

SECTION II.

Economic Impacts from Fort Carson

Introduction

The growth of Soldier assignments to Fort Carson and the associated development and improvement of the Post has broad economic consequences for the region and the State of Colorado. Using the Fort Carson Demographic Model (FCDM) as a base, the Study Team developed additional model elements to calculate the economic and fiscal effects of Fort Carson activity. The following narrative begins with a discussion of methodology, which is followed by the Study Team's conclusions regarding the economic and fiscal effects of Fort Carson during federal Fiscal Year (FY) 2009. The narrative concludes with an assessment of how these effects are projected to change through Federal FY13.¹

Fiscal Year 2009 Analysis

The economic and fiscal effects model developed for this study estimates the overall effects of activities at Fort Carson on jobs, economic output, labor income and the major sources of revenue for local governments and the State of Colorado. The economic analysis focuses primarily on the Fort Carson region, defined to include El Paso County, Fremont County and Pueblo County. The analysis includes both direct effects (e.g. Soldier jobs and income and expenditures by Fort Carson in the local community) and "secondary" or "multiplier" effects. The secondary economic effects were estimated using an IMPLAN input-output model for the Fort Carson region.²

Impact drivers. Fort Carson affects the economy of the region, and the State of Colorado, in several ways. These "impact drivers," include:

- Household spending of disposable income earned by Soldiers,
- Civilian payroll and other Post operating expenditures in the local region, and
- Construction expenditures.

On average, about 11,800 Soldiers were present in the Fort Carson region during FY09. Another 4,200 Soldiers were on deployment, but had family remaining in the region. Almost 4,000 unaccompanied Soldiers that had been deployed in FY08 returned to the region.

¹ Army fiscal years begin October 1 and end on September 30. Thus, Federal FY09 represents the October 1, 2008-September 30, 2009 period.

² IMPLAN is an economic modeling system originally developed by the U.S. Forest Service and now widely used by both public and private sector economists. IMPLAN allows analysts to develop customized models for local regions based on county-specific data. The IMPLAN model estimates the indirect and induced economic effects throughout the economy often referred to as "multiplier effects."

The average income of the Soldiers assigned to Fort Carson in FY09 was about \$42,800 including base pay and additional pay, where applicable.³ In total, about \$704 million in Soldier disposable income was available for spending in the region in FY09.⁴ This estimate reflects the reduced spending in the region by deployed Soldiers, but also incorporates the estimated savings available to be spent in the region by unaccompanied Soldiers returning from deployment in the prior fiscal year. This estimate does not include any income earned by the spouses of Soldiers, which was not included in the impact analysis.

Fort Carson also employed an estimated 2,200 Department of Army (DA) civilians in FY09, with estimated total disposable income of approximately \$113 million.⁵ The Post purchased \$234 million in supplies and services from the local region, plus an additional \$23 million in utilities. The Post also spent almost \$6 million on tuition assistance and grants (about half of which was spent with regional institutions) and almost \$173 million on TRICARE payments. The Post contracted for \$431 million in construction activity in FY09.

In total, the combination of Soldier and DA civilian disposable income, Post operating expenditures and Post construction expenditures provided a \$1.7 billion stimulus for the state and regional economy in FY09, as summarized below.

**Exhibit II-1.
Direct Regional Economic Stimulus
from Fort Carson Activities in FY09**

Note:

* Adjusted disposable income from Soldiers reflects assumptions that 90 percent of disposable income of deployed Soldiers with family in the region is available for spending in the U.S. and 60 percent of disposable income earned by unaccompanied Soldiers on deployment is available for spending in the U.S. during the year following their deployment.

** GPC is an acronym for government purchase card.

Source:

Fort Carson Garrison Command and estimates by BBC Research & Consulting, 2009.

