

# A Strategy to Grow the Fort Bragg Region's Defense & Homeland Security Economy

January, 2010

FINAL REPORT

## Volume Eight Goals, Objectives, and Strategies



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Defense & Homeland Security Economy**

***Volume 8 – Goals, Objectives, and Strategies***

**Submitted to the:**

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**Prepared by:**

UNC-CH School of Government and Booz Allen Hamilton

Under subcontract with Training & Development Associates, Inc.



131B Atkinson Street  
Laurinburg, NC 28352  
[www.tdainc.org](http://www.tdainc.org)

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## I. Goals, Objectives, and Strategies

The preceding chapters of this study have explored in depth the industries that show the most promise for forming the core of a D&HS industry cluster in the Fort Bragg region, the kinds of jobs those industries will need to support their growth, some of the unique labor pools available in the region to meet those needs and the assets and gaps that must be addressed and exploited to successfully build the cluster.

This final chapter of the study provides some concrete recommendations on how to bring the D&HS industry cluster into being. Based on the analysis provided in earlier chapters, a community stakeholder input session, and subject matter experts from economic and workforce development, specific, high priority goals were developed to guide the actions of regional stakeholders. In support of each goal, objectives were established and actionable strategies created that, taken together, define a clear path toward the realization of each goal. Additionally, suggestions have been provided for specific organizations to engage in strategy implementation.

The overarching goals include the following:

- **Goal 1:** Increase coordination and connectivity of the D&HS-related organizational infrastructure at state and regional levels.
- **Goal 2:** Develop innovative approaches to identifying opportunities and winning DoD and DHS business for North Carolina.
- **Goal 3:** Align and develop educational programs with emerging D&HS industry requirements.
- **Goal 4:** Retain and integrate groups with key defense-related skills into regional labor market.

It is important to emphasize that these goals, while they may address some issues at the state level, or mention other military regions, are oriented towards building a defense industry cluster in the Fort Bragg region. The ultimate focus of these goals is the economic growth of the eleven counties of the Fort Bragg region.

### **A. *Goal 1: Increase Coordination and Connectivity of the D&HS-Related Organizational Infrastructure at State and Regional Levels***

As previously discussed, successful economic development requires that relevant organizations be connected into an institutional or organizational infrastructure capable of aligning, coordinating, and leveraging assets to address and overcome gaps. This is especially true of economic development in the D&HS industry. Such coordination and connectivity is essential to incubating or attracting defense-related firms, and then keeping them anchored to the region for the long-term. Because the region's organizational infrastructure crosses institutional, political, and geographic boundaries—pulling in actors from the Governor to the local community college and many stakeholders across that spectrum—we recommend addressing this goal through

approaching organization-building at both the *state level* and the *regional level*. We envision this infrastructure as the primary vehicle through which stakeholders will approach the development and delegation of specific implementation steps.

It is essential to create a state-level infrastructure that provides plans and programs targeted at significantly increasing the D&HS industry statewide and that supports the work of regional organizations. There are clearly unique statewide and regional functions that must be addressed at each level. The state can provide overall strategy, workforce development programs, industrial incentive programs, strategic business intelligence and other functions that are impractical at a regional level. It is at the regional level where services are actually delivered and regional-specific plans must be developed. The organizational infrastructure at the state level must support D&HS industry development state-wide while each region to customizes approaches for their own specific needs and desires. In essence, a two-level structure allows a general alignment of state-level resources and polices towards the defense mission while allowing each region to design and implement specific strategies suited to their own unique needs.

## **1. Objective 1.1: Build State-Level Organizational Coordination and Connectivity**

Many of the agencies and organizations critical to advancing the state's D&HS mission are directed at the level of State government (e.g. the NC Commission on Workforce Development and Department of Commerce) or through a central body coordinating activities throughout the state (e.g. UNC and NC Community College system). Because of this arrangement, it is natural to create a state-level interface for promoting the D&HS mission at the state level and aligning state-level resources and groups. Once aligned in support of the defense mission, these organizations must coordinate their efforts instead of working in possibly misaligned, disconnected silos.

- **Strategy 1.1.1—Create an Office of Military Affairs (OMA) in the Governor’s Office** to coordinate the efforts of State agencies to support the quality of life of North Carolina based troops, promote economic development within the D&HS sectors and support the defense mission embodied by our many DoD installations. This includes aligning and coordinating agency work across many areas from transportation, economic development, education and workforce development.
- **Strategy 1.1.2—Operationalize the NC Center for Defense & Homeland Security (CDHS) currently under development to serve as state coordinating entity.** The proposed Office of Military Affairs will have a broad range of coordinating responsibilities but is not expected to have a large staff or to be directly responsible for executing key programs and functions needed to make the D&HS cluster a success. As this report was being completed, a CDHS was in the planning stages. This Center will be established within the UNC System and under the administrative oversight of Fayetteville State University.

