The economic impact of Blount Island Command

Hassan Pordeli, Jacksonville University

Peter Wynkoop The HPW Group, LLC

ABSTRACT

This report provides a detailed analysis of the economic impact of the U.S. Marine Corps operations at Blount Island, Jacksonville, Florida. The activities that comprise Blount Island are the Marine Corps Support Facility [MCSF], which operates the base, and Blount Island Command [BIC], the primary tenant. The operations at Blount Island are conducted under the aegis of the Marine Corps Logistics Command, which is responsible for the logistical component of the Maritime Prepositioning Force [MPF]. Blount Island Command provides logistics support to sixteen ships of the MPF, which provide contingency combat support to Marine forces wherever they are assigned. This report looked separately at MCSF and BIC to evaluate their contributions to the entire operation. Using FY 2012 budget information and contract details, models were constructed using the IMPLAN system to estimate the individual and combined economic impacts of the Marines' activities at Blount Island. IMPLAN is a PC-based social accounting and impact analysis software developed by the Minnesota IMPLAN Group, Inc. The system is based on national economic data, and the models were designed to determine the effect of Blount Island operations on the greater community. The study findings reveal that the operations at Blount Island were responsible for an estimated \$352 million in economic impact. This logistic activity generated an estimated \$168 million in labor income and was responsible for generating more than 3,100 jobs in the region.

Keywords: BIC, MCSF, IMPLAN, Multiplier, Income effect, Employment effect, Value added effect, Output effect.

INTRODUCTION

Blount Island Command and the Marine Corps Support Facility Blount Island operate a major logistics site at Blount Island in Jacksonville, Florida. The purpose of the site is to serve the sixteen ships of the Maritime Prepositioning Force [MPF], which are owned or leased by the U.S. Navy's Military Sealift Command.MPF ships are assigned to remote areas of the globe, where U. S. Marines are likely to be called upon to operate. When the Marines are called, there is often very short notice. Once in an area for combat operations, the next critical element of the Marines' success is the support to enable them to continue their mission. The MPF vessels carry those supplies that the Marines will need to succeed. Without the MPF ships operating near the combat arena, delays in re-supply could jeopardize the success of the Marines' mission. Blount Island Command, with the support of the Marine Corps Support Facility and its professional contract staff, ensures that the correct logistics support – from fuel to ammunition to vehicles to medical supplies – is stored in each MPF vessel. Once loaded with equipment and deployed awaiting mission assignment, the MPF ships operate for three years. At the end of that period, each ship returns to Blount Island, where the cargo is removed and inspected. Once emptied of mission material, the MPF ship proceeds to a port for repairs, and its load of combat support material is replaced with new or renewed items. After a short period of maintenance, the ship returns to Blount Island, where the new batch of essential cargo is loaded. Once again, the MPF ship returns to its assigned operating area to await tasking. In addition to its primary focus, BIC also supports several overseas components, from forward operations in Afghanistan, Iraq, Kuwait and Qatar to its storage sites in Norway. The complex of business activities that must be accomplished by military and civilian experts provides the subject of this study. From industries as disparate as construction and river dredging to software development and aircraft maintenance, Blount Island Command calls on expertise across northeast Florida and southeast Georgia to accomplish its mission. This study will examine details of the findings and their implications for the Marine Corps and for the greater Jacksonville, Florida economy.

METHODOLOGY

Software

The IMPLAN [IMpact analysis for PLANning] system is an input-output analysis system that provides a highly accurate and reliable model for analysis. It is widely used to determine the consequences of a project or the effects of the arrival or departure of a company or military base in an area. IMPLAN's social accounting system describes transactions that occur between producers and intermediate and final consumers using a social accounting matrix [SAM], which represents flows of all economic transactions that take place within a defined economy [regional or national]. The IMPLAN database contains county, state, zip code and federal economic statistics which are specialized by region, not estimated from national averages. These statistics can be used to measure the effect on a regional or local economy of a given change or event in the economy's activity.

Effects

This study examines the different business activities of the U.S. Marine Corps Blount Island Command, Jacksonville, Florida. At the focus of these activities are four distinct types of economic effect:

Employment effect: the number of jobs created in the study area economy as a result of the activities of the BIC.

Income effect: a measure of income, including pay and benefits, generated by this economic activity.

Value added effect: a combination of labor income, other property type income and indirect business taxes.

Output effect: a measure of the size of the contracts written by BIC and the activity that resulted from them.

Impacts

Within these effects, the IMPLAN defines the economic impacts that comprise them: the direct, indirect and induced impacts.

Direct impact: The direct components indicate the activity that the industry undertook itself, including purchases of raw materials and hiring of employees.

