city and county levels. Develop programs to fill gaps. Publicize resources available to small businesses through cities, chambers, economic development organizations, and community organizations.
- 2.6.2. Fully leverage and promote existing Small Business Development Center (SBDC) programs and investments in the region.
- 2.6.3. Establish additional regional revolving loan funds to provide “gap” financing to small business startups, expansions, or relocations. The text box above describes the revolving loan fund operated by the Apalachee

Regional Planning Council, which was seeded by a grant from the U.S. Economic Development Administration (EDA).

**2.6.3.1.** Pursue additional grants from the EDA to seed the fund.

- The Florida Department of Economic Opportunity operates a rural revolving loan program that provides long-term loans, loan guarantees, and loan loss reserves to eligible applicants (a unit of local government in a rural county or an economic development organization substantially underwritten by a unit of local government within a rural county).

**2.6.4.** Work with nonprofits, especially in disadvantaged neighborhoods in the region, to identify specific growth opportunities in retail and services to expand the number of microenterprises.

- The City of Richmond, Virginia is an example of a community that actively supports and invests resources in neighborhood revitalization, especially in historic commercial corridors.

**2.6.5.** Establish a program to promote enhanced participation of minority contractors and vendors in contracting opportunities. The program should address licensing fees, training, fostering joint venture opportunities, and promotion and marketing.

**2.7. Streamline government processes across the region to help business start-ups, expansions, and relocations get up and running quickly. (High Priority, Short Term)**

Encourage local and county governments to continually review and enhance local permitting, licensing, zoning, and other business and development regulations.

**2.8. Market Northwest Florida as an investment location to full- or part-time residents who own a business or work outside of the region. (Medium Priority, Medium Term)**

Prime business recruitment targets for regional economic development organizations may already reside within the region. Parts of the region, especially its coastal communities, are home to high net worth individuals who reside in the region but own businesses or work elsewhere. For example, there is a growing number of residents who work in Tallahassee but live or summer in rural coastal communities. Regional economic developers should initiate internal marketing campaigns that target these individuals and seek to convince them to relocate their outside businesses to the region. This strategy can partially be accomplished through a local media campaign that utilizes radio, print, and social media. It will also require identifying specific individuals through regional networking and initiating in-person meetings.

**TEN PRINCIPLES FOR REBUILDING NEIGHBORHOOD RETAIL**

The Urban Land Institute published a report in 2003 that describes 10 broad principles for rebuilding neighborhood retail streets.

1. Great Streets Need Great Champions
2. It Takes a Vision
3. Think Residential
4. Honor the Pedestrian
5. Parking Is Power
6. Merchandise and Lease Proactively
7. Make It Happen
8. Be Clean, Safe, and Friendly
9. Extend Day into Night
10. Manage for Change

### GOAL 3. INFRASTRUCTURE

ENSURE THAT NORTHWEST FLORIDA’S ECONOMIC INFRASTRUCTURE IS STATE OF THE ART AND CONNECTS COMMUNITIES IN EVERY PART OF THE REGION.

A regional economy is significantly impacted by the quality of the public infrastructure that supports it. First-class infrastructure is essential for retaining existing employers and residents and for competing for new investment. Regional infrastructure systems, especially the transportation network, must reach every area that can support economic development – from industrial and commercial sites to vibrant urban centers and to the rural areas that link to sites and cities.

The quality and the reach of a region’s infrastructure system, especially its transportation network, is critical in a region such as Northwest Florida that is experiencing uneven population growth. The population of the region’s largest five counties has grown by 8.0% from 2010-2015, which exceeds Florida’s 7.8% growth. The infrastructure in many areas of these counties, especially the transportation network, is under significant pressure. Conversely, the population of the region’s smallest eight counties has declined by 0.7% from 2010-2015. The long-term economic survival of these counties depends on having crucial infrastructure in place to accommodate new investment and employment, especially sites and buildings.

Overall, Northwest Florida’s infrastructure is generally positive. The region is traversed by I-10, which extends from east coast (Jacksonville) to the west coast (Los Angeles). It is also home to three high quality commercial airports and three deepwater/barge ports. CSX owns a major east-west rail line that runs parallel to I-10 and is intersected by several short-line railroads that connect to the region’s deepwater ports and Norfolk-Southern rail lines. Northwest Florida is also well served by utilities, which provides the region with reliable and competitive electricity service.

However, like most locations, there are improvements that can work to enhance regional economic growth. Transportation and mobility emerged as one consistent concern stakeholders expressed when asked about economic development challenges. Many cited inadequate north-south road infrastructure connecting affordable workforce housing north and along I-10 to coastal employment centers. Many of the northern and outlying rural communities also have limited connectivity to I-10. The region also suffers from competitive disadvantage in the number of first-class shovel-ready industrial sites and buildings.

### STRATEGIES & ACTIONS

#### 3.1. Use the Regional Planning Councils to address shared infrastructure needs and other economic development issues. (High Priority, Short Term)

The Regional Planning Councils (RPC), which are comprised of local elected officials, should be utilized to more effectively and collectively address issues of regional significance. The RPCs are a platform for regional officials to network, learn, and organize action on issues that affect regional economic competitiveness. An obvious issue of regional significance is infrastructure investment. Regional Planning Councils should continue to become a strong unified voice in advocating to state and federal agencies for infrastructure funding needs.

**3.1.1.** The West Florida and Apalachee Regional Planning Councils will directly support the implementation of the Northwest Florida Forward regional strategy with the development and implementation of regional Comprehensive Economic Development Strategy (CEDS).

#### APALACHEE REGIONAL PLANNING COUNCIL (ARPC) AND WEST FLORIDA REGIONAL PLANNING COUNCIL (WFRPC)

The ARPC and WFRPC are the two Regional Planning Councils that encompass the entire panhandle region of Florida. These entities are created by state statute to provide technical assistance, planning, grants, and other various functions for the benefit of local governments. Both RPCs have a diverse list of services that greatly benefit the communities of Northwest Florida. The boards of the RPC’s are comprised of local elected officials – both city and county – as well as various developers and economic development professionals. RPCs play a vital role in the implementation of infrastructure projects.

- 3.1.2. The Regional Planning Councils should serve as a champion for specific regional economic development and infrastructure initiatives and work across jurisdictions to ensure they have the greatest regional impact.
- 3.1.3. Florida’s Great Northwest and the Regional Planning Councils (ARPC and WFRPC) boards should meet at least annually to create the Panhandle Forum to discuss large regional issues and reevaluate/update the regional CEDS process.
- 3.1.4. Explore the use of regional revenue sharing models to support regional economic development and infrastructure projects in Northwest Florida. Revenue sharing involves pooling a portion of the new growth in a community’s tax base and then distributing the pool back to the participating communities through a formula that reduces tax base disparities. It has been successfully utilized in other regions of the U.S. to bolster regional economic development. Examples of successful regional revenue sharing programs include:
  - *Twin Cities Fiscal Disparity Program (Minneapolis/St. Paul, Minnesota)*: In operation since 1971, the program encompasses seven counties and many taxing jurisdictions. Contributions to the regional revenue sharing pool are based on growth in commercial and industrial property tax. (<https://metro council.org/Communities/Planning/Local-Planning-Assistance/Fiscal-Disparities.aspx>)
  - *Allegheny Regional Asset District (Pittsburgh, Pennsylvania Region)*: The program seeks to promote economic development and improvement in equity across political jurisdictions with specific attention to core cities. Tax revenues are divided three ways: 50% support regional cultural and recreational assets, 25% goes to county government, and 25% is shared with municipal governments. (<http://radworkshere.org/>)
  - *Montgomery County ED/GE Program (Dayton, Ohio Region)*: This program has two components – an economic development component in which 70 percent of the funds are distributed through a grant process back to participating communities and a government equity fund, which uses more sophisticated formulas to distribute funds and ensure greater equity among jurisdictions. ([www.mcoho.org/departments/economic\\_development/ed\\_ge\\_program.php](http://www.mcoho.org/departments/economic_development/ed_ge_program.php))
- 3.1.5. Bring the Transportation Planning Organizations (TPOs), Regional Planning Councils, and FG NW together in the region together for strategic discussions.

**3.2. Develop sites to accommodate business expansions and relocations (industrial, flex, commercial, tech). (High Priority, Short Term)**

If the region is to be successful in attracting and growing its business investment and employment, it must broaden its supply of certified industrial sites and buildings.

- 3.2.1. Engage a geospatial consulting firm to conduct a land suitability assessment in Northwest Florida for locating new industrial and commercial parks.
- 3.2.2. Raise awareness of the Florida’s First Sites Program. This site certification program offers project-ready industrial sites with the due diligence complete to minimize risk and accelerate speed to market. At present, the First Sites Program has identified and certified nine sites as project-ready industrial sites.
- 3.2.3. Explore options for developing shared regional industrial parks that serve multiple counties in the region. The State of Kentucky has established a

**KENTUCKY REGIONAL INDUSTRIAL PARK PROGRAM**

The Kentucky Local Government Economic Development Fund (LGEDF) provides grants of coal severance tax revenues to assist counties in enhancing existing businesses and securing new industries. Coal producing counties receive an allotment of LGEDF funds for use only in the county, while another portion of LGEDF funding is dedicated to regional projects. LGEDF supplies funding for the Regional Industrial Park Program, which has established several regional industrial parks across Kentucky. The goal of the program is to develop large regional industrial sites in a cost-effective way without regard to county boundaries that will result in greater development and more job opportunities for the larger region. Each county that participates in a regional industrial park shares in the tax revenues generated by the park.

regional industrial park program that allows each county that participates in a regional industrial park to share in tax revenues generated by the park. (See the text box on the previous page.)

**3.3. Support the development of industrial megasites, with a deliberate focus on rural areas of the region. (Medium Priority, Long Term)**

To provide a significant economic boost and to help reverse the loss of population and workforce in the rural communities of the region, catalyst megasite projects able to accommodate significant industrial employers should be identified and developed.

- 3.3.1.** Continue working with state and regional partners in Florida and Alabama to develop the proposed Florida-Alabama Mega Site in Jackson County. The 2,240-acre site is being marketed for a large auto manufacturing facility. If such a facility were successfully attracted to the site, it would obviously have a transformational impact on the region.
- 3.3.2.** Support the efforts of the public/private partnership to develop the “The Bluffs – Northwest Florida’s Industrial Campus” in Escambia County that is envisioned to become a world-class site for new manufacturing that could accommodate as many as 60 industrial tenants and create more than 15,000 new jobs. Partners in the effort include the Pensacola-Escambia County Development Commission, the University of West Florida, Gulf Power, Ascend, Emerald Coast Utilities Authority, the Florida West Economic Alliance, and the Florida Department of Economic Opportunity.
- 3.3.3.** Explore other promising industrial megasites, such as Shoal River Ranch in Okaloosa County, that are located near interstates, ports, airports, and rail.

**3.4. Ensure that the necessary infrastructure improvements to ports and airports to accommodate new private investment and employment are funded and completed. (High Priority, Long Term)**

For example, the Port of Port St. Joe is a state-designated deepwater port in St. Joseph Bay. The Port is adjacent to more than 5,000 acres of undeveloped land and offers unique industrial and transportation logistics development potential due surrounding developable land. Identified infrastructure needs to make the port more competitive include dredging the ship channel up to 37 feet and making improvements to the Apalachicola Northern Railway (AN Railway). Ensuring projects like this are funded and completed is crucial to the ports future development prospects.

In addition, Port Panama City is also in the process of making infrastructure improvements to facilitate the expansion into new markets. The Port is investing \$30 million in a new forest products terminal on a 41-one acre site adjacent to the WestRock paper mill, acquiring 42 acres of land, a dock, and thousands of acres of square footage in warehouse space. The improvements include a 250,000-square foot warehouse, a 40-car railyard, and a 920-foot ship berth with 36 feet of water depth. The Port’s long-term development plans include a second ship berth, additional warehouse space, and up to 30 acres of open storage space.

**NORTHWEST FLORIDA TRANSPORTATION CORRIDOR AUTHORITY 2013 MASTER PLAN**  
 TOP 10 RANKED SHORT-TERM PROJECTS (5-YR. NEEDS)

Destin Cross Town Connector
Airport Connector
SR 292 (Segment 2)
SR 292 (Gulf Beach Highway)
SR 87 Connector
SR 390
SR 292 (Segment 1)
West Bay Parkway (Segment 1)
CR 388 (Segment 2)
PJ Adams Parkway / Antioch Rd (Crestview Bypass)

Source: Northwest Florida Transp. Corridor Authority 2013 Master Plan

**3.5. Continue advocating for state and federal funding for improving the region’s road infrastructure and explore new options to improve transportation mobility. (Medium Priority, Short Term)**

For the region to keep growing, it must continue to improve and expand its road infrastructure. The need for improved mobility options and expanded access to key economic centers was one of the most consistently cited challenges by regional stakeholders. For example, improving mobility along U.S. Highway 98 for commercial traffic, especially in summer months during the height of tourism season, is of particular need. In addition, some outlying rural areas would benefit from enhanced access to I-10, especially those seeking to attract industrial employers to their business parks.

- 3.5.1.** Utilize the Regional Planning Councils to present a unified voice to advocate for funding highway transportation projects of regional significance.
- 3.5.2.** Strengthen the business community’s involvement in advocating to state leaders for transportation infrastructure funding.
- 3.5.1.** Continue implementing the Northwest Florida Transportation Corridor Authority 2013 Master Plan. The top 10 short-term investment needs identified in the master plan are identified in the adjoining table.
- 3.5.2.** Organize a regional mobility summit and invite transportation planning experts to share innovative approaches to regional mobility undertaken and offer suggestions for Northwest Florida.

**3.6. Continue efforts to expand broadband infrastructure and adoption in rural and underserved areas of the region. (Medium Priority, Long Term)**

Broadband is widely regarded as essential infrastructure needed to support commercial and entrepreneurial activity. However, for many rural and underserved areas of the country, access to and adoption of broadband is a significant challenge. Deploying broadband infrastructure to rural and lightly populated areas is costly. Lower adoption and utilization rates of broadband technologies in these areas further limits the market viability of private sector investment in broadband infrastructure. These challenges are also present in Northwest Florida’s rural and underserved areas. The struggles of the Florida Rural Broadband Alliance demonstrate this. Nevertheless, the region must continue to expand broadband infrastructure and utilization to all parts of Northwest Florida.

- The Oregon Business Development Department produced a report for the Oregon Legislature in 2016 that presents a summary of national strategies to expand broadband infrastructure and promote the adoption and utilization of broadband technologies in rural cities and counties for community and economic development.<sup>9</sup> Regional stakeholders should examine this report and others to determine if new approaches are available to enhance Northwest Florida’s broadband infrastructure.

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<sup>9</sup> <http://www.orinfrastructure.org/Infrastructure-Programs/Telecommunications/OBAC/Reports/RuralBbStrategiesRpt16.pdf>

## GOAL 4. ENTREPRENEURSHIP AND INNOVATION

### FOSTER ROBUST ENTREPRENEURSHIP AND INNOVATION ECOSYSTEMS TO DRIVE FUTURE ECONOMIC GROWTH.

Initiatives focused on entrepreneurship and innovation have become high priorities among economic development organizations. Unfortunately, these ideas are often unconnected to the realities of business growth. In addition, there are important distinctions to be made between entrepreneurship and innovation. While often linked, they are not the same. Some communities are home to highly innovative and creative people and firms, especially where there is a research institution or a major corporation. These communities, however, may not foster a strong entrepreneurial culture. Other places have a vibrant entrepreneurial spirit where new business formation and risk taking are part of the cultural fabric. In some places, these ecosystems overlap and nurture each other, making for the most dynamic of economies. The challenge for Northwest Florida, which has elements of both ecosystems, is developing both in tandem and merging them into a cohesive and connected network.

### STRATEGIES & ACTIONS

#### 4.1. Develop the region's entrepreneurial hubs and connect them with industry clusters, assets, services, networks, facilities, tools, and expertise. (High Priority, Medium Term)

Comprehensive services and support are vital to catalyzing entrepreneurship and innovation. This is particularly important for a region like Northwest Florida, which lacks a deep pool of serial entrepreneurs. In effect, a robust system will have to be built from the ground up. Establishing functional centers for entrepreneurs and innovators is essential. Discrete support activities, programs, and facilities must be coordinated and co-located to create critical mass.

At present, there are three hubs of entrepreneurship and innovation in the region. Pensacola is home to the most diverse and mature entrepreneurial community. A recent asset inventory conducted by UWF identified over 30 organizations and events located in Pensacola, including Innovation Coast, UWF's Division of Research and Strategic Innovation, UWF's Center for Entrepreneurship, Florida West EDA's Center for Innovation and Entrepreneurship, the cowork @nnex, the Florida SBDC, and the Young Entrepreneurs Academy Pensacola, among others. Pensacola is also home to a world-class innovation asset – the Institute for Human Machine Cognition (IHMC), which is pioneering cutting edge technologies aimed at leveraging and extending human capabilities. The Pensacola hub can also have a strong industry focus on Information Technology and Cybersecurity.

The Panama City area is another center of activity in the region. Assets include the Jim Moran Institute for Global Entrepreneurship at Florida State University Panama City, the Business Innovation Center, the Millaway Institute for Entrepreneurship located within Gulf Coast State College's Advanced Technology Center, TechFarms (incubator), and TechFarms Capital Management, which is an early-stage angel capital firm targeting innovative tech start-ups in the Southeastern U.S. and Northwest Florida. The FSU Panama City Coastal and Marine Laboratory is one of the area's top research and innovation assets. The Information Technology, Water Transportation, and Advanced Manufacturing sectors are promising targeted industry clusters for entrepreneurial activity.

The third regional hub is concentrated near Ft. Walton Beach. While smaller than the other hubs, the Fort Walton Beach area is home to a high number of Aerospace and Defense firms. Indeed, the county is home to one of the largest concentrations of aerospace engineers in the nation. The Doolittle Institute is dedicated to enhancing the region's innovation ecosystem through technology transfer and commercialization initiatives connected to the Air Force Research Lab, STEM outreach, and workforce development. Venture Hive, supports the entrepreneurial ecosystem with a program focused on assisting veteran-owned startups. Similarly, the Technology Coast Manufacturing and Engineering Network (TeCMEN) was established in Okaloosa County to be the premier business advocate for STEM industries and to provide opportunities for innovative collaboration. Assisting Aerospace and Defense sector start-ups should be a focus of the Fort Walton Beach hub.

As regional entrepreneurial activities begin to expand and deal flow is increased, additional entrepreneurial hubs that focus on other industry clusters can be created to meet demand for entrepreneurial services in other counties. Likewise, entrepreneurial assets can be expanded to support rural entrepreneurial growth.

Regardless of their industry focus, all entrepreneurship hubs should offer similar programs and services. Entrepreneurs typically need management expertise, capital, and professional support services to conduct due diligence and identify markets. Some may need access to specialized facilities and expertise to help solve technical challenges. All will need access to talent in order to fill key positions.

**4.1.1.** Expand the Northwest Florida Entrepreneurial Support Coalition into a formalized region-wide network of entrepreneurship and innovation service providers and experts representing each of the three hubs. Identify common strengths and gaps and ways to connect resources.

- The regional FASTER web portal and entrepreneurship asset map developed by the Coalition is a good starting point.

**4.2. Establish commercialization tools and programs connected to the region’s national security research and technology assets. (High Priority, Medium Term)**

Some of the region’s most important innovation assets are directly tied to the U.S. military and to national security installations and facilities. These assets represent unique opportunities to convert defense R&D activities into civilian commercial technologies and new business start-ups. Transferring that technology and successfully commercializing it for the civilian market, however, has proven difficult. Bridging that gap requires specialized assistance with (among many other areas):

- market analysis;
- product development (including optimizing engineering to meet market price points); and
- financial due diligence.

Technology transfer is one of the key services the Doolittle Institute provides. There are other successful models for supporting military technology transfer and commercialization, including the Dayton Technology Acceleration Project described in the accompanying text box.

**4.2.1.** Work with the Doolittle Institute, UWF, FSU Panama City, Florida Institute for Commercialization and other entrepreneurship and innovation partners to ensure the necessary tools and programs are available in the region to transfer and commercialize research and technology.

**DAYTON TECHNOLOGY ACCELERATION PROJECT**

The Technology Acceleration Project (TAP) is The Entrepreneur Center’s (TEC) pilot project designed to transfer technology from research to market. Sponsored by the Air Force Research Laboratory (AFRL) and partnering with Wright Brothers Institute and the Commercialization Academy, TEC TAP is creating two parallel initiatives: Start-Up TAP and SBIR TAP.

The goal of TEC TAP is to provide a model that allows entrepreneurs to TAP AFRL technology. Technology that was developed to address AFRL research needs can be solutions to real business needs or consumer demand. To tap into this opportunity, existing SBIR companies are invited to participate through SBIR TAP and students attending universities in any major are invited to participate through Start-Up TAP.

SBIR TAP assembles companies that have received Small Business Innovation Research (SBIR) grants from the federal government and identifies promising SBIR Technology that has not been brought to market or has not been developed for a commercial market. Start-Up TAP assembles student groups from local colleges and universities to work with the technology experts and community business mentors to evaluate the technology and complete an extensive market assessment. ([www.tec-tap.com](http://www.tec-tap.com))

**4.3. Increase access to capital for Northwest Florida entrepreneurs and develop a formal mechanism to access funds. (High Priority, Short Term)**

Access to capital remains a primary barrier to entrepreneurship in Northwest Florida, especially (but not exclusively) for start-up ventures. This, however, is not a challenge exclusive to Northwest Florida. Entrepreneurs in many regions located outside of major tech centers have traditionally lacked local access to high-risk startup capital. Over the last 20 years, organized angel networks have emerged as an important source of funding for startup capital. Today, there are about 400 active angel groups in the United States. Their importance to entrepreneurial success rates are measurable. One 2014 study found that startups that received angel funding were 20 to 25 percent more likely to survive after four years and 16 to 19 percent more likely to have grown to 75 employees.<sup>10</sup> )

Local (typically angel) investment funds are created to function the way a real estate investment trust (REIT) does. They are (1) professionally managed, (2) designed to benefit a specific defined geographic area, and (3) reinvestment-oriented. The Central Texas Angel Network is a successful example of this model.

In Northwest Florida, the TechFarms Capital Management angel fund is targeting early stage investment opportunities in Alabama, Georgia, and Florida. A second TechFarms angel fund is being formed to target tech startups in Northwest Florida. (techfarmscapital.com). Regional economic development and local government partners should support the success of TechFarms and other locally-formed angel networks by actively encouraging experienced entrepreneurs, institutional investors, and high net worth individuals to consider investing in the Northwest Florida Startup community.

- 4.3.1. Support the formation of angel networks focused on providing startup capital to regional entrepreneurs.
- 4.3.2. Work with regional investors to establish a seed fund for pre-angel investment rounds.
- 4.3.3. Work with other angel networks in Florida and surrounding states to form a syndication network to improve deal flow for Northwest Florida companies and investors.
- 4.3.4. To address the capital needs of non-tech firms in targeted clusters, a regional working capital (debt) fund should be created.

**4.4. Encourage local entrepreneurs and innovators to tap into federal funding in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants. (Medium Priority, Medium Term)**

Federal SBIR/STTR grant awards are an important source of funding for innovative companies throughout the U.S. Encouraging and assisting businesses to pursue SBIR/STTR funding can be an important tool for enhancing the region’s innovation ecosystem.

- 4.4.1. Improve awareness of these grant programs among regional business community.
- 4.4.2. Provide training and assistance to companies on how to apply for SBIR/STTR awards.
- 4.4.3. Consider targeting companies in other regions that have received SBIR and STTR grants and providing incentives to expand/relocate in Northwest Florida. Targeting companies that have received federal SBIR/STTR

**CENTRAL TEXAS ANGEL NETWORK**

The Central Texas Angel Network (CTAN) was founded in 2006 as an independent nonprofit organization by local investors and community leaders with support from the Greater Austin Chamber of Commerce. CTAN provides funding from \$200,000 to \$2 million through its network of SEC accredited investors. Each of its investors pay a membership fee to encourage only serious investors to join. The executive director of CTAN carefully screens deals to ensure that high quality, investment-ready deals are presented to the network. In addition, CTAN has created a larger network of other angel investment networks in the state of Texas that it can syndicate its deals to and vice versa. (www.centraltexasangelnetwork.com)

<sup>10</sup> Kerr, W.R., J. Lerner, and A. Schoar. “The Consequences of Entrepreneurial Finance: Evidence from Angel Financings.” Review of Financial Studies 27, no. 1 (January 1, 2014): 20-55.

awards allows for focused recruitment of potential high-growth companies with products/technologies in development and receiving federal research funding. The U.S. Small Business Administration’s (SBA) Office of Technology administers the SBIR/Program. Data on specific companies that have received awards are publicly available on [www.sbir.gov](http://www.sbir.gov) (e.g., type of project, award info, address, contact info, etc.).

**4.5. Promote rural entrepreneurship. (Medium Priority, Medium Term)**

Building an entrepreneurship ecosystem should not be an effort exclusive to the three identified hubs. This is also an important strategy for rural communities in the region. As recruitment prospects for rural areas continue to decline across the country, many regions have turned to building the local economy by serving the needs of community-based start-ups and entrepreneurs.

The Washington State Department of Commerce has developed an innovative program called Growing Rural Economies that provides five services crucial to fostering rural entrepreneurship:

- access to capital
- networking
- mentorship
- technical assistance
- education and training

Details of the Washington program can be found at (<http://startup.choosewashingtonstate.com/>).