As envisioned, this center will be resourced to take on certain key, statewide functions such as overall strategic planning and business intelligence focused on developing the actual deals that will bring contracts and business to the state, including the Fort Bragg

region. Many other organizations will play key roles in that overall process but none are currently performing the functions envisioned for this Center. Specifically, this organization would coordinate and align the efforts of industry and state-level partners in government, institutions of higher education (including the community college system), economic development actors, the workforce development system, and defense-related non-profits. The functions of the CDHS would include:

Strategic planning – Work with a broad array of stakeholders to develop a strategic plan that provides statewide direction on D&HS cluster development efforts.

Business intelligence – Identify and target leverage points within the federal funding process that can be used to gather strategic intelligence on upcoming procurements so that the state can position itself to out-compete other states for this business.

Workforce development – Work with 2- and 4-year higher education institutions to ensure that the state is well prepared with a workforce that is trained in the competencies associated with the D&HS industries.

Customer support – Maintain regular communications with DoD installations and regional planning groups in the Fort Bragg, Camp Lejeune, and other regions to ensure that the CDHS is responsive to local needs.

Research and development – Serve as a centralized coordinating organization for statewide R&D activities in the research universities and beyond

While the NC Military Business Center will continue to take the lead on preparing North Carolina firms to secure more federal contracts, and the DSTA will continue to promote the growth of technology and the connections between industry and university R&D, the CDHS will support those efforts through its strategic business intelligence activities and overall coordination of long-term opportunities. The CDHS will maintain close liaison with regional planning organizations such as the BRAC RTF and the Military Growth Task Force at Camp LeJeune to ensure that the efforts of the Center are supportive of the economic development and workforce development initiatives of these regional planning groups.

- **Strategy 1.1.3—Promote targeted focus on defense cluster within State Department of Commerce.** Given tight State budgets, we recommend that, within available resources, DOC sharpen its focus on the defense cluster, and work closely with the new CDHS to integrate economic incentives and other existing state programs in the overall pursuit of D&HS business for the state. .

## **2. Objective 1.2: Build Local-Level Organizational Coordination and Connectivity in Fort Bragg Region**

Just as creating centralized interface points at the state level is essential to addressing the gaps in the state's organizational infrastructure, so it is equally important to replicate that organizational

connectivity at the regional level. We are not recommending the duplication of state-level organizational roles and responsibilities at the regional level; rather, we are recommending regional counterparts to those roles and responsibilities. While the state-level entities set strategic direction and provide resources for the defense mission, it is the local organizations that will actually deliver the services—whether training services, separation-transition assistance, economic development incentives, technical assistance for spin-offs, or STEM-related educational programming for youth—to local recipients in support of that mission. Finally, as happened in Huntsville, building regional connectivity further embeds workers, military personnel, and firms into the region itself by creating institutional connections to which these groups become accustomed.

- **Strategy 1.2.1—Create a regional coordinating entity with the capacity to align all categories of organizational assets and address key gaps at an operational level.** The Fort Bragg region has already established a coordinating entity by the creation of the BRAC RTF. This organization has achieved remarkable cooperation across 11 counties and multiple municipalities over the past 4 years to address the challenges and opportunities associated with BRAC. While the BRAC move officially is complete by September 2011, the impact of BRAC growth will be felt for many years to come in the region and the need for a regional response will not diminish. As noted in the gaps section, some funding resources from the federal government will start to end by next year for the BRAC RTF. If the critical functions of this organization are to continue, alternate means of funding support will need to be addressed.
- **Strategy 1.2.2—Institutionalize stakeholder participation through formalized and substantive representation.** The BRAC RTF has worked closely with a wide array of local groups and stakeholders over the past 4 years to develop plans and programs in response to BRAC growth. As the region moves increasingly from a planning to an execution phase of BRAC-related actions, even greater collaboration will be necessary. To be effective, actions to transform the economy, strengthen the education system, grow the workforce and cope with the infrastructure issues surrounding growth will absolutely require heavy participation and buy-in from affected stakeholders in the region. This is especially true given the likely scarcity of resources to fund the RTF operations.

This stakeholder representation might be achieved through the use of local advisory boards and industry cluster working groups. In Huntsville, the Chamber of Commerce used targeted advisory boards to create institutionalized vehicles for synergy around R&D, bringing together the knowledge, practical skills, and financial resources required for developing new technologies, commercializing them, and spinning them off into new companies. While there is no limit to the focus and number of these groups, we recommend that BRAC RTF and CDHS begin by working with industry partners and higher education stakeholders (FORTCC, FSU, UNC-P) to create cluster working groups for each of the specific industries targeted by the region. As discussed in greater detail in Goal #3, we also recommend the creation of a Subcommittee Advisory Board around the region's workforce development function to assist in coordinating industry specific workforce training and higher education programming.

