

1. Executive Summary

Development Capacity

- In order to determine local development capacity, the planning team met with officials from each county to review existing and proposed development projects. In total, the team identified 67 separate residential subdivisions, totaling over 21,000 acres in Liberty, Bryan and Long Counties, but no subdivisions were identified for Tattnall County.
- The cumulative value of all subdivisions located in each county produced the each county's attractiveness score, or its potential to capture future growth. Liberty County achieved a value of 9,052 points from 17 subdivisions, representing 43% of all available points. Long County was second with 8,264 points from 31 subdivisions, followed by Bryan County with 3,674 points from 21 subdivisions and Tattnall County received no points due to its lack of subdivisions.

Personnel Changes

- Between 2008 and 2013, Fort Stewart and Hunter AAF is projected to add approximately 3,083 full-time military personnel, 680 new civilian government employees, and 578 government contractor personnel. The total change is projected to equal 4,341 new personnel over six years. According to personnel numbers provided by the Fort Stewart Garrison Command, the peak employment year is planned for 2010, when new personnel exceed 4,800.

Construction Spending

- Total construction spending is projected to equal over \$1.4 billion over the 2008-2013 expansion period. The peak spending year is scheduled for 2009, when construction activity will approach nearly a half billion dollars.

Population Projections

- Over the 2010 to 2030 period, Georgia OPB projects that population within the Fort Stewart Region will increase from 131,389 to 204,232, or 72,843 new population. This rate of growth would translate into an average annual rate of 2.8%. By way of comparison, the Fort Stewart Region grew by approximately 2.7% annually during the 1990s and 1.2% annually during the 2000s.
- By 2030, REMI Control Forecast projects that the region's population will increase by 27,237, for an average annual growth rate of 1.5%. Annual growth rates exceeding 1.0% are generally considered steady to strong.

Employment Projections

- The REMI Model projects that as many as 7,984 jobs will be created by 2016 and 11,930 jobs by 2030. Private non-farm employment is projected to equal roughly 30% of all new jobs created by 2030, with the vast majority classified as government jobs.

- During the 2008 to 2013 period, construction-related employment accounts for between 45% and 90% of all new jobs in any given year, with the peak occurring in 2008 at 4,759 jobs. This surge in construction jobs is a direct result of construction spending at Fort Stewart/Hunter AAF, which equals \$1.4 billion during the 6-year period.

2. Introduction

This section examines regional economic and demographic implications of installation growth at Fort Stewart. The primary purpose of this section is to present an evaluation of direct and indirect changes associated with the increase in the number of military, civilian, and contractor personnel, as well as other related changes in the impact region that includes Liberty, Bryan, Long, and Tattnall Counties.

In order to evaluate expected impacts associated with installation expansion, this section examines two scenarios to identify a possible range of impacts. The first scenario, which is referred to as the “REMI Control Scenario,” assumes that all jurisdictions capture their share of future growth, based on the REMI Model’s long-range projections. The “State Control Scenario” ties future regional population growth to long-range forecasts prepared by the Georgia Office of Planning and Budget; the agency responsible for preparing Georgia’s official population forecast.

While the planning team believes that the Georgia OPB population forecasts for the Fort Stewart Region are aggressive, they are presented as a high-end forecast. The use of these two growth scenarios offers a reasonable range of potential outcomes for the region as it plans for the future.

This section does not address impacts to such things as regional housing, educational services, child care and health care. These impacts are detailed in their own sections later in this report.

3. REMI Policy Insight Model

Regional Economic Models, Inc. (REMI) of Amherst, MA developed a custom Policy Insight model to evaluate the economic impacts associated with installation expansion at Fort Stewart. This Policy Insight model was used to evaluate economic impacts related to Liberty, Bryan, Long, and Tattnall Counties on an individual basis. Throughout this section, the results are often expressed for the region, which consists of the four host communities, in addition to an area known as the “rest of state”, which includes the rest of Georgia. It is believed that nearly 100% of the growth impacts of Fort Stewart’s expansion will be captured with the region and State of Georgia. The distinguishing features of the REMI Policy Insight model are listed below:

- The REMI model is a multi-year forecasting and simulation model, enabling users to evaluate policy alternatives in terms of “what if” scenarios in order to estimate economic impacts. The model has strong dynamic properties, which means that it forecasts not only what will happen but also when it will happen.