**4.6. Market regional entrepreneurial success stories. (Medium Priority, Short Term)**

An important component of building an entrepreneurial culture is making residents aware of how entrepreneurship can help to drive the regional economy. This message is best communicated by raising awareness of business success stories, both internally and in target markets. For example, a Florida State University Panama City alumnus was recently presented with the Governor’s Young Entrepreneur Award. Highlighting such stories will encourage prospective entrepreneurs to consider starting their businesses locally and not only in major metropolitan areas. They will help convince outside entrepreneurs and investors that Northwest Florida is a region where ambitious companies can succeed.

- 4.6.1.** Earn media placement in local media outlets (TV, print, radio stations, etc.) to highlight success stories of local startups and entrepreneurs.
- 4.6.2.** Aggressively utilize social media to publicize successes. Utilize local digital ambassadors to share local entrepreneurial success stories through their social network. (See Strategy 1.4.4)
- 4.6.3.** Utilize existing entrepreneurship networks, investors, and researchers to spread the word about successes.
- 4.6.4.** Develop a regional entrepreneurial recognition program that harnesses the strengths of ones that already exist in the area.

**ABOUT THE SBIR/STTR PROGRAM**

Small Business Innovation Research (SBIR) grant awards occur in two phases:

**Phase I.** The objective of Phase I is to establish the technical merit, feasibility, and commercial potential of the proposed R&D efforts and to determine the quality of performance of the small business awardee organization prior to providing further federal support in Phase II. SBIR Phase I awards normally do not exceed \$150,000 total costs for 6 months.

**Phase II.** The objective of Phase II is to continue the R/R&D efforts initiated in Phase I. Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II. Only Phase I awardees are eligible for a Phase II award. SBIR Phase II awards normally do not exceed \$1,000,000 total costs for 2 years.

Source: [www.sbir.gov](http://www.sbir.gov)

**4.6.5.** Establish Entrepreneur of the Year awards and aggressively publicize winners throughout the region.

**4.7. Support youth entrepreneurship programs at local school districts to foster a culture of innovation and cultivate an entrepreneurial spirit in the region. (Medium Priority, Long-Term)**

A critical element of fostering a deep culture of entrepreneurship and innovation in the region is to begin instilling it in the region’s youth. Entrepreneurship education is especially important for helping the region’s low-income and minority youth to develop skills and knowledge that will support their future success as well as benefit their communities.

- The National Consortium for Entrepreneurship Education provides resources and technical assistance for entrepreneurial education. (<http://www.entre-ed.org/>)

## GOAL 5. QUALITY OF PLACE

### MAKE NORTHWEST FLORIDA A PLACE APPEALING TO EXISTING RESIDENTS AND VISITORS AS WELL AS A TO NEW GENERATION OF TALENTED AND CREATIVE INDIVIDUALS AND COMPANIES.

The growing literature linking talented workers to vibrant areas speaks directly to the idea of “place.” While most communities tout their “quality of life” this rarely addresses the concerns of new residents and prospective companies. Quality of place speaks directly to the competitive reality of where people choose to live, not just to where they have roots.

In 2014, the American Planning Association conducted a national online survey seeking to shed light on the relationship between community planning and promoting economic development.<sup>11</sup> The results of the survey enforce the notion that quality of place is a top consideration for people in choosing where they prefer to live and how communities should approach economic development. A few of the findings of the survey are summarized below.

- Two-thirds of all respondents and 74 percent of Millennials believe investing in schools, transportation choices, and walkable areas is a better way to grow the economy than traditional approaches of recruiting companies.
- 81% of Millennials and 77% of Active Boomers say affordable and convenient transportation alternatives to the car are at least somewhat important when deciding where to live.
- 56% of Millennials and 46% of Active Boomers would prefer to live someday in a walkable community, whether, urban, suburban, or small town location.
- When asked about the one overriding factor in choosing where to live, respondents overall cited quality of life features ahead of local economic health and job prospects.

Increasingly, employers are incorporating these preferences and quality of place in their site location decisions. In the *Area Development Magazine’s 2015 Survey of Corporate Executives* referenced in Goal 1, quality of life ranked as the third most important site location factor. Employers understand that communities offering a multitude of amenities are the ones attracting and retaining many of today’s skilled and talented workers. Consequently, cities and regions now must compete not only to attract investment, but also the talent that will support those businesses. A company will be less likely to locate where workers are unwilling to live.

The communities of Northwest Florida understand this reality. The region already competes well for new talent because of its beauty, climate, and natural amenities. Still, many places in the region are also supporting new developments and redevelopments that enhance their cultural, recreational, and entertainment attractions. In some communities, this includes fostering downtown urban amenities to attract younger people. In others, it entails new mixed-use town center developments that allow families to reside, work, shop, and dine in a walkable environment. However, quality of place issues should not be solely focused on the needs of young professionals. The region must also address the placemaking needs of traditionally underserved communities and populations.

#### REDEFINING PLACE

Much has been written about the importance of quality of life to the site selection process. Communities throughout the nation have positioned themselves by touting their advantages in this regard—good schools, safe streets, pleasant weather. These factors are indeed important, but are extremely narrow in focus. Quality of life assumes that everyone thrives in the same environment and is attracted to the same amenities. It assumes that current residents’ view of what makes a community would be shared by all. By contrast, quality of place considers what is attractive to a range of residents, both old and new. The idea of quality of place accommodates growth and recognizes the benefits of change. It recognizes that one person’s “good place to raise a family” might translate into another’s “there’s nothing to do in this town.” Quality of place is about providing options, not just for current residents, but also for those who will be residents in the future.

<sup>11</sup> American Planning Association, *Investing in Place for Economic Growth and Competitiveness*. March 2014.

## STRATEGIES & ACTIONS

### 5.1. Encourage the development of vibrant downtowns, new town centers, and mixed-use developments in the region. (Medium Priority, Long Term)

The competition for talent, especially for young professionals, has compelled cities and regions across the U.S. to prioritize and invest in urban environments and amenities. Cities such as Pensacola have fully embraced this trend and have made great strides in downtown revitalization. The city of Seaside was one of the first cities in America to embrace the principles of New Urbanism in its design. New residential developments in the region are incorporating mixed uses and walkability in their planning. Even smaller communities in the region are changing zoning and permitting regulations to allow for greater densities in new development and redevelopment projects.

The actions to support greater density and mixed-use developments are primarily the responsibility of local government. However, regional planning organizations can play an important role in assisting local governments with technical assistance. Below are some basic actions local government can take to make themselves more competitive for talent.

- 5.1.1. Ensure that land use policies encourage high-density uses and foster high-quality development.
- 5.1.2. Continue to assess the local regulations to ensure they are supportive of desired developments.
- 5.1.3. Develop specialized toolsets using special financing districts, overlay districts, and other mechanisms to encourage desired development in targeted areas.
- 5.1.4. Participate in public-private partnerships that facilitate significant infrastructure improvements and quality redevelopment projects.
- 5.1.5. Encourage the expansion or relocation of business in targeted development areas to stimulate commercial activity.
- 5.1.6. Identify anchor projects that can bring in the type of traffic and uses needed to catalyze development.
- 5.1.7. Develop affordable housing and co-working spaces.
- 5.1.8. Support the growth of arts and culture assets and amenities across the region.

### 5.2. Gain a better understanding of the preferences and needs of existing Northwest Florida residents. (Medium Priority, Medium Term)

- 5.2.1. Work with local chambers and young professionals groups to design and circulate surveys to appraise the quality of place amenities in their community. This can help the communities understand which amenities are most critical for the attraction and retention of young, talented workers.
- 5.2.2. Include similar questions regarding quality of place preferences on surveys of military personnel separating from service in the region.

### 5.3. Invest in the amenities and infrastructure in underserved communities. (High Priority, Long Term)

Quality of place must be enhanced for all communities and neighborhoods in the region. Despite the increasing popularity of city living and urban amenities across the U.S., many urban neighborhoods face several ongoing challenges such as shortage of affordable housing and inadequate infrastructure. This is also true for communities in Northwest Florida.

- 5.3.1. Ensure that adequate funds are invested in roads, sidewalks, education, recreational facilities, and other basic infrastructure in underserved neighborhoods and communities.

- 5.3.2. Expand the development of affordable student and workforce housing in the region. This is a need in underserved neighborhoods, coastal communities, and rural areas.
- 5.3.3. Make sure that underserved communities are directly engaged in local planning efforts.
- 5.3.4. Identify sites and properties of historical significance and seek to have them designated as historical landmarks. If appropriate, pursue Federal Historic Preservation Tax Incentives from the National Park Service to encourage private sector rehabilitation of historic properties.
- 5.3.5. Explore funding options available from the USDA Rural Community Development Initiative, which provides technical assistance and training funds to qualified intermediary organizations to develop their capacity to undertake housing, community facilities, and community and economic development projects in rural areas.

**5.4. Incorporate the site location needs of target industries into local and regional planning and placemaking strategies. (Medium Priority, Medium Term)**

As communities and regional planning organizations plan for future land and transportation developments/redevelopments, the site location factors associated with target industries should be taken into consideration. This will assist planning organizations in identifying which locations are most appropriate for specific industries and will assist FGNW, Opportunity Florida, and local economic development organizations in their marketing and attraction efforts.

- 5.4.1. Local and regional planning and transportation organizations should meet regularly and consult with economic development officials and with the business sector councils to learn of target industry site selection needs and incorporate those needs into planning efforts.



# IMPLEMENTATION MATRIX

## GLOSSARY OF ORGANIZATIONS

ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
AA	Aerospace Alliance	IC	Innovation Coast
CCs	Chambers of Commerce	MIE	Millway Institute for Entrepreneurship
CSFs	CareerSource Florida Organizations	NFCU	Navy Federal Credit Union
CVBs	Convention & Visitors Bureaus	NWFMC	Northwest Florida Manufacturers Council
EDOs	Economic Development Organizations	OF	Opportunity Florida
EFI	Enterprise Florida	RC	Regional Council*
FDOT	Florida Department of Transportation	TPO	Northwest Florida Regional Transportation Planning Organization
FGNW	Florida’s Great Northwest	PSEs	Post-Secondary Education Institutions
FW	FloridaWest	RPCs	Regional Planning Councils
DI	Doolittle Institute	SBDCs	Small Business Development Centers
GCIP	Gulf Coast Center for Innovation and Entrepreneurship	TeCMEN	Technology Coast Manufacturing and Engineering Network
GP	Gulf Power	TF	TechFarms
K12s	K-12 Educational Institutions	UWF	University of West Florida
LGs	Local Governments	VF	Visit Florida

\*Proposed

LEGEND			
<b>Priority:</b>	Low	★	Medium
			★★
			High
			★★★

## MATRIX

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
<b>GOAL 1: CONNECT THE TALENT ASSETS OF NORTHWEST FLORIDA TO KEY INDUSTRY CLUSTERS AND ENSURE A DYNAMIC AND DIVERSE WORKFORCE FOR NEW AND GROWING BUSINESSES.</b>						
<b>Strategy 1.1. Create a regional workforce training and development initiative designed to meet the needs of large employers relocating or expanding in Northwest Florida.</b>						
1.1.1. Work with educational institutions and workforce boards to create an employer-driven workforce training initiative.	★ ★ ★	◆	◆			PSEs, GP, CSFs, K12s, EDOs, FGNW
<b>Strategy 1.2. Better leverage separated and retired military personnel as a key talent pool for target industry clusters.</b>						
1.2.1. Formalize a regional military talent pipeline survey and marketing program.	★ ★ ★		◆			CSFs, FGNW, EDOs, Military Installations
1.2.1.1. Expand the existing surveys to include all installations in the region where meaningful numbers of military personnel are separating from service.			◆			CSFs, Military Installations
1.2.1.2. The region’s CareerSource organizations should jointly develop a common set of questions across all surveys.			◆			CSFs
1.2.1.3. Tabulated and analyzed data should be shared with Florida’s Great Northwest and other local economic development organizations for business development purposes.			◆			CSFs, FGNW, EDOs
1.2.1.4. Survey data should be shared with existing regional employers seeking workforce assistance.			◆			CSFs, FGNW, EDOs, CCs
1.2.1.5. If needed, execute a regional MOU between the region’s CareerSource organizations, Florida’s Great Northwest, Veterans Florida, and other pertinent entities necessary to structure a regional survey program.			◆			CSFs, FGNW, Veterans Florida
1.2.2. Partner with Veterans Florida to build an online portal designed to connect veterans with occupational opportunities in the region and to market Northwest Florida to veterans.	★ ★ ★		◆			CSFs, Veterans Florida
1.2.3. Explore options for assisting service members and veterans obtain higher education credits and based on their military skills and credentials.	★ ★ ★		◆			CSFs, Veterans Florida

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
1.2.4. Partner with Veterans Florida and CareerSource Florida organizations to address Northwest Florida veterans and spousal needs.	★ ★ ★		◆			CSFs, Veterans Florida
1.2.5. Build awareness among employers regarding the skill sets represented by personnel separating from service at installations in the region.	★ ★ ★		◆			CSFs, FGNW, EDOs, Veterans Florida
1.2.6. Encourage employers to participate in job fairs and related events at the region’s installations.	★ ★ ★		◆			CSFs, FGNW, EDOs, CCs
1.2.7. Work with the Florida Department of Economic Opportunity, CareerSource Florida organizations, and other relevant organizations to ensure that military training requirements match state licensing requirements.	★ ★ ★		◆			CSFs, PSEs, FDEO
<b>Strategy 1.3. Explore establishing an employer-driven workforce training initiative focused on assisting underemployed and long-term unemployed residents.</b>						
1.3.1. Explore creating/transforming a workforce organization using the demand-driven model developed by Skills for Chicagoland’s Future.	★ ★ ★		◆	◆		CSFs, EDOs, FGNW
1.3.1.1. Review the Demand-Driven Playbook offered by SCF to determine if such a model is feasible in the region.			◆			CSFs
1.3.1.2. If there is interest, reach out to SCF to inquire about obtaining assistance in developing a model in the region.			◆			CSFs
1.3.2. Engage employers and regional workforce partners in evaluating and prioritizing comprehensive, long-term strategies for improving access to economic opportunity for all residents. Programs that facilitate re-entry into the workforce for underrepresented populations should be emphasized.	★ ★ ★			◆		CSFs, EDOs
<b>Strategy 1.4. Develop a regional talent recruitment program.</b>						
1.4.1. Create a regional talent retention and attraction program similar to the Baton Rouge Area Chamber of Commerce’s talent development program.	★ ★		◆	◆		CSFs, EDOs, FGNW, CSFs
1.4.2. Create an online talent portal that provides information about working, living, and relocating to Northwest Florida.	★ ★			◆		CCs, EDOs, FGNW
1.4.3. Design a “come home” campaign to inform former residents and alumni who live in other cities of the career opportunities, events, and quality of place amenities in Northwest Florida.	★ ★			◆		CCs, EDOs, PSEs, K12s
1.4.3.1. Assemble a network of local alumni associations—both college and high school—that are willing to relay information and content out to their alumni networks.				◆		CCs, EDOs, PSEs, K12s

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
1.4.3.2. Use this network to communicate regularly with alumni. Share information such as job opportunities, arts and cultural events, notable economic development activities, and other types of information that will build awareness of the positive things going on in the region and draw the alumni back.				◆		CCs, EDOs, PSEs, K12s
1.4.4. Create a Digital Ambassadors program that utilizes a network of “connectors” who share positive stories about Northwest Florida online and through social media.	★ ★			◆		CCs, EDOs, CVBs
1.4.4.1. Identify connectors and thought leaders and encourage them to be digital ambassadors for the region.				◆		CCs, EDOs, CVBs
1.4.4.2. Develop content that portrays a positive image of the regional business climate and highlights opportunities for business and talent to be successful in the region.				◆		CCs, EDOs, CVBs
1.4.4.3. Create an incentive system that rewards digital ambassadors for actively participating.				◆		CCs, EDOs, CVBs
1.4.4.4. Promote the program across the region through city, chamber, CVB, and other local existing communications channels, including traditional and social media.				◆		CCs, EDOs, CVBs
1.4.5. Continue supporting the content growth and awareness of existing local and regional career pathways online portals.	★ ★			◆		CSFs, K12s, PSEs
<b>Strategy 1.5. Expand work-based learning and career exploration opportunities for students.</b>						
1.5.1. Work with existing workforce development organizations, education institutions, and the proposed sector councils to create an inventory of existing public, private, and nonprofit work-based learning programs.	★ ★			◆		CSFs, K12s, PSEs
1.5.2. Create a directory of companies and volunteers who are willing to provide these opportunities to students to help career counselors, instructors, and students identify the opportunities more easily. Promote the database.	★ ★			◆		CSFs, K12s, PSEs
1.5.3. Pursue funding from the Florida Apprenticeship Grant Program to expand apprenticeships in the region.	★ ★			◆		CSFs, K12s, PSEs
1.5.4. Develop a toolkit for employers to use to organize meaningful work-based learning experiences that will ensure the realization of benefits for both the employers and students.	★ ★			◆		CSFs, K12s, PSEs

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
1.5.5. Work collaboratively with employers to target traditionally hard-to-reach populations such as minority youth and students in rural communities.	★ ★			◆		CSFs, K12s, PSEs
1.5.6. Continue to bring funds into the region to do more internships.	★ ★			◆		CSFs, K12s, PSEs
1.5.7. Recognize, celebrate, and reward businesses that are engaged in talent development/offering work-based learning opportunities.	★ ★			◆		CSFs, K12s, PSEs
<b>Strategy 1.6. Further leverage the manufacturing academies model to expand the promotion of science, technology, engineering, and math (STEM) programs and technical skills development as early as grade school to build long-term talent supply in the region.</b>						
1.6.1. Work with education, workforce development, private sector, nonprofit, and economic development partners to expand STEM education and technical skills development program throughout the region.	★ ★ ★			◆		K12s, CSFs, EDOs
1.6.2. Partner with cradle to career efforts like Achieve Escambia and Alignment Bay County to ensure programming supports employability and technical skills development to support target industries.	★ ★ ★			◆		K12s, CSFs, EDOs
<b>Strategy 1.7. Increase employability skills training programs to reduce employment barriers for all students and adults, with a particular focus on underserved populations.</b>						
1.7.1. Incorporate employability skills training in all schools across the region, including but not limited to career academies and business/education partnership programs.	★ ★			◆		K12s
1.7.2. Explore establishing other national programs and models in the region that address soft skills, employability, and leadership development in low-income populations.	★ ★			◆		K12s, CSFs, LGs
<b>GOAL 2: STRENGTHEN THE REGION'S ECONOMY THROUGH TARGETED RECRUITMENT OF NEW BUSINESSES AND SUPPORTING EXISTING BUSINESS EXPANSIONS.</b>						
<b>Strategy 2.1. Ensure the growth of region's key industry clusters.</b>						
2.1.1. Strengthen and build on the Aerospace and Defense cluster, and leverage the presence of major regional employers in the Water Transportation and Financial Services sectors for economic growth.	★ ★ ★	◆	◆	◆		PSEs, GP, CSFs, EDOs, FGNW
2.1.1.1. Continue strengthening the region's workforce education and training programs connected to aerospace and other STEM fields.		◆				CSFs, K12s, PSEs
2.1.1.2. Identify and attract suppliers of Airbus, Boeing, and other major aerospace and defense companies to the region.			◆			FGNW, AA, EDOs

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.1.1.3. Build aerospace supply chain across I-10 from Pensacola to Jacksonville.					◆	FGNW, AA, EDOs
2.1.1.4. Continue leveraging relationships with Aerospace Alliance partners in Alabama, Mississippi, and Louisiana to promote the Southeastern U.S. as a top location for aerospace companies.		◆				FGNW, AA, EDOs
2.1.1.5. Build an online database of regional aerospace suppliers. Assist original equipment manufacturers (OEMs) in identifying and partnering with capable supply chain partners.			◆			FGNW, AA, EDOs
2.1.1.6. Create or attract a new center of excellence (COE) focused on Advanced Manufacturing in the Aerospace sector.				◆		PSEs, CSFs, FGNW
2.1.1.7. Develop marketing campaign and materials to encourage aerospace and defense companies to locate and expand in Northwest Florida.			◆			FGNW, EDOs, AA
2.1.1.8. Work with NFCU to conduct a supply chain analysis of IT vendors to identify suppliers and service providers located outside of the region.			◆			FW, FGNW, NFCU
2.1.1.9. Develop a targeted marketing initiative to persuade NFCU vendors and other Financial Services firms to locate operations in proximity to the campus as well as other areas of the region.			◆			FW, FGNW, NFCU
2.1.1.10. Work closely with Eastern and other ship building companies to identify future workforce development and attraction requirements and implement programs to address these needs.			◆			Eastern, CSFs, PSEs, K12s
2.1.1.11. Conduct a supply chain analysis of Eastern’s vendors and suppliers to identify candidates for recruitment to the region.			◆			Eastern, FGNW, EDOs
2.1.1.12. Develop marketing campaign and materials specific to the Water Transportation cluster.			◆			FGNW, EDOs
2.1.1.13. Ensure the region’s maritime and industrial infrastructure can accommodate new facilities, employment, and investment.				◆		FDOT, EDOs, LG
2.1.2. Support the ongoing expansion of Cybersecurity employment, investment, education, and training in the region.	★ ★ ★		◆			PSEs, FW, FGNW, EDOs
2.1.2.1. Develop a regional Cybersecurity business development strategy that highlights the collective assets in this sector.			◆			PSEs, FW, FGNW, EDOs

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.1.2.2. Identify Cybersecurity as a formal regional industry target and design marketing efforts and materials for its growth.			◆			PSEs, FW, FGNW, EDOs
2.1.2.3. Identify and promote niche specializations to build competitive advantages.			◆			PSEs, FW, FGNW, EDOs
2.1.3. Support the vibrancy of Advanced Manufacturing across clusters.	★ ★ ★	◆	◆	◆		FGNW, GP, EDOs, NWFMC, TeCMEN
2.1.3.1. Support the efforts of the Northwest Florida Manufacturing Council to develop a robust marketing plan to raise awareness and perception of Advanced Manufacturing career (and other middle skills occupations) opportunities for students in Northwest Florida.			◆			NWFMC, TeCMEN, K12s, PSEs, CSFs
2.1.3.2. Pursue federal and private funding to establish new advanced manufacturing training centers in the region and/or to strengthen existing centers.					◆	PSEs
2.1.3.3. Enhance the regional manufacturing supply chain by creating an online buyer-supplier database.			◆			NWFMC, TeCMEN, FGNW
2.1.3.4. Brand and promote the North Florida Manufacturing, Logistics, and Distribution Corridor along I-10 from Pensacola to Jacksonville.			◆			FGNW, NWFMC, TeCMEN
2.1.3.5. Provide technical assistance, technology acquisition, and financial support to assist manufacturers transition from traditional production into more advanced upstream (e.g., research and development or design) and downstream segments (repair and maintenance or sales) of the manufacturing value chain.					◆	NWFMC, TeCMEN, FGNW
<b>Strategy 2.2. Create industry sector councils to ensure the critical workforce needs and challenges of each sector are addressed.</b>						
2.2.1. Bring together primary decision makers in Northwest Florida’s key economic drivers and target industries to assess talent and business competitiveness needs.	★ ★ ★		◆			EDOs, FGNW, CSFs, GP, PSEs, CCs
2.2.2. Identify critical occupations and skills and quantify demand through employer surveys.	★ ★ ★		◆			CSFs, EDOs, CCs
2.2.3. For critical occupations and skills that are shared across sectors, create a multi-sectoral group that could engage a wider community of employers.	★ ★ ★			◆		EDOs, FGNW, CSFs, GP, PSEs, CCs
2.2.4. Continue to update and expand the regional training inventory to meet the needs of those critical occupations through the training provider survey.	★ ★ ★		◆			CSFs, PSEs, K12s, GP

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.2.5. Determine if relevant curricula are teaching students the critical skills they need.	★ ★ ★			◆		CSFs, PSEs, K12s
2.2.6. Work with educational institutions and training providers to define career pathways related to critical occupations.	★ ★ ★			◆		CSFs, PSEs, K12s
2.2.7. Launch awareness initiatives to drive students/workers into training programs.	★ ★ ★			◆		CSFs, PSEs, K12s
2.2.8. Monitor the needs of other industries and facilitate the launch of new councils as needed.	★ ★ ★			◆		EDOs, FGNW, CSFs, GP, PSEs, CCs
2.2.9. Work with regional CareerSource organizations to utilize data captured from military talent pipeline surveys to benefit employers in each sector and translate military occupations and skills to civilian sector career opportunities.	★ ★ ★			◆		EDOs, FGNW, CSFs, GP, PSEs, CCs
<b>Strategy 2.3. Market and promote Northwest Florida as a destination for new investment and employment.</b>						
2.3.1. Engage in a coordinated business attraction and marketing campaign with other local and regional economic development organizations.	★ ★	◆	◆			FGNW, OF, EDOS
2.3.1.1. Provide data and information developed for Northwest Florida Forward to local and regional partners, especially the individual county profiles and the regional target industry profiles.			◆			FGNW, OF, EDOS
2.3.1.2. Develop a package of regional marketing materials that highlight the unique assets of each county.			◆			FGNW, OF, EDOS
2.3.1.3. Continue supporting Opportunity Florida’s marketing efforts to promote rural Northwest Florida and coordinate those with FGNW’s activities.		◆				FGNW, OF, EDOS
2.3.1.4. Schedule economic development marketing pieces, such as email newsletters, to coincide with recent business attraction, retention, expansion, and creation success stories. Also, highlight successes around education/training programs, infrastructure developments, and quality of place enhancements.			◆			FGNW, OF, EDOS
2.3.1.5. Leverage the Digital Ambassadors Network (1.4.4) and develop a coordinated effort to highlight targeted industry success stories to generate awareness and interest among out of state targeted business executives and site location consultants.			◆			FGNW, OF, EDOS