As a final note, we recognize that the region’s stakeholders are ultimately responsible for developing a governance model that best suits their specific needs. Regardless of which structural arrangement is adopted, we strongly recommend the use of local advisory boards that bring together a broad array of key stakeholders around target industries and issues

- **Strategy 1.2.3—Create an All American Defense Business Association (AADBA) to connect defense firm employees with each other.** This strategy is already underway in the Fort Bragg region with the new AADBA growing to over 100 members in just a few months. An association such as this can be extremely beneficial to a growing industry cluster in a region by organizing educational and networking functions and by serving as a source of information to firms outside the region seeking partners. This association can increase the opportunity for knowledge spill-overs and skill transference within industry firms, while simultaneously creating the kinds of relational connections among workers so essential to embedding them within the community. In turn, this works towards retaining white collar professionals—itsself a key objective of this plan. Key actors in implementation include the BRAC Regional Task Force, NC Military Business Center (NCMBC), and regional Chambers of Commerce. Finally, regional stakeholders must decide whether they envision this entity growing its role beyond professional networking to that of a stronger industry trade association which provides member services, technical assistance, and aggressive public policy functions.

## ***B. Goal 2: Prepare the Regional Economy to Compete More Effectively For D&HS Contracts***

Building a D&HS industry cluster naturally requires expanding the number of defense-related firms and workers in the region. Although much of the discussion by regional stakeholders has focused almost exclusively on recruiting defense-related firms to the region, it must be stressed that for defense contractors, work follows contracts. Therefore, any recruitment effort must be tied to an existing or potential contract that is to be performed in North Carolina. To ensure that more contracts are executed in the state, we recommend a more comprehensive approach to economic development as the primary means to build the region’s D&HS industry cluster. Along with the recruitment of defense firms into the region, this approach emphasizes making existing firms more competitive, increasing the number and value of contracts won by regional firms; expanding the existing firms already established in the region; assisting in the creation of new, locally grown defense businesses; and the assessment and strategic upgrading of the region’s physical and industrial infrastructure.

In proposing this approach, we outline a blue-print for leveraging the organizational assets recommended in the previous goal to achieve the overarching mission of a vibrant defense industry cluster in the region. Many of the strategies proposed in this blueprint directly or indirectly address regional gaps highlighted in Section 3.

## 1. Objective 2.1: Win More Defense Contracts

A recent analysis for the NC Military Business Center showed that while North Carolina is home to the fourth largest number of military personnel in the nation, the state ranks 23<sup>rd</sup> in the nation in terms of military procurement. In light of this imbalance, one of the key elements in building the region's D&HS cluster is ensuring that the region's firms secure a larger share of the contracts offered annually by the Pentagon.

- **Strategy 2.1.1—Help the region's existing firms compete for prime contracts.** Not all DoD prime contracts are large and complex and many are set aside for certain categories of small or disadvantaged businesses. The BRAC RTF should work closely with the NC Military Business Center whose primary responsibility is to provide educational offerings on DoD and Federal contracting, notification to North Carolina firms on upcoming procurement opportunities and business development services for firms in North Carolina wishing to do business with the DoD to help firms secure prime contracts. The services offered by the DSTA in the R&D sector are also critical to improving the competitive advantage of the region.
- **Strategy 2.1.2—Help regional firms connect with established prime contractors for teaming on contracts.** A proven method for firms new to the defense industry to enter this market is through teaming with larger established firms. To do so will require that regional firms become familiar with DoD contracting practices as noted in the strategy above and skilled at presenting their capabilities to potential prime teammates. Another important factor in the formation of these teams is to have long-term strategic business intelligence on upcoming procurement actions. By developing advanced intelligence on future opportunities before prime contractors finalize their teams, regional firms greatly improve their chances to successfully partner on larger procurements.

We recommend that a joint approach that includes participation by the NC CDHS, NCMBC, NCMF, the DOC and the BRAC RTF work together to bring businesses in the Fort Bragg region together with major defense contractors on work to be done in the region. The new CDHS will be bringing its long-term strategic business intelligence resources to bear to identify opportunities well in advance of procurements and before prime contractors finalize their teaming arrangements. The NCMF with its prestigious membership is ideally suited to make connections at the highest levels within prime contractor organizations to broker teaming deals and the NCMBC, with its extensive network of North Carolina firms to call on can identify the best possible local firms to meet the needs of a particular DoD contract. Finally, the DOC can bring to bear the state's various industrial recruitment tools and incentives to help "close the deal.

- **Strategy 2.1.3—Work with state's Congressional delegation** to secure large-scale contracts and additional defense programs to Fort. Bragg. With several members on key defense appropriations and authorizing committees, the state is well positioned to pursue this strategy.