- REMI developed a custom multi-regional economic and demographic forecast for the Fort Stewart Region communities. This dynamic year-by-year forecast represents the baseline, or no-build scenario. The REMI forecast extends to the year 2030.
- The Industrial Sectors in Policy Insight are based on the North American Industry Classification System (NAICS). NAICS replaced the old Standard Industrial Classification (SIC) System in 1997, and was developed jointly by the United States, Canada and Mexico to allow business statistics comparability across North America.
- Policy Insight’s forecast was assembled at the county level using data from various U.S. government agencies, including the Bureau of Economic Analysis (BEA), the Bureau of Labor Statistics (BLS), the Department of Energy, Department of Defense (DoD), the Bureau of Census, and other public sources. It should be noted that Georgia’s independent cities are not tracked by the BLS as independent jurisdictions from the counties. As such, their data are reported as part of the county and the planning team had to develop a methodology to disaggregate the data to the jurisdictional level.
- The disaggregation methodology employed a weighted/proportional share method to estimate each county’s economic impacts. The two methods are explained in detail later in this chapter.
- The REMI model generates estimates for both DIRECT and INDIRECT impacts. Direct impacts for this analysis are expanded military operations: military personnel, on-post jobs, and on-post construction spending. The indirect impacts can be split into two groups: Intermediate and Induced. Intermediate impacts are essentially business to business purchases. Induced impacts are associated with increased regional disposable income resulting in a change in consumer spending.
- The model structure has been developed to include “new economic geography” assumptions. Economic geography theory explains regional and urban economies in terms of competing factors of dispersion and agglomeration. Producers and consumers are assumed to benefit from access to variety, which tends to concentrate production and the location of households.
- For businesses, the demand for labor, capital, and fuel depends on their relative costs. For example, if there were an increase in the price of capital, businesses would likely have a preference shift away from capital toward labor and fuel.
- Individuals respond to price changes. Consequently, economic migrants will respond to wages, new employment opportunity, local prices, and other labor market factors.

Figure 1 is a representation of REMI Policy Insight’s structure and illustrates the linkages within the local economy. The output block shows how businesses will produce goods to sell to other firms, consumers, investors, governments, and purchasers outside the region. The Labor and Capital Demand block shows how labor and capital requirements depend both on total sales (output) and on relative costs. In the

Demographic block, Population and Labor Supply contribute to consumer spending (demand) and influence wages. Supply and demand interact in the Wage, Price, and Profit block. Production costs determine market shares locally, for the rest of the U.S., and for the rest of the world. Output depends on market shares and the components of demand.

Figure 1 – REMI Model Linkages Diagram

REMI Model Linkages (Excluding Economic Geography Linkages)

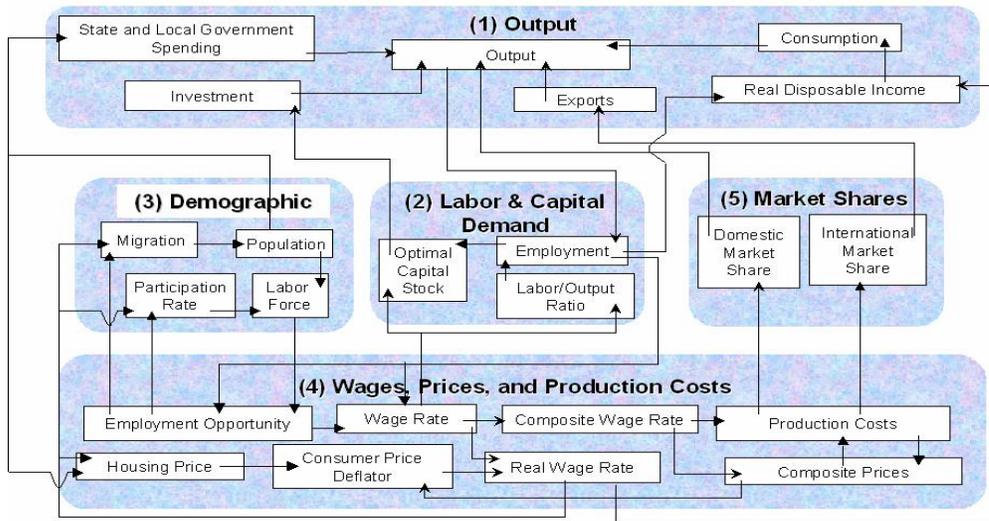
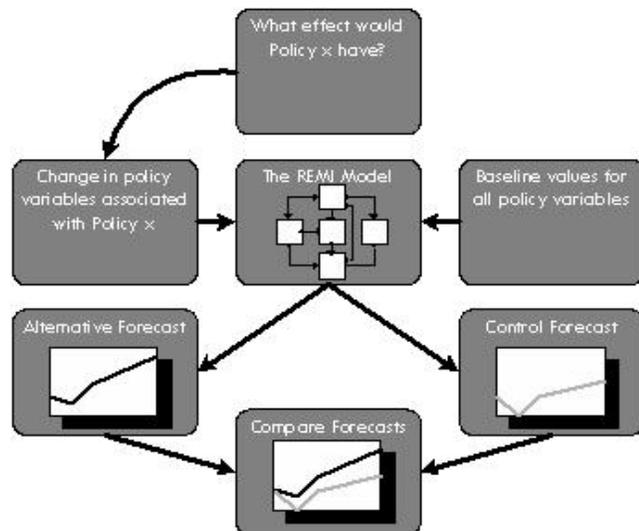


Figure 2 illustrates the policy simulation process for a scenario called “Policy X.” To determine the effects of this scenario, the user must select the appropriate policy variables and then enter the values and assumptions that represent the direct effects of the scenario. The alternative forecast is then generated using these policy variable inputs. Two alternative forecasts are used in this analysis, the Expected Growth Scenario and the Alternative Growth Scenario. The impacts of these scenarios are then determined by comparing the baseline REMI forecast (or Control Forecast) with these new alternative forecasts to quantify the

Figure 2 - REMI Model Policy Simulation Process



expected change to the baseline economy.

