INSTALLATION MISSION GROWTH

Community Profile

November 2009

Aberdeen Proving Ground (APG), Maryland

Community Contact:

Karen L. Holt
BRAC Manager
APG-CSSC
Regional BRAC Office
1201 Technology Drive
Suite 109
Aberdeen, MD 21001
410-273-5708
klholt@harfordcountymd.gov
www.apg-cssc.com

Installation Contact:

COL Andrew Nelson
Deputy Garrison Commander for Transformation
Transformation Office
US Army Garrison
Aberdeen Proving Ground
4304 Susquehanna Avenue
APG, MD 21005-5001
410-278-0914
www.apg.army.mil

State Contact:

BGen (Retired) J. Michael Hayes
Managing Director
Maryland Department of Business & Economic Development, Office of Military and Federal Affairs
401 East Pratt Street
Suite 1760
Baltimore, MD 21202
410-767-2988
mhayes@choosemaryland.org
www.choosemaryland.org

Community at a Glance

Growth Management Organization (GMO):

Chesapeake Science & Security Corridor (CSSC) (the "Consortium")

Geographic area affected by military installation growth:

The Consortium is comprised of eight jurisdictions in three states within a 40-mile radius of Aberdeen Proving Ground (Harford, Cecil, Baltimore Counties and Baltimore City, Maryland; New Castle County, Delaware; and bordering communities of York, Lancaster & Chester, Pennsylvania).

Population of affected area: 2.4 million (2012 projection)

Top growth challenges:

- Transportation
- Water and Sewer
- Workforce (technical and spousal)
- Education (school capacity)

Outstanding requirements in support of mission growth:

Project Category	# of Projects	Sum of Project Cost	Sum of Funding Gap
Transportation	10	$168,531,000	$130,531,000
Education	2	$152,906,790	$139,806,790
Water & Sewer	2	$53,200,000	$ 49,900,000
Totals:	14	$374,637,790	$320,237,790

Mission Growth at a Glance

Growth Action: Base Realignment and Closure (BRAC), Grow the Army (GTA)

Personnel Baseline and Growth Projection

	Baseline (January 2005)	Build-out Projection (FY 2012)
Military Personnel	4,000-5,000	1,373
Dependents	1,000	1,000
Civilian Personnel	7,500	13,012
Contractors	4,100	5,622

Source: US Army APG Garrison, Army Stationing and Installation Plan FY 2012

Growth Factors affecting community planning: Due to the size of the 45-minute commute impact area (three states, seven counties, and the City of Baltimore), a primary growth factor has been forecasting the mission growth-related spatial impacts. Equal to that challenge is determining the best way to transport workers to APG.

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Background

APG is located at the top of the Chesapeake Bay, midway between Baltimore and Philadelphia. The installation and its current 69 tenants serve as Harford County's top employer and a leading economic engine generating approximately $3 billion dollars in revenue annually. The 72,000-acre installation, established in 1917, has served historically as a test and evaluation site. Military training students have comprised a significant portion of APG's personnel as the Army Ordinance Center and School housed 4,000-5,000 students for incremental training exercises.

The BRAC 2005 decision brings significant growth to the APG installation and its surrounding community resulting in the largest economic boon since World War II. The following 14 actions impact command, directorate, or activities from six states:

- Relocating the Communications-Electronics Life Cycle Management Command and the Communications-Electronics Research, Development, and Engineering Center from Fort Monmouth, NJ, to APG
- Relocating and consolidating Information Systems Development and Acquisition from Redstone Arsenal, AL, to APG
- Relocating procurement and management/support for Depot Level Reparables from Fort Huachuca, AZ, to APG and designating them as Inventory Control Point functions
- Relocating Army Test and Evaluation Command Headquarters and elements of the Army Evaluation Center from Alexandria, VA, to APG
- Relocating the Army Research Laboratory Vehicle Technology Directorate from Columbus, OH/Langley, VA, to APG
- Relocating the Army Research Institute Human Systems Research from Fort Knox, KY, to APG
- Relocating the Joint Program Executive Office for Chemical and Biological Defense from Falls Church, VA, to APG
- Relocating Air Force Non-Medical Chem-Bio Defense Development and Acquisition from Brooks City Base, TX, to APG
- Relocating Chem-Bio Defense Research, Defense Threat Reduction Agency from Fort Belvoir, VA, to APG
- Relocating Medical Chemical Defense Research from Walter Reed Army Institute of Research from Forest Glen Annex to APG
- Relocating the Ordinance Center and School from APG to Fort Lee, VA
- Relocating the Army Environmental Command from APG to Ft. Sam Houston, TX.