- **Strategy 2.1.4—Work with the General Assembly, DOC, and county governments to ensure that business incentives are aligned to meet the specific needs of firms in the region’s targeted industries.** We recommend that the CDHS and DOC Military Affairs Office work directly with industry leaders to determine the scale and scope of these incentives (i.e., tax rebates, power savings, cash incentives, buildings, etc). We also recommend that both the State and the region’s local Economic Development Commissions (EDCs) base incentive levels on capital investment and not just on job creation, since many technology-based defense contractors have relatively small employment numbers. This will be especially true for the initial wave of contractors, many of which will be competing for smaller pieces of larger, multi-partner contracts. We do not recommend disadvantaging large-scale job creators like Boeing or Lockheed-Martin, but we do want to make sure that incentive options exist for high-investment, low employment firms as well.
- **Strategy 2.1.5—Ensure that business incentives are aligned to needs of firm retention/expansion, and not just geared towards recruitment.** We recommend that DOC and the General Assembly include this expansion/retention focus in their development of State-level defense-specific incentives. Likewise, we recommend that all County EDCs update their incentive policies where necessary to include retention/expansion provisions, and to market existing incentive policies to existing industry.

## 2. **Objective 2.2: Pursue Entrepreneurship to Promote Locally-Grown Defense Businesses**

Since small businesses account for the largest percentage of the nation’s employment, entrepreneurship forms the third pillar of building a D&HS cluster in the region. Opportunities for new spin-off companies are especially important within the R&D functions of the region’s target industries.

- **Strategy 2.2.1—Leverage NCMBC and the DSTA to provide small business start-up support services like technical assistance and initial financing.** We further recommend that these partners also engage with local CDHS Subcommittee Advisory Boards to ensure potential entrepreneurs are aware of and connected to the services provided by these assets.
- **Strategy 2.2.2—Facilitate patenting, commercialization of research, and the spin-off of new companies.** We recommend that the DSTA work in collaboration with the CDHS to pursue commercialization of relevant research. We further recommend that the CDHS leverage assistance from the NCMBC to provide start-up assistance for new spin-off companies. These two recommendations will help research centers secure more investment in patenting and commercialization activities and address identified gaps in the region’s R&D commercialization efforts. As part of this, **securing access to capital for defense-related start-ups** is critical, and as a result, we recommend the creation of a regional entrepreneurial committee under the auspices of the BRAC RTF to network together potential entrepreneurs, members of the region’s banking community, and

representatives from DOC, the Rural Center’s venture capital fund and loan funds, and other sources of defense-related venture capital. BRAC RTF should identify such sources and invite them to join this committee.

### **3. Objective 2.3: Assess and Strategically Upgrade Physical and Industrial Infrastructure to Support Defense Industry Expansion**

Currently, the region is lacking a comprehensive assessment of its physical infrastructure and likewise is lacking a single inventory of available industrial sites in all eleven counties. Building the region’s defense industry will require understanding and upgrading its physical/industrial infrastructure as much as developing its organizational infrastructure

- **Strategy 2.3.1—Address immediate air transportation gap through short-term partnerships with airlines and Fayetteville Airport.** Notwithstanding the importance of a comprehensive assessment to frame a long-range strategic upgrading of the region’s infrastructure, it is clear from existing research that the lack of air transportation is an immediate, critical problem for defense contractors who need efficient air travel to military command centers in Washington, DC. This is a challenge that can be addressed immediately, while a broader assessment is being completed. In light of this, we recommend the immediate development of short-term partnerships with airlines to provide additional direct flight services between Fayetteville and Washington. Alongside the BRAC RTF, the state’s Congressional delegation may also be useful in implementing this strategy.
- **Strategy 2.3.2 – Address critical capital needs in the region.** The Comprehensive Regional Growth Plan developed by the BRAC RTF outlines several critical gaps in the areas of transportation, water/sewer, public safety, communication technologies, and k-12 education. Capital improvements in these areas continue to be a prerequisite to a successful regional D&HS cluster. Funding shortfalls in these areas however are a significant challenge and efforts to secure additional funding should continue to be pursued.
- **Strategy 2.3.3—Assess industrial infrastructure in the region.** While lists of available industrial sites are scattered across multiple economic development entities, including a state-wide inventory at NCSiteSearch.com, there is no single, comprehensive inventory focused directly on this region. Specifically, there is no single, readily available portal to viewing the defense-related industrial infrastructure improvements in the 11-county footprint covered by BRAC RTF. To address this gap, we recommend that the local CDHS hire a site selection consultant with defense industry experience to provide a comprehensive industrial infrastructure assessment for the region, with special attention to identifying shovel-ready sites that are already connected to water/sewer lines and have Interstate frontage. New and emerging military-centered business parks such as the All-American Military Business Park in Fayetteville and Freedom Center in Spring Lake are indicative of the needs of defense contractors.

### **C. Goal 3: Align and Develop Educational and Workforce Development Programs With Emerging D&HS Industry Requirements**

In order to build a successful defense cluster around the high-skill industries targeted by regional stakeholders, the region clearly must address its shortcomings in educational attainment and job skills. Without sufficient education and specialized skills in its workforce, the region will face significant barriers to attracting, retaining, and creating high-skill defense firms, many of which have very specific training needs. In terms of addressing these human capital and educational gaps, the challenge for the region is two-fold: 1) upgrade the general educational levels of citizens, especially in Science, Technology, Engineering, and Math; and 2) ensure that businesses have access to workers with specialized skills and skill-development programs customized to the specific needs of those businesses. In order to address both of these challenges, the region needs to align its organizational assets in K-12 education, higher education, workforce development and develop the programming infrastructure necessary to meet the skill needs of businesses in these industries.