Direct Economic Stimulus from Fort Carson	FY2009
Adjusted Disposable Income from Soldiers	\$704 million
DA Civilian Disposable Income	\$113 million
Local Purchases/GPC	\$234 million
Utilities	\$23 million
Tuition Assistance/Grants (in region)	\$3 million
TRICARE Payments	\$173 million
Construction Expenditures	\$431 million
Total Direct Economic Stimulus in Region	\$1,681 million

Summary of FY09 economic impacts. The Fort Carson economic impact drivers led to an estimated \$2.4 billion in total economic activity throughout the Fort Carson region in FY09.⁶ This estimate includes approximately \$470 million in retail trade, \$450 million in construction, \$300 million in health and social services, \$190 million in real estate and rental activity and about \$80 million in accommodation and food services sales, among other sectors. The study team estimates that about \$50 million of the \$470 million in retail trade activity occurred at the Post PX, commissary and other on-Post retail operations not subject to sales taxes.

³ Additional pay includes the basic allowance for subsistence, basic allowance for housing (for Soldiers living off-post), combat pay (for deployed Soldiers) and family separation pay (for deployed Soldiers with dependents).

⁴ Disposable income is defined as total income net of income taxes and savings. Disposable income was estimated to range from 94 percent of gross wages and salaries for households earning less than \$35,000 per year to 86 percent of gross wages and salaries for households earning \$50,000 to \$75,000 per year. These estimates were derived from the IMPLAN model used for this economic impact analysis.

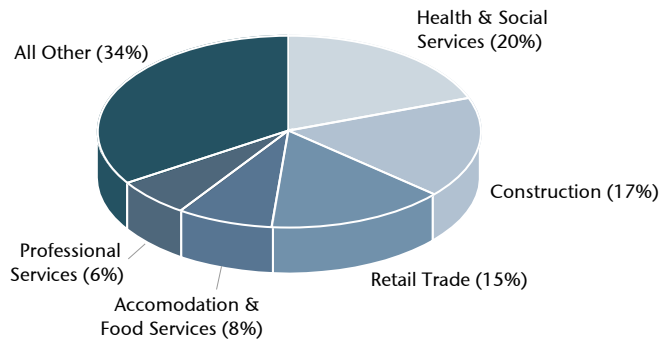
⁵ Estimated number of civilian workers per Army Stationing and Installation Plan (ASIP) projections provided by Garrison Command. Earnings level of civilian workers based on average income of Federal Non-military employees in El Paso County.

⁶ Fort Carson reports their "Economic Impact" at \$1.8 billion based on FY08 data. The Fort Carson reported figure differs from the estimate in this analysis because Fort Carson does not include secondary or "multiplier" impacts, but Fort Carson includes total military and civilian payroll, not just disposable income.

Apart from direct employment of Soldiers and Department of Army civilians, Fort Carson supported an additional 17,400 “secondary” jobs throughout the region.⁷ The largest numbers of these jobs were in health and social services, construction, retail trade, accommodation and food services, and other services. These jobs supported by Fort Carson’s activities produced almost \$740 million in labor earnings in the region. Exhibit II-2 depicts the estimated distribution of secondary jobs throughout the regional economy.

**Exhibit II-2.
Estimated FY09 Indirect and Induced Employment (“Secondary Jobs”) Supported By Fort Carson**

Source:
BBC Research & Consulting, 2009.



Between direct employment of Soldiers and civilians and secondary employment due to the Post’s economic impact drivers, Fort Carson supported about 31,500 jobs in the region in FY09, about 7 percent of total employment in the region and about 9 percent of all jobs in El Paso County.