4. Regional Growth Allocation Method

The following section presents the forecasts for the four jurisdictions comprising the study area. The forecasts are influenced by Fort Stewart’s expansion and should be viewed as growth forecasts that would occur as a result of the expansion of Fort Stewart and Hunter Army Airfield in the future. The forecasts cover the projection period starting in 2008 and ending in 2030 and include population, gross regional product, personal income, and employment.

This section presents two alternative forecasts for the counties of Liberty, Bryan, Long, and Tattnall. The REMI Model was constructed as a two-region model consisting of the combined four counties and an area consisting of the rest of Georgia. As such, it was necessary for the planning team to proportionally disaggregate the data for the four impact counties to prepare individual forecasts.

In order to determine the share of regional growth that each county would receive, the team constructed a regional growth gravity model. The gravity model included all known residential subdivisions within the region and included land acreage and lot inventory estimates for each. In order to obtain this information, the team met with representatives from each county to review existing and proposed development projects. In total, the analysis identified 67 separate residential subdivisions totaling over 21,000 acres in Liberty, Bryan and Long Counties, but no subdivisions were identified for Tattnall County. This total includes a 7,883-acre proposed residential development called TerraPoint located in Bryan County. This large development has not been submitted for development approval and will likely be developed in several phases over a generation.

The regional growth gravity model used residential subdivisions as a proxy for each county’s capacity to support new growth. While not all new population growth results in the construction of new housing units, the availability of developable lots is an important indicator of a jurisdiction’s ability to capture new growth.

4.1 Population Growth Share

The regional growth gravity model assigned each subdivision a numerical score based on a number of different attractiveness factors. The factors related to the number and status of available development lots, the proximity of the development to critical services, the estimated homes sales pricing, and various other factors.

Subdivision Attractiveness Score

- **Land Capacity (30% Weight)** - A combined factor that weighs each subdivision based on the number of lots available for sale, lots under construction (e.g., infrastructure being installed), approved lots, and lots pending approval or long-term lots (**Table 1.1**).
 - For-sale Lots (45%) - immediately available for sale and development.

- Under Construction Lots (30%) - Assumed these lots will finish construction of infrastructure (i.e., streets, water, sewer, etc.) and be available for sale in the near future.
- Approved Lots (15%) - Lots approved but without infrastructure and cannot be conveyed for sale.
- Lots Pending Approval or Long-Term Lots (10%) - Planned lots that may or may not be developed in the future and do not have development approval.
- **Schools (5%)** - A combined factor that weights each subdivision based on nearby elementary school average test scores (75%) and the number of schools located within proximity of the subdivision (25%).
- **Military Impact (25%)** – A combined factor that weights each subdivision based on the percentage of military living in each county (35%), the percentage of military workers in each county (45%), and proximity of each subdivision to the main gate at Fort Stewart (20%).
- **Proximity to Shopping and Services (15%)** – A score of each subdivision based on proximity to total number of retail stores within 5 miles) and grocery stores within 3 miles.
- **Home Pricing Factors (25%)** - A combined factor that weights each subdivision based on the average existing home sale price (70%) by zip code where each subdivision is located and percentage of homes in each county built before 1960 (30%).

Each pipeline subdivision received an attractiveness score based on the combined weighting factors described above. Each weighting factor had a potential score of 1,000, which was awarded to the top scoring subdivision in each category. Each of the five weighted categories was then re-weighted one final time based on a share of 100%. For example, the final weighting for land capacity was equal to 30% of the final weighted score. The maximum final score for any single subdivision was equal to 1,000, and the Independence development in Liberty County achieved the highest score of 755 and the number one ranking.

Table 1
Future Growth Share - Fort Stewart Region

60%			
Cumulative Subdivision			
Attractiveness Share	Total Score	% of Total	Weighting
Liberty County	9052	43.1%	25.9%
Bryan County	3674	17.5%	10.5%
Long County	8264	39.4%	23.6%
Tattnall County	0	0.0%	0.0%
	20991	100.0%	60.0%
40%			
Existing Population Share			
	2010 pop.	% Share	Weighting
Liberty County	61,940	47.1%	18.9%
Bryan County	33,326	25.4%	10.1%
Long County	11,893	9.1%	3.6%
Tattnall County	24,230	18.4%	7.4%
	131,389	100.0%	40.0%
Fort Stewart Growth			
Final Population Share			Weighting
Liberty County			44.7%
Bryan County			20.6%
Long County			27.2%
Tattnall County			7.4%
Total Weighting			100.0%

Source: RKG Associates, Inc., 2010

The cumulative value of all subdivisions located in each county produced the county's attractiveness score, or its potential to capture future growth. As shown in **Table 1**, Liberty County achieved a value of 9,052 points from 17 subdivisions, representing 43% of all available points. Long County was second with 8,264 points from 31 subdivisions, followed by Bryan County with 3,674 points from 21 subdivisions and Tattnall County received no points due to its lack of subdivisions.

Despite Tattnall's lack of approved subdivisions, it was not reasonable to assume that the county would not capture any growth in the future. As such, the planning team introduced 2010 population estimates into the gravity model to reflect existing regional growth patterns. Current population was weighted at 40% of the final growth capture share and the remaining 60% was attributed to the cumulative attractiveness score. The results of the analysis produced a capture rate for each county equal to its share of future population growth (**Table 1**).