In this section, four key objectives for accomplishing this goal are outlined: 1) Align higher education curricula and research programs to better support the D&HS industry in the region; 2) Institutionalize a coordinated workforce development structure for the Fort Bragg region; 3) Align K-12 programs with industry needs; and finally, 4) Increase overall skill-base of the region's workforce in Science, Technology, Engineering, and Math (STEM)—a key skill-set for businesses in D&HS industries.

#### **1. Objective 3.1: Align Higher Education Curricula and Research Programs to Better Support the D&HS Industry in the Region**

With dozens of universities, community colleges, and university-based training programs and research centers scattered across the region, it is imperative to ensure that these assets are adequately connected and coordinated to maximize their benefit to the region's efforts to build a D&HS industry. Programs and curricula across the state should be coordinated to avoid unnecessary duplication and to ensure that the courses that are needed to support industry are available where needed.

There are some four-year and two-year programs already established or under development in the region to help meet industry demand. For example, Campbell University has established a new degree in management information and security and Sandhills Community College and FTCC have programs in modeling and simulation.

- **Strategy 3.1.1—Create a higher education defense advisory committee to work with the CDHS to ensure that the curricula offered within the university and community college systems supports the workforce needs of the emerging D&HS cluster.** This advisory committee should serve as a clearinghouse for keeping relevant higher education stakeholders around the state aware of each others activities with respect to the defense mission. The board's membership should consist of senior leadership at the system and university levels. Initiatives to make curricula D&HS- relevant, are already being pursued at FSU and Campbell University. Similar efforts should continue.

- **Strategy 3.1.2—Provide a centralized source to coordinate the pursuit of R&D funding from DoD and DHS.** The CDHS, as part of its mission of developing business intelligence on DoD and DHS funding, should identify opportunities for obtaining R&D grant funding for educational institutions in North Carolina. The UNC system currently does not have a comprehensive program to identify and pursue DoD R&D funding.
- **Strategy 3.1.3—Develop collaborative partnerships between regional higher education institutions and major research universities outside the region.** Examples might include research partnerships around the new Electron Microprobe at FSU and the Advanced Visualization Center at FTCC.
- **Strategy 3.1.4—Higher education institutions in the region should consider expanding and creating appropriate coursework to better meet the needs of cluster industries.** Certificates, majors, and specializations are needed in information assurance and security, the federal acquisition process, security studies, modeling and simulation, and logistics. Specific initiatives might include:

Information assurance and security. Four-year schools might consider adding a concentration within their existing computer science programs to focus on computer security. Within the region, Campbell University’s new Information Technology and Security undergraduate degree is a good example of the focused coursework that is needed in the region’s four-year institutions. Schools outside the regions such as NCSU, UNC-CH and ECU already offer such specialized courses. Partnerships with these institutions would provide local availability and ready resources. Further targeting of coursework to include DoD-specific competencies such as knowledge of the Federal Information Security Management Act and OMB Circular A130 - Management of Federal Information Resources is also needed. More information on DoD-specific knowledge areas can be found at <http://iase.disa.mil>.

Federal acquisition process. Coursework that deals with the federal acquisition process – particularly in the Department of Defense - as contract administration, cost/price analysis, bidding protocols, proposal development, etc. is needed. The N.C. Military Business Center (NCMBC) already has a successful record of providing seminars on “Getting Work with the Federal Government” and “Doing Work with the Federal Government”. The region would be well served to also have more intensive and distance-based learning opportunities similar to those provided by the University of Alabama-Huntsville (UAH) (<http://www.coned.uah.edu>). UAH offers non-credit certificate programs in contracting essentials and certain contracting specialties through their continuing education division.

Security studies. Coursework which combines traditional disciplines like criminal justice with more recently established disciplines such as environmental health and emergency planning and information security could serve as a needed foundation for students interested in the defense and homeland security industries. Increased awareness of programs such as the East Carolina University graduate certificate and degree programs in security studies (<http://www.ecu.edu/cs-cas/securitystudies/>) would

be beneficial. Likewise, similar coursework – not presently available in the region – should also be provided on a continuing education or undergraduate level.

Modeling and simulation, Coursework which focuses on mimicking the operation of a real system, such as a warrior on the battlefield will dominate military training efforts. Efforts such as the Advanced Visualization and Interactive Design Center at Fayetteville Technical Community College and a new program in simulation and gaming at Sandhills Community College are indicative of this type of valued training.

All of these programs should incorporate internships with appropriate D&HS firms, research centers, and Fort Bragg offices.