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.3.2. Cultivate relationships and networks with business executives for the recruitment of new businesses to Northwest Florida, especially in target clusters and sectors.	★ ★	◆	◆			FGNW, EDOs, GP, OF
2.3.2.1. Join and participate in trade or industry associations for the priority target sectors.			◆			FGNW, EDOs
2.3.2.2. Conduct domestic call trips/marketing missions to meet with company executives in regions where each target industry concentration is the highest.		◆	◆			FGNW
2.3.3. Continue building awareness of Northwest Florida as a destination for investment among site selection consultants.	★ ★ ★	◆	◆	◆		FGNW, EDOs, OF, GP
2.3.3.1. Call on site consultants in targeted metropolitan areas, particularly the Atlanta metro area. Utilize a site selection database to identify targets and periodically set appointments to discuss the Northwest Florida market and development opportunities.		◆	◆			FGNW
2.3.3.2. Continue maintaining and updating information typically of interest to commercial and industrial site selectors on the FGNW website.		◆	◆			FGNW
2.3.3.3. Periodically host events in Northwest Florida that showcase specific assets, such as available land and buildings or new projects.		◆	◆			FGNW, EDOs, GP
2.3.4. Maintain database of company expansion/relations for tracking and marketing purposes.	★ ★ ★		◆			CSFs, FGNW
2.3.5. Promote the region for new foreign direct investment.	★ ★		◆			FGNW, EDOs, GP, OF
2.3.5.1. Identify individuals and organizations from the international community residing or working in Northwest Florida that could assist in marketing and recruitment efforts.			◆			FGNW, EDOs, GP
2.3.5.2. Leverage the existing international connections of exporters and foreign-owned companies within the region.			◆			FGNW, EDOs, GP, OF
2.3.5.3. Leverage university/college relationships with foreign institutions and students.			◆			FGNW, EDOs, PSEs, OF
2.3.5.4. Build a regional international business alliance comprised of companies with international operations, foreign ownership, or trade relations.				◆		FGNW, EDOs, GP, OF

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.3.5.5. Strategically attend international industry events and trade shows in target markets, especially in Aerospace and Defense.		◆				FGNW, EDOs, GP
2.3.5.6. Develop marketing materials to show benefits of a Northwest Florida location to international companies.			◆			FGNW, EDOs, GP, OF
2.3.6. Build and maintain relationships with state economic development organizations, including Enterprise Florida, to ensure Northwest Florida remains top of mind for prospect leads.	★ ★		◆			
<b>Strategy 2.4. Increase shared Business Retention and Expansion (BRE) activities throughout the region.</b>						
2.4.1. Local and county economic development organizations should engage regional partners to assist in BRE support and visits with companies within the region’s target industry clusters.	★ ★			◆		FGNW, EDOs, OF
2.4.2. Identify local businesses to gain competitive intelligence across the region on how we can help existing companies grow and remove common barriers for business across the region.	★ ★			◆		FGNW, EDOs, OF
2.4.3. Encourage education on trade and exporting opportunities.	★ ★			◆		SBDCs, EDOs, FGNW, OF
<b>Strategy 2.5. Expand and leverage tourism to support industry attraction.</b>						
2.5.1. Establish a conference and meeting strategy linked to target sector opportunities.	★ ★		◆	◆		FGNW, EDOs, CVBs, CCs, OF, VF
2.5.1.1. Identify a complementary theme for tourism attraction, business recruitment, and talent attraction.			◆			FGNW, EDOs, CVBs, CCs, OF
2.5.1.2. Local and regional economic development organizations should work with the local CVBs to tie their conference and meeting strategy to targeted occupations, groups, and industries.				◆		FGNW, EDOs, CVBs, CCs, OF
2.5.1.3. Identify industry associations within each target industry and encourage them to consider Northwest Florida as a destination for annual events and meetings.			◆			FGNW, EDOs, CVBs, CCs, OF
2.5.1.4. Coordinate with local EDOs the targeting of specific businesses and organizations holding conferences and symposia in the region.			◆			FGNW, EDOs, CVBs, CCs, OF

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.5.1.5. Create a brief profile and coherent and coordinated marketing message to assist local economic developers in promoting Northwest Florida’s competitive advantages.			◆			FGNW, EDOs, CVBs, CCs, OF
2.5.2. Leverage tourism assets to get business marketing messages out.	★ ★			◆		FGNW, EDOs, CVBs, CCs, OF
2.5.2.1. Prominently display positive information about the region’s economy and business climate at key visitor destinations (e.g., commercial airports, hotels, CVBs).				◆		FGNW, EDOs, CVBs, CCs, OF
2.5.2.2. Encourage first points of contact to communicate positive messages about the region’s business advantages to visitors. Provide educational materials and talking points on the region’s economy to first points of contact.				◆		FGNW, EDOs, CVBs, CCs, OF
2.5.2.3. Work with tourism partners to learn more about the visitors traveling to the region on business, including information on the businesses they own or represent.				◆		FGNW, EDOs, CVBs, CCs, OF
2.5.3. Diversify and expand the Tourism sector to capitalize on the region’s historical, cultural, heritage, scenic, ecological, sports, and recreational assets, including those north of I-10.	★ ★			◆		CVBs, CCs, EDOs, VF
2.5.3.1. Build upon existing efforts to maintain a “trail and destination” guide that captures all the major outdoor recreation, adventure, scenic, historical, and cultural assets in the region.				◆		CVBs, CCs, EDOs, VF
2.5.3.2. Work in conjunction with the UWF Historic Trust, the African American Heritage Society, and other organizations to identify underutilized historical and heritage assets that may need investment and/or additional marketing.				◆		CVBs, CCs, EDOs, VF
2.5.3.3. Pursue federal and foundation grants to support the region’s tourism infrastructure needs.				◆		CVBs, CCs, EDOs, VF
<b>Strategy 2.6. Support the growth of microenterprises and small businesses in the region, particularly in rural areas and minority communities.</b>						
2.6.1. Review and catalog small business support at the city and county levels. Develop programs to fill gaps. Publicize resources available to small businesses through cities, chambers, economic development organizations, and community organizations.	★ ★ ★		◆			EDOs, SBDCs, LGs, CCs, OF, FGNW

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
2.6.2. Fully leverage and promote existing Small Business Development Center (SBDC) programs and investments in the region.	★ ★		◆			SBDCs, EDOs, CCs
2.6.3. Establish a regional revolving loan fund to provide “gap” financing to small business startups, expansions, or relocations.	★ ★			◆		EDOs, RPOs, FGNW
2.6.3.1. Pursue a grant from the U.S. Economic Development Administration to seed the fund.				◆		EDOs, RPOs, FGNW
2.6.4. Work with nonprofits, especially in disadvantaged neighborhoods in the region, to identify specific growth opportunities in retail and services to expand the number of microenterprises.	★ ★ ★		◆			EDOs, RPOs, SBDCs, LGs
2.6.5. Establish a program to promote enhanced participation of minority contractors and vendors in contracting opportunities. The program should address licensing fees, training, fostering joint venture opportunities, and promotion and marketing.	★ ★ ★		◆			LGs, EDOs, CCs, SBDCs
<b>Strategy 2.7. Streamline government processes across the region to help business start-ups, expansions, and relocations get up and running quickly.</b>						
2.7.1. Streamline government processes across the region to help business start-ups, expansions, and relocations get up and running quickly.	★ ★ ★	◆	◆			LGs, EDOs, RPCs
<b>Strategy 2.8. Market Northwest Florida as an investment location to full- or part-time residents who own a business outside of the region.</b>						
2.8.1. Market Northwest Florida as an investment location to full- or part-time residents who own a business outside of the region.	★ ★			◆		EDOs, FGNW, OF, CCs
<b>GOAL 3: ENSURE THAT NORTHWEST FLORIDA’S ECONOMIC INFRASTRUCTURE IS STATE OF THE ART AND CONNECTS COMMUNITIES IN EVERY PART OF THE REGION.</b>						
<b>Strategy 3.1. Use the Regional Planning Councils to address shared infrastructure needs and other economic development issues.</b>						
3.1.1. The West Florida and Apalachee Regional Planning Councils will directly support the implementation of the Northwest Florida Forward regional strategy with the development and implementation of regional Comprehensive Economic Development Strategy (CEDs).	★ ★ ★		◆			RPCs, FGNW, LGs
3.1.2. The Regional Planning Councils should serve as a champion for specific regional economic development and infrastructure initiatives and work across jurisdictions to ensure they have the greatest regional impact.	★ ★ ★	◆				RPCs

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
3.1.3. Florida’s Great Northwest and the Regional Planning Councils (ARPC and WFRPC) boards should meet at least annually to create the Panhandle Forum to discuss large regional issues and reevaluate/update the regional CEDS process.	★ ★ ★		◆			RPCs, FGNW
3.1.4. Explore the use of regional revenue sharing models to support regional economic development and infrastructure projects in Northwest Florida.	★ ★ ★		◆			GP, FGNW, LGs
3.1.5. Bring the Transportation Planning Organizations (TPOs), Regional Planning Councils, and FGNW together in the region together for strategic discussions.	★ ★ ★		◆			TPOs, LGs, RPCs, FGNW
<b>Strategy 3.2. Develop sites to accommodate business expansions and relocations.</b>						
3.2.1. Engage a geospatial consulting firm to conduct a land suitability assessment in Northwest Florida for locating new industrial and commercial parks.	★ ★ ★		◆			GP, FGNW, EDOs
3.2.2. Raise awareness of the Florida’s First Sites Program.	★ ★ ★	◆	◆			GP, FGNW, EDOs
3.2.3. Explore options for developing shared regional industrial parks that serve multiple counties in the region.	★ ★				◆	FGNW, LGs, RPCs
<b>Strategy 3.3. Support the development of industrial megasites, with a deliberate focus on rural areas of the region.</b>						
3.3.1. Continue working with state and regional partners in Florida and Alabama to develop the proposed Florida-Alabama Mega Site in Jackson County.	★ ★	◆			◆	LGs, FGNW, EDOs, GP, OF
3.3.2. Support the efforts of the public/private partnership to develop the “The Bluffs – Northwest Florida’s Industrial Campus” in Escambia County that is envisioned to become a world-class site for new manufacturing that could accommodate as many as 60 industrial tenants and create more than 15,000 new jobs.	★ ★				◆	LGs, FGNW, EDOs, GP, UWF
3.3.3. Explore other promising industrial megasites, such as Shoal River Ranch in Okaloosa County, that are located near interstates, ports, airports, and rail.	★ ★				◆	LGs, FGNW, EDOs, GP, OF
<b>Strategy 3.4. Ensure that the necessary infrastructure improvements to ports and airports to accommodate new private investment and employment are funded and completed.</b>						
3.4.1. Ensure that the necessary infrastructure improvements to ports and airports to accommodate new private investment and employment are funded and completed.	★ ★ ★				◆	LGs, FDOT, RPCs, EDOs, FGNW, OF

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
<b>Strategy 3.5. Continue advocating for state and federal funding for improving the region’s road infrastructure and explore new options to improve transportation mobility.</b>						
3.5.1. Utilize the Regional Planning Councils to present a unified voice to advocate for funding highway transportation projects of regional significance.	★ ★		◆			LGs, RPCs, TPO, RC
3.5.2. Strengthen the business community’s involvement in advocating to state leaders for transportation infrastructure funding.	★ ★		◆			LGs, RPCs, TPO, FGW, EDOs, RC
3.5.3. Continue implementing the Northwest Florida Transportation Corridor Authority 2013 Master Plan.	★ ★		◆			
3.5.4. Organize a regional mobility summit and invite transportation planning experts to share innovative approaches to regional mobility undertaken and offer suggestions for Northwest Florida.	★ ★			◆		FDOT, TPO, LGs, RPCs
<b>Strategy 3.6. Continue efforts to expand broadband infrastructure and adoption in rural and underserved areas of the region. (Medium Priority, Long Term)</b>						
3.6.1. Continue efforts to expand broadband infrastructure and adoption in rural and underserved areas of the region.	★ ★				◆	LGs, RPCs
<b>GOAL 4: FOSTER ROBUST ENTREPRENEURSHIP AND INNOVATION ECOSYSTEMS TO DRIVE FUTURE ECONOMIC GROWTH.</b>						
<b>Strategy 4.1. Develop the region’s entrepreneurial hubs and connect them with industry clusters, assets, services, networks, facilities, tools, and expertise.</b>						
4.1.1. Expand the Northwest Florida Entrepreneurial Support Coalition into a formalized region-wide network of entrepreneurship and innovation service providers and experts representing each of the three hubs. Identify common strengths and gaps and ways to connect resources.	★ ★ ★			◆		, PSEs, IC, MIE, DI, GCIP, EDOs, FGW
<b>Strategy 4.2. Establish commercialization tools and programs connected to the region’s national security research and technology assets.</b>						
4.2.1. Work with the Doolittle Institute, UWF, FSU Panama City, Florida Institute for Commercialization and other entrepreneurship and innovation partners to ensure the necessary tools and programs are available in the region to transfer and commercialize research and technology.	★ ★ ★			◆		DI, PSEs
<b>Strategy 4.3. Increase access to capital for Northwest Florida entrepreneurs and develop a formal mechanism to access funds.</b>						
4.3.1. Support the formation of angel networks focused on providing startup capital to regional entrepreneurs.	★ ★ ★		◆			

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
4.3.2. Work with regional investors to establish a seed fund for pre-angel investment rounds.	★ ★ ★		◆			MIE, IC, EDOs, FGWN
4.3.3. Work with other angel networks in Florida and surrounding states to form a syndication network to improve deal flow for Northwest Florida companies and investors.	★ ★ ★		◆			MIE, IC, EDOs, FGWN
4.3.4. To address the capital needs of non-tech firms in targeted clusters, a regional working capital (debt) fund should be created.	★ ★ ★		◆			MIE, IC, EDOs, FGWN
<b>Strategy 4.4. Encourage local entrepreneurs and innovators to tap into federal funding in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants.</b>						
4.4.1. Improve awareness of these grant programs among regional business community.	★ ★			◆		EDOs, SBDCs
4.4.2. Provide training and assistance to companies on how to apply for SBIR/STTR awards.	★ ★			◆		DI, SBDCs, PSEs
4.4.3. Consider targeting companies in other regions that have received SBIR and STTR grants and providing incentives to expand/relocate in Northwest Florida.	★ ★			◆		FGNW, EDOs
<b>Strategy 4.5. Promote rural entrepreneurship.</b>						
4.5.1. Strategy 4.5. Promote rural entrepreneurship.	★ ★			◆		FGNW, EDOs, OF, PSEs
<b>Strategy 4.6. Market regional entrepreneurial success stories.</b>						
4.6.1. Earn media placement in local media outlets (TV, print, radio stations, etc.) to highlight success stories of local startups and entrepreneurs.	★ ★		◆			FGNW, EDOs, CCs
4.6.2. Aggressively utilize social media to publicize successes. Utilize local digital ambassadors to share local entrepreneurial success stories through their social network.	★ ★		◆			FGNW, EDOs, CCs
4.6.3. Utilize existing entrepreneurship networks, investors, and researchers to spread the word about successes.	★ ★		◆			PSEs, IC, MIE, DI, GCIP, EDOs, FGWN, CCs
4.6.4. Develop a regional entrepreneurial recognition program that harnesses the strengths of ones that already exist in the area.	★ ★		◆			PSEs, IC, MIE, DI, GCIP, EDOs, FGWN, CCs

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
4.6.5. Establish Entrepreneur of the Year awards and aggressively publicize winners throughout the region.	★ ★		◆			PSEs, IC, MIE, DI, GCIP, EDOs, FGNW, CCs
<b>Strategy 4.7. Support youth entrepreneurship programs at local school districts to foster a culture of innovation and cultivate an entrepreneurial spirit in the region.</b>						
4.7.1. Support youth entrepreneurship programs at local school districts to foster a culture of innovation and cultivate an entrepreneurial spirit in the region.	★ ★				◆	K-12s, PSEs
<b>GOAL 5: MAKE NORTHWEST FLORIDA A PLACE APPEALING TO EXISTING RESIDENTS AND VISITORS AS WELL AS A TO NEW GENERATION OF TALENTED AND CREATIVE INDIVIDUALS AND COMPANIES.</b>						
<b>Strategy 5.1. Encourage the development of vibrant downtowns, new town centers, and mixed-use developments in the region.</b>						
5.1.1. Ensure that land use policies encourage high-density uses and foster high-quality development.	★ ★			◆	◆	LGs, RPCs
5.1.2. Continue to assess the local regulations to ensure they are supportive of desired developments.	★ ★				◆	LGs, RPCs, EDOs
5.1.3. Develop specialized toolsets using special financing districts, overlay districts, and other mechanisms to encourage desired development in targeted areas.	★ ★			◆	◆	LGs, RPCs, EDOs
5.1.4. Participate in public-private partnerships that facilitate significant infrastructure improvements and quality redevelopment projects.	★ ★				◆	LGs
5.1.5. Encourage the expansion or relocation of business in targeted development areas to stimulate commercial activity.	★ ★				◆	LGs, EDOs
5.1.6. Identify anchor projects that can bring in the type of traffic and uses needed to catalyze development.	★ ★				◆	LGs, EDOs
5.1.7. Develop affordable housing and co-working spaces.	★ ★				◆	LGs, EDOs, RPCs
5.1.8. Support the growth of arts and culture assets and amenities across the region.	★ ★				◆	LGs, CCs, EDOs
<b>Strategy 5.2. Gain a better understanding of the preferences and needs of existing Northwest Florida residents.</b>						
5.2.1. Work with local chambers and young professionals groups to design and circulate surveys to appraise the quality of place amenities in their community.	★ ★			◆		CCs

	PRIORITY	TIMEFRAME				POTENTIAL PARTNERS
		Ongoing	Short-Term Next 24 mo.	Mid-Term 3 to 5 years	Long-Term 5+ years	
5.2.2. Include similar questions regarding quality of place preferences on surveys of military personnel separating from service in the region.	★ ★			◆		CSFs, CCs
<b>Strategy 5.3. Invest in the amenities and infrastructure in underserved communities.</b>						
5.3.1. Ensure that adequate funds are invested in roads, sidewalks, education, recreational facilities, and other basic infrastructure in underserved neighborhoods and communities.	★ ★ ★				◆	LGs, RPCs, TPO, RC
5.3.2. Expand the development of affordable student and workforce housing in the region. This is a need in underserved neighborhoods, coastal communities, and rural areas.	★ ★ ★				◆	LGs, RPCs, RC
5.3.3. Make sure that underserved communities are directly engaged in local planning efforts.	★ ★ ★				◆	LGs, RPCs, RC
5.3.4. Identify sites and properties of historical significance and seek to have them designated as historical landmarks.	★ ★ ★				◆	LGs, CVBs, RPCs
5.3.5. Explore funding options available from the USDA Rural Community Development Initiative.	★ ★ ★				◆	
<b>Strategy 5.4. Incorporate the site location needs of target industries into local and regional planning and placemaking strategies.</b>						
5.4.1. Local and regional planning and transportation organizations should meet regularly consult with economic development officials and with the business sector councils to learn of target industry site selection needs and incorporate those needs into planning efforts.	★ ★			◆		FGNW, EDOs, LGs, RPCs



## APPENDIX 1. TARGET INDUSTRIES

The targets outlined in this section were identified by TIP Strategies and the Haas Center. Selection was based on an industry cluster analysis performed by the Haas Center (published under separate cover), discussions with stakeholders, and the consulting team’s experience in identifying target industries for markets nationwide. The objective of the following analysis is to further define the cluster and why it’s a fit for the region, highlight relevant trends, document the related workforce, and provide information sources for networking and intelligence.

### SITE SELECTION FACTORS

Findings from *Area Development Magazine’s* Annual Survey of Corporate Executives help to illustrate how a corporate decision-maker might initially assess site location decisions based on readily available data. Florida and the 13-county Northwest Florida region offer a number of advantages for industry relocation and expansion.

These advantages include:

- A favorable business climate, including competitive tax rates.
- Aggressive economic development programs at state and regional level.
- The presence of a skilled and educated workforce.
- A dense network of transportation assets that include a number of components of the state’s Strategic Intermodal System (SIS) identified by the Department of Transportation (see Figure 2, page 64).
- Multiple postsecondary institutions, including colleges and universities (e.g., University of West Florida, Pensacola State College, Northwest Florida State College, Chipola College, Gulf Coast State College, and the Florida State University–Panama City Campus) and technical centers (George Stone, Locklin, CHOICE, Washington-Holmes, and Haney).
- Reliable and competitively priced electricity, with service provided by two investor-owned electric utilities (Gulf Power and Duke Energy), four electric membership cooperatives (Escambia River EC, CHELCO, West Florida EC, and GulfCoast EC), and municipal electricity providers.
- International recognition stemming from its destination as desirable tourism destination.
- A highly desirable quality of life.

**FIGURE 1. TOP 10 SITE SELECTION FACTORS**  
RANKED BY SCORE IN 2015, WITH 30-YEAR COMPARISON

RANK/FACTOR	2015	2010	2005	2000	1995	1990	1986
1 Availability of skilled labor	92.9	85.9	87.2	87.7	87.9	87.1	84.8
2 Highway accessibility	88.0	97.3	91.4	95.9	93.6	92.3	91.3
3 Quality of life*	87.6	62.1	54.7	58.8	70.4	70.6	60.4
4 Occupancy or construction costs	85.4	89.8	83.7	83.0	90.2	88.5	N/A
5 Available buildings	83.7	81.0	N/A	N/A	N/A	N/A	N/A
6 Labor costs	80.8	91.0	87.9	91.6	94.2	92.1	96.6
7 Corporate tax rate	78.8	86.3	85.0	84.7	N/A	N/A	N/A
8 Proximity to major markets	76.3	66.4	83.2	76.8	74.5	74.9	84.8
9 State and local incentives	75.8	89.3	86.0	83.6	87.8	88.7	79.6
10 Energy availability and costs	75.3	82.1	82.8	77.7	89.6	88.1	N/A

Source: *Area Development* magazine, 30th Annual Survey of Corporate Executives  
 Note: All figures are percentages and are the total of “very important” and “important” ratings. \*In the current survey, respondents were asked to rate “quality of life” as a single variable. By contrast, quality of life ratings in prior years’ surveys represent the average rating of nine factors: climate, housing availability, housing costs, healthcare facilities, ratings of public schools, cultural opportunities, recreational opportunities, colleges and universities in the area, and low crime rate. The simpler approach used in the 2015 survey increased its overall importance rating considerably.

**FIGURE 2. KEY TRANSPORTATION & FREIGHT FACILITIES**

COUNTY	HIGHWAYS		AIRPORTS			RAILROADS	SEAPORTS
	SIS	OTHER	SIS	GENERAL AVIATION			
Bay	US 231, SR 77, SR 79, SR 368, SR 390	US 98, SR20, SR 22	NW Florida Beaches Intl. Airport	Calhoun County Airport		Bayline	Port of Panama City
Calhoun	US 231, SR 77, SR 79, SR 368, SR 390	SR 20, SR 60, SR 71, SR 73	NW Florida Beaches Intl. Airport, Tallahassee Regional	Calhoun County Airport		Bayline	Port of Panama City
Escambia	I-10, I-110, US 29	US 90, US 98, SR 97, SR 292	Pensacola Gulf Coast Regional Airport	Coastal Airport, Ferguson Airport		CSX	Port of Pensacola
Franklin	N/A	US 98, US 319, SR 65, SR 300	Tallahassee Regional Airport	Carabelle-Thompson, St. George Island, Apalachicola Regional Airport		Apalachicola Northern	Port of Panama City
Gulf	N/A	US 98, SR 22, SR 30, SR 71	NW Florida-Beaches Intl. Airport	Costin Airport		Apalachicola Northern	Port of Port St. Joe
Holmes	I-10, SR 79	US 90, SR 2, SR 81	NW Florida-Beaches Intl. Airport	Tri-County Airport		CSX	Port of Panama City
Jackson	I-10, US 231	US 90, SR 71, SR 69, SR 2	Tallahassee Regional Airport, NW Florida-Beaches Intl. Airport	Marianna Municipal Airport		CSX	Port of Panama City
Liberty	N/A	SR 12, SR 20, SR 65, SR 267	Tallahassee Regional Airport	Calhoun County Airport		Apalachicola Northern	Port of Port St. Joe
Okaloosa	I-10, SR 85, SR 123	US 90, US 98	Northwest Florida Regional Airport	Bob Sikes Airport, Destin Airport		CSX	Port of Pensacola
Santa Rosa	I-10, SR 87	US 98, US 90, SR 89	Pensacola Gulf Coast Regional Airport	Ft. Walton Beach Airport, Peter Prince Airport		CSX	Port of Pensacola
Wakulla	N/A	US 98, US 319, SR 267, SR 363, SR 61	Tallahassee Regional Airport	Wakulla County Airport		N/A	Port of Port St. Joe
Walton	I-10, US 331, US 98	US 90, SR 20, SR 83	NW Florida Regional, NW Florida-Beaches Intl. Airport	DeFuniak Springs Airport		CSX	Port of Panama City
Washington	I-10, SR 77, SR 79	SR 20, SR 277, SR 272	NW Florida-Beaches Intl. Airport	Tri-County Airport		CSX	Port of Panama City

Source: Florida Department of Transportation, Freight & Logistic Overview for each county.  
 SIS = Strategic Intermodal System

The following pages provide information on a number of broad factors that drive state and regional competitiveness. Where applicable, a discussion of cluster-specific factors and trends is included in the profiles that are presented in this section.