These actions result in an increase of 8,500 direct jobs to the installation (primarily Department of Defense civilian positions); a significant decrease in the installation's military presence with the loss of the ordnance school and center; and an exponential growth of a contractor tail conservatively estimated at a two-to-one ratio. Overall, the BRAC 2005 decision results in the introduction of nearly 30,000 direct, indirect, and induced jobs to the APG community. APG's transformation, expedited by BRAC, brings Research, Design, Testing and Evaluation (RDT&E) to heightened levels amidst $1.4 billion dollars in construction of new facilities and generating contract revenues in excess of $15 billion annually.

This expedited growth was addressed though an aggressive plan including phased early moves and temporary (swing) space. By the end of 2008, 350 positions were relocated; by September 2009, 1,000 positions were relocated. A total of 1,700 positions are projected to be relocated by the end of 2009. An additional 1,700 positions are projected to be relocated in 2010. An estimated 1,600 vacancies are projected for FY 2011. Modification of existing installation facilities, relocatables, and shared space among defense contractors in the Enhanced Use Lease (EUL) facilities have accommodated these moves to date.

Community Response

Prior to the BRAC 2005 announcement, the Harford County Executive appointed a BRAC Planning Advisory Committee (BPAC) to develop a BRAC action plan with timelines, budgets and benchmarks for successful BRAC implementation related to infrastructure, transportation, workforce and education, and public health and safety. Harford County also coordinated efforts with surrounding jurisdictions to market the region in identifying the location

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of Aberdeen Proving Ground. Simultaneous to the BPAC's early work, Harford County, in collaboration with its neighboring jurisdictions of Cecil County, Baltimore County and the City of Baltimore, applied for and was awarded Office of Economic Adjustment (OEA) funding to study key infrastructure issues outside the installation's gate and coordinate communication efforts related to BRAC. A BRAC manager was hired in October 2006 and a Regional BRAC Office was established at the Higher Education Advanced Technology (HEAT) Center located about four miles from the installation. The effort grew as the magnitude of growth under expedited timelines was fully realized and an amendment to the grant expanded staffing to include a BRAC coordinator to focus on communication and outreach, as well as an administrative assistant. Collaboration expanded into strategic partners as we looked to neighboring jurisdictions – strategic partners – in Pennsylvania and Delaware as well as involving metropolitan planning organizations defined by an approximate 45-minute commute radius to the installation as shown in Figure 1.