- **Strategy 3.1.5—Foster cooperation to create clearly defined educational pathways and to maximize workplace value.** There is a need to establish educational pathways that make clear the knowledge and skill requirements and job opportunities available for workers at all levels. The Regional Talent Platform, PipelineNC.com, is specifically designed to provide these clear pathways for students or workers at all levels to guide their efforts to improve their job skills and match up with desirable careers. In addition, higher education partners can work together to ensure that prospective workers who enter defense-related training programs at 2-year colleges with a minimal skill-set can progress through the educational pathway to increasingly higher levels of training to gain an Associates or Bachelor’s degree in targeted competencies.

To maximize the value of education, we also recommend that higher education partners develop strong credit transfer programs, and attempt to integrate these transfers with professional licensing and certifying systems like those with the North Carolina State Board of CPA Examiners, Defense Acquisition University, National Contract Management Administration (NCMA), and the North Carolina Chapter of the Project Management Institute.

## **2. Objective 3.2: Institutionalize a Coordinated Workforce Development Program for the Fort Bragg Region**

- **Strategy 3.2.1—Create a single workforce development advisory board (WDAB) in the Fort Bragg region to coordinate the various workforce training programs, including those offered by the region’s higher education institutions.** Since there is no single Workforce Board representing the complete eleven-county region, a WDAB under the umbrella of the BRAC RTF could play this role for the region. There is currently a Workforce Demonstration Program Steering Group in place under the sponsorship of the BRAC RTF to coordinate efforts in Workforce and Education, which has region-wide representation. This group could evolve to become a permanent coordinating organization for the region. Through regular meetings and staff contact, this board will create a venue for stakeholders to collectively monitor industry workforce needs and regional training gaps on an ongoing basis.

### 3. Objective 3.3: Align K-12 Programs with Industry Needs

In order to increase the relevance of curriculum and comprehensively address the region's skill gaps, it is important to involve K-12 educators with partners from the D&HS industry.

- **Strategy 3.3.1—Include K-12 stakeholders in workforce development process.** There is currently a K-12 Steering Group under the sponsorship of the BRAC RTF that seeks to align K-12 programs with the needs of regional industry. We recommend that this group be continued under the BRAC RTF to ensure that the elementary and secondary systems are involved in the development of regional workforce training strategies, are connected to the needs of private industry, and have the information necessary to develop and align their own programs in support of the overall defense mission.
- **Strategy 3.3.2—Develop career and technical education programs in partnership with industry.** These programs can address the region's skill gaps, especially those related to the manufacturing-related target industries, through targeting these challenges earlier in a future worker's life. Additionally, K-12 stakeholders should consider models such as D&HS magnet schools in Maryland. It is important for all programs to promote the importance of gaining security clearances for work in the defense industry.

### 4. Objective 3.4: Increase Overall Skill-Base of the Region's Workforce in Science, Technology, Engineering, and Math (STEM)

Given the critical shortfall of STEM-educated workers in the region, it is essential for K-12 and higher education institutions to increase the number of STEM teachers and students proficient with STEM-related skills. It is worth noting that a similar focus on STEM from K-12 through higher education is often credited by Huntsville's stakeholders in explaining the success of their own defense cluster.

- **Strategy 3.4.1—Seek funding support from State, Federal, and private industry sources to provide scholarships and programming resources** for college-level majors in STEM subjects and for education majors to receive specialized training in STEM subjects. This can be modeled on the State's existing Burroughs Wellcome Fund Scholars Program and leverage existing NOYCE Grant funding. The Burroughs Wellcome Fund Scholars Program is a "fast track" to teacher licensure for science and math majors. We recommend that UNC General Administration make this a priority in its member schools, and the General Assembly provide additional State funds to support this effort. Finally we recommend that the state-level CDHS and the BRAC RTF Workforce Demonstration Steering Group coordinate the lobbying and promotional efforts around this initiative.
- **Strategy 3.4.2—Develop and deploy Distributed Learning Curriculum supporting STEM.** A distributed learning pilot program is underway in the region and should be evaluated to determine its effectiveness. If results are positive, this program should be extended to other schools in the region.

#### **D. Goal 4: Retain and Integrate Groups with Key Defense-Related Skills into the Regional Labor Market**

Along with strategies to develop the existing labor pool with new skills vital to the D&HS industry, it is imperative for the region to find ways of retaining and integrating those untapped or underutilized segments of the labor market already in possession of key occupational skills related to the region's targeted defense industries. There are two such untapped and underutilized labor market segments in the Fort Bragg region, 1) the civilian spouses of active-duty military personnel stationed in the region, 2) military personnel who have recently separated from active duty. In addition, there is a shortage of white collar professionals with management and technical skills critical to defense contractors.