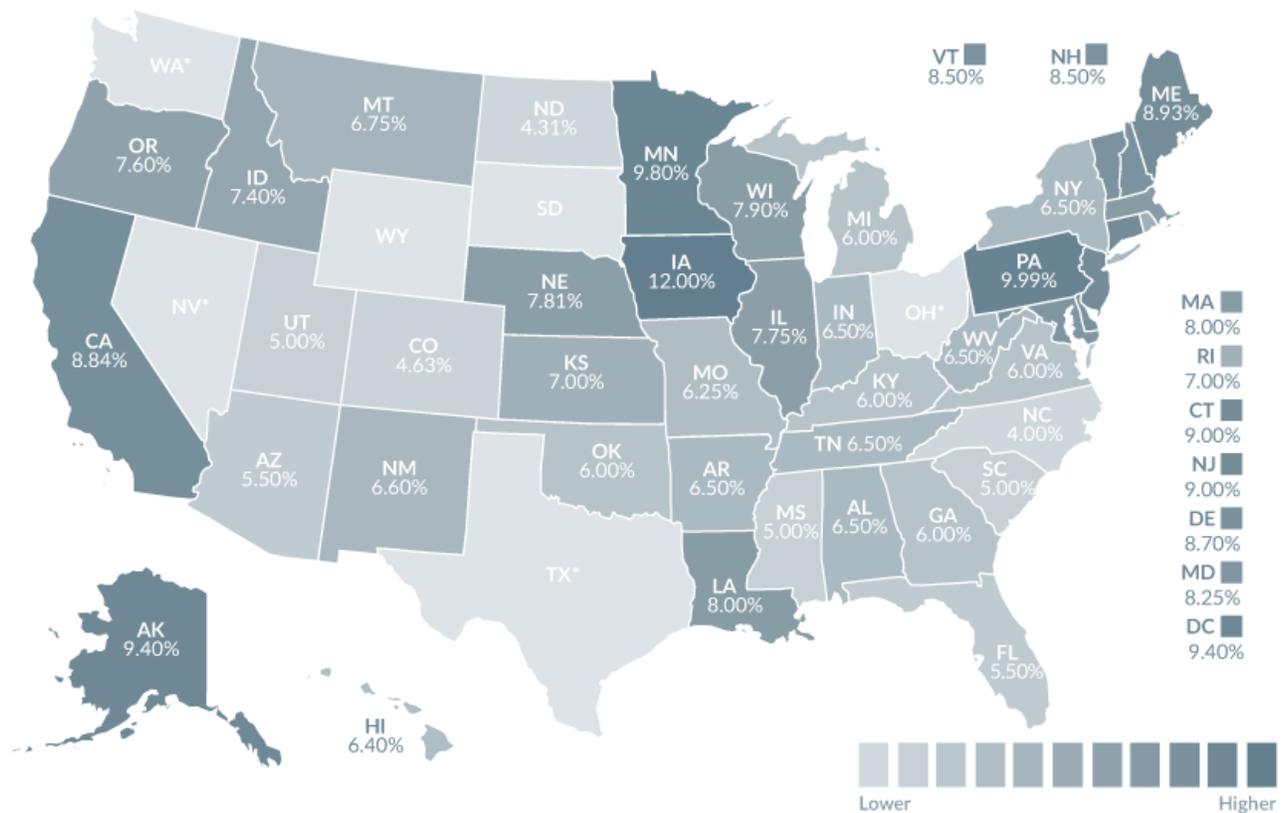
### CORPORATE TAX RATE

Florida consistently ranks near the top in national analyses of business climate. Corporate tax rates are a key factor. According to the latest analysis of corporate income tax rates prepared by the Tax Foundation, top statutory corporate tax rates range from a low of 4 percent in North Carolina to a high of 12 percent in Iowa. With a top rate of 5.50 percent, Florida rates are competitive within the southeastern US and fall below many of the largest states, including California (with a top rate of 8.84 percent at the time of the analysis) and New York (6.50 percent).

According to Moody Analytics’ 2014 Cost of Doing Business Index, the state and local tax burden for the region’s three metro areas falls below the national average. This portion of the index calculates an effective tax rate (i.e., total state and local tax revenue as a percent of total personal income in the area), which is then indexed to the national effective tax rate. All three areas had a similar score—84 to 85 (with the national average equal to 100)—placing them on the lower-cost end of the spectrum with regard to tax burden among the 401 metropolitan areas analyzed.

On a scale where 1 represents the highest burden, the Northwest Florida metro areas ranked as follows: Crestview (244), Pensacola (203), and Panama City (192).

**FIGURE 3. TOP STATE MARGINAL CORPORATE INCOME TAX RATES IN 2016**



Source: Tax Foundation, State Corporate Income Tax Rates and Brackets for 2016

Note (\*): Nevada, Ohio, Texas, and Washington do not have corporate income taxes but do have gross receipts taxes with rates not strictly comparable to corporate income tax rates. Arkansas assesses a surcharge of 3% of the taxpayers’ total liability. Connecticut’s rate includes a 20% surtax. Delaware and Virginia have gross receipts taxes in addition to their corporate income taxes. Illinois’ rate includes two separate corporate income taxes, one at a 5.25% rate and one at a 2.5% rate. The tax rate in Indiana decreased to 6.25 on July 1, 2016.

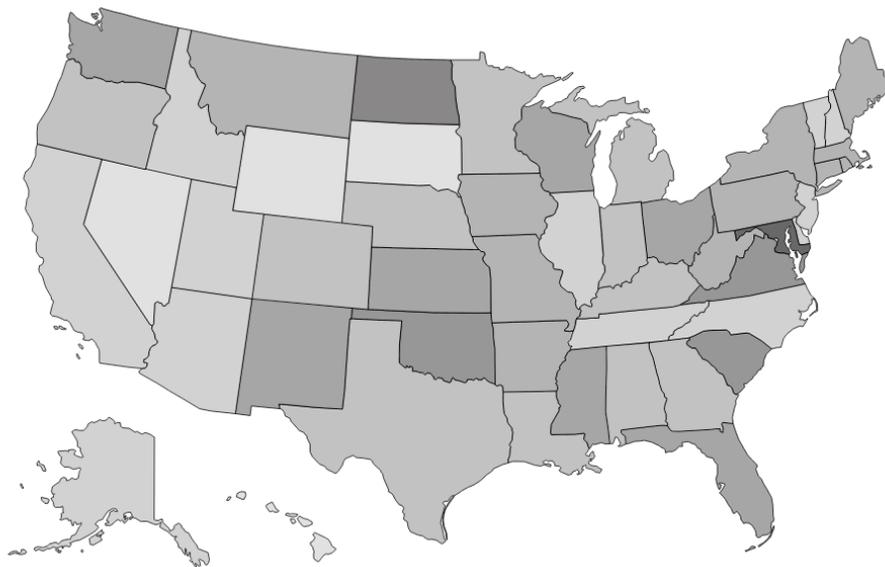
## ECONOMIC DEVELOPMENT APPROACH

The state of Florida is an oft-cited example of a strong state partnership with an aggressive approach to economic development. This aggressive approach includes a number of targeted incentives. The State Business Incentives Database, created in 1999 by the Council for Community and Economic Research (C2ER), features nearly 2,000 programs from all US states and territories. Data are continuously tracked by C2ER using a range of sources, including state agency websites, statutes and codes, budget documents, and interviews with state agency representatives. The entire database is updated on a biannual basis to ensure that information for each program is accurate and complete and to verify that the program is still active. According to C2ER’s research shown in Figure 4, Florida offers 46 incentives programs, with grants and tax exemptions being the most common. By contrast, tax credits are the most common incentive nationally, accounting for 27 percent of the total at the time of the analysis.

Northwest Florida is fortunate to have a robust network of local economic development organizations, as well as strong regional partners, including Florida’s Great Northwest and Gulf Power. The region is home to four workforce development boards (CareerSource Chipola, CareerSource Escarosa, CareerSource Gulf Coast, and CareerSource Okaloosa Walton) and several important industry support organizations, including:

- Northwest Florida Manufacturers Council – created to help increase skills among regional manufacturing workers and advocate important business climate issues
- Innovation Coast – a network of technology companies and professionals that help develop local talent and support recruiting efforts of technology-related businesses
- Technology Coast Manufacturing & Engineering Network (TeCMEN) – provides Okaloosa County technology-based companies the opportunity to network and compete for substantial business opportunities

**FIGURE 4. INCENTIVES PROGRAMS OFFERED BY STATE**  
DARKER SHADES REPRESENT HIGHER NUMBERS OF PROGRAMS



**UNITED STATES**

Number of entries: 1,827  
 Top 5 program types (% of total):  
 1) Tax credit (27%)  
 2) Grant (22%)  
 3) Loan/loan participation (20%)  
 4) Tax exemption (14%)  
 5) Other (7%)

**FLORIDA**

Number of entries: 46  
 Top 5 program types (% of total):  
 1) Grant (26%)  
 2) Tax exemption (17%)  
 3) Loan/loan participation (15%)  
 4) Tax credit (15%)  
 5) Loan guarantee (11%)

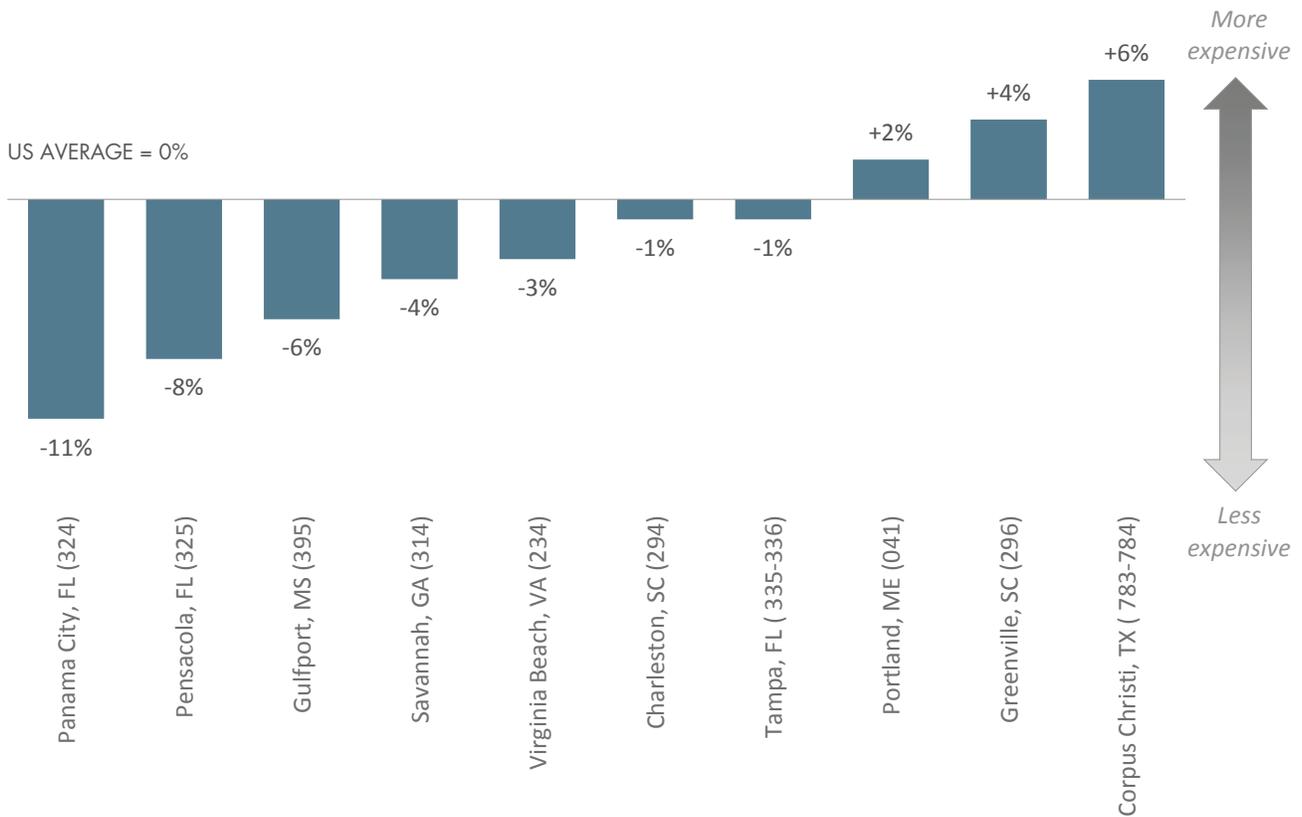
Source: Council for Community and Economic Research (C2ER), accessed January 2017.  
 Note: Data for US territories is not shown.

## CONSTRUCTION COSTS

According to estimates by Craftsman Costbooks, construction costs in the region are well below the national average. In the two three-digit ZIP codes for which estimates are available—324 (which covers the Panama City area) and 325 (which includes Pensacola and Crestview)—costs are estimated to be 11 percent and 8 percent lower, respectively, than national averages. A comparison to the peer regions identified as part of the planning process reveals an advantage relative to all eight MSAs.

Costs in Corpus Christi, Texas, were the highest among the peer regions according to Craftsman. The region’s higher costs are a reflection of the massive amount of petrochemical and related investments planned and in progress along the Texas Gulf coast, as well as commercial and residential construction projects in the state’s major metro areas.

**FIGURE 5. RELATIVE CONSTRUCTION COSTS VS. NATIONAL AVERAGE**



Source: Craftsman 2017 National Construction Estimator (65th ed.)

## AEROSPACE AND DEFENSE

### DEFINITION

The Aerospace and Defense cluster consists of companies involved in the production of civilian and military aircraft (including engines, aircraft parts, and equipment), as well as spacecraft and guided missile systems and closely related industries, such as the production of instrumentation and measurement equipment. Figure 7 lists the NAICS codes associated with this cluster as defined and provides an overview of employment trends in the region, state, and the US. In addition, this cluster encompasses a number of technologies that are not well defined by the industrial classification system. Most notable in light of the region’s assets is the growth in robotics and unmanned vehicles.

**FIGURE 6. REGIONAL SNAPSHOT**  
AEROSPACE AND DEFENSE CLUSTER

Employment	1,865
Recent trends (%)	40%
LQ	1.05
Establishments	33
Earnings/Job	\$97,009
Relative Earnings/Job (US=1.00)	0.80

**FIGURE 7. EMPLOYMENT OVERVIEW: AEROSPACE AND DEFENSE**

NAICS CODE	DESCRIPTION	2015 JOBS			LQ	RECENT TRENDS (2009 TO 2015)			10-YEAR FORECAST (2016-2026)		
		Number	% of Cluster	US=1.00		Total Change	Region % Chg.	US % Chg.	Total Change	Region % Chg.	US % Chg.
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	686	37%	2.19	-215	-24%	9%	168	27%	12%	
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	379	20%	23.77	-235	-38%	-37%	-115	-31%	-28%	
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Mfg.	238	13%	8.43	-454	-66%	-34%	-219	-92%	-32%	
334511	Search, Detection, Navigation, Guidance, Aeronautical/Nautical System and Instrument Mfg.	228	12%	0.63	-250	-52%	-17%	-164	-56%	-12%	
336411	Aircraft Manufacturing	221	12%	0.33	-115	-34%	0%	76	36%	2%	
336412	Aircraft Engine and Engine Parts Manufacturing	83	4%	0.36	22	36%	-5%	-57	-64%	-5%	
336414	Guided Missile and Space Vehicle Manufacturing	29	2%	0.18	-12	-29%	1%	20	83%	7%	
<b>Cluster Total</b>		<b>1,865</b>	<b>100%</b>	<b>1.05</b>	<b>-1,258</b>	<b>-40%</b>	<b>-5%</b>	<b>-291</b>	<b>-16%</b>	<b>0%</b>	

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed; Haas Center.

Note: Cluster definition based on the US Benchmark Cluster Definitions prepared by Harvard Business School's Institute for Strategy and Competitiveness in partnership with the US Department of Commerce and US Economic Development Administration.

**TRENDS**

The commercial aviation industry has experienced record growth in recent years due to demand for fleet replacement, passenger growth in emerging markets, and the introduction of new products and manufacturers to the market. According to the most recent data available from the Aerospace Industries Association (AIA), sales of aerospace products started to rebound in 2015 after stalling out at the end of the last decade. Over the past decade, aircraft manufacturing has made up an increasingly larger share of all aerospace sales, rising from 51 percent of the total in 2004 to an estimated 56 percent in 2015, according to the AIA’s analysis (Figure 8).

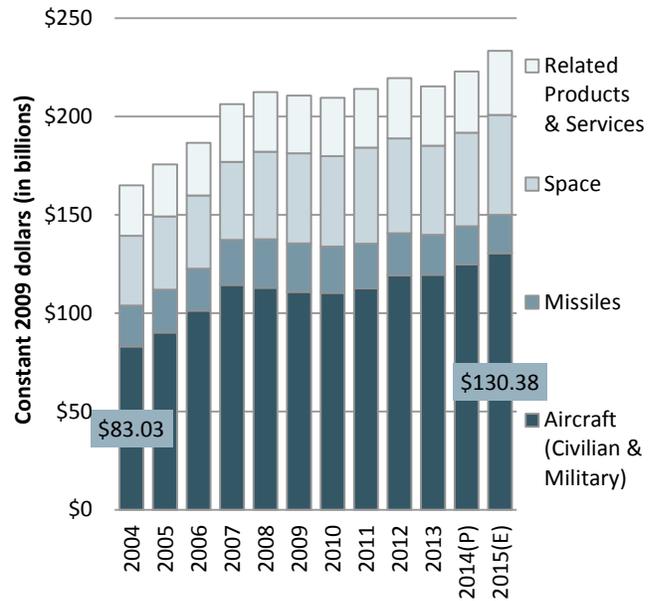
However, when aircraft sales are considered by type (civilian versus military) there are substantial differences in performance during the same time period (Figure 9.). Civilian (commercial) aircraft sales reached record highs in 2014 and 2015, doubling from 2004. By contrast, military-related sales declined after climbing to just over \$60 billion (constant 2009 dollars) as the US entered the recession.

Major factors affecting the global outlook for the Aerospace and Defense cluster include:

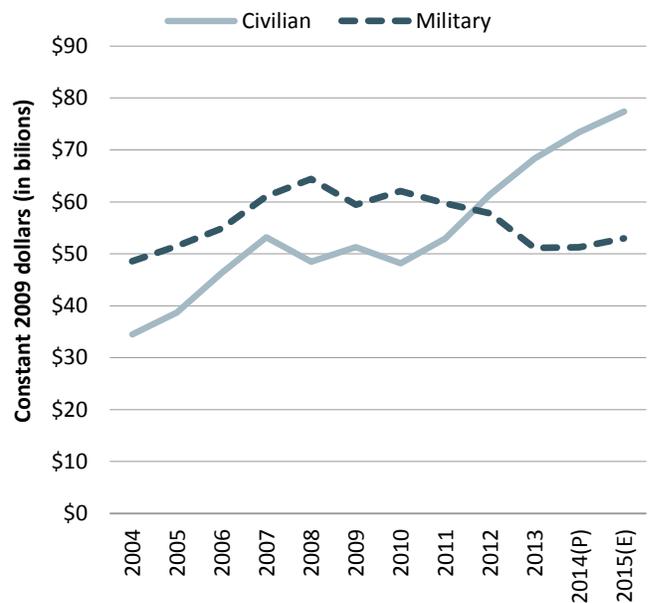
- CONTINUED HIGH LEVELS OF DEMAND FOR AIRCRAFT: The global aerospace and defense industry saw a decline in profits and revenues in 2015 for the first time in five years, due in large part to the impact of the strong US dollar and restructuring charges taken by two major companies (Bombardier and UTC). Despite the declines, prospects for commercial aircraft remain strong, driven by the replacement of aging fleet in mature markets, new passenger growth in emerging markets (driving fleet expansion), and increasing fuel efficiency standards in North America and Europe.

Net orders for Boeing and Airbus flattened slightly in 2015, dropping below 2,000 aircraft for the first time in four years. However, the firms continue to have record-breaking backlogs, calculated at 12,626 units as of December 31, 2015. At current production rates, PwC estimated the backlog of orders is sufficient to keep manufacturers busy for the next nine years (*Aerospace & Defense: 2015 Year in Review and 2016 Forecast*).

**FIGURE 8. AEROSPACE SALES BY PRODUCT GROUP**



**FIGURE 9. AIRCRAFT SALES BY TYPE**



Source: Aerospace Industries Association, 2014 Year-End Review and Forecast (based on company reports; *The Budget of the United States Government*, National Aeronautics and Space Administration, US Department of Commerce, and Department of Defense); TIP Strategies. Note: Government purchases reflected as appropriated funding. P = preliminary, E = estimate

Long-term reauthorization of the US Export-Import Bank (Ex-Im) through 2019 was good news for domestic producers, who often rely on the bank to supplement traditional funding sources. The program is opposed by US carriers who view the program as a subsidy provided to foreign firms purchasing US aircraft, an option not available to domestic airlines.

The future is less bright for defense contractors. Although passage of the Bipartisan Budget Act of 2015 extends relief from the full impacts of sequestration through 2017, uncertainty about the federal budget continues. However, PwC cites “rapidly changing US defense priorities” (including global threats from ISIS, the Russia-Ukraine conflict, and growing modernization of the militaries of North Korea and China) as a force that is likely to help drive compromise in future budget deals.

- **DEPARTMENT OF DEFENSE PRIORITIES:** In addition to continued uncertainty over global military spending, the cluster has experienced a shift towards vendors that “aren’t part of the core defense industry” according to PwC’s review of trends affecting aerospace and defense in 2016. The analysis highlights the unusual position traditional defense contractors find themselves in, stating that the “combination of unexpected competitive pressures and a more frugal customer base is a one-two punch that the defense industry has never quite faced before,” (PwC, *2016 Aerospace and Defense Industry Trends: Battling Against Technology Firms, Tight Budgets, and Uncertain Military Needs*, p. 3).

This shift towards technology-oriented vendors can be seen in the Defense Innovation Initiative announced in November 2014 by former Secretary of Defense, Chuck Hagel. This initiative is commonly referred to as the “third offset strategy” because it marks the third evolution of DoD thinking on how the US can maintain strategic advantage over potential adversaries into the future. Priority areas outlined in the Defense Innovation Initiative are designed to accelerate innovation and emphasize the application of breakthrough technologies. These priority areas include the following:

- *Robotics & Autonomous Systems:* unmanned machines that assess situations and make decisions on their own
  - *Miniaturization:* making components of weapons systems smaller, including warheads, sensors, and electronics
  - *Big Data:* utilizing commercial techniques for analyzing large volumes of intelligence data
  - *Advanced Manufacturing:* using technologies such as 3-D printing that allow for ongoing, rapid changes to test new technologies and customize existing tech for particular situations
- **ROBOTICS AND AUTONOMOUS SYSTEMS:** A growing number of systems are being designed to operate autonomously, including aerial, ground, and underwater vehicles. Interest in unmanned aerial vehicles (UAVs) for civilian use and among foreign militaries is expected to help push the market to \$93 billion in sales over the next decade, according to the Teal Group ([www.tealgroup.com](http://www.tealgroup.com)). The group’s 2015 study estimates that military uses will account for nearly three quarters (72 percent) of the market, with consumer and civil uses capturing 23 percent and 5 percent, respectively. Though a much smaller market, growth in unmanned underwater vehicles (UUVs) is also expected to climb, driven primarily by DoD investments. Increasingly sophisticated sensors will be an important element to the growth of both aerial and underwater systems. Likewise, artificial intelligence (AI) also plays a key role in autonomous systems by allowing machines to place feedback generated by the sensors into context and learn to respond. Although the subject matter differs, the Florida Institute for Human and Machine Cognition in Pensacola, which designs computer systems to extend human capabilities, is an example of this kind of relationship.
  - **TALENT PIPELINE:** The aerospace and defense industry faces a significant brain drain, the result of an aging workforce and stiff competition to attract and retain young talent. According to *Aviation Week’s* 2016 Workforce Study, just over one in four workers (26.8 percent) qualified for retirement in 2015. However, the industry’s actual retirement rate is “staggeringly low” at roughly 3 percent of the total workforce (or just 10 percent of those eligible). As in prior years, the study highlights the need to increase the pipeline of STEM talent and increase “work-readiness” skills among younger workers. Increasing diversity in the workforce was also cited as an issue.

## BENCHMARK GEOGRAPHIES

As the long-time home of Boeing Corporation, it is not surprising that Seattle tops the list of metropolitan areas based on total employment in the aerospace and defense cluster (Figure 10, page 71). The Seattle region also has a strong concentration of employment relative to national averages, as evidenced by its location quotient (LQ) of 10.90. However, Seattle's employment concentration is far exceeded by Wichita's LQ of 24.12, indicating that employment in aerospace manufacturing is 24 times higher than would be expected in an MSA of the same size. Like Seattle, Boeing has had a long-time presence in Wichita. In contrast to Seattle, Boeing's Wichita operations were focused on military work, a sector that has been hard hit in recent years. As a result, Wichita has seen sharp declines in recent years, while Seattle's employment has soared as orders for commercial aircraft continue to surge.