4.2 Regional Employment Growth Share

The allocation process for future employment growth was largely based on existing levels of employment and business establishments in each county. The team assumed that future employment growth would follow established development patterns and locate near existing employment clusters. To determine the employment growth share, planners obtained 2010 employment and establishment data from the State of Georgia. County establishment shares were weighted 35% and employment shares were weighted 65% of the final growth share. Establishments and employment was also segmented into goods producing (e.g., manufacturing, construction, etc.), service producing (e.g., retail, services, etc.) and government. The results of the analysis indicate that Liberty County will capture approximately 53.8% of future employment growth, which is 5% below its historical capture rate (**Table 2**).

Table 2
Regional Employment Share

Employment Share	Establishments	Employment	Weighting		Establishment Wgt. Share	Employment Wgt. Share	Total Wgt. Share
			35%	65%			
			Establishment % Share	Employment % Share			
Bryan County	672	6,233	32.2%	20.5%	11.3%	13.3%	24.6%
Goods Producing	140	1,015	36.8%	26.5%	12.9%	17.2%	30.1%
Service Producing	487	3,613	32.6%	23.5%	11.4%	15.3%	26.7%
Government	45	1,605	21.5%	14.3%	7.5%	9.3%	16.8%
Liberty County	953	17,687	45.7%	58.2%	16.0%	37.8%	53.8%
Goods Producing	122	1,801	32.1%	47.0%	11.2%	30.6%	41.8%
Service Producing	719	9,181	48.1%	59.8%	16.8%	38.9%	55.7%
Government	112	6,705	53.6%	59.8%	18.8%	38.9%	57.6%
Long County	84	847	4.0%	2.8%	1.4%	1.8%	3.2%
Goods Producing	27	108	7.1%	2.8%	2.5%	1.8%	4.3%
Service Producing	43	164	2.9%	1.1%	1.0%	0.7%	1.7%
Government	14	575	6.7%	5.1%	2.3%	3.3%	5.7%
Tattnall County	375	5,626	18.0%	18.5%	6.3%	12.0%	18.3%
Goods Producing	91	906	23.9%	23.7%	8.4%	15.4%	23.8%
Service Producing	246	2,391	16.5%	15.6%	5.8%	10.1%	15.9%
Government	38	2,329	18.2%	20.8%	6.4%	13.5%	19.9%
Totals - Region	2,084	30,393	100.0%	100.0%	35.0%	65.0%	100.0%
Goods Producing	380	3,830	100.0%	100.0%	35.0%	65.0%	100.0%
Service Producing	1,495	15,349	100.0%	100.0%	35.0%	65.0%	100.0%
Government	209	11,214	100.0%	100.0%	35.0%	65.0%	100.0%

Source: RKG Associates, Inc., 2010

5. Model Simulation – Economic Drivers

The REMI Model is driven by a series of economic “shocks” or inputs that drive a series of multiplier effects. For purposes of this analysis, the model is driven by three factors: (1) changes in new Fort Stewart /Hunter AAF personnel, (2) construction spending, and (3) changes in operations and maintenance costs at Fort Stewart and Hunter AAF. As such, the model results do not reflect the economic impacts associated with the entire installation, but rather the impact of the Fort’s expansion.

5.1 Personnel Changes

Between 2008 and 2013, Fort Stewart and Hunter AAF is projected to add approximately 3,083 full-time military personnel, 680 new civilian government employees, and 578 government contractor personnel (**Table 3**). The total change is projected to equal 4,341 new personnel over six years. According to personnel numbers provided by the Fort Stewart Garrison Command, the peak employment year is planned for 2010, when new personnel exceed 4,800. Over the next several years, personnel levels are expected to decline by 505 people or 10.4%. Much of this decline is attributable to 19.8% decline in full-time military personnel, with a partial off-set from new civilian government employees.

Table 3
Annual Employment Projections
Fort Stewart/Hunter Army Airfield
(2007 to 2013)

	2007	2008	2009	2010	2011	2012	2013
TOTAL - EMPLOYMENT	29,183	30,804	33,274	34,029	33,641	33,464	33,524
MILITARY	22,827	23,566	25,909	26,675	26,032	25,850	25,910
Fort Stewart	17,139	17,875	19,917	20,939	20,402	20,526	20,674
Hunter AA	5,688	5,691	5,992	5,736	5,630	5,324	5,236
CIVILIAN	4,183	4,443	4,299	4,605	4,858	4,863	4,863
Fort Stewart	3,257	3,354	3,481	3,731	3,898	3,898	3,898
Hunter AA	926	1,089	818	874	960	965	965
CONTRACTORS	2,173	2,795	3,066	2,749	2,751	2,751	2,751
Fort Stewart	1,520	1,575	1,907	1,607	1,607	1,607	1,607
Hunter AA	653	1,220	1,159	1,142	1,144	1,144	1,144

Annual Employment Changes
Fort Stewart/Hunter Army Airfield
(2007 to 2013)