##### **1. Objective 4.1: Retain Separated Military Personnel in the Region**

As previously discussed, separating military personnel are a significant and untapped resource for the region's labor market. Aside from highly relevant skills in defense-related fields, many of these former military personnel already have security clearances and outstanding soft skills such as leadership and experience working in teams, making them of exceptional value to contractors. Since many of these soldiers and airmen leave the region upon separation from service, retaining them—and their skills—is a high priority for the region. As with white-collar professionals, the region must address this challenge not only in terms of facilitating job creation and placement, but also in terms of addressing their desire for “a great place to live.”

- **Strategy 4.1.1—Expand web-based job connection platforms for separating military personnel.** A job connection platform, PipelineNC.com, is currently under development with launch expected in January 2010. This Web 2.0 talent platform will have special features for targeting separating military and military spouses, will help them translate their military skills and experiences into civilian equivalents and will match them with regional employment opportunities.
- **Strategy 4.1.2—Enhance the region's image as a great place to live.** The Regional Partnerships, local economic development commissions, and county tourism offices should collaborate to continue efforts to market the region as an attractive place for white collar professionals.

##### **2. Objective 4.2: Integrate the Civilian Spouses of Active-Duty Military Personnel into the Regional Labor Market**

As previously discussed, the civilian spouses of active-duty soldiers and airmen provide a valuable and underutilized pool of potential workers with higher educational attainment levels than are average in the region. For those that want to work, the region needs to ensure that these spouses can be brought into the workforce. In order to do so, the region must provide employment and training information that is readily accessible, current, and efficient. It is worth noting that embedding civilian spouses into the region's labor market can also serve the additional benefit of further anchoring and retaining separated military personnel in the region.

- **Strategy 4.2.1—Identify and track spouses when active-duty personnel arrive at Fort Bragg and are initially processed into service on the base.** Since entry is the easiest access point in which to start this process, we recommend that base personnel include spouses in initial intake processing and then provide their skills, education, and experience information to the JobLink and new PipelineNC platform. Their generic profiles should then be included in the Worker Skills database for use in training program development and contractor recruitment efforts. It is worth noting that spouses may be required to sign a waiver due to privacy concerns.
- **Strategy 4.2.2—Conduct outreach to local defense firms promoting military spouses as potential employees.** Feedback from military spouses indicates that regional firms are reluctant to hire spouses based on the prevailing view that they are too transient to merit employment. The Fort Bragg community has made major strides over the past 5 years to improve the quality of life for service member families and, as a result, many spouses do not leave the area when their spouse is deployed. In many cases, this results in spouses remaining in the area for extended periods. This information, along with information on the high levels of education possessed by spouses should be communicated more effectively to the business community. An aggressive, “Hire a Military Spouse” outreach and marketing effort could be targeted at businesses in the region, perhaps through partnerships with local chambers of commerce, public service announcements in local media, etc.. An essential part of this pitch is that these spouses genuinely have highly marketable training, education, and skills and, as a result, have the potential to add significant value to their prospective employers.

### **3. Objective 4.3: Attract and Retain White Collar Professionals Essential to High-Technology Defense Contracting Businesses**

One of the region’s greatest weaknesses is its shortage of educated, white collar professionals needed to fill management positions in defense firms. Without this base, new businesses will be hesitant to locate in the region. It is, therefore, imperative to develop methods for attracting and retaining this kind of talent. According to separate studies recently completed by the Southeastern Economic Development Commission and UNC Chapel Hill, one of the greatest challenges to this may be the region’s perceived lack of amenities and negative image associated with the quality of life in rural areas and near military bases. Many white collar professionals are not just looking for a job; they are looking for an attractive place to live and raise their families, places that have good schools, quality housing, a variety of entertainment and recreation options as well as high-end retail and fine dining options. The Fort Bragg region needs to address the quality-of-life factors if the goal of attracting and retaining white collar professionals is going to be achieved.

## **II. Conclusions**

This comprehensive list of goals and strategies for building a D&HS cluster in the Fort Bragg region was based on community input, existing research by BRAC consultants, best practices in comparison areas, and new research conducted for this study. Four overarching goals were recommended : Building an organizational infrastructure capable of facilitating key aspects of

the region's transformation; Increasing the actual presence of the industry in the region through sound economic development practices; Aligning the workforce development efforts of state and regional stakeholders in higher education; and Integrating underutilized segments of the labor market into the regional employment base. These goals, taken together, provide a roadmap for the development of the D&HS industry cluster that will require the sustained efforts of many stakeholders over an extended time horizon. In addressing this challenge, a key dimension of success involves the creation of lasting organizational connections which can facilitate an ongoing, interactive process directed and implemented by local, regional and state stakeholders. This report is the beginning, not the end of such a process.

