

2009

ECONOMIC IMPACT ANALYSIS



Ellsworth
Air Force Base
Rapid City, SD

2009

ECONOMIC ANALYSIS

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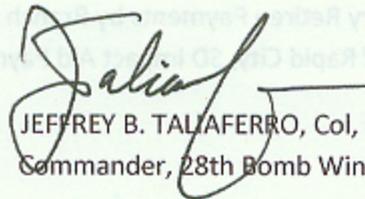
Commander's Foreword

The attached Economic Impact Analysis follows Air Force standards to report Ellsworth's impact to the surrounding local area. Ellsworth is the largest employer in the West River region, and the second-largest in the state. In 2009, there were more than 500 local civilians working on base. However, this is only a small part of the contribution the Airmen of Ellsworth make to the broader community.

In our view, Ellsworth and the 28th Bomb Wing are not just next to a great community, we are part of a great community. Our over 8,500 Airmen and family members are dedicated to playing an active role in the welfare of the broader Black Hills—far beyond just jobs and payroll. In 2009, our Airmen volunteered more than 4,000 hours on and off base helping the local community. Some of their contributions include coaching children's sports, working with Honor Flight, the Make-a-Wish Foundation and many other local charities.

While active in the local community, the Airmen of Ellsworth were even more engaged in combat operations overseas throughout 2009. During this period, over 1,200 of our active duty Airmen, roughly one third of the wing, were engaged in combat operations compiling an impressive 205,000 man-days overseas. We dropped more guided weapons in Afghanistan than any other wing in the Air Force and only lost one Airman to hostile fire. While flying 3,985 hours at home, our Airmen compiled an impressive 6,752 combat hours overseas supporting 352 troops-in-contact situations. This pattern is expected to continue for the foreseeable future.

We are proud of all our Airmen are doing for the nation both at home and overseas every day. But we are equally proud to be partners with the broader Black Hills community, and we look forward to continuing this special relationship.



JEFFREY B. TALIAFERRO, Col, USAF
Commander, 28th Bomb Wing



B-1B Lancer Fact Sheet

Mission

Carrying the largest payload of both guided and unguided weapons in the Air Force inventory, the multi-mission B-1B Lancer is the backbone of America's long-range bomber force. It can rapidly deliver massive quantities of precision and non-precision weapons against any adversary, anywhere in the world, at any time.

Features

The B-1's blended wing/body configuration, variable-geometry wings and turbofan afterburning engines, combine to provide long range, maneuverability and high speed while enhancing survivability. Forward wing settings are used for takeoff, landings, air refueling and in some high-altitude weapons employment scenarios. Aft wing sweep settings - the main combat configuration -- are typically used during high subsonic and supersonic flight, enhancing the B-1's maneuverability in the low- and high-altitude regimes. The B-1's speed and superior handling characteristics allow it to seamlessly integrate in mixed force packages. These capabilities, when combined with its substantial payload, excellent radar targeting system, long loiter time and survivability, make the B-1 a key element of any joint/composite strike force.

The B-1 is a highly versatile, multi-mission weapon system. The B-1's synthetic aperture radar is capable of tracking, targeting and engaging moving vehicles as well as self-targeting and terrain-following modes. In addition, an extremely accurate Global Positioning System-aided Inertial Navigation System enables aircrews to navigate without the aid of ground-based navigation aids as well as engage targets with a high level of precision. The Combat Track II radios provide a secure beyond line of sight reach back connectivity until Link-16 is integrated on the aircraft. In a time sensitive targeting environment, the aircrew can use targeting data from the Combined Air Operations Center over Combat Track II, then to strike emerging targets rapidly and efficiently. This capability was effectively demonstrated during operations Enduring Freedom and Iraqi Freedom.

The B-1's onboard self-protection electronic jamming equipment, radar warning receiver (ALQ-161) and expendable countermeasures (chaff and flare) system and a towed decoy system (ALE-50) complements its low-radar cross-section to form an integrated, robust defense system that supports penetration of hostile airspace. The ALQ-161 electronic countermeasures system detects and identifies the full spectrum of adversary threat emitters then applies the appropriate jamming technique either automatically or through operator inputs.