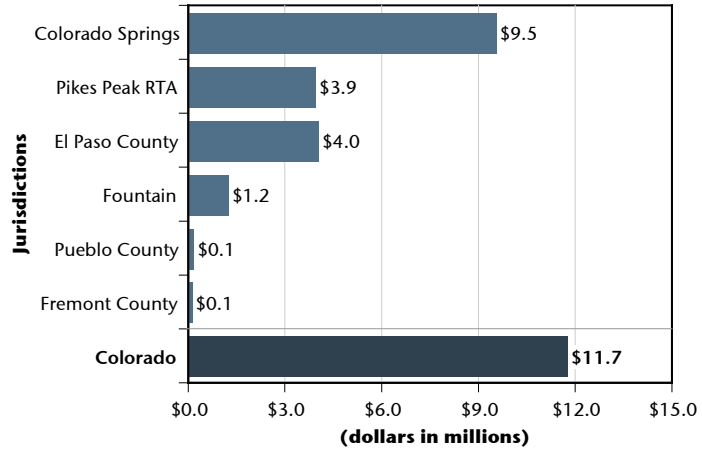
State and local government sales and use tax revenues. Based on the estimated impacts of Fort Carson on retail trade and other taxable sectors, the Study Team estimates the economic activity generated by Fort Carson produced about \$4 million in sales and use tax revenues for El Paso County, \$9.5 million in sales and use tax revenues in Colorado Springs and about \$1.2 million in sales and use tax revenues in the City of Fountain in FY09. The Pikes Peak Rural Transportation Authority (PPRTA) received an estimated \$3.9 million in sales tax revenues attributable (directly and indirectly) to activity at Fort Carson. Sales tax revenues for Pueblo County and Fremont County were estimated at about \$130,000 and \$70,000, respectively. Fort Carson generated activity also produced nearly \$12 million in sales and use tax revenue for the State of Colorado.

The preceding estimates reflect an 11 percent reduction in sales tax revenues due to non-taxable sales at the PX and commissary. Nonetheless, Fort Carson activity generates more than 20 percent of all sales and use tax revenue in the City of Fountain and almost 6 percent of all sales and use tax revenue in the City of Colorado Springs and El Paso County. Exhibit II-3 depicts estimated sales and use tax revenues by jurisdiction due to Fort Carson activities in FY09.

⁷ “Secondary” jobs include indirect effects (jobs at businesses that provide goods and services to other businesses serving Fort Carson) and induced effects (jobs at businesses that provide goods and services to Soldiers and employees of directly and indirectly affected firms).

**Exhibit II-3.
Estimated Sales and Use
Tax Revenues Directly and
Indirectly Resulting from
Fort Carson Operations and
Construction in FY09**

Source:
BBC Research & Consulting, 2010



The preceding sales tax calculations do not reflect the fact that City and/or other local sales taxes are not collected for some motor vehicle transactions involving Soldiers who may declare residency at a location other than their current physical and/or local address. Therefore, the positive sales tax impacts may be overstated. However, the absolute magnitude of this potential error is estimated to be significantly less than 5 percent of the total sales and use tax receipts attributed to Fort Carson activities.

Fort Carson activities also supported local governments through property taxes (on the homes of employees whose jobs are directly or indirectly supported by Fort Carson activities), and minor fees, charges and assessments not quantified in this analysis.

State income tax revenues. In addition to the sales and use tax revenues received by the State of Colorado from activity related to Fort Carson, direct and indirect employment supported by the Post also produces considerable state income tax revenue. Soldiers generally have discretion regarding the state in which they declare themselves to be residents and the proportion of Soldiers at Fort Carson that declare Colorado to be their state of residence is unknown. Consequently, the following analysis provides a range of estimated state income tax revenue attributable to Fort Carson. At the lower end of the range, we assume that none of the Soldiers posted to Fort Carson declare Colorado as their home state for income tax purposes—so the estimated income tax revenue from Fort Carson activity reflects only civilian employees at the Post and the indirect employment in the region stimulated by Fort Carson activities (including local spending by Soldier families). At the upper end of the range, we assume all Fort Carson Soldiers declare Colorado to be their home state for income tax purposes. The actual state income tax benefits from Fort Carson lie somewhere between the lower and upper estimates provided below.