### III. Appendix



<b>Goals, Objectives, &amp; Strategies Implementation Matrix</b>  <b>Key:</b> <b>R – Responsible: Those who do the work to achieve the task</b> <b>C – Consulted: Those whose opinions are sought</b>	CDHS	NCMF	DOC	BRAC RTF	DSTA	NCMBC	AADBA	FSU	UNC System	FTCC	NC DPI	Regional School Boards	Gov’s Office of Military Affairs	General Assembly	NC Congressional Delegations	Reg. Chambers of Commerce
<b>Goal 2: Develop innovative approaches to identifying opportunities and winning DoD and DHS business for NC.</b>																
<b>Objective 2.1: Win More Defense Contracts</b>																
<i>Strategy 2.1.1—Help the region’s existing firms compete for prime contracts.</i>	R	R	R	R	R	R	C						C			
<i>Strategy 2.1.2—Help regional firms connect with established prime contractors for teaming on contracts.</i>	R	R	R	R	R	R	C						C			
<i>Strategy 2.1.3—Work with state’s Congressional delegation</i>	R	R											R		R	
<i>Strategy 2.1.4—Work with the General Assembly, DOC, and county governments to ensure that business incentives are aligned to meet the specific needs of firms in the region’s targeted industries.</i>	R		R										R			
<i>Strategy 2.1.5—Ensure that business incentives are aligned to needs of firm retention/expansion, and not just geared towards recruitment.</i>			R										R	R		
<b>Objective 2.2: Pursue Entrepreneurship to Promote Locally-Grown Defense Businesses</b>																
<i>Strategy 2.2.1—Leverage NCMBC and the DSTA to provide small business start-up support services like technical assistance and initial financing.</i>	C				R	R										
<i>Strategy 2.2.2—Facilitate patenting, commercialization of research, and the spin-off of new companies.</i>	C			C	R	C		C	C	C						

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<b>Objective 2.3: Assess and Strategically Upgrade Physical and Industrial Infrastructure to Support Defense Industry Expansion</b>																
<i>Strategy 2.3.1—Address immediate air transportation gap through short-term partnerships with airlines and Fayetteville Airport.</i>			C	R									C		C	C
<i>Strategy 2.3.2 – Address critical capital needs in the region.</i>				R									R			
<i>Strategy 2.3.3—Assess industrial infrastructure in the region.</i>	R			C												
<b>Goal 3: Align and develop educational programs with emerging D&amp;HS industry requirements.</b>																
<b>Objective 3.1: Align Higher Education Curricula and Research Programs to Better Support the D&amp;HS Industry in the Region</b>																
<i>Strategy 3.1.1—Create a higher education defense advisory committee to work with the CDHS to ensure that the curricula offered within the university and community college systems supports the workforce needs of the emerging D&amp;HS cluster.</i>	R							R	R	R						
<i>Strategy 3.1.2—Provide a centralized source to coordinate the pursuit of R&amp;D funding from DoD and DHS.</i>	R							C	C							
<i>Strategy 3.1.3—Develop partnerships between major research universities outside the region.</i>	R							C	C	C						
<i>Strategy 3.1.4—Higher education institutions in the region should consider expanding and creating appropriate coursework to better meet the needs of cluster industries.</i>	C			C				R	R	R						

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<i>Strategy 3.1.5—Foster cooperation to create clearly defined educational pathways and to maximize workplace value.</i>	R															
<b>Objective 3.2: Institutionalize a Coordinated Workforce Development Program for the Fort Bragg Region</b>																
<i>Strategy 3.2.1—Create a single workforce development advisory board (WDAB) in the Fort Bragg region to coordinate the various workforce training programs, including those offered by the region's higher education institutions.</i>			C	R	C	C	C									C
<b>Objective 3.3: Align K-12 Programs with Industry Needs</b>																
<i>Strategy 3.3.1—Include K-12 stakeholders in workforce development process.</i>				R				R		R		R				
<i>Strategy 3.3.2—Develop career and technical education programs in partnership with industry.</i>				R								R				
<b>Objective 3.4: Increase Overall Skill-Base of the Region's Workforce in Science, Technology, Engineering, and Math (STEM)</b>																
<i>Strategy 3.4.1—Seek funding support from State, Federal, and private industry sources to provide scholarships and programming resources</i>	R			R				C	C	C		R				
<i>Strategy 3.4.1—Seek funding support from State, Federal, and private industry sources to provide scholarships and programming resources</i>				R				C	C	C		R				

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<b>Goal 4: Retain and integrate groups with key defense-related skills into regional labor market.</b>																
<b>Objective 4.1: Retain Separated Military Personnel in the Region</b>																
<i>Strategy 4.1.1—Expand web-based job connection platforms for separating military personnel.</i>	R			R												
<i>Strategy 4.1.2—Enhance the region's image as a great place to live.</i>				R			C						R	C	C	R
<b>Objective 4.2: Integrate the Civilian Spouses of Active-Duty Military Personnel into the Regional Labor Market</b>																
<i>Strategy 4.2.1—Identify and track spouses when active-duty personnel arrive at Fort Bragg and are initially processed into service on the base.</i>				R			C									
<i>Strategy 4.2.2—Conduct outreach to local defense firms promoting military spouses as potential employees.</i>				R			C									