Current modifications build on this foundation. Radar sustainability and capability upgrades will provide a more reliable system and may be upgraded in the future to include an ultra high-resolution capability and automatic target recognition. The addition of a fully integrated data link, or FIDL, will add Link-16 communications capability. FIDL combined with associated cockpit upgrades will provide the crew with a much more flexible, integrated cockpit, and will allow the B-1 to operate in the fast-paced integrated battlefield of the future. Several obsolete and hard to maintain electronic systems are also being replaced to improve aircraft reliability.

Background

The B-1 was initially developed in the 1970s as a replacement for the B-52. Four prototypes of this long-range, high speed (Mach 2.2) strategic bomber were developed and tested in the mid-1970s, but the program was canceled in 1977 before going into production. Flight testing continued through 1981.

The B-1 is an improved variant initiated by the Reagan administration in 1981. Major changes included the addition of additional structure to increase payload by 74,000 pounds, an improved radar and reduction of the radar cross section by an order of magnitude. The inlet was extensively modified as part of this RCS reduction, necessitating a reduction in maximum speed to Mach 1.2.

The first production B-1 flew in October 1984, and the first B-1 was delivered to Dyess Air Force Base, Texas, in June 1985. Initial operational capability was achieved on Oct. 1, 1986. The final B-1 was delivered May 2, 1988.

The B-1 holds almost 50 world records for speed, payload, range, and time of climb in its class. The National Aeronautic Association recognized the B-1 for completing one of the 10 most memorable record flights for 1994. The most recent records were made official in 2004.

The B-1 was first used in combat in support of operations against Iraq during Operation Desert Fox in December 1998. In 1999, six B-1s were used in Operation Allied Force, delivering more than 20 percent of the total ordnance while flying less than 2 percent of the combat sorties.

During the first six months of Operation Enduring Freedom, eight B-1s dropped nearly 40 percent of the total tonnage delivered by coalition air forces. This included nearly 3,900 JDAMs, or 67 percent of the total. In Operation Iraqi Freedom, the aircraft has flown less than 1 percent of the combat missions while delivering 43 percent of the JDAMs used. The B-1 continues to be deployed today, flying missions daily in support of continuing operations.

ECONOMIC IMPACT TABLES

Table 1

Personnel by Classification and Housing Location

CLASSIFICATION	LIVING ON BASE	LIVING OFF BASE	FY09 TOTAL
1. APPROPRIATED FUND MILITARY			
Active Duty			
Air Force	1,423	1,888	3,311
ANG/Reserve/ART		29	29
TOTAL:	1,423	1,917	3,340
2. ACTIVE DUTY MILITARY DEPENDENTS			
TOTAL:	1,797	2,518	4,315
3. APPROPRIATED FUND CIVILIANS			
General Schedule (GS) and General Government (GG)			278
National Security Personnel System (NSPS)			129
Federal Wage Board			155
Other (SES, Scientific and Professional Positions)			25
TOTAL:			587
4. NON-APPROPRIATED FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS			
Civilian NAF			201
Civilian BX			107
Contract Civilians (not elsewhere included)			239
Private Businesses On Base, By Type:			29
FCU Credit Union			17
AAFES-Barber Shop			9
AAFES-Flower Shop			1
AAFES-Optical Shop			2
TOTAL:			576
TOTAL ASSIGNED PERSONNEL:			4,503
TOTAL PERSONNEL INCLUDING DEPENDENTS:			8,818

Table 2
Annual Payroll by Classification and Housing Location

CLASSIFICATION	LIVING ON BASE (\$)	LIVING OFF BASE (\$)	FY09 TOTAL (\$)
1. APPROPRIATED FUND MILITARY (APFM)			
Active Duty			
Air Force	\$ 39,000,711	\$ 80,959,520	\$ 119,960,231
ANG/Reserve/ART			\$ 1,015,000
TOTAL:			120,975,231
2. APPROPRIATED FUND CIVILIANS			
General Schedule (GS) and General Government (GG)			\$ 16,794,963
National Security Personnel System (NSPS)			\$ 7,765,413
Federal Wage Board (FWB)			\$ 9,330,535
Other (SES, Scientific and Professional Positions)			\$ 352,300
TOTAL:			\$ 34,243,211
3. NON-APPROPRIATED FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS			
Civilian NAF			\$ 2,850,206
Civilian BX			\$ 2,015,100
Contract Civilians (not elsewhere included)			\$ 14,186,300
Private Businesses On Base, By Type:			
FCU Credit Union			\$ 473,200
AAFES-Barber Shop			\$ 99,600
AAFES-Flower Shop			\$ 8,600
AAFES-Optical Shop			\$ 42,300
TOTAL:			\$ 19,675,306
TOTAL ANNUAL PAYROLL:			\$ 174,893,748