When viewed by the concentration of employment in the Aerospace and Defense cluster (as measured by LQs), the top 10 metro areas shift considerably, with only Seattle and Wichita appearing on both lists. By this metric, Ozark, Alabama, is in the top spot, with an LQ of 38.28. The metro area includes Fort Rucker, the primary location for the Army's aviation-related missions, along with a cluster of aerospace firms. These include aircraft parts manufacturers (such as Brauer Aerospace Products), helicopter maintenance and support firms (including Bell Helicopter, US Helicopter and Army Fleet Services), and a number of training providers.

Of the three Northwest Florida metro areas, only one exhibits strengths in Aerospace and Defense cluster employment. The Crestview-Fort Walton Beach-Destin metro area ranked 53rd nationwide in terms of employment levels in the cluster and 42nd based on its location quotient of 3.29.

**FIGURE 10. TOP 10 METROS: AEROSPACE AND DEFENSE**  
RANKED BY NUMBER OF JOBS IN 2015

METROPOLITAN AREA	LOCATION QUOTIENT (US = 1.00)	2015 JOBS	CHANGE FROM 2009	ESTABLISHMENTS	EARNINGS PER JOB
Seattle-Tacoma-Bellevue, WA	10.90	92,810	+10,121	161	\$131,187
Los Angeles-Long Beach-Anaheim, CA	2.62	70,049	-9,423	422	\$131,156
Dallas-Fort Worth-Arlington, TX	2.34	33,753	-5,784	122	\$139,783
Wichita, KS	24.12	28,758	-7,059	139	\$93,967
Phoenix-Mesa-Scottsdale, AZ	2.33	19,589	-6,131	123	\$116,485
Hartford-West Hartford-East Hartford, CT	6.99	18,053	-2,054	103	\$130,075
San Diego-Carlsbad, CA	2.76	17,667	+6,622	96	\$116,352
St. Louis, MO-IL	2.67	15,803	+1,507	34	\$135,365
Boston-Cambridge-Newton, MA-NH	1.29	14,670	-2,331	53	\$155,887
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.12	13,544	-1,932	70	\$134,908

### NORTHWEST FLORIDA METROPOLITAN AREAS (RANKED BY NUMBER OF JOBS IN 2015)

Crestview-Fort Walton Beach-Destin, FL	3.29	1,649	-1,162	22	\$100,442
Pensacola-Ferry Pass-Brent, FL	0.17	146	-124	6	\$62,561
Panama City, FL	0.17	62	+29	3	\$72,528

**FIGURE 10. TOP 10 METROS: AEROSPACE AND DEFENSE (CONTINUED)**  
 RANKED BY RELATIVE CONCENTRATION OF EMPLOYMENT (US=1.00)

METROPOLITAN AREA	LOCATION QUOTIENT (US = 1.00)	2015 JOBS	CHANGE FROM 2009	ESTABLISHMENTS	EARNINGS PER JOB
Ozark, AL	38.28	3,105	-500	5	\$99,398
Wichita, KS	24.12	28,758	-7,059	139	\$93,967
Savannah, GA	14.34	9,910	+2,986	18	\$118,827
Cedar Rapids, IA	12.53	7,880	-722	3	\$130,719
Arkansas City-Winfield, KS	11.74	686	-113	2	\$106,462
Troy, AL	11.47	653	-125	3	\$100,591
Milledgeville, GA	11.18	839	+243	1	\$73,475
Seattle-Tacoma-Bellevue, WA	10.90	92,810	+10,121	161	\$131,187
Jamestown, ND	9.97	520	+34	1	\$65,957
Binghamton, NY	9.11	3,900	-1,716	6	\$120,573

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

**✓ RATIONALE & NICHES**

This target capitalizes on the growth of aerospace manufacturing in the southern US, solidified by Airbus’s selection of Mobile as the site for a new A320 assembly facility. Data compiled by The Pew Charitable Trusts indicates that southern states have captured an increasing share of aerospace employment in recent years (*Aerospace Manufacturing Takes Off in Southern States*, April 2, 2014). Factors cited by the analysis include lower labor costs and strong incentives, particularly with regard to training packages. Pew points out these factors also explain the expansion of the automotive industry in southern states, which has similar site selection requirements.

According to AIA data, Florida is one of five states accounting for more than one-half of total aerospace and defense employment in the US. The others are Washington, California, Texas, and Michigan. In a separate analysis, the AIA lists Florida as the tenth largest state in terms of aerospace and defense export gains between 2010 and 2015. The state is also well positioned to capture future growth. For the second year in a row, Florida ranked first in PwC’s *2015 Aerospace Manufacturing Attractiveness Rankings* report. The state received its highest rank on the industry size component, which considers “existing suppliers and supply/growth of workforce including available aerospace technicians, engineers, mechanics.” Florida also scored well on the educational attainment component of the index, suggesting an ability to meet the industry’s need for a highly skilled workforce.

**KEY SITE LOCATION FACTORS:**

- Good truck access
- Easy access (not more than 45 to 60 minutes) to multimodal logistics networks
- Reliable and redundant electric service
- Low startup costs
- A plan from the community for recruiting and training top-level production and scientific talent
- Strong education system
- Attractive tax structure

Source: GLDP Partners

**FIGURE 11. 2015 AEROSPACE MANUFACTURING ATTRACTIVENESS RANKINGS**  
50-STATE ANALYSIS PREPARED BY PWC

STATE	OVERALL RANK	INDEX COMPONENT RANKINGS			
		<i>Tax</i>	<i>Operating costs</i>	<i>Industry size</i>	<i>Education</i>
<b>Florida</b>	<b>1</b>	<b>14</b>	<b>21</b>	<b>5</b>	<b>12</b>
Michigan	<b>2</b>	<b>10</b>	25	<b>3</b>	18
Ohio	<b>3</b>	26	18	<b>1</b>	17
Utah	<b>4</b>	<b>5</b>	29	<b>7</b>	22
Virginia	<b>5</b>	<b>6</b>	34	19	<b>5</b>
Georgia	<b>6</b>	<b>8</b>	31	11	16
New York	<b>7</b>	20	28	17	<b>1</b>
Texas	<b>8</b>	39	16	<b>4</b>	<b>9</b>
Missouri	<b>9</b>	<b>4</b>	<b>7</b>	34	24
North Carolina	<b>10</b>	25	<b>9</b>	22	15

Source: PwC analyzed the relative ‘aerospace industry attractiveness’ of the US in a state-by state comparison. The study produced an overall ‘attractiveness ranking index’ using a weighted average of the following major elements: taxes, operating costs (industry and overall wage rates, business climate, energy costs), industry size (existing suppliers and supply/growth of workforce including available aerospace technicians, engineers, mechanics), and educational attainment.

The 13-county Northwest Florida region has a number of strategic assets that support the Aerospace and Defense cluster’s expansion. These include a dense, multimodal transportation network; proximity to several military installations; targeted tax incentives; major employers; and industry-specific training programs and R&D.

**FIGURE 12. STRATEGIC ASSETS: AEROSPACE AND DEFENSE**



**INDUSTRY/INFRASTRUCTURE**

- Close proximity to five major Aerospace OEM Assembly facilities.
- Regional employers, such as L-3 Crestview Aerospace, BAE Systems and others.
- Multiple military installations with aviation-related missions, including R&D and testing associated with Elgin AFB.
- Florida Institute for Human and Machine Cognition in Pensacola.
- Multi-modal transportation network (Interstate 10, multiple ports, international air service, Class I and Class III rail access).
- Concentration of machine shops and supportive industries.
- Available sites and buildings, including multiple certified industrial sites.
- High quality of life featuring easy access to recreation and entertainment offerings.

**WORKFORCE/TRAINING**

- A significant pipeline of skilled military personnel exiting regional military institutions annually.
- Concentration of key occupations (Aircraft Systems Assemblers and Aircraft Mechanics & Service Technicians).
- Aerospace technologies and aviation maintenance academies at area high schools and middle schools.
- Industry-specific postsecondary training programs, including technical centers (Tom P. Haney and George Stone) and colleges (Chipola College, Embry-Riddle, Gulf Coast State College).
- Gulf Power STEM and Career Awareness Programs (various initiatives targeting fifth through 12th students).
- Identified as “Key Industry” by two of the four workforce boards in their local workforce services plans (Escarosa and Gulf Coast).

**MARKET TRENDS/POLICY**

- Strong outlook for aerospace, including unmanned vehicle systems.
- Growing concentration of aerospace employment in southern states.
- Tax incentives including the Qualified Target Industry Tax Refund and the Qualified Defense and Space Contractor Tax Refund.
- Favorable state business climate (Florida ranked “Best Business Climate” in 2016 by Business Facilities magazine).
- Low operating costs and favorable tax structure (including no state personal income tax).
- Gulf Power Job Creation Rate Incentive for qualified business customers.

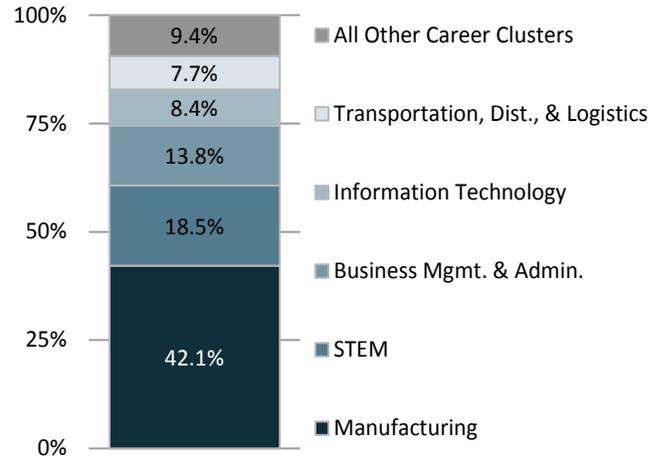
Source: TIP Strategies research

**TALENT**

The top five career clusters account for nine out of ten jobs in the US Aerospace and Defense industry cluster (Figure 13). Manufacturing is the largest career cluster, totaling 42.0 percent of the industry cluster’s employment nationwide. Jobs in the Science, Technology, Engineering and Mathematics (STEM) career cluster represent the second largest group, with roughly one in five workers (18.5 percent) found in this occupational cluster.

The Production pathway—part of the Manufacturing career cluster—accounts for slightly more than one in four workers in the industry cluster (Figure 14). It is the Aerospace and Defense industry cluster’s largest pathway, representing 27 percent of total employment. The second largest pathway, Engineering and Technology, comprises 18 percent of the industry cluster’s employment nationally. It is one of two pathways within the STEM career cluster; Science and Mathematics is the other.

**FIGURE 13. TOP CAREER CLUSTERS: AEROSPACE AND DEFENSE**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US



**FIGURE 14. TOP 10 CAREER PATHWAYS: AEROSPACE AND DEFENSE**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US

Pathway   CAREER CLUSTER	Share of total US employment in industry cluster
1 Production   MANUFACTURING	27.3%
2 Engineering and Technology   STEM	18.2%
3 Programming and Software Development   INFORMATION TECHNOLOGY	6.5%
4 Manufacturing Production Process Development   MANUFACTURING	6.3%
5 Quality Assurance   MANUFACTURING	6.0%
6 Administrative Support   BUSINESS MGMT. & ADMIN.	5.4%
7 Operations Management   BUSINESS MGMT. & ADMIN.	4.7%
8 Facility and Mobile Equipment Maintenance   TRANSPORTATION, DIST., & LOGISTICS	4.4%
9 Maintenance, Installation & Repair   MANUFACTURING	2.6%
10 Logistics Planning and Management Services   TRANSPORTATION, DIST., & LOGISTICS	1.9%

Source (both figures): US Cluster Mapping Benchmark Definitions; National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies

At the individual occupation level, one-half of the top 10 occupations in the Aerospace and Defense cluster are part of the Manufacturing career cluster (Figure 15). Of these, Aircraft Systems Assemblers (SOC 51-2011) is the largest single occupation, representing 6.0 percent of all jobs in the cluster nationally. The STEM career cluster also features prominently in the top occupations, with Aerospace Engineers (SOC 17-2011) being the largest detailed occupation, at 4.7 percent of US Aerospace and Defense employment.

Figure 16 (page 77) provides the top occupations in the cluster in the 13-county region. Aircraft Systems Assemblers (SOC 51-2011) tops the list at the regional level, but accounts for a slightly larger share of the cluster’s employment (8.7 percent) than it does nationally. Two of the cluster’s top occupations are more concentrated in Northwest Florida than would be expected based on national patterns with LQs of roughly 3.0: Aircraft Mechanics & Service Technicians (SOC 49-3011) and Avionics Technicians (SOC 49-2091). With the exception of Business Operations Specialists, All Other (SOC 13-1199), which is a catchall category, the cluster’s largest occupation in the region is Team Assemblers (SOC 51-2092), with 1,720 jobs in the 13 counties in 2015.

**FIGURE 15. CAREER CLUSTERS FOR LARGEST OCCUPATIONS: AEROSPACE AND DEFENSE**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US

SOC CODE	DESCRIPTION	CAREER CLUSTER					SHARE OF TOTAL US EMPLOYMENT IN INDUSTRY CLUSTER
		Manufacturing	STEM	Info. Tech.	Transp. & Logistics	Bus. Mgmt. & Admin.	
1	51-2011 Aircraft Systems Assemblers	■					6.4%
2	17-2011 Aerospace Engineers		■				4.6%
3	51-9061 Inspectors, Testers, Sorters, Samplers, & Weighers	■					4.0%
4	17-2112 Industrial Engineers		■				4.0%
5	51-4041 Machinists	■					3.4%
6	49-3011 Aircraft Mechanics & Service Technicians				■		3.3%
7	17-2141 Mechanical Engineers		■				3.0%
8	15-1133 Software Developers, Systems Software			■			2.8%
9	51-2092 Team Assemblers	■					2.7%
10	51-2022 Electrical & Electronic Equip. Assemblers	■					2.4%
11	15-1132 Software Developers, Applications			■			2.3%
12	13-1023 Purchasing Agents, Exc, Whls., Retail, & Farm	■					2.1%
13	51-1011 First-Line Supvsr., Production & Operating Workers	■					2.1%
14	43-5061 Production, Planning, & Expediting Clerks	■					1.9%
15	51-4011 CNC Machine Operators, Metal/Plastic	■					1.8%
16	13-1081 Logisticians				■		1.7%
17	13-1199 Business Operations Specialists, All Other					■	1.7%
18	11-9041 Architectural & Engineering Mgrs.		■				1.6%
19	17-2071 Electrical Engineers		■				1.6%
20	17-2072 Electronics Engineers, Except Computer		■				1.3%

Source: US Cluster Mapping Benchmark Definitions (Delgado, Porter, Stern 2013); National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies

Among the largest occupations, only two had median hourly wage rates below the region rate for all industries (\$17.27). At the other end of the spectrum, several occupations offer median hourly wage rates in excess of \$40 per hour. These include Engineers, All Other (SOC 17-2199) and Software Developers, Systems Software (SOC 15-1133), with median hourly wage rates of \$49.99 and \$48.40, respectively.

Generally speaking, wages correlate with education requirements. However, a few of the occupations offer the opportunity for high-wage employment with relatively modest levels of education and training. Aircraft Mechanics & Service Technicians (SOC 49-3011) is one example, with median hourly wage rates above \$27 per hour and educational requirements that can be as minimal as a postsecondary award that is not part of a degree program.

**FIGURE 16. TOP NORTHWEST FLORIDA OCCUPATIONS: AEROSPACE AND DEFENSE**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE REGION

SOC CODE	OCCUPATION	% OF CLUSTER EMPL.	2015 JOBS IN REGION	LQ (US=1.00)	MEDIAN HOURLY EARNINGS	MINIMUM EDUCATION REQUIRED
51-2011	Aircraft Systems Assemblers	8.7%	189	1.48	\$21.78	Moderate-term OJT
49-3011	Aircraft Mechanics & Service Technicians	7.7%	1,158	3.02	\$27.19	Non-degree award
17-2112	Industrial Engineers	4.9%	489	0.68	\$31.93	Bachelor's degree
51-2092	Team Assemblers	3.6%	1,720	0.54	\$14.22	Moderate-term OJT
17-2011	Aerospace Engineers	2.9%	198	1.00	\$42.55	Bachelor's degree
51-2022	Electrical & Electronic Equip. Assemblers	2.8%	243	0.38	\$16.15	Moderate-term OJT
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	2.7%	611	0.42	\$18.94	Moderate-term OJT
13-1081	Logisticians	2.5%	551	1.35	\$37.03	Bachelor's degree
15-1133	Software Developers, Systems Software	2.3%	553	0.48	\$48.40	Bachelor's degree
13-1023	Purchasing Agents, Exc, Whls., Retail, & Farm	2.3%	852	0.97	\$32.13	Bachelor's degree
17-2199	Engineers, All Other	2.1%	788	1.89	\$49.99	Bachelor's degree
49-2091	Avionics Technicians	2.0%	163	3.08	\$27.26	Associate's degree
51-1011	1st-Line Supvsr., Production & Operating Workers	1.9%	1,116	0.63	\$24.21	Related experience
13-1199	Business Operations Specialists, All Other	1.9%	4,137	1.48	\$30.51	Bachelor's degree

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Note: Location quotients (LQs) of 1.25 or greater suggest a specialization in the occupation relative to the US and are highlighted. Median hourly wages above the regional rate of \$17.27 are highlighted.

**✂ RESOURCES & NETWORKING**

AEROSPACE		
<b>TRADE ASSOCIATIONS</b>		
Aerospace Industries Association		<a href="http://www.aia-aerospace.org">www.aia-aerospace.org</a>
Aerospace & Defense Forum		<a href="http://aerospacedefenseforum.org">aerospacedefenseforum.org</a>
Aircraft Electronics Association		<a href="http://www.aea.net">www.aea.net</a>
American Institute of Aeronautics and Astronautics		<a href="http://www.aiaa.org">www.aiaa.org</a>
Aviation Suppliers Association		<a href="http://www.aviationsuppliers.org">www.aviationsuppliers.org</a>
Aviation Distributors and Manufacturers Association		<a href="http://www.adma.org">www.adma.org</a>
General Aviation Manufacturers Association		<a href="http://www.gama.aero">www.gama.aero</a>
Aeronautical Repair Station Association		<a href="http://www.arsa.org">www.arsa.org</a>
Helicopter Association International		<a href="http://www.rotor.com">www.rotor.com</a>
International Coordinating Council of Aerospace Industries Associations		<a href="http://www.iccaia.org">www.iccaia.org</a>
National Aeronautics Association		<a href="http://www.naa.aero">www.naa.aero</a>
National Business Aviation Association		<a href="http://www.nbaa.org">www.nbaa.org</a>
Professional Aviation Maintenance Association		<a href="http://www.pama.org">www.pama.org</a>
Regional Airline Association		<a href="http://www.raa.org">www.raa.org</a>
SAE International		<a href="http://www.sia.org">www.sia.org</a>
Satellite Industry Association		<a href="http://www.sia.org">www.sia.org</a>
Space Enterprise Council		<a href="http://www.uschamber.com/space/default">www.uschamber.com/space/default</a>
Space Foundation		<a href="http://www.spacefoundation.org">www.spacefoundation.org</a>
Space Transportation Association		<a href="http://www.spacetransportation.us">www.spacetransportation.us</a>
<b>RELEVANT CONFERENCES/EVENTS</b>		
<b>Space Tech Expo</b>		
23-25 May 2017	<i>Pasadena, CA</i>	<a href="http://www.spacetecheexpo.com/">www.spacetecheexpo.com/</a>
<b>Aerospace &amp; Defense Supplier Summit</b>		
26-18 March 2018	<i>Seattle, WA</i>	<a href="http://www.bciaerospace.com/seattle/">www.bciaerospace.com/seattle/</a>
<b>AeroDef 2017</b>		
6-9 March 2017	<i>Fort Worth, TX</i>	<a href="http://www.aerodefevent.com/">www.aerodefevent.com/</a>
<b>TRADE PUBLICATIONS</b>		
PwC Aerospace & Defense team publications		<a href="http://www.pwc.com/us/en/industrial-products/aerospace-defense.html">http://www.pwc.com/us/en/industrial-products/aerospace-defense.html</a>
Aerospace America		<a href="http://www.aerospaceamerica.org/">www.aerospaceamerica.org/</a>
Aerospace & Defense Technology		<a href="http://www.techbriefsmediagroup.com/magazines/adt">www.techbriefsmediagroup.com/magazines/adt</a>
Aerospace Manufacturing and Design		<a href="http://www.onlineamd.com/magazine/">www.onlineamd.com/magazine/</a>
AIAA Journal		<a href="http://www.arc.aiaa.org/loi/aiaaj">www.arc.aiaa.org/loi/aiaaj</a>
Aircraft Engineering and Aerospace Technology		<a href="http://www.emeraldgrouppublishing.com/aeat.htm">www.emeraldgrouppublishing.com/aeat.htm</a>
Journal of Aircraft		<a href="http://www.arc.aiaa.org/loi/ja">www.arc.aiaa.org/loi/ja</a>
Journal of Air Transport Management		<a href="http://www.journals.elsevier.com/journal-of-air-transport-management/">www.journals.elsevier.com/journal-of-air-transport-management/</a>

AEROSPACE	
Journal of Spacecraft and Rockets	<a href="http://www.arc.aiaa.org/loi/jsr">www.arc.aiaa.org/loi/jsr</a>
Journal of Propulsion and Power	<a href="http://www.arc.aiaa.org/loi/jpp">www.arc.aiaa.org/loi/jpp</a>
Journal of Guidance, Control, and Dynamics	<a href="http://www.arc.aiaa.org/loi/jgcd">www.arc.aiaa.org/loi/jgcd</a>
Journal of Aerospace Information Systems	<a href="http://www.arc.aiaa.org/loi/jais">www.arc.aiaa.org/loi/jais</a>
NASA Tech Briefs	<a href="http://www.techbriefsmediagroup.com/magazines/ntb">www.techbriefsmediagroup.com/magazines/ntb</a>
PwC Aerospace & Defense team publications	<a href="http://www.pwc.com/us/en/industrial-products/aerospace-defense.html">http://www.pwc.com/us/en/industrial-products/aerospace-defense.html</a>

Source: TIP Strategies research

## FINANCIAL SERVICES

### DEFINITION

The Financial Services cluster consists of companies involved in deposit banking, extending credit in the form of loans, and the exchange of securities and commodities. The cluster plays an essential role in the economy as it interacts with virtually all other clusters via the banking industry. Figure 18 shows employment levels and historic and projected trends for several of the region’s largest industries within the Financial Services cluster. As defined here, the cluster focuses on traded industries (those that sell products and services outside of their home region). However, for this analysis, the cluster has been expanded to include Credit Unions (NAICS 52213). While this industry is part of the Local Financial Services cluster (those that primarily serve a local market), it is included here due to its size and concentration in the region. The 13-county region also has far outpaced national growth trends in this industry, a trend that is projected to continue.

**FIGURE 17. REGIONAL SNAPSHOT  
FINANCIAL SERVICES**

Employment	<b>7,736</b>
Recent trends (%)	<b>+28%</b>
LQ	<b>1.15</b>
Establishments	<b>497</b>
Earnings/Job	<b>\$71,382</b>
Relative Earnings/Job (US=1.00)	<b>0.47</b>

**FIGURE 18. EMPLOYMENT OVERVIEW: FINANCIAL SERVICES (SELECTED INDUSTRIES)**

NAICS CODE	DESCRIPTION	2015 JOBS		LQ US=1.00	RECENT TRENDS (2009 TO 2015)			10-YEAR FORECAST (2016-2026)		
		Number	% of Cluster		Total Change	Region % Chg.	US % Chg.	Total Change	Region % Chg.	US % Chg.
52213	Credit Unions	5,826	75%	8.16	2,637	83%	7%	2,700	44%	21%
52312	Securities Brokerage	396	5%	0.48	-18	-4%	-3%	33	9%	8%
522292	Real Estate Credit	379	5%	0.60	182	92%	2%	34	9%	-7%
522298	All Other Nondepository Credit Intermediation	193	2%	0.95	68	54%	15%	41	22%	30%
52393	Investment Advice	154	2%	0.25	-27	-15%	28%	-11	-8%	28%
522291	Consumer Lending	148	2%	0.48	-20	-12%	4%	-50	-34%	17%
52311	Investment Banking and Securities Dealing	147	2%	0.34	-58	-28%	-9%	33	26%	0%
52392	Portfolio Management	110	1%	0.18	37	51%	29%	40	38%	31%
<b>Cluster Total</b>		<b>7,736</b>	<b>100%</b>	<b>1.15</b>	<b>1,709</b>	<b>28.4%</b>	<b>1.4%</b>	<b>2,784</b>	<b>35.0%</b>	<b>9.0%</b>

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed; Haas Center.  
Note: Cluster defined by Haas Center

## TRENDS

Since the financial crisis, increased regulation and near-zero interest rates have trimmed revenues for a number of financial companies, leading them to search for cost-cutting measures. However, while the changing political climate creates uncertainty in the short term, a more relaxed regulatory environment may be the end result, which could improve the sector's profitability over the long term.