Colorado levies a 4.63 percent state income tax against personal income. However, because Colorado’s income taxes apply to federal taxable income (thus incorporating the full set of federal income tax deductions) the effective tax rate relative to gross personal income is about 2.7 percent.⁸ Applying this effective income tax rate to the income of Fort Carson’s Soldiers (based on the alternative assumptions described above), the DA civilians working at Fort Carson, and the secondary employees whose jobs are directly and indirectly supported by activities at Fort Carson produces an

⁸ Based on comparison of total Colorado personal income tax collections to total statewide personal income in 2008.

estimate of state income tax revenue derived from Fort Carson operations and construction. The Study Team estimates Fort Carson directly and indirectly produced between \$23 million and \$45 million in state income tax revenues in FY09.

Fort Carson activities also provides other revenues to the State of Colorado through sources such as highway users taxes, corporate income taxes and cigarette taxes that were not quantified in this analysis.

Fiscal Years 2010-2013 Analysis

Over the next four years, the number of Soldiers posted to Fort Carson, and present in the region, are expected to increase from the FY09 numbers (and the estimated numbers for the preceding year, FY08). The adjusted disposable Soldier income available for spending in the region is projected to exceed \$900 million by FY13. Civilian employment and disposable income is also projected to increase, but much more slowly. Other Post operating expenditures are projected to increase along with the increases in the number of Soldiers assigned to the Post.

The additional economic impacts of these increases in Soldiers and operating expenditures, however, are expected to be partly offset by the decline in construction spending. Construction expenditures are expected to diminish from \$431 million in FY09 to about \$50 million in FY12 and about \$150 million in FY13.⁹ Based on these offsetting changes, the number of secondary jobs supported by Fort Carson is expected to remain fairly consistent through 2013. Secondary employment is expected to peak in FY10 at about 18,800 jobs but then recede back to about 17,000 jobs by 2013.

Exhibit II-4 displays the projected breakdown of secondary jobs supported by Fort Carson in the region in FY13. The primary difference in the distribution of secondary employment supported by Fort Carson in FY13, compared to the FY09 distribution shown previously in Exhibit II-2, results from the decrease in jobs in the construction sector.

**Exhibit II-4.
Projected FY13 Indirect and Induced Employment (“Secondary Jobs”) Supported by Fort Carson by Sector**

Source:
BBC Research & Consulting, 2009.

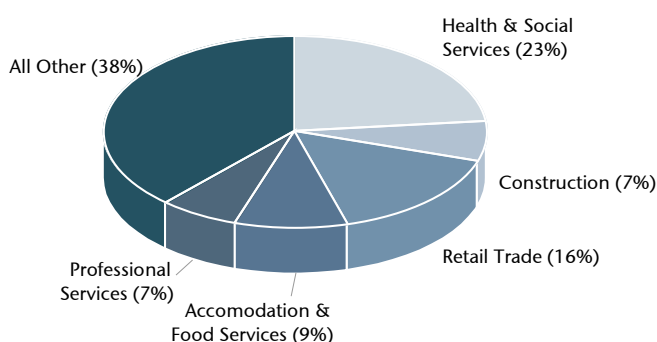
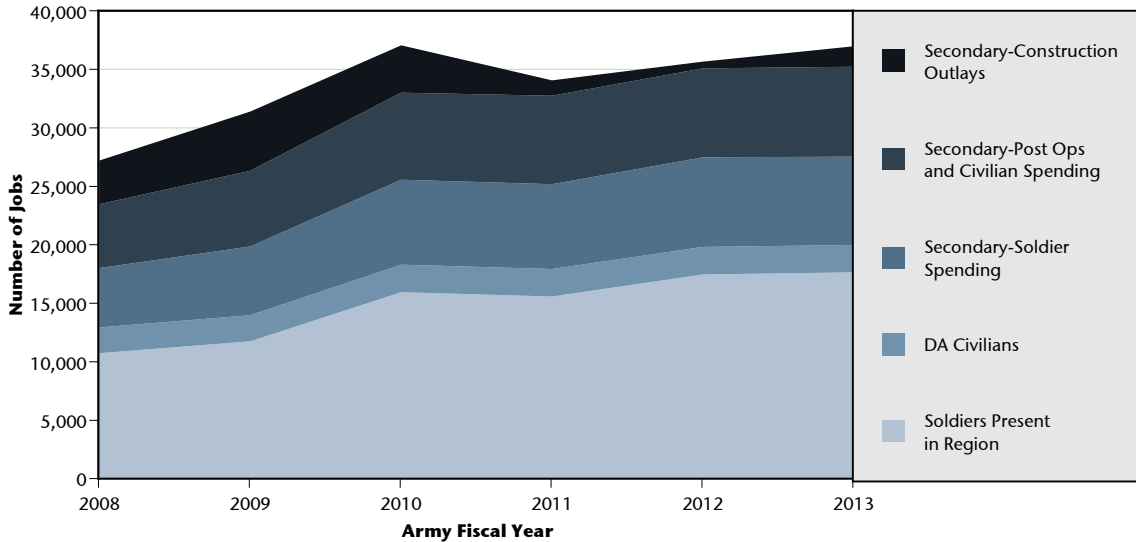