Indirect impact: The indirect portions represent business-to-business transactions in support of this industry, such as when their suppliers make purchases from other suppliers.

Induced impact: The induced components reflect activity by employees of this industry and indirect industries, such as purchase of groceries.

Geographic Study Area

The study area includes six counties of northeast Florida: Baker, Clay, Duval, Nassau, Putnam and St. Johns; and three counties of southeast Georgia: Camden, Charlton and Ware. This region encompasses the locations of firms that do business with Blount Island Command and the primary area in which employees of the command reside "as indicated in Figure 1 (Appendix A)".

Study definition

Blount Island Command is the primary tenant command located aboard the Marine Corps Support Facility, Jacksonville. While the purpose of the entire installation is support for the mission of Blount Island Command, the two commands have separate missions and conduct business unique to them. This study will examine the economic activities of the Marine Corps Support Facility Blount Island and Blount Island Command, and it will report on them both, as well as present an aggregated view of their economic impacts on the region.

Mission statement

Marine Corps Support Facility Blount Island plans, coordinates and executes facility maintenance, construction, environmental management and physical security efforts in support of Blount Island Command's logistics mission of managing the Marine Corps Prepositioning programs. Blount Island Command plans, coordinates and executes the logistics efforts in support of the Maritime Prepositioning Force (MPF) program and the Marine Corps Prepositioning Program - Norway (MCPP-N).

Economic process

When Blount Island Command makes a contract for service or goods, it purchases from a primary contractor. From this agreement, the contractor makes purchases of raw materials and services from its suppliers and subcontractors, and it pays wages to employees to conduct the business. The suppliers purchase goods and services from their respective suppliers. Households of the employees purchase the goods and services required for their maintenance, and cycle expands across the community. The results of the initial economic activity ultimately spread to affect industries across the entire community, as multiple iterations of these transactions recur.

ANALYSIS OF RESULTS

Below is a detailed example of the Employment effect for MCSF and BIC.

Employment effect

In addition to the active duty military members and civil servants employed by the two commands, as contracts are written for goods or services, more jobs are created. Direct jobs are those that result from the initial economic activity; indirect jobs are created from supplier & subcontractor activity; induced jobs result from employee spending activity.

Marine Corps Support Facility [MCSF]

As the support base to Blount Island Command, MCSF acts mainly as "landlord" to its tenant. Its primary economic activities are the maintenance of the infrastructure needed to support BIC and base security. In 2012 its primary expenditures were for construction [repair & improvements], facilities, environmental support and security. The MCSF employment effect" is shown in Table 1 (Appendix A)".

Blount Island Command [BIC]

Blount Island Command depends on several major contractors to conduct its business of the Maritime Prepositioning Force [MPF] and Marine Corps Prepositioning Program – Norway [MCPP-N]. These contractors accomplish the MPF ship onload & offload and the myriad tasks required to monitor and maintain the equipment in combat-ready condition. The BIC employment effect "is shown in Table 2 (Appendix A)".

The combined numbers of jobs created from the economic activity of the two commands at Blount Island " is shown in Table 3 (Appendix A)".

Income effect

In 2012, the two commands and their contractors aboard Blount Island paid more than \$116M in payroll and benefits to their employees. This direct income and benefits generated more than \$15 million in indirect income and more than \$35 million in induced income, with the resulting total effect on regional labor income of more than \$168 million, these effects "are shown in Table 4 (Appendix A).

Value added effect

The software computes Value Added, which is the sum of compensation, taxes and profits that a firm 'adds' to goods and services it purchases in the process of creating the product that it sells. It is the increased value of production through the local supply chain from the business side. The total value added effect "is shown in Table 5 (Appendix A)".

Output effect

Blount Island Command and Marine Corps Support Facility Blount Island conducted direct economic activity that yielded more than \$204 million in direct output in 2012. The compounding effects of indirect [\$42 million] and induced [\$106 million] activity led to more than \$352 million in total economic output in the region which "is shown in Table 6 (Appendix A)".

FINDINGS

Industries most effected

The top 10 industries that created the greatest number of jobs, amount of labor income, value added, and produced the greatest total output "are shown in tables 7,8,9, and 10 respectively (Appendix A).

Multipliers

The aggregating effects of indirect and induced impacts on the direct impacts are called multipliers. Because they are often misunderstood, multipliers are frequently estimated in error or are exaggerated. IMPLAN models compute multipliers with great accuracy. The combined multipliers for Blount Island "is shown in Figure 2 (Appendix A)".