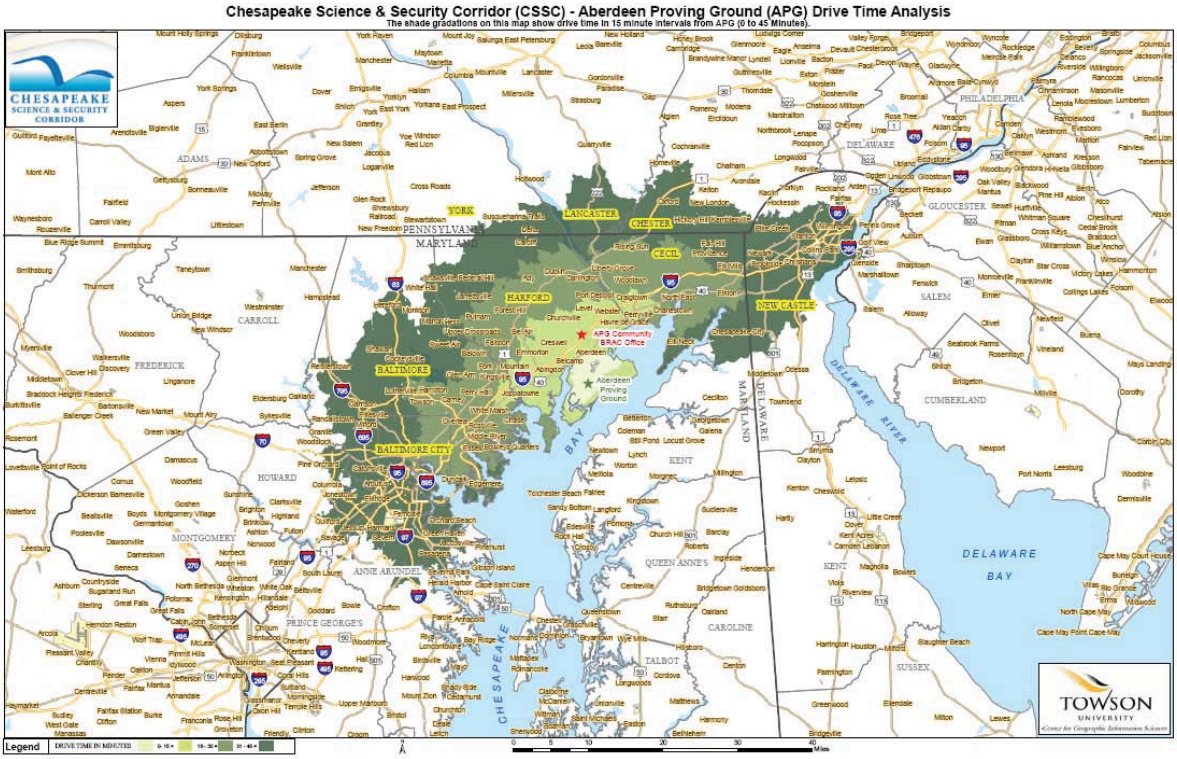

Figure 1: APG Commute Time Analysis

In April 2007, CSSC signed a formal Memorandum of Understanding among its members symbolizing commitment to work collectively throughout the BRAC implementation process. Three priority areas were identified to address BRAC community needs: transportation, land use and infrastructure, and workforce and education. The Consortium meets monthly with a core representation of approximately 35 different government entities. In January 2008, the Consortium was recognized by the National Association of Counties as a Sustainable Communities Award recipient. To date, a strong partnership established with the APG Garrison and other tenant activities; Harford County serving as the lead agency on this regional planning approach; and with total awards of more than $7 million dollars; the Consortium has comprehensively studied a variety of issues in support of BRAC implementation in the APG community. In August 2009, CSSC was named Active Base Community of the Year by the Association of Defense Communities.

A variety of studies have been completed or are underway through the Consortium's efforts. Early on, a demographics study to project growth impacts throughout the region and a capital facilities inventory and gap analysis were conducted to better plan for BRAC-related growth. Building upon these findings, several large initiatives have begun including a multi-modal transportation center feasibility study that examines municipal, county, state and regional capabilities to establish a transportation hub within Aberdeen to alleviate congested roadways and accommodate rail, commuter bus and shuttle service on and off the installation. Another development is a regional geographic information systems (GIS) enablement tool, a web-based application that allows for land use planning across county

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and state boundaries. A regional workforce analysis is currently underway that looks at the public service sector (healthcare, education, law enforcement and emergency services) to identify gaps in projected service demands as well as identify recruitment strategies and opportunities for spousal employment. A workforce training curriculum assessment, coordinated through four community colleges, is examining existing curriculum while assessing future training needs associated with mission growth at APG. Figure 2 below highlights the various studies executed in the CSSC region.