Exhibit II-5 displays the number of total jobs (direct and secondary) that Fort Carson activities are projected to support in the region from FY08 through FY13. The total contribution of the Post to regional employment is projected to increase from about 27,300 jobs in FY08 and 31,500 jobs in FY09 to about 37,000 jobs by FY13.

⁹ Data from Fort Carson Garrison Command.

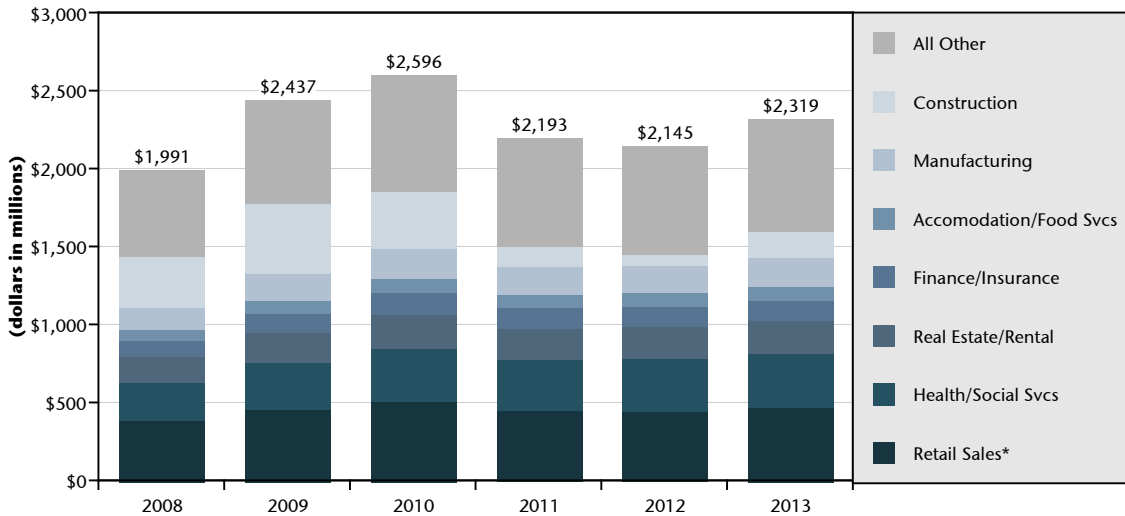
**Exhibit II-5.
Projected Total Employment Supported by Fort Carson in the Region
FY08 through FY13 (Includes Direct And Secondary Jobs)**



Source: BBC Research & Consulting, 2009.

Exhibit II-6 shows the estimated and projected total economic activity generated by Fort Carson in the three county region from Federal FY08 through Federal FY13. Retail trade is shown in terms of the total retail value of sales generated, though a portion of the value of the output from the retail trade sector includes the cost of goods – some of which benefits areas outside of the Fort Carson region.

**Exhibit II-6.
Annual Regional Economic Activity Directly and Indirectly
Generated by Fort Carson, FY08 through FY13**



Note: * Retail sales reflects value of sales in retail prices. All other sectors reflect value of output.

Source: BBC Research & Consulting, 2010.