Table 3

Expenditures for Construction, Services, and Procurement of Materials, Equipment, and Supplies

CLASSIFICATION	ACTUAL ANNUAL EXPENDITURES
1. CONSTRUCTION	
Military Construction Program	\$ 10,136,000
Non-Appropriated Fund	\$ 23,508
O&M	\$ 490,285
Other-Stimulus Funding (O&M & MFH)	\$ 4,318,197
TOTAL:	\$ 14,967,990
2. SERVICES	
Services Contracts	\$ 14,032,598
TOTAL:	\$ 14,032,598
3. MATERIALS, EQUIPMENT, AND SUPPLIES PROCUREMENT	
Commissary	\$ 667,733
Base Exchange (BX)	\$ 30,100
Health (Tri-Care, Government cost only)	\$ 21,856,726
Education (Impact aid)	\$ 6,915,313
TDY (Military and civilian)	\$ 803,290
Other Materials, Equipment & Supplies (not elsewhere included)	\$ 2,229,350
TOTAL:	\$ 32,502,512
TOTAL ANNUAL EXPENDITURES:	\$ 61,503,100

Table 4
Estimate of Number and Dollar Value of Indirect Jobs Created

TYPE OF PERSONNEL	NUMBER OF BASE JOBS	MULTIPLIER	NUMBER OF INDIRECT JOBS
ACTIVE DUTY MILITARY	3,311	0.29	960
RESERVE/ANG	29	0.29	8
APF CIVILIANS	587	0.43	252
OTHER CIVILIANS	576	0.43	248
TOTAL:	4,503		1,468

ESTIMATED NUMBER OF INDIRECT JOBS CREATED: 1,468

AVERAGE ANNUAL PAY FOR THE LOCAL COMMUNITY: \$33,000

ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED: \$48,444,000

DATA SOURCES:

Multiplier: Logistics Management Institute (LMI) Economic Impact Database, Installations and Indirect/Induced Job Multipliers, Feb 95

Avg Annual Pay: Current tables for Average Annual Pay Levels in Metropolitan Areas and Average Annual Pay by city/state are accessible at: www.bls.gov/oes/2008/may/oes_39660.htm

Table 5
Total Annual Economic Impact Statement

ANNUAL PAYROLL:	\$ 174,893,748
Military	\$ 120,975,231
Federal Civilian	\$ 34,243,211
Other Civilian	\$ 19,675,306
ANNUAL EXPENDITURES:	\$ 61,503,100
ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED:	\$ 48,444,000
Estimated Indirect Jobs Created	1,468
Average Annual Pay	\$ 33,000
TOTAL ECONOMIC IMPACT:	\$284,840,848

APPENDICES

Analysis Methodology

The objective of this Economic Impact Analysis is to quantify Ellsworth AFB's local economic activity within fiscal year 2009 (FY09). FY09 covers the time period of October 1, 2008 – September 30, 2009. The local area is defined by the U.S Office of Management and Budget and is called a Metropolitan Statistical Area (MSA). The MSA consists of two surrounding counties: Meade and Pennington.

Table 1: Personnel by Classification and Housing Location

The headcount of military personnel was derived from an Economic Resource Impact Statement (ERIS) from the Defense Joint Military Pay System (DJMS) report furnished by the 28th CPTS. The Air National Guard and Reserve numbers were collected from the 28th FSS/FSR. The number of military personnel and dependents living on base was provided by the 28th BW Civil Engineering Office for Housing (28th BW/CEH). The number of Air Force off base dependants was provided by the Base Military Personnel Flight (MPF). Civilian headcount was collected from the Civilian Personnel Flight (28th MSS/DPCXC) and various tenant organizations.

Table 2: Annual Payroll by Classification and Housing Location

The payroll of military personnel was derived from the ERIS report furnished by the 28th CPTS. The Air National Guard and Reserve payroll was collected from the 28th FSS/FSR. The majority of the appropriated fund civilian input was provided by the 28th FSS office. The payroll for civilian contractors was provided by the 28th FSS/FSR.