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Total
TOTAL - EMPLOYMENT	1,621	2,470	755	(388)	(177)	60	4,341
MILITARY	739	2,343	766	(643)	(182)	60	3,083
Fort Stewart	736	2,042	1,022	(537)	124	148	3,535
Hunter AA	3	301	(256)	(106)	(306)	(88)	(452)
CIVILIAN	260	(144)	306	253	5	-	680
Fort Stewart	97	127	250	167	-	-	641
Hunter AA	163	(271)	56	86	5	-	39
CONTRACTORS	622	271	(317)	2	-	-	578
Fort Stewart	55	332	(300)	-	-	-	87
Hunter AA	567	(61)	(17)	2	-	-	491

Source: Fort Stewart Garrison Command, 2010

5.2 Construction Spending

Total construction spending is projected to equal over \$1.4 billion over the 2008-2013 expansion period (**Table 4**). The peak spending year was scheduled for 2009, when construction activity approached nearly a half billion dollars. With the variability of spending year-over-year, the amount of construction and related employment generated by the spending will vary considerably.

The largest single construction project is planned in 2013 when new headquarters, company operations and barracks will be built. In 2012, a new hospital addition will be completed for an estimated \$94 million.

5.3 Operations & Maintenance Costs

While the planning team was not able to obtain projections on how the installation's operations and maintenance costs would change during the projection period (2008-2013), estimates were derived from other Army installations experiencing similar growth. According to the Fort Stewart Garrison Command, the total operations and maintenance costs exceeded \$685 million in 2008 and supported nearly 31,000 on-post personnel and millions of building square feet. Based on projected changes in new personnel and facilities, the analysis projects that O&M costs will fluctuate with these

Table 4
Proposed Construction Spending (2008-2013)
Fort Stewart/Hunter AAF

FISCAL YEAR	PROJECT DESCRIPTION	PA (Millions)	Installation
07	Training Ranges	\$ 57.00	Stewart
07	Company Operations Facility	\$ 30.50	Stewart
07	Child Development Center	\$ 6.80	Stewart
07	Brigade Headquarters & Classroom Facility	\$ 23.80	Stewart
07	Soldier Barracks	\$ 10.30	Hunter
07	Child Development Center	\$ 6.80	Hunter
07	Company Operations Facility	\$ 13.30	Hunter
07	Training Range	\$ 0.70	Hunter
07	Renovate Fire Station #4	\$ 0.90	Hunter
Total MCA Construction FY07		\$ 150.10	
08	Company Operations Facilities	\$ 59.70	Stewart
08	Soldier Barracks	\$ 39.00	Stewart
08	Soldier Family Assistance Center	\$ 6.00	Stewart
08	Fire Station	\$ 6.50	Stewart
08	Brigade Headquarters	\$ 3.50	Hunter
08	Company Operations Facility	\$ 7.40	Hunter
08	Soldier Barracks	\$ 22.80	Hunter
08	Two Child Development Centers (Modular)	\$ 10.10	Hunter
Total MCA Construction FY08		\$ 155.00	
09	Training Range	\$ 2.30	Stewart
09	Two Child Development Center (Modular)	\$ 9.00	Stewart
09	Warrior In Transition Company Operations & Barracks	\$ 42.00	Stewart
09	Brigade Headquarters & Company Operations Facility	\$ 30.00	Stewart
09	New Road & Infrastructure Improvements	\$ 59.00	Stewart
09	Barracks	\$ 121.00	Stewart
09	Physical Fitness Center	\$ 22.00	Stewart
09	Child Development Centers	\$ 20.00	Stewart
09	Brigade Headquarters	\$ 36.00	Stewart
09	Company Operations Facilities	\$ 75.00	Stewart
09	Tactical Equipment Maintenance Facilities (Motorpools)	\$ 67.00	Stewart
09	Youth Service Center	\$ 8.60	Hunter
09	Brigade Headquarters	\$ 3.10	Hunter
Total MCA Construction FY09		\$ 495.00	
10	Training Range	\$ 3.40	Stewart
10	Child Development Center	\$ 2.00	Stewart
10	Battalion Headquarters & Company Operations Facility	\$ 48.00	Stewart
10	Medical Clinic	\$ 27.00	Stewart
Total MCA Construction FY10		\$ 80.40	
11	Battalion Headquarters	\$ 23.00	Stewart
11	Training Ranges	\$ 31.75	Stewart
11	Training Aid Center	\$ 6.30	Stewart
11	Elementary School	\$ 22.94	Stewart
11	Hospital Renovation	\$ 37.00	Stewart
11	Aviation Hangar	\$ 35.00	Stewart
11	National Guard Operations Facility	\$ 5.80	Hunter
Total Anticipated MCA Construction FY11		\$ 161.79	
12	Hospital Addition	\$ 94.00	Stewart
Total Anticipated MCA Construction FY12		\$ 94.00	
13	Company Operations Facilities	\$ 40.00	Stewart
13	Soldier Service Center Expansion	\$ 20.00	Stewart
13	Brigade HQ, Company Operations & Barracks	\$ 161.00	Hunter
13	Training Ranges & Facilities	\$ 56.80	Stewart
Total Anticipated MCA Construction FY13		\$ 277.80	
Total - All Construction Projects		\$ 1,414.09	

Source: Fort Stewart Garrison Command, 2010

changes. On average, the team projects that additional annual O&M costs might average between \$25 and \$35 million.