Each industry and each effect has multipliers that are unique to that industry and to that region of the country. The major industries operating at Blount Island combine to produce these multipliers in aggregate:

Employment multiplier: The employment multiplier is 1.63: For each job created at Blount Island, an additional 0.63 jobs are created across the region.

Labor Income multiplier: The labor income multiplier is 1.44: For each dollar of wages & benefits paid to employees at Blount Island, an additional \$0.44 in labor income is generated throughout the First Coast economy.

Value Added multiplier: The Value Added multiplier is 1.65, showing that BIC and MCSF activities created an additional \$0.65 for each dollar of value added.

Output multiplier: The output multiplier computes to 1.73, which means that for each dollar invested in Blount Island's activities, an additional \$0.73 of output is achieved across the entire economy of the region.

CONCLUSION

The U. S. Marine Corps facility at Blount Island, Jacksonville, Florida provides an essential national defense capability. The Marine Corps Support Facility and its tenant, Blount Island Command, are responsible for the readiness of the entire U. S. fleet of Maritime Prepositioning Ships [MPS] in support of Marine Corps operations in hostile theaters worldwide. The scope of these operations is broad, and outsiders are unaware of the economic force that this military effort generates.

The economic impact of the Marine Corps operations at Blount Island is robust, as this activity affects more than 350 different industries in the region. A military work force that numbers just 101 military specialists, augmented by 153 civil servants, achieved more than \$350 million in output, which had a powerful effect on the greater First Coast community. This economic activity is reflected in the different multipliers at work within the economic effect of employment, labor income, value added and total output:

- Every job that the activity created resulted in an additional 0.63 jobs in the greater Jacksonville region;
- For every dollar of income paid to employees, another \$0.44 of labor income was generated;
- Each dollar of value added, or increase in gross regional product, resulted in an additional \$0.65 of value added;
- For every dollar of total output attained by BIC and MCSF, an additional \$0.73 of output was created throughout the region.

Highlights of 2012 economic activity at Blount Island:

With an unparalleled responsibility for worldwide readiness of the Marine Corps Maritime Prepositioning Force, a lean labor force of just 244 military and civilian workers created this powerful set of economic effects:

- More than 3,100 jobs were created across the study area.
- Labor income grew by more than \$168 million.
- Value added, or gross regional product, grew by \$225 million.
- Total economic output in the region increased by more than \$352 million.
- This business activity affected more than 350 different industries in the region.



Appendix A - Figures and Tables

Figure 1

Table 1
Employment Effect

2012 MCSF Employment				
Direct	Indirect	Induced	Total	
876	174	368	1419	

2012 BIC Employment			
Direct	Indirect	Induced	Total
1078	157	525	1761

Table 3

2012 BIC - MCSF Employment				
Direc	t	Indirect Induced Tota		
1954	Ļ	332	893	3 3179
		Table	4	
		2012 BIC	-MCSF Labor I	ncome
	Direct	Indirect	Induced	Total
BIC	70,547,077	7,330,426	21,154,867	99,032,370
MCSF	46,138,236	8,432,602	14,824,733	69,395,572
BIC-MCSF	116,685,314	15,763,028	35,979,601	168,427,942

Table 5

		2012 BI <mark>C-M</mark>	CSF Value Added	
	Direct	Indirect	Induced	Total
BIC	\$86,354,036	\$11,872,883	\$37,952,662	\$136,179,581
MCSF	\$50,423,979	\$12,632,517	\$2 <mark>6,593</mark> ,757	\$89,650,252
BIC-MCSF	\$136,778,015	\$24,505,399	\$64,546,419	\$225,829,834

Table 6

2012 BIC & MCSF Total Output				
	Direct	Indirect	Induced	Total
BIC	\$116,676,461	<mark>\$19,664,</mark> 087	\$62,747,960	\$199,088,508
MCSF	\$87,350,230	\$22 <mark>,511,3</mark> 29	\$43,966,603	\$153,828,161
BIC-MCSF	\$204,026,091	\$42,17 <mark>5,41</mark> 6	\$106,714,563	\$352,916,669

Table 7 Employment BIC-MCSF Top 10

Commercial and industrial machinery and equipment repair and maintenance	836
Construction of new nonresidential commercial and health care structures	415
Maintenance and repair construction of nonresidential structures	307
Employment and payroll only (federal govt, non-military)	178
Food services and drinking places	119
Employment and payroll only (federal govt, military)	76
Real estate establishments	57
Employment services	54
Offices of physicians, dentists, and other health practitioners	49
Private hospitals	49

Table 7 shows the ten industries in which economic activity at BIC and MCSF resulted in the greatest number of jobs.