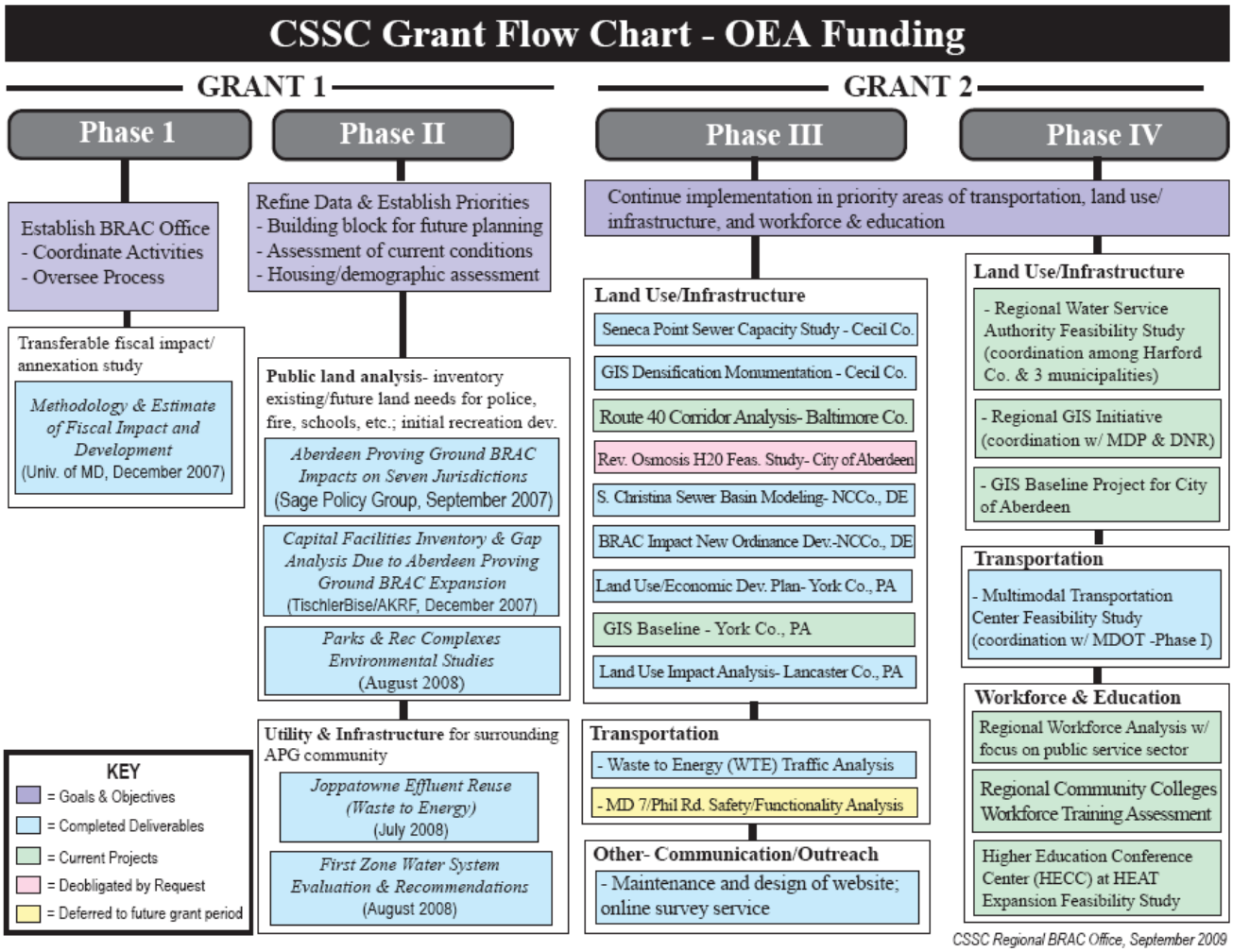

Figure 2: Studies Executed in the CSSC Region

Implementation and Partnering Strategies

Priorities & Challenges

Transportation

In general, northeastern Maryland has a less mature road system than other parts of the country. Road improvements, identified in a list of 23 intersections, were reduced to eight, then six, then one when state budget deficits and funding deferrals eclipsed efforts to address commuter congestion. Modeling simulations of the roadways leading to the installation post-BRAC show extensive gridlock. Commuter bus routes have been reduced and currently there is no shuttle service on or off the installation. Rail service gaps limit access to the installation from the northeast. In fact, commuter rail service ceases less than six miles east of Aberdeen Proving Ground. Moreover, ample parking on the

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installation provides no disincentive to driving. The earliest efforts to establish service aligned with APG commuter schedules would become operational in 2014, three years after most workers have established commuter patterns.

The challenges are being openly discussed through coordinated efforts among local and state transit-related agencies; innovative approaches like Harford County's "Road Club" to examine funding opportunities for public-private partnerships; exploration of Defense Access Roads (DAR) funding in support of roads leading onto the installation, and encouraging combined state efforts through the CSSC Regional Rail Committee to engage Federal delegations in addressing corridor issues.

Infrastructure

In the early stages of BRAC, water and sewer were areas of focus to accommodate capacity needs in an expedited time frame. The installation receives its water supply from the City of Aberdeen, which is also experiencing tremendous growth outside the gate. Capacity issues morphed into allotment issues as partnerships developed; a regional water service authority is under exploration. These challenges have been addressed proactively with the Lieutenant Governor's BRAC Water Summit, a water agreement established between Harford County and the City of Aberdeen, and expansion of a key water treatment facility.