6. Population Growth Projections (2008-2030)

As discussed previously, the planning team prepared two alternative growth scenarios called the “REMI Control” and “State Control” forecasts. The state control forecast was based the recently completed population projections prepared by the Georgia Office of Planning and Budget (OPB). The OPB contracted with the Carl Vinson Institute of Government at the University of Georgia to prepare state population forecasts. The Institute used traditional cohort component methods with adjustments made for migration effects. Preliminary projections were submitted for review by local officials. These numbers were challenged as too low and adjustments were made to the official projections after consulting with an expert panel. According to state population forecasters, the region’s future growth forecasts were tied to recent historical growth rates.

Table 5 includes the official state population projections for the Fort Stewart Region prepared by the University of Georgia (UGA) for the OPB, as well as projections prepared by Georgia Tech for a Georgia Coastal Region water resource study. Over the 2010 to 2030 period, OPB projects that population within the Fort Stewart Region will increase from 131,389 to 204,232, or 72,843 in new population (**Table 5**). This rate of growth would translate into an average annual rate of 2.8%. By way of comparison, the Fort Stewart Region grew by approximately 2.7% annually during the 1990s and 1.2% annually during the 2000s.

Table 5
Population Projections
Fort Stewart Study Area; 2010 to 2030

ACTUAL CHANGE	UGA	GATech								
	2010		2015		2020		2025		2030	
Liberty	61,940	75,656	71,937	79,698	78,740	82,856	86,448	86,014	93,821	89,163
Bryan	33,326	35,203	38,984	38,815	45,272	41,746	52,466	44,134	59,534	45,986
Long	11,893	15,537	13,089	17,705	14,386	19,568	15,744	21,163	17,171	22,607
Tattnall	24,230	--	26,418	--	28,706	--	31,142	--	33,706	--
Fort Stewart Region	131,389	--	150,428	--	167,104	--	185,800	--	204,232	--
State of Georgia	10,069,700	--	11,076,619	--	12,189,252	--	13,426,590	--	14,687,906	--
PERCENT CHANGE										
Liberty	--	--	16.1%	5.3%	9.5%	4.0%	9.8%	3.8%	8.5%	3.7%
Bryan	--	--	17.0%	10.3%	16.1%	7.5%	15.9%	5.7%	13.5%	4.2%
Long	--	--	10.1%	14.0%	9.9%	10.5%	9.4%	8.2%	9.1%	6.8%
Tattnall	--	--	9.0%	--	8.7%	--	8.5%	--	8.2%	--
Fort Stewart Region	--	--	14.5%	--	11.1%	--	11.2%	--	9.9%	--
State of Georgia	--	--	10.0%	--	10.0%	--	10.2%	--	9.4%	--
ANNUAL PERCENT CHANGE										
Liberty	--	--	3.2%	1.1%	1.9%	0.8%	2.0%	0.8%	1.7%	0.7%
Bryan	--	--	3.4%	2.1%	3.2%	1.5%	3.2%	1.1%	2.7%	0.8%
Long	--	--	2.0%	2.8%	2.0%	2.1%	1.9%	1.6%	1.8%	1.4%
Tattnall	--	--	1.8%	--	1.7%	--	1.7%	--	1.6%	--
Fort Stewart Region	--	--	2.9%	--	2.2%	--	2.2%	--	2.0%	--
State of Georgia	--	--	2.0%	--	2.0%	--	2.0%	--	1.9%	--

Source: University of Georgia, Georgia Tech, and RKG Associates, Inc., 2010

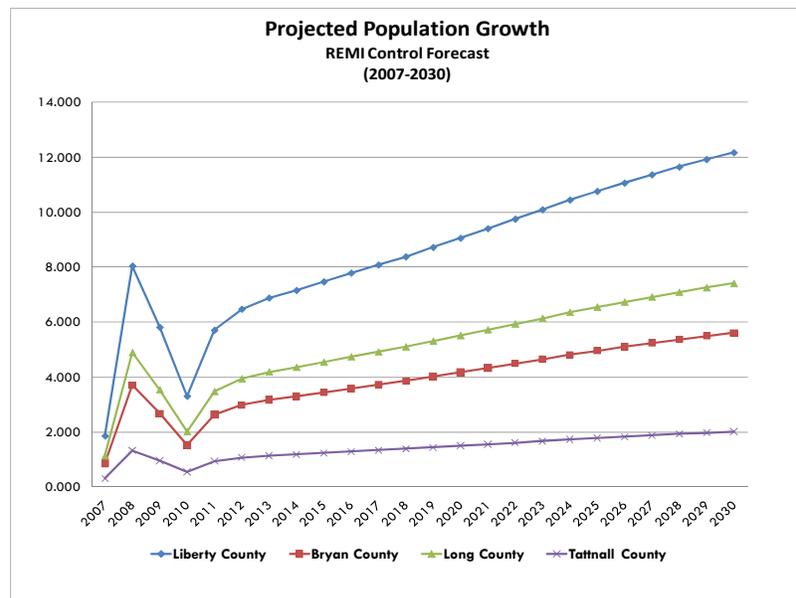
6.1 REMI Control Forecast

The REMI Control forecast lets the model determine the future population changes resulting from the Fort Stewart/Hunter AAF expansion. Between 2010 and 2016, total population within the region is projected to increase by 17,432 people, as compared against the REMI baseline forecast. It should be noted that planners adjusted the first year (2008) regional population based on anticipated increases in direct installation personnel and their dependents. As such, the starting population is greater than either state or census estimates for 2008.