Table 8 Labor Income [\$] BIC-MCSF Top 10

Commercial and industrial machinery and equipment repair and	
maintenance	46,544,214
Construction of new nonresidential commercial and health care structures	19,104,177
Employment and payroll only (federal govt, non-military)	17,707,667
Maintenance and repair construction of nonresidential structures	15,064,542
Employment and payroll only (federal govt, military)	9,844,354
Offices of physicians, dentists, and other health practitioners	3,760,908
Wholesale trade businesses	3,280,116
Private hospitals	2,818,271
Architectural, engineering, and related services	2,600,628
Food services and drinking places	2,479,673

Table 8 shows the top ten industries in labor income from BIC and MCSF operation.

Table 9 Value Added [\$] BIC-MCSF Top 10

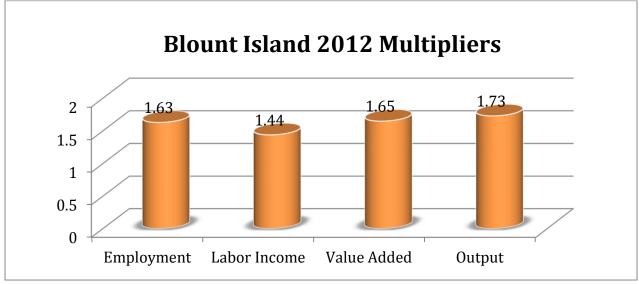
Bie meer top to	
Commercial and industrial machinery and equipment repair and maintenance	56,297,444
Construction of new nonresidential commercial and health care structures	20,396,872
Employment and payroll only (federal govt, non-military)	19,119,615
Maintenance and repair construction of nonresidential structures	15,983,294
Employment and payroll only (federal govt, military)	12,847,707
Imputed rental activity for owner-occupied dwellings	8,529,743
Real estate establishments	5,835,784
Monetary authorities and depository credit intermediation activities	5,827,298
Wholesale trade businesses	5,713,990
Offices of physicians, dentists, and other health practitioners	3,872,377

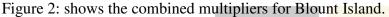
Table 9 describes the industries that contributed the most to the Value Added of BIC and MCSF in 2012.

Table 10 Total Output [\$] BIC-MCSF Top 10

Commercial and industrial machinery and equipment repair and maintenance	80,708,706
Construction of new nonresidential commercial and health care structures	40,584,610
Maintenance and repair construction of nonresidential structures	28,868,323
Employment and payroll only (federal govt, non-military)	19,218,565
Employment and payroll only (federal govt, military)	13,062,101
Imputed rental activity for owner-occupied dwellings	12,793,787
Monetary authorities and depository credit intermediation activities	8,827,069
Real estate establishments	8,108,993
Wholesale trade businesses	7,782,951
Food services and drinking places	6,838,764

Table 10 lists the industries that produced the greatest total output for BIC and MCSF in 2012.





REFERENCES

McHenry, P., Sanderson, A. & Siegfried, J. "Pitfalls of Traditional Measures of Higher Education's Role in Economic Development" (2013), *Economics of Education Review (2013)* MIG, Inc. (1999) *IMPLAN Professional, Version 2.0: User's Guide, Analysis Guide, Data Guide,* Minnesota IMPLAN Group, Inc., Stillwater, MN.

U.S. Forestry Service, Minnesota IMPLAN Group, Inc. (1996), *Deriving SAM Multiplier Models Using IMPLAN*, G. Alward and S. Lindall

MIG, Inc. () *Elements of the Social Accounting Matrix*, Technical Report TR 98002

MIG, Inc. (2010) *IMPLAN Social Accounting & Impact Analysis Software User's Guide, version 3.0,* Minnesota IMPLAN Group, Inc., Stillwater, MN.

MIG, Inc. (2010) Using IMPLAN V.3, Minnesota IMPLAN Group, Inc., Stillwater, MN.

MIG, Inc. (2011) Introduction to IMPLAN V3, Minnesota IMPLAN Group, Inc., Hudson WI

MIG, Inc. (2011) *Principles of Impact Analysis and IMPLAN Applications*, F. Day, Minnesota IMPLAN Group, Inc.

Rebuck, Michael (2013) "The Economic Impact of Institutions of High Learning", Urban Economics, (2013)

Siegfried, John J., Allen R. Sanderson, and Peter McHenry. "The Economic Impact of Colleges and Universities." *Economics of Education Review* 26.5 (2007): 546-58. Web.

U.S. Bureau of Labor Statistics Consumer Expenditure Survey (2013)

U.S. Census Bureau County Business Patterns (2013)

U.S. Census Bureau Economic Census (2012)