Table 3: Expenditures for Construction, Services, and Procurement

Military construction spending was collected from the 28th CES/CER and various tenant organizations. The 28th BW/CE office was the only base organization with either NAF or MFH spending in FY09. Several organizations provided FY09 totals for O&M Construction spending. The amount for Service Contracts was calculated from the 28th CONS, CCS/PK, and several of the tenant organizations. Supply Services consist of input from the CCS/PK. Education spending was a combination of the Education and Training Flight and Federal Government Impact Aid. Data for the GPC and other spending came from the 28th BW, 28th CONS, and several tenant organizations.

Table 4: Estimate of Number and Dollar Value of Indirect Jobs Created

The multipliers in this table were taken from the Economic Impact Database owned by the Logistics Management Institute. The average annual pay was taken from the Bureau of Labor and Statistics website. This methodology is required according to Chapter 4 of AFMAN 65-506.

Table 5: Total Annual Economic Impact Estimate

This table is simply a summary of Tables 1 – 4. Ellsworth AFB's total economic impact upon the Rapid City's MSA is \$284,840,848.

Summary

This Economic Impact Analysis was prepared by the 28 CPTS/FMA, Ellsworth AFB, with assistance from 28 BW Public Affairs Office, as well as the Financial Management Center of Expertise, Denver, Colorado. Questions or comments concerning the statistics or data contained in this analysis may be addressed to 28th Comptroller Squadron at Ellsworth Air Force Base, South Dakota. The point of contact is Major Erik Dunn, and he can be reached via email at erik.dunn@ellsworth.af.mil or phone at (605) 385-1499.

Summary of Capital Assets

CAPITAL ASSETS		
<i>(As of: 30 September 2009)</i>		
Building Category	Square Feet	
Housing (Includes detached garages and storage buildings)	2,177,818	
Community (Includes commissary, BX, BAQ, VAQ/VOQ, and recreation)	454,005	
Research and Development		
Hospital	165,426	
All Other Buildings (Includes Operations & Training, Supply, Maintenance & Production, and Administration)	3,426,134	
Other Structures and Facilities	42,476	
Utilities and Ground Improvement	2,737,171	
TOTAL:	6,265,859	
Dormitory/Temporary Quarters	Number of Units	Bed Capacity
Airman/NCO	6	742
Visiting Officer/Airman Quarters	4	175
Temporary Lodging Facilities	2	60
Compassionate Care Facilities	0	0
TOTAL:	12	977
Land	Acres	
Fee Owned	7,920	
Easements	731	
Right of Way	75	
Leased	206	
TOTAL:	8,932	
Runways	Linear Feet	
Area A	13,497	
TOTAL:	13,497	
Facilities Data	Number of Buildings	
Buildings	353	
Family Housing	601	
TOTAL:	954	

Figure 1: Ellsworth AFB's Capital Assets

Service	Number of Buildings	Amount	Amount	Amount	Amount
Active	334	\$21,928,000	\$2,344,000	\$1,384,000	\$236,000
Retiree	12				