Expansion of existing waste-to-energy facilities, which convert refuse to energy in the form of electricity and steam supplied to APG was also studied in preparation for BRAC implementation.

Workforce/Education

Extensive outreach (relocation fairs, motorcoach tours, town hall, etc.) to the incoming BRAC workforce and their families has had a positive impact on percentage intending to relocate. In 2006, only 20 percent expressed intent to move with their jobs; today that number approaches 60 percent. The state of the economy has offered bittersweet support regarding those willing to relocate as opportunities for alternative employment have diminished greatly. Unfortunately, the housing market has left many unable to take advantage of incentive programs with upside down mortgages in closing base communities. Science and engineering represent nearly 40 percent of the jobs transitioning to the region; a sector already competitive on the national level and compounded by retiring baby boomers. Coupled with experienced acquisition and government contracting personnel, competition among government DoD and defense contractors creates a shell game of employment moves as 69 other tenant organizations become vulnerable to the impacts of resulting vacancies within their organizations. Fundamental process differences between government hiring and the private sector leave many qualified candidates out of the hiring circle in compliance with federal guidelines. Interns – hired right out of college – have been a progressive solution by the government to grow their own while acclimating to organizational culture. Internship offers rapid advancement and a training ground to replenish a seasoned and retiring workforce. Spousal employment for the civilian workforce continues to be a focus as dual-income households make decisions about relocation. Sectors such as teaching and health care that initially seemed to be promising when BRAC 2005 was announced have experienced layoffs and staff reductions under current economic conditions.

A higher education and research laboratory facility has been identified as a need in the APG region. Recent studies indicate that between 2010 and 2019, average annual demand to support the APG defense mission will be 205 positions requiring bachelor's degrees, 163 requiring master's degrees, and 21 requiring doctoral degrees. Several higher education institutions are available in the Baltimore-Washington region, but outside a 35-mile radius of Aberdeen. The closest university to the installation is out of state and 25 miles away. The HEAT Center in Aberdeen brings satellite programs to the APG community, but is currently at capacity. The CSSC continues to address a shortfall in regional higher education institutions' perceived interest in responding to APG program needs. Regional communty colleges throughout the corridor are engaged in assessing workforce training needs and aligning curriculum in support of APG's growing workforce. The two closest community colleges have entered into partnerships with higher education institutions to bring four-year programs to their campuses.

These challenges have been addressed through regional job fairs in coordination with incoming mission activities; a series of community tours that showcase quality of life, and development of the *APG Maryland Welcome & Relocation Guide* to offer a comprehensive, regional tool to explore living within the Chesapeake Science & Security Corridor. The

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community has also engaged BRAC early movers as well as undecided DoD personnel eligible to relocate. Demographic and workforce surveys to continue to target community messages and address concerns in a timely manner. The State of Maryland established a BRAC Transition Center on the Ft. Monmouth, NJ, installation, designed to provide personalized assistance on relocation, has exceeded 5,600 visits.

Issues involving higher education have been addressed through early dialogue that brought mission leadership and higher education representatives together in discussing future needs at APG. As a result, a University Day followed where Ft. Monmouth hosted higher education officials in their laboratories and demonstrated technologies that will require the greatest demands for modified or customized curriculum needs. A feasibility study is underway to look at expansion of the HEAT Center, and the state has identified the need for a regional higher education center (RHEC) in the APG community within its State BRAC action plan. The senior mission command at APG has targeted outreach efforts to engage both flagship universities in Maryland and Delaware.

A Community & Installation Partnership

The installation has maintained a strong partnership with the community during BRAC implementation. Briefings to incoming missions and directorates, Congressional Delegations and state and Federal officials are co-presented by garrison and community BRAC representatives; tours are organized jointly, transportation committees have dual representation, and concerted efforts are made to provide consistent information in terms of data, timelines and updates both on- and off-post. The Enhanced Use Lease (EUL) negotiations brought county officials and installation leadership together for frank discussion about priorities and fostered a shared approach of service provisions serving as a win-win for all stakeholders.

Project Needs Assessment

Transportation:

Six intersection improvements identified within a five mile radius of APG have gained regional consensus; however, one top priority intersection has been identified in light of State transportation revenue shortfalls. Currently, the intersection identified, which leads directly onto the base, is only at 65 percent design. Collectively, the improvements are estimated to cost $90,840,000 with $30,000,000 allocated, resulting in a funding gap of $60,840,000. The one intersection deemed essential is slated to exceed $31,750,000; however, even given a green light to proceed today, could not be completed prior to September 15, 2011.