Much of the new population gains are expected to occur during the 2008-2016 projection period as new installation personnel and their dependents enter the region. In addition, the expenditure of \$1.4 billion in construction spending will likely attract new people to the region in search of good paying jobs. By 2030, the team projects that the region's population will increase by 27,237, for an average annual growth rate of 1.5%. Annual growth rates exceeding 1.0% are generally considered steady to strong. However, this growth rate falls short of the OPB official projections approved by the state.

Relative to the distribution of regional population growth, Liberty County is projected to capture roughly 44.7% of future gains (Figure 3). This will result in a net increase of 7,792 people by 2016 and 12,175 by 2030. The second largest share is projected for Long County (27.2%), which has seen the planning and development of 31 new residential subdivisions during the past 5 years with nearly 1,600 acres either available for sale or suitable for sale once essential infrastructure is complete.

Figure 3

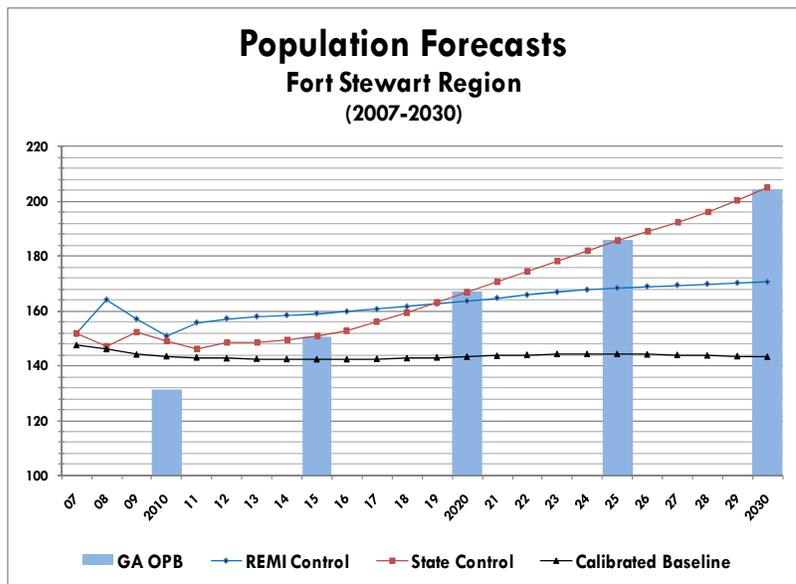


While this would represent a rapid growth spurt for Long County, reports from local officials indicate that the county was experiencing unprecedented growth just prior to the real estate collapse in late 2008. As conditions improve for development, Long County is likely to offer an affordable option for people seeking lower priced, mid-range housing.

6.2 State Control Forecast

As mentioned previously, the “State Control Forecast” represents the REMI Model’s simulation of state population forecasts for the region. The five year population levels, starting in 2015 are closely synced with the OPB forecast for the region. The starting population is higher than the current OPB estimates due to adjustments in military personnel and their dependents in the earlier years. By the Year 2015, the State Control Forecast and the GA OPB forecast align at

Figure 4



roughly 150,000 population, which are roughly 9,000 below the REMI Control Forecast (Figure 4). However, due to the aggressive growth rates projected by the OPB, the State Control Forecast quickly surpasses the REMI Control numbers by 2019. By the end of 2030, the region’s total population is projected to exceed 204,000, while the REMI Control forecast peaks at roughly 170,000; a difference of 34,000. Population growth projected by the REMI Model cannot be expressed as actual new population gains, but rather the difference between the calibrated REMI baseline forecast and the “REMI Control Forecast”, which includes the Fort Stewart expansion.

7. Employment Growth Projections (2008-2030)

Relative to new employment growth, the REMI Model projects that as many as 7,984 jobs will be created by 2016 and 11,930 jobs by 2030 (Figure 5). Private non-farm employment is projected to equal roughly 30% of all new jobs created by 2030, with the vast majority classified as government jobs. Since the majority of new positions are classified as either military or civil government jobs, it is not surprising that government jobs account for the majority of all new employment. However, it is worth noting that during the 2008 to 2013 period, construction-related employment account for between 45% and 90% of all new jobs in any given year, with the peak occurring in 2008 at 4,759 jobs. This surge in construction jobs is a direct result of construction spending at Fort Stewart/Hunter AAF, which equals \$1.4 billion during the 6-year period. However, once installation construction is completed, employment in this industry is expected to drop down to less than 10%.