- **CONTINUED DECENTRALIZATION OF OPERATIONS:** Financial services companies continue to move out of traditional financial centers, either establishing redundant facilities away from high-profile locations or by completely relocating sensitive operations. Originated in response to the security concerns exposed by 9/11, the sector has discovered significant cost savings in the process, prompting others to follow, particularly back-office functions associated with the sector including data processing and storage, accounting, procurement, and human resources.
- **GROWING COMPETITION FROM FINTECH FIRMS:** PwC identifies the rapid development of financial technology firms—fintech—as a trend the sector can no longer afford to ignore. The term encompasses a growing number of startups offering financial services such as online lending, retail-payment services, and investment advising. In its brief on the topic, the consulting firm cites figures by CB Insights which place industry funding at \$11.2 billion in the first three quarters of 2015, nearly double the funding received by fintech companies in all of 2014 (*2016 Financial services trends: Incumbents must create new business ecosystems*, PwC).
- **INCREASED SECURITY DEMANDS:** Financial firms are expected to pursue digital strategies more aggressively, as a response to the rise of fintech and a reflection of the rapid growth in the number of digital payment options (e.g., wearable technologies, such as smart watches, and internet-connected devices, commonly referred to as the Internet of Things). The growing number of digital options is expected to ratchet up the sector's cybersecurity needs. Existing technologies like biometrics and encryption are likely to be the near-term response to securing payment transactions. Interest in creating “faster, seamless, and secure digital payments” will be a top focus according to Deloitte's 2017 banking outlook.
- **MAJOR IT INVESTMENTS.** The net effect of many trends affecting the sector is a need for significant IT investments. According to Deloitte, top priorities include cloud-based platforms, robotic process automation, and cognitive technologies. In addition to meeting new demand, many of the sector's largest players are expected to be facing the replacement of aging core systems (*Perspectives: Banking and Securities Outlook 2017*, Deloitte).

## BENCHMARK GEOGRAPHIES

The New York metropolitan area tops the list of financial services employment hubs, with more than 303,500 jobs in the cluster in 2015. This figure is well above that of the next largest metro area (Los Angeles), which employs nearly 105,000 workers in financial services industries. Because the cluster as defined includes some basic depository institutions, none of the top metropolitan areas has dramatically high levels of concentration (since virtually all markets have some level of related employment). The expanded definition also increases the correlation with population (since credit unions are found in all markets). With that in mind, however, the absence of Houston and Atlanta, which are among the 10 largest metro areas in terms of population—is notable.

In addition to having the highest LQ among the top 10 metro areas, New York City has the highest earnings per job at nearly \$323,000. Although employment is not as concentrated, both San Francisco and Boston also have earnings per job in excess of \$230,000, a reflection of venture capital and stock exchange activities in each region. Although it did not make the top 10 list based on employment or LQs, the Pensacola-Ferry Pass-Brent metropolitan area is considerably more concentrated than most other markets, with an LQ of 2.06, the 12th highest among nearly 1,000 metro areas analyzed.

**FIGURE 19. TOP 10 METROS: FINANCIAL SERVICES**  
RANKED BY NUMBER OF JOBS IN 2015

METROPOLITAN AREA	LOCATION QUOTIENT (US = 1.00)	2015 JOBS	CHANGE FROM 2009	ESTABLISHMENTS	EARNINGS PER JOB
New York-Newark-Jersey City, NY-NJ-PA	2.02	303,581	-13,675	14,977	\$322,990
Los Angeles-Long Beach-Anaheim, CA	1.05	104,680	-539	8,915	\$153,510
Dallas-Fort Worth-Arlington, TX	1.87	98,647	+8,817	4,919	\$118,136
Chicago-Naperville-Elgin, IL-IN-WI	1.27	92,338	-10,460	6,640	\$182,910
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.79	79,433	+3,306	3,708	\$139,647
Boston-Cambridge-Newton, MA-NH	1.54	65,072	-2,811	4,069	\$233,458
Phoenix-Mesa-Scottsdale, AZ	1.92	57,866	+2,613	2,552	\$90,116
San Francisco-Oakland-Hayward, CA	1.33	52,644	+5,961	3,795	\$252,385
Washington-Arlington-Alexandria, DC-VA-MD-WV	0.98	50,253	-249	3,560	\$165,007
Miami-Fort Lauderdale-West Palm Beach, FL	1.11	45,411	-1,197	5,146	\$138,049

**NORTHWEST FLORIDA METROPOLITAN AREAS (RANKED BY NUMBER OF JOBS IN 2015)**

Pensacola-Ferry Pass-Brent, FL	2.06	5,759	+2,798	232	\$68,962
Crestview-Fort Walton Beach-Destin, FL	0.48	965	-54	137	\$79,220
Panama City, FL	0.61	818	-1,019	91	\$84,669

**RANKED BY RELATIVE CONCENTRATION OF EMPLOYMENT (US=1.00)**

Fairfield, IA	5.51	676	+571	26	\$66,673
Bridgeport-Stamford-Norwalk, CT	3.63	26,451	-1,408	1,895	\$335,635
Warren, PA	3.02	725	+187	21	\$59,673
Sioux Falls, SD	2.94	7,218	-738	302	\$73,688
Hagerstown-Martinsburg, MD-WV	2.91	4,797	+219	122	\$60,295
Port Lavaca, TX	2.77	610	+549	17	\$61,587
Columbus, GA-AL	2.69	5,936	+4,822	187	\$93,771
Salt Lake City, UT	2.35	24,733	+3,797	1,442	\$93,817
Owensboro, KY	2.30	2,279	+1,280	83	\$51,146
Trenton, NJ	2.16	8,077	+133	292	\$131,686

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed  
Cluster definition based on the US Benchmark Cluster Definitions prepared by Harvard Business School's Institute for Strategy and Competitiveness in partnership with the US Department of Commerce and US Economic Development Administration.

**✓ RATIONALE & NICHES**

The Financial Services sector already plays important role in Northwest Florida. In addition to employing thousands of residents, the sector serves as an essential support service for other industries and contributes to the regional economy. For example, a 2013 analysis by the Haas Center found that the planned expansion of Navy Federal Credit Union is expected to add \$220 million dollars to Escambia County’s total gross domestic product by 2020.

The trend towards decentralization of the sector discussed previously favors smaller markets with advantageous business costs and easy access to major financial centers. In the northeastern corner of the state, Jacksonville has captured a significant number of these relocations in recent years. The Northwest Florida region offers many of the same benefits: the presence of a multilingual workforce, access to major financial markets (with direct flights to Chicago, Houston, and Washington DC and seasonal to Newark/New York region), a favorable business climate, lower rental costs (relative to major markets), and a desirable quality of life.

The presence of a skilled and available workforce is an important site location factor for the sector. Northwest Florida’s employment base offers strengths in this area. As shown in Figure 25 (page 87), strengths include above-average concentrations of two of the sector’s top occupations: Tellers (SOC 43-3071) and Customer Service Representatives (SOC 43-4051). In addition, the region is home to an above-average concentration of cybersecurity-related occupations, an essential skillset for this cluster. (See Cybersecurity cluster profile beginning on page 98.)

A matrix of the region’s strategic assets related to the Financial Services cluster is shown in Figure 20 (page 83).

**KEY SITE LOCATION FACTORS:**

- Abundant qualified labor (including language proficiency in multiple markets)
- Minimal terror/natural disaster risks
- Lower overall business costs
- Cheaper electricity (for associated IT-intensive operations like data processing and storage)
- Favorable rents (for back-office operations).

Source: AreaDevelopment magazine

**FIGURE 20. FLORIDA’S FINANCIAL SERVICES SECTOR**

**LARGEST DEPOSIT MARKETS IN FLORIDA**  
From 2015 Summary of Deposits

MARKET	INSTITUTIONS IN MARKET	DEPOSITS (IN MILLIONS)
Miami–Fort Lauderdale–West Palm Beach	105	\$207,460
Tampa–St. Petersburg–Clearwater	66	\$69,881
Jacksonville	38	\$55,789
Orlando–Kissimmee–Sanford	45	\$42,806
North Port–Sarasota–Bradenton	42	\$18,087

**STATEWIDE RANKINGS**  
On selected FACTORS

#3	Largest insurance industry (US)
#4	Largest financial services industry (US)
160	Private equity firms (> \$33.9B AUM*)
141	Commercial Banks (\$140B+ in assets)
18	Foreign banks headquartered in Florida

Source: Enterprise Florida, financial services profile \*B=billions, AUM=Assets under management  
Note: Although a formal industry definition is not provided, the Enterprise Florida profile appears to use a more expansive definition of the sector than is shown in this profile, one that likely includes both traded and local industries.

**FIGURE 21. STRATEGIC ASSETS: FINANCIAL SERVICES**



**INDUSTRY/INFRASTRUCTURE**

- Strong concentration of employment in some segments.
- Past and present financial services employers in the region, including Navy Federal Credit Union.
- Strong broadband infrastructure in areas along I-10.
- Access to major financial centers including nonstop service to Chicago and Washington DC and easy connections to New York (Newark) and Los Angeles.

**WORKFORCE/TRAINING**

- High concentrations of employment in two of the cluster’s leading occupations—bank tellers and customer service representatives.
- A multilingual population, enabling firms to serve a diverse customer base.
- The region has a concentration of occupations associate with cybersecurity which is a critical concern for this cluster
- Presence of postsecondary finance and accounting programs.

**MARKET TRENDS/POLICY**

- Changing regulatory environment could improve profitability and outlook for the sector.
- Regional growth in some industry segments has outpaced the US trend.
- State-level tax incentives that target the sector: Capital Investment Tax Credit (CITC) and High Impact Performance Incentive.
- Strong cluster of financial services and related firms located in the state.
- No personal income tax and competitive corporate tax rates.

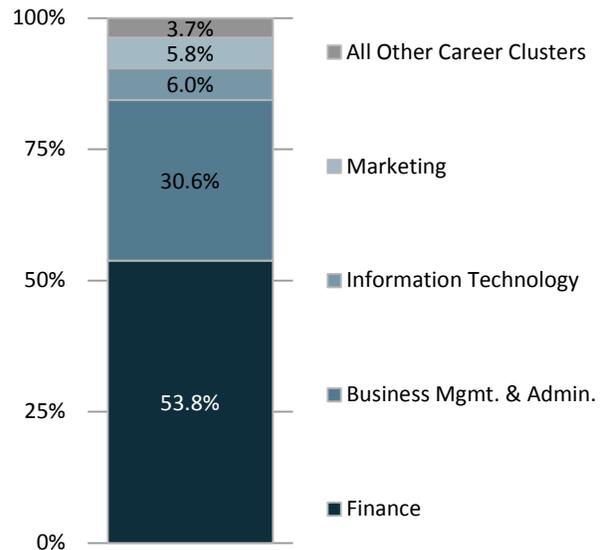
Source: TIP Strategies research

**TALENT**

As might be expected, the Finance career cluster accounts for more than one-half of all jobs (54 percent) nationally in the Financial Services industry cluster (Figure 22). When taken in conjunction with the Business Management & Administration career cluster, the two comprise more than four out of five jobs (84 percent). In fact, just four of the 16 career clusters defined under the National Career Clusters Framework account for all but a handful of US employment in the Financial Services cluster.

Within these broad career clusters, the Banking Services pathway (part of the Finance career cluster) accounts for roughly one in four jobs (24 percent). Administrative Support represents the largest share of the cluster’s employment within the Business Management & Administration career cluster (23 percent), with two management pathways—Operations Management and General Management—accounting for an additional 6 percent. Information Technology pathways include Programming & Software Development and Network Systems. Still, three pathways (Banking Services, Administrative Support, and Securities & Investment) account for two-thirds of employment in the Financial Services cluster nationally.

**FIGURE 22. TOP CAREER CLUSTERS: FINANCIAL SERVICES**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US



**FIGURE 23. TOP 10 CAREER PATHWAYS: FINANCIAL SERVICES**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US

Pathway   CAREER CLUSTER	Share of total US employment in industry cluster
1 Banking Services   FINANCE	24.0%
2 Administrative Support   BUSINESS MGMT. & ADMIN.	23.0%
3 Securities & Investments   FINANCE	19.1%
4 Business Finance   FINANCE	7.3%
5 Professional Sales   MARKETING	3.6%
6 Programming and Software Development   INFORMATION TECHNOLOGY	3.4%
7 Operations Management   BUSINESS MGMT. & ADMIN.	3.0%
8 General Management   BUSINESS MGMT. & ADMIN.	2.8%
9 Accounting   FINANCE	2.4%
10 Network Systems   INFORMATION TECHNOLOGY	1.8%

Source (both figures): US Cluster Mapping Benchmark Definitions; National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies

A single occupation, Securities, Commodities, and Financial Services Sales Agents (SOC 41-3031), accounts for nearly 1 in 10 jobs (9 percent) in the Financial Services cluster nationally. It is one of 11 occupations shown in Figure 24 belonging to the Finance career cluster. Loan Officers (SOC 13-2072), Tellers (SOC 43-3071), and Personal Financial Advisors (SOC 13-2052) each represent roughly 7 percent of US employment in the industry cluster. Software Developers, Applications (SOC 15-1132) is the largest individual occupation within the Information Technology career cluster. However, it represents just over 1 percent of jobs in the Financial Services industry cluster at the national level.

Figure 25 (page 87) provides the top occupations in the cluster in the 13-county region. Because of the addition of Credit Unions (NAICS 52213) to the regional cluster definition, Northwest Florida staffing patterns differ from the nation, with Tellers (SOC 43-3071) comprising a much greater share of employment: 18 percent versus 7 percent nationally. This level of

**FIGURE 24. CAREER CLUSTERS FOR LARGEST OCCUPATIONS: FINANCIAL SERVICES**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US

SOC CODE	DESCRIPTION	CAREER CLUSTER			SHARE OF TOTAL US EMPLOYMENT IN INDUSTRY CLUSTER	
		Finance	Business Mgmt. & Admin.	Information Tech.		
1	41-3031	Securities, Commodities, & Financial Svcs. Sales	■			9.2%
2	43-4051	Customer Service Representatives		■		7.1%
3	13-2072	Loan Officers	■			7.0%
4	43-3071	Tellers	■			6.9%
5	13-2052	Personal Financial Advisors	■			6.8%
6	43-4131	Loan Interviewers & Clerks	■			5.2%
7	13-2051	Financial Analysts	■			4.1%
8	43-1011	First-Line Supvsr., Office & Admin. Support		■		4.0%
9	11-3031	Financial Managers	■			3.2%
10	43-9061	Office Clerks, General		■		2.8%
11	43-6014	Secretaries/Admin. Asst., Exc. Legal, Med., & Exec.		■		2.5%
12	13-2011	Accountants & Auditors	■			2.4%
13	43-3011	Bill & Account Collectors	■			2.2%
14	11-1021	General & Operations Managers		■		2.1%
15	43-4011	Brokerage Clerks	■			2.1%
16	43-3031	Bookkeeping, Accounting, & Auditing Clerks		■		2.0%
17	43-6011	Exec. Secretaries/Admin. Assistants		■		1.9%
18	15-1132	Software Developers, Applications			■	1.3%
19	13-2041	Credit Analysts	■			1.3%
20	13-1111	Management Analysts		■		1.2%

Source: US Cluster Mapping Benchmark Definitions (Delgado, Porter, Stern 2013); National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies

employment is well above what would be expected in a similarly sized labor market, as evidenced by the region’s LQ of 1.58 for this occupation. While the median wage rate paid to this occupation in the region (\$13.13 per hour) is not above the rate for all occupations (\$17.27), it is well above minimum wage for a position that requires little training.

In numeric terms, Customer Service Representatives (SOC 43-4051) are the largest occupation among those most commonly found in the cluster, with more than 10,000 people employed in this occupation (across all industries) in the region in 2015. Like Tellers, the occupation is present in the region at levels above what would be expected based on national staffing patterns (LQ=1.33). The median wage for this occupation is lower than for Tellers, but the training requirements are also minimal. The cluster’s highest wage rates are found among occupations requiring a four-year degree or higher, with the highest wages paid to Financial Managers (SOC 11-3031), with a median wage rate in the region of \$48.78.

**FIGURE 25. TOP NORTHWEST FLORIDA OCCUPATIONS: FINANCIAL SERVICES**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE REGION

SOC CODE	OCCUPATION	% OF CLUSTER EMPL.	2015 JOBS IN REGION	LQ (US=1.00)	MEDIAN HOURLY EARNINGS	MINIMUM EDUCATION REQUIRED
43-3071	Tellers	17.8%	2,320	1.58	\$13.13	Short-term OJT
43-4051	Customer Service Representatives	16.1%	10,216	1.33	\$11.87	Short-term OJT
43-1011	First-Line Supvrs., Office & Admin. Support	8.8%	4,404	1.03	\$21.06	Related experience
13-2072	Loan Officers	5.8%	792	0.88	\$28.67	Bachelor's degree
43-4131	Loan Interviewers & Clerks	5.8%	704	1.10	\$17.75	Short-term OJT
41-3031	Securities, Commodities, & Financial Svcs. Sales	3.8%	431	0.43	\$30.32	Bachelor's degree
43-3031	Bookkeeping, Accounting, & Auditing Clerks	2.8%	4,628	0.91	\$15.55	Non-degree award
43-6014	Secretaries/Admin. Asst., Exc. Legal, Med., & Exec.	2.5%	8,987	1.14	\$14.05	HS diploma/GED
11-3031	Financial Managers	2.2%	628	0.39	\$48.78	Bachelor's or above + exp.
13-2052	Personal Financial Advisors	2.2%	244	0.33	\$45.18	Bachelor's degree
43-9061	Office Clerks, General	1.7%	7,373	0.77	\$12.40	Short-term OJT
43-4141	New Accounts Clerks	1.5%	161	1.15	\$15.98	Moderate-term OJT

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Note: Location quotients (LQs) of 1.25 or greater suggest a specialization in the occupation relative to the US and are highlighted. Median hourly wages above the regional rate of \$17.27 are highlighted.

 **RESOURCES & NETWORKING**

FINANCIAL SERVICES		
<b>TRADE ASSOCIATIONS</b>		
Financial Management Association International		<a href="http://www.fma.org">www.fma.org</a>
American Financial Services Association		<a href="http://www.afsaonline.org">www.afsaonline.org</a>
Association for Financial Professionals		<a href="http://www.afponline.org">www.afponline.org</a>
Society of Financial Service Professionals		<a href="http://www.financialpro.org">www.financialpro.org</a>
American Bankers Association		<a href="http://www.aba.com">www.aba.com</a>
Credit Union National Association		<a href="http://www.cuna.org">www.cuna.org</a>
National Association of Federally-Insured Credit Unions		<a href="http://www.nafcu.org">www.nafcu.org</a>
National Association of Credit Union Supervisory & Auditing Committees		<a href="http://nacusac.wildapricot.org">nacusac.wildapricot.org</a>
National Association of Credit Union Chairmen		<a href="http://naocuc.wildapricot.org">naocuc.wildapricot.org</a>
<b>RELEVANT CONFERENCES/EVENTS</b>		
<b>ABA National Conference for Community Bankers</b>		
19-22 February 2017	Orlando, FL	<a href="http://www.aba.com/Training/Conferences/Pages/community.aspx">www.aba.com/Training/Conferences/Pages/community.aspx</a>
<b>NACUSAC Annual Conference &amp; Expo</b>		
14-17 June 2017	San Diego, CA	<a href="http://nacusac.wildapricot.org/Annual-Conference">nacusac.wildapricot.org/Annual-Conference</a>
<b>2017 Leadership Development Seminar</b>		
25-27 June 2017	Boston, MA	<a href="http://naocuc.wildapricot.org/LDS-Details">naocuc.wildapricot.org/LDS-Details</a>
<b>America's Credit Union Conference</b>		
25-28 June 2017	Las Vegas, NV	<a href="http://www.cuna.org/Events/CUNA-Americas-Credit-Union-Conference/Home">www.cuna.org/Events/CUNA-Americas-Credit-Union-Conference/Home</a>
<b>2017 FMA Annual Meeting</b>		
11-14 October 2017	Boston, MA	<a href="http://www.fma.org/Boston">www.fma.org/Boston</a>
<b>ABA Annual Convention</b>		
15-17 October 2017	Chicago, IL	<a href="http://www.aba.com/Training/Conferences/Pages/annual.aspx">www.aba.com/Training/Conferences/Pages/annual.aspx</a>
<b>TRADE PUBLICATIONS</b>		
<i>ABA Banking Journal</i>		<a href="http://bankingjournal.aba.com">bankingjournal.aba.com</a>
<i>Financial Management</i>		<a href="http://www.fma.org/Publications/FM/FMIndex.htm">www.fma.org/Publications/FM/FMIndex.htm</a>
<i>Credit Union Magazine</i>		<a href="http://news.cuna.org/topics/481-credit-union-magazine">news.cuna.org/topics/481-credit-union-magazine</a>
<i>Journal of Financial Service Professionals</i>		<a href="http://www.financialpro.org/pubs/journal_toc.cfm">www.financialpro.org/pubs/journal_toc.cfm</a>
<i>AFP Exchange Magazine</i>		<a href="http://www.afponline.org/publications-data-tools/publications/afp-exchange-magazine">www.afponline.org/publications-data-tools/publications/afp-exchange-magazine</a>
<i>Journal of Financial Services Research</i>		<a href="http://www.springer.com/finance/journal/10693">www.springer.com/finance/journal/10693</a>

Source: TIP Strategies research

## WATER TRANSPORTATION

### DEFINITION

The Water Transportation cluster consists of companies involved in operating shipyards (which include facilities for the building, repair, alteration, and storage of watercraft that are typically intended for other than personal use, as well as specialized services for those vessels); providing support activities for marine cargo and passenger transportation (including the operation of port facilities, cargo handling, and navigational services). Of the industry segments shown in Figure 27, Shipbuilding and Repairing (NAICS 336611) is by far the largest, reflecting the presence of Eastern Shipbuilding Group. The industry accounts for 7 out of 10 jobs in the cluster regionally.

**FIGURE 26. REGIONAL SNAPSHOT**  
WATER TRANSPORTATION

Employment	<b>2,003</b>
Recent trends (%)	<b>+27%</b>
LQ	<b>2.25</b>
Establishments	<b>65</b>
Earnings/Job	<b>\$65,491</b>
Relative Earnings/Job (US=1.00)	<b>0.76</b>

**FIGURE 27. EMPLOYMENT OVERVIEW: WATER TRANSPORTATION**

NAICS CODE	DESCRIPTION	2015 JOBS			LQ	RECENT TRENDS (2009 TO 2015)			10-YEAR FORECAST (2016-2026)		
		Number	% of Cluster	US=1.00		Total Change	Region % Chg.	US % Chg.	Total Change	Region % Chg.	US % Chg.
336611	Shipbuilding and Repairing	1,409	70%	4.72	389	38%	1%	775	56%	12%	
488320	Marine Cargo Handling	162	8%	1.13	5	3%	21%	70	42%	18%	
336612	Boat Building	149	7%	1.40	-43	-22%	27%	42	29%	-18%	
488330	Navigational Services to Shipping	72	4%	1.28	11	18%	-3%	23	34%	1%	
488310	Port and Harbor Operations	57	3%	0.97	39	217%	-3%	-5	-10%	10%	
483113	Coastal and Great Lakes Freight Transportation	54	3%	1.55	—	—	9%	28	48%	27%	
483111	Deep Sea Freight Transportation	44	2%	1.31	—	—	-4%	17	37%	1%	
488390	Other Support Activities for Water Transportation	36	2%	1.37	-14	-28%	-11%	-7	-21%	-7%	
483114	Coastal and Great Lakes Passenger Transportation	<10	—	0.19	—	—	-25%	—	—	-21%	
483112	Deep Sea Passenger Transportation	<10	—	0.17	—	—	62%	—	—	42%	
483211	Inland Water Freight Transportation	<10	—	0.09	—	—	12%	—	—	22%	
483212	Inland Water Passenger Transportation	<10	—	0.45	—	—	11%	—	—	25%	
<b>Cluster Total</b>		<b>2,003</b>	<b>100%</b>	<b>2.25</b>	<b>426</b>	<b>27%</b>	<b>7%</b>	<b>949</b>	<b>48%</b>	<b>9%</b>	

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed; Haas Center.

Note: Cluster definition based on the US Benchmark Cluster Definitions prepared by Harvard Business School's Institute for Strategy and Competitiveness in partnership with the US Department of Commerce and US Economic Development Administration.

**TRENDS**

This cluster includes both transportation-related activities (cargo and passenger traffic) and shipbuilding and repair. As a result, it is affected by a broad range of trends.