A Multi-modal Transportation Center (MTC) was deemed feasible and the existing Aberdeen Train Station was identified as the best site. Currently, no shuttle service is available on or off the installation and train schedules to and from the station afford an APG employee the opportunity to work only a 5.5 hour work day at best. Commuter bus service cannot operate out of the over-capacity parking facility as it currently exists. Platform expansion and Americans with Disabilities Act compliance issues would be priority improvements, and the station itself would need to be relocated to the west. Again, even with funding for engineering and design in hand, and $60,000,000 in construction dollars identified, the MTC would not be complete before 2014, three years after nearly 20,000 direct and indirect jobs have established themselves in the APG community and ingrained travel behavioral patterns as single-rider roadway commuters.

Infrastructure

The primary funding source for water and sewer projects is through local bonding. Local bond measures in most of the CSSC jurisdictions (e.g., Maryland counties) do not need to be approved through referendum; however, bond measures must be approved by county commissioners. County utility systems (i.e., those not managed by private operators) also have the ability to set utility rates; however, rate increases require the support of a large number of elected officials. The total of identified project costs is estimated at $53,200,000 with a $49,900,000 funding gap.

The extent and distribution of the projected growth in the CSSC region is not yet understood to a point where it is possible to make accurate projections about what specific projects will be required to mitigate growth at a local level, thus the community is challenged with the inability to determine the requirement for federal funding. With a 95

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percent growth in the civilian growth population, all of whom have the choice to live in any of four states and 11 counties and still reside within a 50-minute commute to Aberdeen Proving Ground, identifying key growth areas continues to be a challenge. Collaboration with incoming mission leadership as well as the defense contractor community has provided survey data on early movers' zip codes and intent of workforce to relocate by jurisdiction.

Education

School construction priority needs identified in Harford and Cecil Counties are estimated at $152,906,790 with a funding gap of $139,806,790. In Harford County, forward funding of school construction has been used to accommodate growth in recent capital facility projects for education. In Cecil County, because Maryland enrollment projections are driven by historical data (such as enrollment trends and birth rate), and the wave of BRAC-related students have not yet been part of any head count, state-rated enrollment only supports a 700-student capacity for the newly designed 840-capacity Comprehensive Technical High School. This puts the onus of the additional seat funding on the local level and, as a result, the school board has lowered the priority of other systemic school improvement projects throughout the county. Survey data indicates that Harford and Cecil Counties will receive approximately 70 percent of the anticipated BRAC residential growth.

Successes/Lessons Learned

Successes

- Establishing a regional approach early on in the planning process was critical to building relationships, achieving consensus and developing priorities for the APG community that are supported by multiple entities at municipal, county and state levels.
- Enhancing a working partnership between the community and the Post that is focused on support for the warfighter and installation transformation. The impact of delivering a unified message with consistent information both inside and outside the gate has nurtured credibility, streamlined communications and focused resources to priority areas.
- Creating a Regional BRAC Office to serve as a communications clearinghouse, maintain a comprehensive BRAC website, disseminate a daily news distribution on BRAC-related activity, distribute regional print materials and coordinate outreach efforts for community tours, presentations, etc.

Lessons Learned

- Be flexible! The numbers are ever-changing and external forces (i.e., economic conditions) can play havoc on rigid plans. Look for opportunity in every challenge. Engage stakeholders, develop messages for multiple audiences, and stick to key messages and talking points when briefing elected officials.
- Utilize OEA for technical assistance, not just as a funding source. OEA has a wealth of expertise and resources available to communities.
- To growth communities with a large civilian influx: quit looking for best practices and recognize you're a pioneer! Network "outside the box" and look for creative approaches to addressing critical issues.

Experience worth sharing:

Empathy is an important tool in successful BRAC implementation. Despite the technical aspects of data, charts, maps and timelines, BRAC has a face: A co-worker. A parent. A coach. A congregation member. A caregiver for aging parents. BRAC is a monumental, logistical process, but first and foremost it is about relationships. Take the time to invest in understanding the issues. In time, you will build an investment in ambassadorship and develop peer endorsements that reach farther than you imagined!

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