As mentioned earlier in this section, more than half of new employment is expected to occur within Liberty County (53.8%), followed by Bryan (24.6%), Tattnall (18.3%) and Long Counties (3.2%) (Figure 6). Over the 22-year forecast period, roughly 9.2% of all new jobs will be created in “goods producing” sectors. This sector includes construction, manufacturing, mining, forestry, utilities, etc. Roughly 27.6% of total employment will be classified as “service producing” jobs, including such sectors as retail trade, services, real estate, finances and other sectors.

8. Key Issues and Findings

The following key issues and findings are related to the region’s growth projections:

- Potential Out-migration of Population -

Accodring to the

REMI Control Forecast, the region may be at risk as people age 25 to 64 are projected to leave the region in search for greater economic opportunity in the future. The planning team believes that the region’s economy is not creating enough high paying jobs to attract economic migrants to the region. Typically, economic migrants represent the largest share of a region’s population change, as compared to natural births and deaths, retirees, and international migration. Economic migrants are drawn to an area in search for employment opportunities. If the region lacks adequate employment, people will seek better

Figure 5

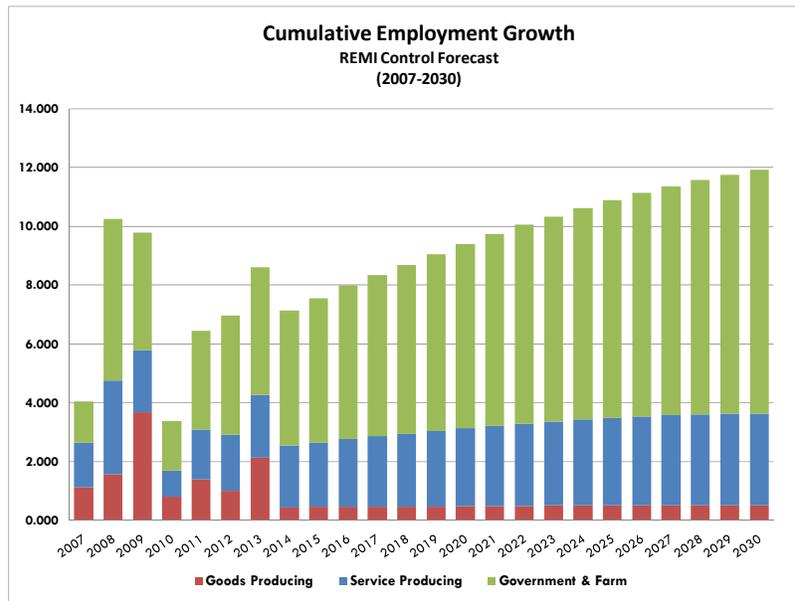
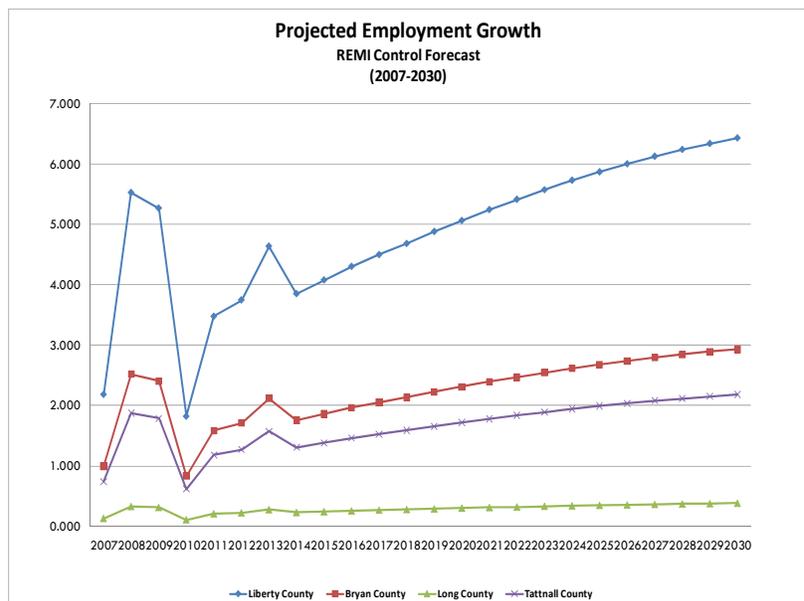


Figure 6



- opportunities in other locations. The loss of people age 25 to 64 is critical and could create gap in a key labor force component of the region.
- Regional Housing Affordability - The region's lower housing costs attract people to the region. With few exceptions, the housing stock is considered affordable for most local households. However, a partially off-setting factor is housing conditions, which do not always meet the needs of new homebuyers entering the region. According to local developers, new homebuyers are becoming more discerning and their expectations are rising in terms of the types of amenities they desire in their homes and neighborhoods.
 - Region has High Amenity Value - The region's proximity to Savannah, the coastal region, and the inland waterways is attractive to second homebuyers and retirees, particularly in Bryan County. Accordingly, developers are proposing large projects that will be marketed to retirees and investor owners. If successful, this trend could bolster the region's population growth and attract more affluence to the area.
 - Regional Development Capacity - If the region's subdivision land (21,000 acres) were developed at ½ acre lot densities, they would support roughly 35,000 to 42,000 single-family homes and a population of between 87,500 and 105,000. This level of development would equal 65% to 80% of the current population. At quarter lot densities the development capacity would double.