- **DEFENSE SPENDING UNCERTAINTY.** Shipbuilding activities nationally are closely tied to defense spending. Spending on shipbuilding and maritime weapons systems have increased steadily in recent years. However, as discussed in the Aerospace and Defense section, there is a great deal of uncertainty surrounding future plans. The Department of Defense’s stated priorities related to robotics and autonomous systems include the development of autonomous underwater vehicles, which could offer opportunities within this cluster.
- **WORKFORCE CHALLENGES.** Both aspects of the cluster face challenges with regard to workforce. The shipbuilding industry relies on a number of specialized occupations, including engineering and skilled trades, two occupational groups in short supply nationally. Increasing concerns about the security of the nation’s trade-related infrastructure have created a growing demand for cybersecurity workers among ports and shipping operators, a workforce that is already in high demand across multiple industries.
- **GROWTH OF LATIN AMERICAN AND CARIBBEAN MARKETS.** The Port of Panama City receives almost two-thirds of current commodity traffic from Latin America and Caribbean (LAC) markets. An October 2016 analysis by The World Bank, *The Big Switch in Latin America: Restoring Growth Through Trade*, projects that economies in LAC countries will expand by 1.8 percent in 2017. This expansion follows economic declines for the region in 2016 driven by recessions in some larger South American countries (including Brazil and Argentina). The uptick will be driven by improvement in these countries and the continued positive and stable growth seen in Mexico, Central America, and the Caribbean. However, the ability of the US to fully capitalize on this growth will depend on a number of factors including currency fluctuations and the direction of US trade policy.
- **SCALE OF CONTAINER SHIPS.** Ports around the country have been scrambling to accommodate the growing scale of container ships. While the largest ships—New Panamax and Ultra Large Container Vessels (ULCV)—comprise a small fraction of the global fleet currently, they represent a growing share of orders for new ships. These massive ships, which can carry as many as 18,000 twenty-foot shipping containers, are in limited use in the US. The region’s ports are not competing for these larger vessels, which require berth depths of as much as 50 feet when fully loaded. However, intense competition and consolidation in the shipping industry, rising fuel costs, and environmental policy are likely to continue to drive the industry’s use of bigger and bigger ships.

**FIGURE 28. DOD FUNDING REQUEST FOR MAJOR DEFENSE ACQUISITION PROGRAMS (MDAPS) FOR SELECTED FISCAL YEARS (FY) BY MISSION AREA CATEGORIES (\$ IN BILLIONS)**

	FY 2017	FY 2016	FY 2015
<b>Modernization Total</b>	<b>\$183.9</b> % of total	<b>\$177.5</b> % of total	<b>\$153.9</b> % of total
Mission Support Activities*	\$52.4 28%	\$47.4 27%	\$43.1 28%
Aircraft & Related Systems	\$45.3 25%	\$48.8 27%	\$40.0 26%
<b>Shipbuilding &amp; Maritime Systems</b>	<b>\$27.0</b> 15%	<b>\$25.6</b> 14%	<b>\$22.0</b> 14%
Missiles and Munitions	\$13.9 8%	\$11.9 7%	\$9.0 6%
RDT&E Science & Technology	\$12.5 7%	\$12.3 7%	\$11.5 7%
Ground Systems	\$9.8 5%	\$8.2 5%	\$6.3 4%
Missile Defense Programs	\$8.5 5%	\$8.8 5%	\$8.2 5%
C4I Systems	\$7.4 4%	\$7.4 4%	\$6.6 4%
Space Based Systems	\$7.1 4%	\$7.1 4%	\$7.2 5%

Source: Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, from *Program Acquisition Cost by Weapon System* for year indicated.

\*FY 2015 figure includes proposed cancellation of \$265.7 million (FY 2014, \$198.7 million; FY 2013, \$67.0 million)

C4I - Command, Control, Communications, Computers, and Intelligence; RDT&E - Research, Development, Test, and Evaluation

## BENCHMARK GEOGRAPHIES

As might be expected, Water Transportation employment is highest in metropolitan areas associated with ports and, in some cases, naval installations (Figure 29, page 91). The Virginia Beach-Norfolk-Newport News metro area is home to both. In addition to being the home of Naval Station Norfolk, the metro area also boasts Norfolk International Terminals, the Virginia Port Authority's largest terminal, and Newport News Marine Terminal its primary break-bulk and roll-on/roll-off facility. In addition to having the largest total employment in the cluster, the Virginia Beach-Norfolk-Newport News metro area also has a high concentration relative to the nation, with an LQ of 17.40.

However, a look at metro areas by LQs shows many mid- and small-sized metro areas with significantly higher concentrations. Topping the list is Houma-Thibodaux, Louisiana, with an LQ of 57.97. Located at the intersection of the Gulf Intracoastal Waterway and the Houma Navigational Canal, the area is home to a number of employers in the cluster, including several shipbuilding and repair companies, transportation services companies associated with both shipping and offshore oil and gas activities, and the Port of Terrebonne.

Among Northwest Florida metro areas, Panama City has both the largest number of workers employed in the cluster and the highest concentration of employment (LQ = 8.88).

**FIGURE 29. TOP 10 METROS: WATER TRANSPORTATION**  
RANKED BY NUMBER OF JOBS IN 2015

METROPOLITAN AREA	LOCATION QUOTIENT (US = 1.00)	2015 JOBS	CHANGE FROM 2009	ESTABLISHMENTS	EARNINGS PER JOB
Virginia Beach-Norfolk-Newport News, VA-NC	17.40	29,008	3,046	127	\$91,004
Los Angeles-Long Beach-Anaheim, CA	1.43	18,216	1,689	214	\$122,426
Miami-Fort Lauderdale-West Palm Beach, FL	3.25	17,157	1,430	554	\$85,617
Houston-The Woodlands-Sugar Land, TX	2.56	15,557	2,656	321	\$80,010
Gulfport-Biloxi-Pascagoula, MS	39.79	12,688	(1,805)	45	\$78,939
New York-Newark-Jersey City, NY-NJ-PA	0.66	12,534	(467)	308	\$128,160
New Orleans-Metairie, LA	9.93	11,562	(3,537)	356	\$88,424
Houma-Thibodaux, LA	57.97	10,712	1,498	177	\$91,732
Seattle-Tacoma-Bellevue, WA	2.59	10,529	877	217	\$93,006
Norwich-New London, CT	39.94	10,524	1,513	16	\$111,246

### NORTHWEST FLORIDA METROPOLITAN AREAS (RANKED BY NUMBER OF JOBS IN 2015)

Panama City, FL	8.88	1,525	284	29	\$69,073
Pensacola-Ferry Pass-Brent, FL	0.87	318	116	18	\$55,522
Crestview-Fort Walton Beach-Destin, FL	0.43	106	22	13	\$48,297

**FIGURE 29. TOP 10 METROS: WATER TRANSPORTATION (CONTINUED)**  
 RANKED BY RELATIVE CONCENTRATION OF EMPLOYMENT (US=1.00)

METROPOLITAN AREA	LOCATION QUOTIENT (US = 1.00)	2015 JOBS	CHANGE FROM 2009	ESTABLISHMENTS	EARNINGS PER JOB
Houma-Thibodaux, LA	57.97	10,712	1,498	177	\$91,732
Lebanon, MO	46.50	1,253	455	5	\$43,173
Morgan City, LA	43.15	2,126	(782)	65	\$84,310
Norwich-New London, CT	39.94	10,524	1,513	16	\$111,246
Gulfport-Biloxi-Pascagoula, MS	39.79	12,688	(1,805)	45	\$78,939
Paducah, KY-IL	31.67	3,059	693	32	\$85,595
Marinette, WI-MI	26.68	1,473	713	8	\$69,645
Ketchikan, AK	24.38	383	61	17	\$83,782
Mobile, AL	19.71	7,090	2,090	92	\$76,352
Cadillac, MI	19.07	647	338	3	\$55,957

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

**✓ RATIONALE & NICHES**

Northwest Florida boasts a number of assets that support the development and expansion of the Water Transportation cluster, including three seaports offering a range of options for shippers, multiple US naval installations (Pensacola NAS, Whiting Field, and Naval Support Activity Panama City), and Eastern Shipbuilding Group.

Eastern Shipbuilding Group is a private vessel construction company located in Panama City. Employing more than 1,500 workers, the company accounts for nearly one-half of the region’s total employment in the Water Transportation cluster. The company was recently awarded a \$10.5 billion contract to build 25 next-generation ships for the US Coast Guard. The award is expected to result in the addition of as many as 2,000 jobs over the course of the contract (*Eastern Shipbuilding in Panama City awarded \$10.5 billion Coast Guard contract*, Sept. 16, 2016, WJHG-TV as accessed via Florida’s Great Northwest).

The Naval Surface Warfare Center Panama City Division (NSWC PCD) is one of the major research, development, test and evaluation (RDT&E) laboratories of the US Navy. The facility provides RDT&E and in-service support for a number of the Navy’s core mission areas. The NSWC PCD serves as the Technical Center of Excellence for Littoral Warfare and Coastal Defense and offers a broad base of expertise in engineering and scientific disciplines.

**FIGURE 30. US PORT RANKING BY CARGO VOLUME (IN SHORT TONS)**

	PORT PANAMA CITY		PORT OF PENSACOLA	
	RANK	TONS	RANK	TONS
Total Trade	99	2,779,840	146	918,862
Foreign Trade (Total)	58	2,211,622	107	124,351
Imports	67	983,747	95	76,353
Exports	48	1,227,875	94	47,998
Domestic Trade	132	568,218	126	794,511

Source: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center (accessed via the American Association of Port Authorities)  
 Note: A short ton is a unit of weight equal to 2,000 pounds that is most commonly used in the US. In contrast, the long ton, which is 2,240 pounds, is more commonly used in Britain. A third measure, the metric ton, is equal to 1000 kilograms or approximately 2,204 pounds.

The region boasts three seaports offering a range of options:

- The Port Panama City, the region’s largest with two properties totaling 388 acres, is located on the Gulf Intracoastal Waterway. The port provides easy access to the Gulf of Mexico via an 8.9-mile channel and is one of the nation’s closest ports to the Panama Canal. Served by the Bay Line Railroad and located near the Northwest Florida Beaches International Airport, the port features an intermodal industrial park and is designated as a foreign trade zone.
- Located on the Gulf of Mexico, the Port of Pensacola is a deepwater port (dredged to 33 feet) which handles specialty bulk and breakbulk cargoes. The port includes an area designated as a foreign trade zone and an enterprise zone and offers Class I rail services (CSX).
- The region’s newest port is a state-designated deepwater port that can accommodate ships with drafts of 27 feet. The port is located on St. Joseph’s Bay and offers access to the Gulf of Mexico and the Intracoastal Waterway. It is a designated enterprise zone as well as a state-designated Rural Area of Critical Economic Concern. The latter designation can allow criteria for economic development incentives to be waived by executive order of the Governor.

**FIGURE 31. STRATEGIC ASSETS: WATER TRANSPORTATION**



**INDUSTRY/INFRASTRUCTURE**

- Three seaports offering a range of services and incentives including foreign trade zones and ample shovel-ready sites.
- Recent improvements to the Port of Panama City including planned completion of a 41-acre forest products terminal in 2017 (including 250,000 SF warehouse).
- Eastern Shipbuilding Group, which accounts for roughly one-half of the cluster employment in the region.
- Concentration of machine shops and supportive industries.
- Available sites and buildings, including multiple certified industrial sites.

**WORKFORCE/TRAINING**

- Northwest Florida Regional Manufacturing Academies on track to help raise awareness of production careers and expand talent pipeline.
- Scientific and technical expertise at the Naval Surface Warfare Center Panama City Division.
- Relevant academies offered at area high schools (including production, fabrication, welding, and robotics).
- Postsecondary offerings, including Marine Service Technology at Tom P. Haney Technical Center and various engineering and machining programs.

**MARKET TRENDS/POLICY**

- The region is well positioned to benefit from growing trade with Latin American and Caribbean countries.
- DoD priorities related to robotics and autonomous systems includes the development of underwater vehicles.
- Favorable state business climate (Florida ranked “Best Business Climate” in 2016 by Business Facilities magazine).
- Low operating costs and favorable tax structure (including no state personal income tax).

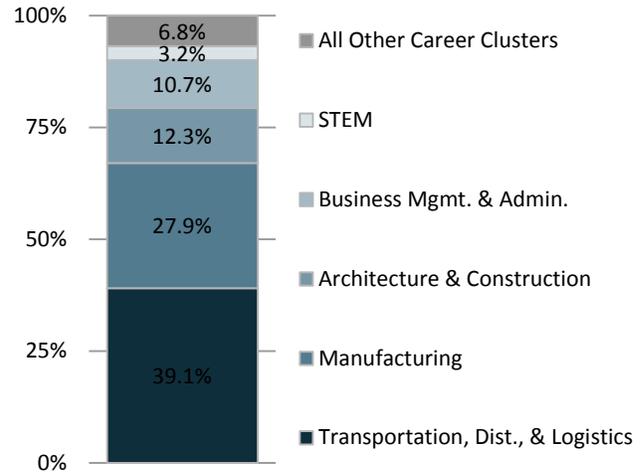
Source: TIP Strategies research

**TALENT**

Two career clusters—Transportation, Distribution, & Logistics (TDL) and Manufacturing—account for more than two-thirds (67 percent) of all employment in the Water Transportation cluster. Jobs in the Architecture & Construction career cluster are a key element of the talent pipeline, representing roughly one out of every eight jobs (12 percent) in the industry cluster nationally.

The Transportation Operations pathway—one of five pathways in the TDL career cluster—accounts for roughly one-third (34 percent) of all employment in the Water Transportation cluster. Facility and Mobile Equipment Maintenance is the only other TDL pathway in the top 10, comprising just 2 percent of employment in the cluster nationally. All four of the Manufacturing pathways appear on the list, with the largest being the Production pathway which represents 20 percent (one in five workers) within the Water Transportation cluster.

**FIGURE 32. TOP CAREER CLUSTERS: WATER TRANSPORTATION**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US



**FIGURE 33. TOP 10 CAREER PATHWAYS: WATER TRANSPORTATION**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US

Pathway   CAREER CLUSTER	Share of total US employment in industry cluster
1 Transportation Operations   TRANSPORTATION, DIST., & LOGISTICS	34.3%
2 Production   MANUFACTURING	19.8%
3 Construction   ARCHITECTURE & CONSTRUCTION	11.1%
4 Administrative Support   BUSINESS MGMT. & ADMIN.	6.7%
5 Maintenance, Installation & Repair   MANUFACTURING	3.6%
6 Engineering and Technology   STEM	3.2%
7 Manufacturing Production Process Development   MANUFACTURING	2.7%
8 Facility and Mobile Equipment Maintenance   TRANSPORTATION, DIST., & LOGISTICS	2.0%
9 Quality Assurance   MANUFACTURING	1.9%
10 General Management   BUSINESS MGMT. & ADMIN.	1.9%

Source (both figures): US Cluster Mapping Benchmark Definitions; National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies

A number of the Water Transportation cluster’s largest occupations are connected with the movement of cargo. This includes Laborers and Freight, Stock, and Material Movers, Hand (SOC 53-7062); Captains, Mates, and Pilots of Water Vessels (SOC 53-5021); and Sailors and Marine Oilers (53-5011). However, several critical occupations are associated with the Manufacturing and Construction & Architecture career clusters, including Welders, Cutters, Solderers, and Brazers (SOC 51-4121); Maintenance and Repair Workers, General (SOC 49-9071); and Plumbers, Pipefitters, and Steamfitters (SOC 47-2152).

A look at the cluster’s top occupations in Northwest Florida (Figure 35, page 96) reveals only one position that is concentrated in the region relative to the US. With an LQ of 2.95, Fiberglass Laminators and Fabricators (SOC 51-2091) is also among the smallest in terms of total employment in the region. The occupation also accounts for a much greater share of employment in the cluster than would be expected based on national patterns, comprising 7 percent of Water Transportation jobs regionally versus just 2 percent at the national level. Likewise, Welders, Cutters, Solderers, and Brazers (SOC 51-4121) is an

**FIGURE 34. CAREER CLUSTERS FOR LARGEST OCCUPATIONS: WATER TRANSPORTATION**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE US

SOC CODE	DESCRIPTION	CAREER CLUSTER				SHARE OF TOTAL US EMPLOYMENT IN INDUSTRY CLUSTER
		Transp., Dist. & Logistics	Manufacturing	Arch. & Construction	Business Mgmt. & Admin.	
1	53-7062 Laborers/Freight, Stock, & Material Movers, Hand	■				7.9%
2	53-5021 Captains, Mates, & Pilots of Water Vessels	■				7.2%
3	53-5011 Sailors & Marine Oilers	■				6.4%
4	51-4121 Welders, Cutters, Solderers, & Brazers		■			5.3%
5	53-7051 Industrial Truck & Tractor Operators	■				3.7%
6	51-2092 Team Assemblers		■			2.3%
7	53-5031 Ship Engineers	■				2.2%
8	51-1011 First-Line Supvrs., Production & Operating Workers		■			2.2%
9	51-2091 Fiberglass Laminators & Fabricators		■			2.1%
10	47-2111 Electricians			■		1.9%
11	47-2152 Plumbers, Pipefitters, & Steamfitters			■		1.9%
12	49-9071 Maintenance & Repair Workers, General		■			1.7%
13	53-7121 Tank Car, Truck, & Ship Loaders	■				1.6%
14	53-7021 Crane & Tower Operators			■		1.5%
15	11-1021 General & Operations Managers				■	1.5%
16	43-5011 Cargo & Freight Agents	■				1.3%
17	51-4041 Machinists		■			1.3%
18	51-2041 Structural Metal Fabricators & Fitters			■		1.3%
19	53-1031 First-Line Supvrs., Transp. & Material-Moving Ops.	■				1.2%
20	43-9061 Office Clerks, General				■	1.1%

Source: US Cluster Mapping Benchmark Definitions (Delgado, Porter, Stern 2013); National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies

occupation found in higher proportion in Northwest Florida, representing more than 1 in 10 workers in the cluster (10.8 percent) compared with just 5.3 percent of Water Transportation workers nationwide.

Eight of the top 20 occupations had median hourly wage rates above the region’s median wage rate for all occupations (\$17.27). Of these, however, only one position—Mechanical Engineers (SOC 17-2141)—required a four-year degree. A number of the other occupations with above-average wage rates had relatively modest levels of education and training, including various levels of on-the-job (OJT) training and postsecondary certificates. Three of the 20 occupations required no formal credential at all, including Sailors and Marine Oilers (SOC 53-5011). This occupation, which includes job titles such as Deck Hand and Able-Bodied Seaman, offers a path to high-wage employment in the region, with a median wage rate in excess of \$16 per hour.

**FIGURE 35. TOP NORTHWEST FLORIDA OCCUPATIONS: WATER TRANSPORTATION**  
 BASED ON SHARE OF TOTAL EMPLOYMENT IN THE INDUSTRY CLUSTER IN THE REGION

SOC CODE	OCCUPATION	% OF CLUSTER EMPL.	2015 JOBS IN REGION	LQ (US=1.00)	MEDIAN HOURLY EARNINGS	MINIMUM EDUCATION REQUIRED
51-4121	Welders, Cutters, Solderers, & Brazers	10.6%	814	0.71	\$16.12	Moderate-term OJT
51-2092	Team Assemblers	7.2%	1,720	0.54	\$14.22	Moderate-term OJT
51-2091	Fiberglass Laminators & Fabricators	7.0%	182	<b>2.95</b>	\$14.26	Moderate-term OJT
53-7062	Laborers/Freight, Stock, & Material Movers, Hand	4.4%	4,307	0.59	\$10.60	No formal credential
51-1011	First-Line Supvsr., Production & Operating Workers	3.7%	1,116	0.63	<b>\$24.21</b>	Related experience
47-2152	Plumbers, Pipefitters, & Steamfitters	3.4%	1,518	1.13	\$15.56	Apprenticeship
51-2041	Structural Metal Fabricators & Fitters	3.0%	229	1.00	<b>\$17.48</b>	Moderate-term OJT
47-2111	Electricians	2.7%	1,739	0.89	<b>\$19.89</b>	Moderate-term OJT
17-2141	Mechanical Engineers	2.7%	605	0.76	<b>\$45.57</b>	Bachelor's degree
53-5021	Captains, Mates, & Pilots of Water Vessels	2.4%	97	0.96	<b>\$29.47</b>	Nondegree award
53-5011	Sailors & Marine Oilers	2.1%	88	0.96	\$16.23	No formal credential
51-4041	Machinists	1.6%	365	0.34	<b>\$20.86</b>	Long-term OJT
51-9122	Painters, Transportation Equipment	1.6%	153	0.91	<b>\$17.28</b>	Moderate-term OJT
17-3013	Mechanical Drafters	1.5%	176	0.93	<b>\$25.87</b>	Associate's degree
51-9198	Helpers--Production Workers	1.5%	346	0.29	\$11.73	No formal credential
49-9071	Maintenance & Repair Workers, General	1.4%	4,701	1.12	\$14.81	Long-term OJT
47-2031	Carpenters	1.3%	2,587	0.84	\$15.15	Apprenticeship

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Note: Location quotients (LQs) of 1.25 or greater suggest a specialization in the occupation relative to the US and are **highlighted**. Median hourly wages above the regional rate of \$17.27 are **highlighted**.

 **RESOURCES & NETWORKING**

WATER TRANSPORTATION		
<b>TRADE ASSOCIATIONS</b>		
Shipbuilders Council of America		<a href="http://shipbuilders.org">shipbuilders.org</a>
American Boat Builders & Repairers Association		<a href="http://www.abbra.org">www.abbra.org</a>
American Shipbuilding Suppliers Association		<a href="http://shipbuildingsuppliers.org">shipbuildingsuppliers.org</a>
International Chamber of Shipping		<a href="http://www.ics-shipping.org">www.ics-shipping.org</a>
Society of Naval Architects and Marine Engineers		<a href="http://www.sname.org">www.sname.org</a>
Society of Naval Architects and Marine Engineers: Southeast Section		<a href="http://www.sname.org/southeastsection">www.sname.org/southeastsection</a>
Maritime Industries Association of South Florida		<a href="http://www.miasf.org">www.miasf.org</a>
<b>RELEVANT CONFERENCES/EVENTS</b>		
<b>ABRA Annual Conference and Symposium</b>		
24-25 January 2017	Fort Lauderdale, FL	<a href="http://www.abbra.org/annual-conference">www.abbra.org/annual-conference</a>
<b>Maritime Week Americas</b>		
22-26 May 2017	Miami, FL	<a href="http://www.petrospot.com/events/mwa17-miami">www.petrospot.com/events/mwa17-miami</a>
<b>Marine Industry Day</b>		
17 June 2017	Fort Lauderdale, FL	<a href="http://www.marineindustryday.org">www.marineindustryday.org</a>
<b>ICS International Shipping Conference 2017</b>		
13 September 2017	Boston, MA	<a href="http://www.ics-shipping.org/news/events">www.ics-shipping.org/news/events</a>
<b>Fort Lauderdale International Boat Show</b>		
TBD November 2017	Fort Lauderdale, FL	<a href="http://flibs.com">flibs.com</a>
<b>International WorkBoat Show</b>		
29 Nov-1 Dec 2017	New Orleans, LA	<a href="http://www.workboatshow.com">www.workboatshow.com</a>
<b>TRADE PUBLICATIONS</b>		
<i>(mt) Magazine</i>		<a href="http://www.sname.org/mt">www.sname.org/mt</a>
<i>Journal of Ship Production and Design</i>		<a href="http://www.sname.org/pubs/authoroppo/journalofshipproduction">www.sname.org/pubs/authoroppo/journalofshipproduction</a>
<i>Bunkerspot Magazine</i>		<a href="http://www.bunkerspot.com/magazines">www.bunkerspot.com/magazines</a>
<i>International Shipbuilding Progress</i>		<a href="http://www.iospress.nl/journal/international-shipbuilding-progress">www.iospress.nl/journal/international-shipbuilding-progress</a>
<i>Professional Mariner</i>		<a href="http://www.professionalmariner.com">www.professionalmariner.com</a>
<i>The Waterways Journal</i>		<a href="http://www.waterwaysjournal.net/Magazine/Print.aspx">www.waterwaysjournal.net/Magazine/Print.aspx</a>

Source: TIP Strategies research

## CYBERSECURITY

### DEFINITION

Industry and occupational classification systems do not adequately capture cybersecurity-related activities. As a result, specific employment numbers are not available for the Cybersecurity sector. Figure 37 provides an overview of employment in relevant occupations (as identified by the Haas Center). Like other subsectors of information technology employment, jobs in the Cybersecurity cluster cut across multiple industry sectors from retail to finance. While the figures shown below do not represent workers in the cluster, they do provide a sense of the workforce that is available to support the Cybersecurity cluster in the region.

**FIGURE 36. REGIONAL SNAPSHOT  
CYBERSECURITY**

Employment (related occupations)	<b>6,141</b>
Recent trends (%)	<b>-5%</b>
LQ	<b>0.50</b>
Median hourly wage for group	<b>\$32.54</b>
Relative to US wage (US=1.00)	<b>0.79</b>

**FIGURE 37. EMPLOYMENT OVERVIEW: CYBERSECURITY OCCUPATIONS**

SOC CODE	DESCRIPTION	2015		RECENT TRENDS (2009 TO 2015)			10-YEAR FORECAST (2016-2026)		
		JOB Number	LQ US=1.00	Total Change	Region % Chg.	US % Chg.	Total Change	Region % Chg.	US % Chg.
11-3021	Computer & Info. Systems Managers	319	0.32	-50	-13%	15%	59	18%	18%
15-1111	Computer & Info. Research Scientists	233	2.90	33	17%	14%	8	3%	13%
15-1121	Computer Systems Analysts	611	0.37	-56	-8%	20%	125	19%	23%
15-1122	Information Security Analysts	152	0.58	6	4%	16%	25	16%	21%
15-1131	Computer Programmers	429	0.48	-64	-13%	8%	-36	-8%	-1%
15-1132	Software Developers, Applications	883	0.40	-74	-8%	23%	115	12%	22%
15-1133	Software Developers, Systems Software	553	0.48	-66	-11%	15%	63	11%	17%
15-1134	Web Developers	303	0.62	54	22%	34%	69	22%	28%
15-1141	Database Administrators	210	0.62	-8	-3%	10%	22	10%	15%
15-1142	Network & Computer Systems Admin.	539	0.49	-53	-9%	9%	56	10%	12%
15-1143	Computer Network Architects	441	1.01	-27	-6%	7%	4	1%	12%
15-1151	Computer User Support Specialists	1,203	0.64	-3	0%	14%	132	11%	16%
15-1152	Computer Network Support Specialists	265	0.46	-48	-15%	9%	30	11%	12%
<b>Total for Occupational Group</b>		<b>6,141</b>	<b>0.50</b>	<b>-354</b>	<b>-5%</b>	<b>16%</b>	<b>673</b>	<b>11%</b>	<b>17%</b>

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed; Haas Center.