Figure 3: Total Military Retiree Payments by Branch of Service

Personnel Distribution

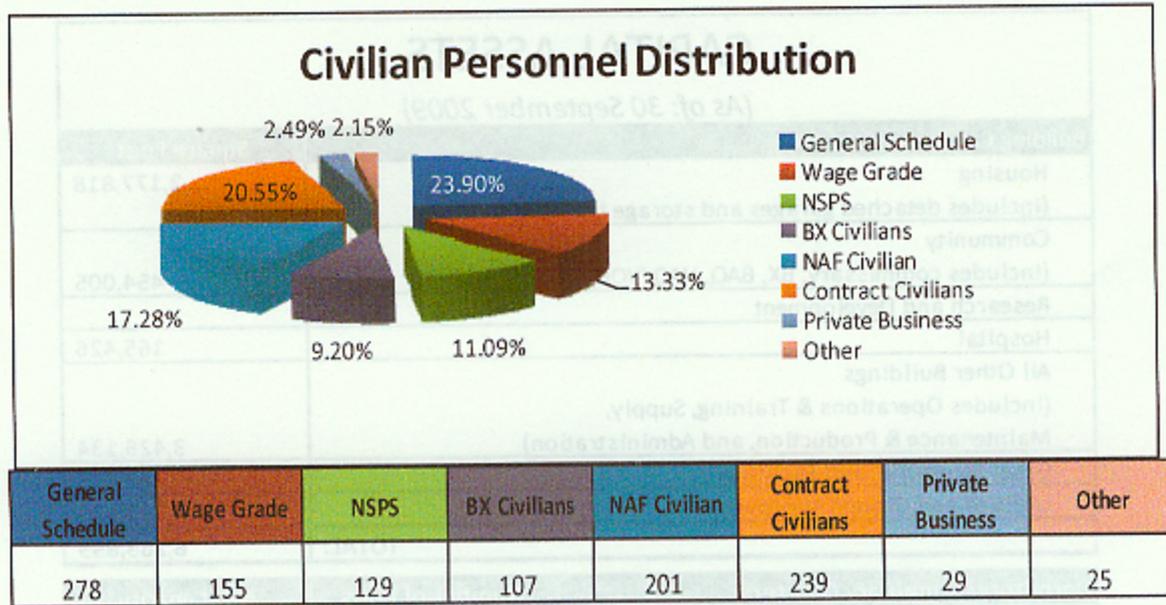


Figure 2: Distribution of Civilians by Personnel System

Military Retiree Payments

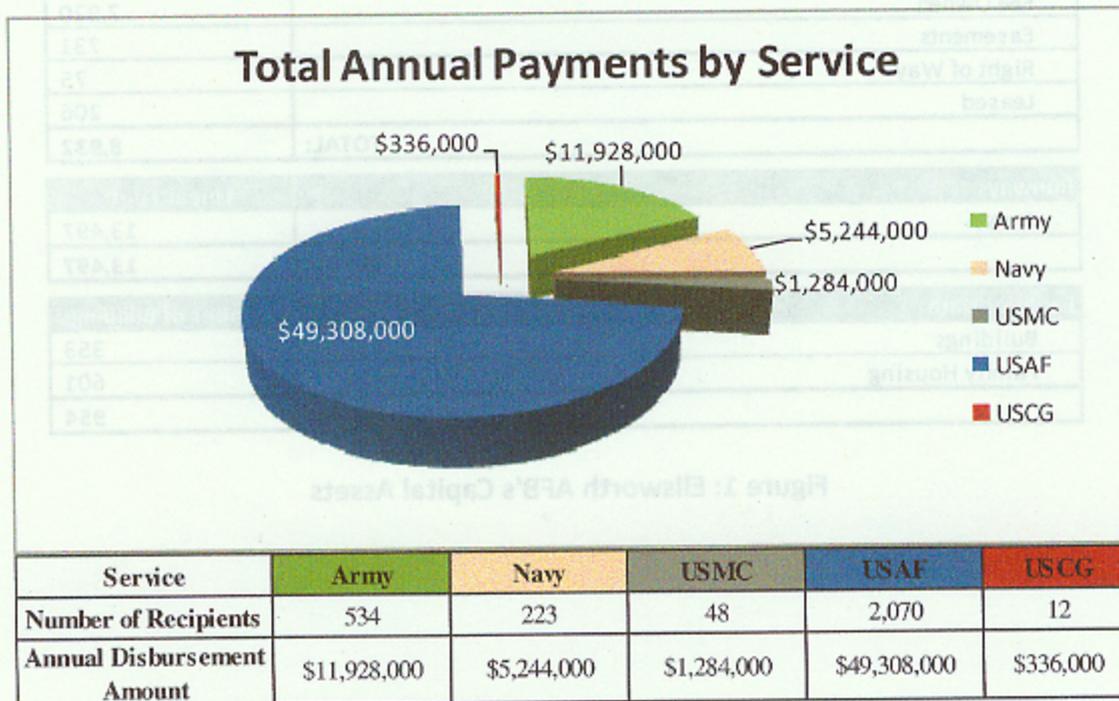


Figure 3: Total Military Retiree Payments by Branch of Service

Summary of Impact Aid Payments

IMPACT AID SUMMARY		
School District	County	Amount
Douglas		\$ 6,915,313
TOTAL Impact Aid		\$ 6,915,313

Figure 4: Summary of Rapid City, SD Impact Aid Payments

2

T AID SUMMARY	
County	Amount
	\$ 6,912,313
TOTAL Impact Aid \$ 6,912,313	

Rapid City, SD Impact Aid Payments

Ellsworth
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