Note: Cluster definition based on the US Benchmark Cluster Definitions prepared by Harvard Business School's Institute for Strategy and Competitiveness in partnership with the US Department of Commerce and US Economic Development Administration.

 **TRENDS**

Concerns about the security of personal information, intellectual property, and infrastructure have continued to drive demand for cybersecurity-related products and services. Research and market intelligence firm, Cybersecurity Ventures, values the global cybersecurity market at \$120 billion in 2017. The firm projects that \$1 trillion will be spent globally on cybersecurity through 2021. Trends affecting cybersecurity growth include:

- **EXPONENTIAL GROWTH IN INTERNET-CONNECTED DEVICES.** The number of internet-connected devices has exploded in recent years, with no evidence of slowing. Security needs associated with the rise of the Internet of Things (IoT), coupled with increased deployment of web and cloud-based business applications, has increased security demands. The use of internet-connected devices such as cameras, baby monitors, and home routers to attack part of the global internet infrastructure in October 2016 was just one example of the need to step up security protections for even the most basic devices.
- **CONTINUED RISE IN CYBERCRIMES.** Interest in cybersecurity is fueled in part by the rapidly growing cost of cybercrime. In its Q3 2016 report on the subject, Cybersecurity Ventures projects that global spending to defend against cybercrime will exceed \$1 trillion dollars between 2017 and 2021 (*Hackerpocalypse: A Cybercrime Revelation*). Securing consumer, business, and government information and infrastructure is a priority for governments around the world. According to the report, NATO designated cybercrime as an act of “hybrid warfare.”
- **PRIVACY REGULATIONS.** Policy decisions also serve as a driver of cybersecurity demand. Government agencies and businesses alike are required to secure massive amounts of personal data stored on their servers. The ability to share data with partners, for example in a healthcare setting, while keeping sensitive data protected, presents a significant security challenge.
- **CONTINUING WORKER SHORTAGE.** The supply of IT workers with the specific skills required for cybersecurity functions remains well short of demand. Cybersecurity Ventures calls the workforce shortage “severe,” citing a shortage of one million cybersecurity workers in 2016, with the number of open jobs expected to reach 1.5 million by 2019.

**FIGURE 38. GLOBAL CYBERSECURITY ECONOMY**



Source: Cybersecurity Ventures, Predictions 2017-2021 (infographic)

 **BENCHMARK GEOGRAPHIES**

Major population centers comprise the top 10 metro areas in terms of the overall number of workers in the identified cybersecurity-related occupations (Figure 39, next page). The appearance of San Jose on the list reflects the significant pull of the Silicon Valley for workers in information technology fields. Relative wage rates in the region—which are 50 percent higher than the median hourly wage rate for workers in this group nationally (\$41.31)—also reflect the region’s demand for IT workers. Likewise, Boston, San Francisco, and Seattle place higher on this list than they would on the basis of population alone. The higher-than-expected concentration of workers in these areas can also be seen in their above-average LQs.

**FIGURE 39. TOP 10 METROS: CYBERSECURITY OCCUPATIONS**  
 RANKED BY NUMBER OF JOBS IN CYBERSECURITY OCCUPATIONS IN 2015

MSA Name	2016 Location Quotient	2015 JOBS	CHANGE FROM 2009	MEDIAN HOURLY WAGE	RELATIVE TO US (US=1.00)
New York-Newark-Jersey City, NY-NJ-PA	1.09	292,894	34,653	\$48.08	1.16
Washington-Arlington-Alexandria, DC-VA-MD-WV	2.13	198,385	10,319	\$49.71	1.20
Los Angeles-Long Beach-Anaheim, CA	0.90	160,422	11,670	\$44.18	1.07
Dallas-Fort Worth-Arlington, TX	1.42	138,243	28,317	\$41.55	1.00
San Francisco-Oakland-Hayward, CA	2.04	137,208	43,529	\$52.64	1.27
San Jose-Sunnyvale-Santa Clara, CA	4.38	134,789	41,422	\$62.44	1.51
Chicago-Naperville-Elgin, IL-IN-WI	1.02	132,479	15,943	\$40.59	0.98
Boston-Cambridge-Newton, MA-NH	1.64	125,987	19,707	\$48.05	1.16
Seattle-Tacoma-Bellevue, WA	2.23	124,949	23,708	\$51.91	1.25
Atlanta-Sandy Springs-Roswell, GA	1.45	107,835	17,413	\$40.66	0.98

**NORTHWEST FLORIDA METROPOLITAN AREAS (RANKED BY NUMBER OF JOBS IN 2015)**

Pensacola-Ferry Pass-Brent, FL	0.50	2,618	170	\$29.17	0.71
Crestview-Fort Walton Beach-Destin, FL	0.69	2,365	(353)	\$37.65	0.91
Panama City, FL	0.36	833	(93)	\$31.05	0.75

**RANKED BY RELATIVE CONCENTRATION OF EMPLOYMENT (US=1.00)**

San Jose-Sunnyvale-Santa Clara, CA	4.38	134,789	41,422	\$62.44	1.51
California-Lexington Park, MD	2.28	3,090	54	\$46.41	1.12
Seattle-Tacoma-Bellevue, WA	2.23	124,949	23,708	\$51.91	1.25
Boulder, CO	2.20	12,046	1,368	\$44.10	1.07
Austin-Round Rock, TX	2.14	59,399	19,223	\$40.80	0.99
Washington-Arlington-Alexandria, DC-VA-MD-WV	2.13	198,385	10,319	\$49.71	1.20
San Francisco-Oakland-Hayward, CA	2.04	137,208	43,529	\$52.64	1.27
Huntsville, AL	1.93	12,004	507	\$44.44	1.07
Los Alamos, NM	1.92	854	(90)	\$43.92	1.06
Durham-Chapel Hill, NC	1.92	16,815	894	\$43.20	1.04

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

When metropolitan areas are selected based on LQs, four metro areas remain among the top 10: San Jose, Seattle, Washington DC, and San Francisco. A number of mid-size regions make up the remaining spots, including California-Lexington Park, Maryland. Located in the Washington DC area, California-Lexington Park, which is comprised of St. Mary’s County, is home to Naval Air Station Patuxent River. In addition, the area includes Webster Field, which houses the Naval Air Warfare Center Aircraft Division (NAWCAD) 4.5 and NAWCAD 5.1.11, as well as Coast Guard Station St. Inigoes and a component of the Maryland Army National Guard.

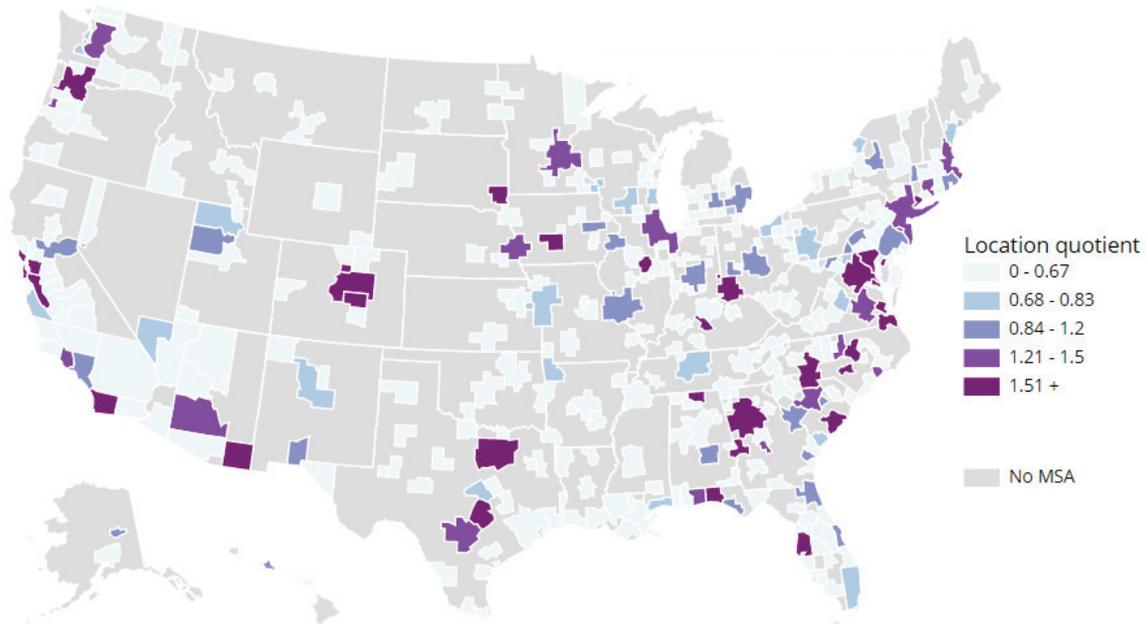
The three Northwest Florida metro areas do not exhibit high LQs for the 13 occupations as a group. However, as noted in Figure 44 (page 105), Computer & Info. Research Scientists (SOC 15-1111) are highly concentrated in the region. Furthermore, regional demand for these occupations (as indicated by the Cyberseek map shown on page 101) is high relative to national averages.

**✓ RATIONALE & NICHES**

Data compiled by Cyberseek.org shows above-average demand for cybersecurity-related occupations in two of the region’s three metropolitan areas.

The presence of multiple military installations and defense asset in Northwest Florida creates a unique advantage for the region in pursuit of cybersecurity firms. This advantage includes the potential for connecting to research activities conducted by the installations, the market represented by the installations and defense contractors, and access to a pool of talent (including active duty personnel separating from service and retirees). While specific figures aren’t available, this pool of talent is likely to include individuals with active security clearance.

**FIGURE 40. CONCENTRATION OF CYBERSECURITY JOB DEMAND BY METRO AREA**  
 LOCATION QUOTIENT OF JOB DEMAND (US = 1.00)



Source: Cyberseek.org

Note: The Cyberseek analysis defines location quotients as follows: “Measures the concentration of cybersecurity job demand in a specific location relative to the national average. A location quotient of 1 is average, below 1 is below average, and above 1 is above average.”

The region is also home to strong higher education programs and initiatives in related fields. As an example, the University of West Florida currently serves as a Center of Academic Excellence in Cyber Defense (CAE-CD). The CAE-CD program is sponsored by the National Security Agency (NSA) and the US Department of Homeland Security (DHS) and is intended to expand the pool of cybersecurity professionals nationwide.

Strong support from economic development organizations can play an important role. Efforts like the Innovation Coast are asset in this regard. Created to “grow, sustain, and showcase the successful, vibrant community of technology companies and professionals along the Northern Gulf Coast,” the program works to address the specific challenges facing area technology organizations.

In addition to military sector, the region is also home to other industries that have high demand for cybersecurity personnel, including Financial Services and Healthcare. Like the Financial Services sector, access to major markets is an important consideration. The availability of nonstop flights to Washington DC and other major markets, including Chicago, Houston, Atlanta, and the New York metro area will help the expansion of the Cybersecurity cluster in the region.

Figure 41 (page 103) provides an overview of selected assets that support the expansion of the Cybersecurity sector in the region.

**KEY SITE LOCATION FACTORS:**

- Availability of IT/cybersecurity workers (proven ability to recruit and retain talent)
- Workers with security clearances
- Linkages with colleges and research universities (to provide talent pool and spinoff opportunities)
- Desirable quality of life
- Favorable business climate
- Reliable, high-speed broadband access
- Reliable and redundant electric power (for data storage facilities)
- Quality of air service to major markets
- Natural disaster risk

Source: TIP Strategies research

**FIGURE 41. STRATEGIC ASSETS: CYBERSECURITY OCCUPATIONS**



**INDUSTRY/INFRASTRUCTURE**

- Science and technology assets including the Air Force Research Laboratory at Elgin AFB and the Institute for Human & Machine Cognition.
- Concentration of industries and firms with high demand for cybersecurity products and services, including defense contractors, aerospace manufacturers, and financial services firms.
- Gulf Breeze-based AppRiver was ranked among the world’s “hottest and most innovative companies in the cybersecurity industry” by Cybersecurity Ventures (Cybersecurity 500, Q4 2016).
- Availability of broadband, with strong broadband infrastructure in areas along I-10.

**WORKFORCE/TRAINING**

- Access to military personnel and retirees, including those with active security clearances.
- Relatively high concentration of some cybersecurity-related occupations in selected metropolitan areas.
- Numerous IT programs offered at regional postsecondary institutions, including Cybersecurity degrees available at University of West Florida’s Hal Marcus College of Science & Engineering.
- University of West Florida’s designation as a federal Center of Academic Excellence in Cyber Defense (CAE-CD).
- Cybersecurity-related academies offered by local middle schools (e.g., Bailey, Bellview, Ferry Pass, and Woodham) and high schools (e.g., Tate, Jay, Pine Forest, and West Florida).

**MARKET TRENDS/POLICY**

- Favorable business climate.
- Aggressive support from regional and state economic development organizations.
- Technology-specific economic development initiatives like Innovation Coast.
- Growing emphasis on entrepreneurship assets in the region.
- No personal income tax and competitive corporate tax rates.

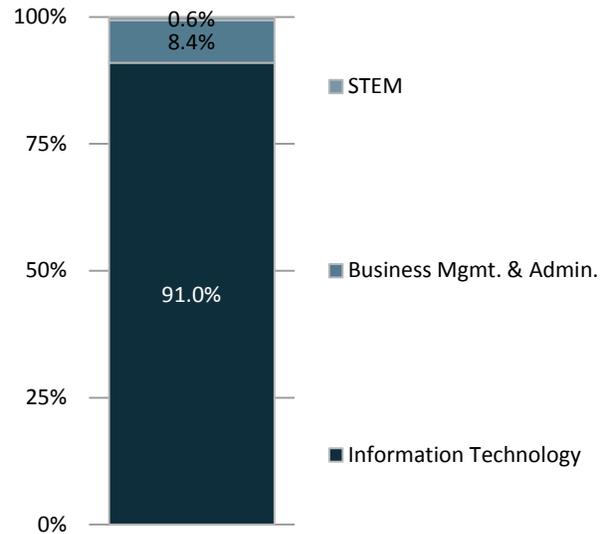
Source: TIP Strategies research

**TALENT**

Eleven of the 13 occupations identified for this analysis fall under the Information Technology career cluster, accounting for 91 percent of total employment in the identified occupations nationally. Of the two remaining two occupations, Computer and Information Systems Managers (SOC 11-3021) is categorized under the Business Management & Administration career cluster and Computer and Information Research Scientists (SOC 15-1111) are part of the Science, Technology, Engineering & Mathematics (STEM) career cluster.

Of the six pathways that relate to the identified cybersecurity occupations, Programming and Software Development is the largest representing roughly one-half (49.1 percent) of total employment in these occupations nationally. It is one of four pathways in the Information Technology career cluster: Network Systems (with 22.4 percent of US employment in the identified occupations), Information and Support Services (15.5 percent), and Web and Digital Communications (3.9 percent). The Business Management & Administration and STEM career clusters each have only one pathway applicable to this group of occupations.

**FIGURE 42. TOP CAREER CLUSTERS: CYBERSECURITY OCCUPATIONS**  
BASED ON SHARE OF TOTAL EMPLOYMENT IN THE IDENTIFIED OCCUPATIONS IN THE US



Nationally, Software Developers, Applications (SOC 15-1132) is the largest of the 13 cybersecurity-related occupations, accounting for 18 percent of the group’s employment in the US. In Northwest Florida, Computer User Support Specialists (SOC 15-1151) are the largest of the cybersecurity-related occupations, representing one in five jobs (20 percent) of the group’s regional employment. This occupation also has the lowest median hourly wage rate among the cybersecurity-related occupations. It is, however, also the only one that does not require at least an associate’s degree. In fact, the vast majority of occupations in the group—10 out of 13—require a bachelor’s degree or higher.

**FIGURE 43. TOP 10 CAREER PATHWAYS: CYBERSECURITY OCCUPATIONS**  
BASED ON SHARE OF TOTAL EMPLOYMENT IN THE IDENTIFIED OCCUPATIONS IN THE US

Pathway   CAREER CLUSTER	Share of total US employment in industry cluster
1 Programming and Software Development   INFORMATION TECHNOLOGY	49.1%
2 Network Systems   INFORMATION TECHNOLOGY	22.4%
3 Information Support and Services   INFORMATION TECHNOLOGY	15.5%
4 Business Information Management   BUSINESS MGMT. & ADMIN.	8.4%
5 Web and Digital Communications   INFORMATION TECHNOLOGY	3.9%
6 Science and Mathematics   STEM	0.6%

Source (both figures): National Career Clusters Framework (Perkins IV Crosswalks, rev. August 2012); EMSI; TIP Strategies  
Based on cybersecurity-related occupations identified by Haas Center.

Although it is among the smallest in terms of employment, Computer & Info. Research Scientists (SOC 15-1111) are by far the most concentrated of the 13 cybersecurity-related occupations, with an LQ of 2.90. This highly technical position works at a more theoretical level than other occupations in this group. Individuals in this field research fundamental issues in computing and develop theories and models to address them. Examples include developing, improving, and testing software systems; inventing new computing tools and languages; solving complex computer problems; and programming robots and autonomous systems. It is the only occupation among the 13 identified that requires a graduate or professional degree.

All of the occupations have median hourly wage rates above the regional figure for all occupations (\$17.27), with three having median wage rates in excess of \$40 per hour. The highest-paying occupation on the list is Software Developers, Systems Software (SOC 15-1133) at \$48.40 per hour. Like the majority of occupations in this group, a bachelor’s degree is typically required for entry into this occupation.

**FIGURE 44. NORTHWEST FLORIDA: CYBERSECURITY OCCUPATIONS**  
 RANKED BY SHARE OF TOTAL EMPLOYMENT IN THE IDENTIFIED OCCUPATIONS IN THE REGION

SOC CODE	OCCUPATION	% OF OCCUP. EMPL.	2015 JOBS IN REGION	LQ (US=1.00)	MEDIAN HOURLY EARNINGS	MINIMUM EDUCATION REQUIRED
15-1151	Computer User Support Specialists	20%	1,203	0.64	\$19.23	Some college, no degree
15-1132	Software Developers, Applications	14%	883	0.40	\$36.84	Bachelor's degree
15-1121	Computer Systems Analysts	10%	611	0.37	\$39.04	Bachelor's degree
15-1133	Software Developers, Systems Software	9%	553	0.48	\$48.40	Bachelor's degree
15-1142	Network & Computer Systems Admin.	9%	539	0.49	\$31.61	Bachelor's degree
15-1143	Computer Network Architects	7%	441	1.01	\$31.03	Bachelor's degree
15-1131	Computer Programmers	7%	429	0.48	\$29.32	Bachelor's degree
11-3021	Computer & Info. Systems Managers	5%	319	0.32	\$47.14	Bachelor's degree
15-1134	Web Developers	5%	303	0.62	\$22.07	Associate's degree
15-1152	Computer Network Support Specialists	4%	265	0.46	\$23.46	Associate's degree
15-1111	Computer & Info. Research Scientists	4%	233	2.90	\$42.88	Advanced degree
15-1141	Database Administrators	3%	210	0.62	\$32.18	Bachelor's degree
15-1122	Information Security Analysts	2%	152	0.58	\$36.72	Bachelor's degree

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Note: Location quotients (LQs) of 1.25 or greater suggest a specialization in the occupation relative to the US and are highlighted. Median hourly wages above the regional rate of \$17.27 are highlighted.

For the industry-based profiles presented previously, national staffing patterns were used to understand the types of workers employed in the sector. For this group of occupations, inverse staffing patterns are used in Figure 45 (page 105) to illustrate the types of industries that typically employ workers with these skills. The figure shows the distribution of the 13 occupations as a group among industries in the Northwest Florida region, with a comparison to the national distribution. The largest source of employment for these workers in the region is found in computer-related industries, including Custom Computer Programming Services (NAICS 541511) and Computer Systems Design Services (NAICS 541512). Together, these two industries are likely to employ nearly 30 percent of Northwest Florida cyber-security related workforce.

**FIGURE 45. LARGEST INDUSTRIES BY EMPLOYMENT: CYBERSECURITY OCCUPATIONS**  
 BASED ON SHARE OF IDENTIFIED OCCUPATIONS EMPLOYED IN THE INDUSTRY IN THE US

NAICS CODE	INDUSTRY	% OF OCCUPATION GROUP EMPLOYED IN INDUSTRY	
		Northwest Florida	US
541511	Custom Computer Programming Services	16.9%	12.4%
541512	Computer Systems Design Services	12.2%	13.5%
541330	Engineering Services	5.2%	1.6%
522130	Credit Unions	3.7%	0.3%
902999	State Government, Excluding Education and Hospitals	3.3%	1.8%
903611	Elementary and Secondary Schools (Local Government)	2.9%	1.3%
517110	Wired Telecommunications Carriers	2.8%	2.2%
901199	Federal Government, Civilian, Excluding Postal Service	2.8%	0.4%
551114	Corporate, Subsidiary, and Regional Managing Offices	2.5%	5.9%
903999	Local Government, Excluding Education and Hospitals	2.5%	2.0%
511210	Software Publishers	1.8%	4.5%
561320	Temporary Help Services	1.7%	2.4%
622110	General Medical and Surgical Hospitals	1.7%	1.4%
541712	R&D in the Physical, Engineering, and Life Sciences (except Biotechnology)	1.7%	1.3%
541611	Administrative Management and General Management Consulting Services	1.6%	1.2%
902612	Colleges, Universities, and Professional Schools (State Government)	1.5%	1.7%
522110	Commercial Banking	1.5%	1.3%
561422	Telemarketing Bureaus and Other Contact Centers	1.4%	0.5%
524128	Other Direct Insurance (except Life, Health, and Medical) Carriers	1.0%	0.0%
518210	Data Processing, Hosting, and Related Services	0.9%	3.0%

Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed  
 Industries in which the 13 identified cybersecurity-related occupations comprise 50 percent or more of total employment are **highlighted**.

 **RESOURCES & NETWORKING**

CYBERSECURITY		
<b>TRADE ASSOCIATIONS</b>		
ASIS International		<a href="http://www.asisonline.org">www.asisonline.org</a>
International Association for Cryptologic Research		<a href="http://www.iacr.org">www.iacr.org</a>
Information Systems Security Association (ISSA)		<a href="http://www.issa.org">www.issa.org</a>
ISSA- Tampa Bay Chapter		<a href="http://tampabay.issa.org">tampabay.issa.org</a>
IEEE Computer Society’s Technical Committee on Security and Privacy		<a href="http://www.ieee-security.org">www.ieee-security.org</a>
Internet Security Alliance (ISA)		<a href="http://www.isalliance.org">www.isalliance.org</a>
National Cyber Security Alliance		<a href="http://staysafeonline.org">staysafeonline.org</a>
<b>RELEVANT CONFERENCES/EVENTS</b>		
<b>RSAConference 2017</b>		
13-17 February 2017	San Francisco, CA	<a href="http://www.rsaconference.com/events/us17">www.rsaconference.com/events/us17</a>
<b>SOURCE Boston 2017</b>		
26-27 April 2017	Boston, MA	<a href="http://www.sourceconference.com/boston-2017-main">www.sourceconference.com/boston-2017-main</a>
<b>SC Congress</b>		
2 May 2017	New York, NY	<a href="http://www.sccongress.com/new-york">www.sccongress.com/new-york</a>
<b>38<sup>th</sup> IEEE Symposium on Security and Privacy</b>		
22-24 May 2017	San Jose, CA	<a href="http://www.ieee-security.org/TC/SP2017">www.ieee-security.org/TC/SP2017</a>
<b>Black Hat USA</b>		
22-27 July 2017	Las Vegas, NV	<a href="http://hwww.blackhat.com">hwww.blackhat.com</a>
<b>ASIS International 63<sup>rd</sup> Annual Seminar and Exhibits</b>		
25-28 September 2017	Dallas, TX	<a href="http://securityexpo.asisonline.org">securityexpo.asisonline.org</a>
<b>2017 ISSA International Conference</b>		
10-11 October 2017	San Diego, CA	<a href="http://www.issa.org/page/IIC2017RSVP">www.issa.org/page/IIC2017RSVP</a>
<b>Annual Computer Security Applications Conference 2017</b>		
4-8 December 2017	San Juan, Puerto Rico	<a href="http://www.acsac.org">www.acsac.org</a>
<b>TRADE PUBLICATIONS</b>		
Infosecurity Magazine		<a href="http://www.infosecurity-magazine.com">www.infosecurity-magazine.com</a>
SC Magazine		<a href="http://www.scmagazine.com">www.scmagazine.com</a>
Security Management		<a href="http://sm.asisonline.org">sm.asisonline.org</a>
Journal of Cryptology		<a href="http://www.iacr.org/jofc">www.iacr.org/jofc</a>
Security & Privacy Magazine		<a href="http://www.computer.org/security-and-privacy">www.computer.org/security-and-privacy</a>
Journal of Cybersecurity		<a href="http://cybersecurity.oxfordjournals.org">cybersecurity.oxfordjournals.org</a>

Source: TIP Strategies research