

Department of Defense Spending in Rural and Urban Counties

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A strong national defense requires materials and supplies, which includes everything from boots to tanks. The U.S. Department of Defense (DoD) obtains these items from private companies and reports its spending to the U.S. Census Bureau.

To better understand what impact this spending had on the overall economy in Pennsylvania's rural and urban counties, the Center for Rural Pennsylvania analyzed data from fiscal years 2000 to 2008. It also looked to find whether there were any correlations between DoD spending and the following key economic indicators: wages, changes in wages, unemployment, and changes in the number of businesses.

The analysis indicated that DoD spending had little or no economic effect in rural and urban Pennsylvania.

Method

To complete the analysis, the Center used data from the 2000 and 2008 Consolidated Federal Funds Report from the U.S. Census Bureau. These data are only for domestic contracts and are reported by place of performance rather than the location of the prime contract. Since data for certain DoD contracts are classified with respect to place of performance, they are reported as "U.S. undistributed." In 2008, about \$8 billion, or 2 percent, of spending amounts were in this category.

Other data used for the analysis included population and business establishment data from the U.S. Bureau of Economic Analysis and the U.S. Census Bureau. Nationally, data were not available for two counties: Kalawao, Hawaii and Hoonah-Angoon, Alaska.

For the analysis, all dollar figures were adjusted for inflation using the Consumer Price Index with 2008 = 100.

All counties in the U.S. were coded as either rural or urban based on their population density. Counties with population densities below their respective state average were identified as rural while counties with population densities at or above their respective state average were defined as urban. In Pennsylvania, 48 counties were considered rural and 19 were considered urban.

Nationwide, there were 2,349 rural counties and 790 urban counties.

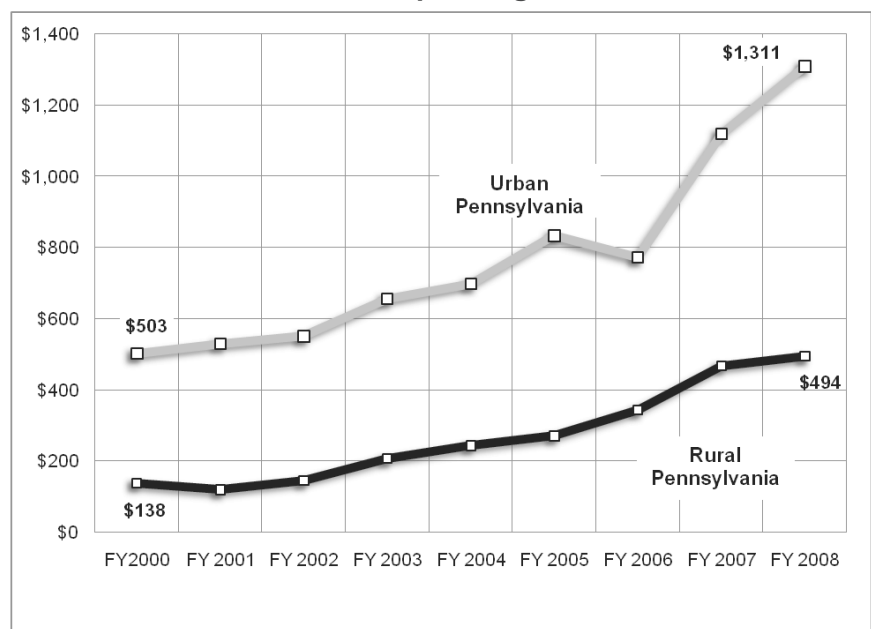
Findings

Pennsylvania Comparisons

In 2008, DoD spent about \$13.5 billion, or \$1,086 per person, in procurement contracts in Pennsylvania. These contracts accounted for 12 percent of all federal spending in Pennsylvania.

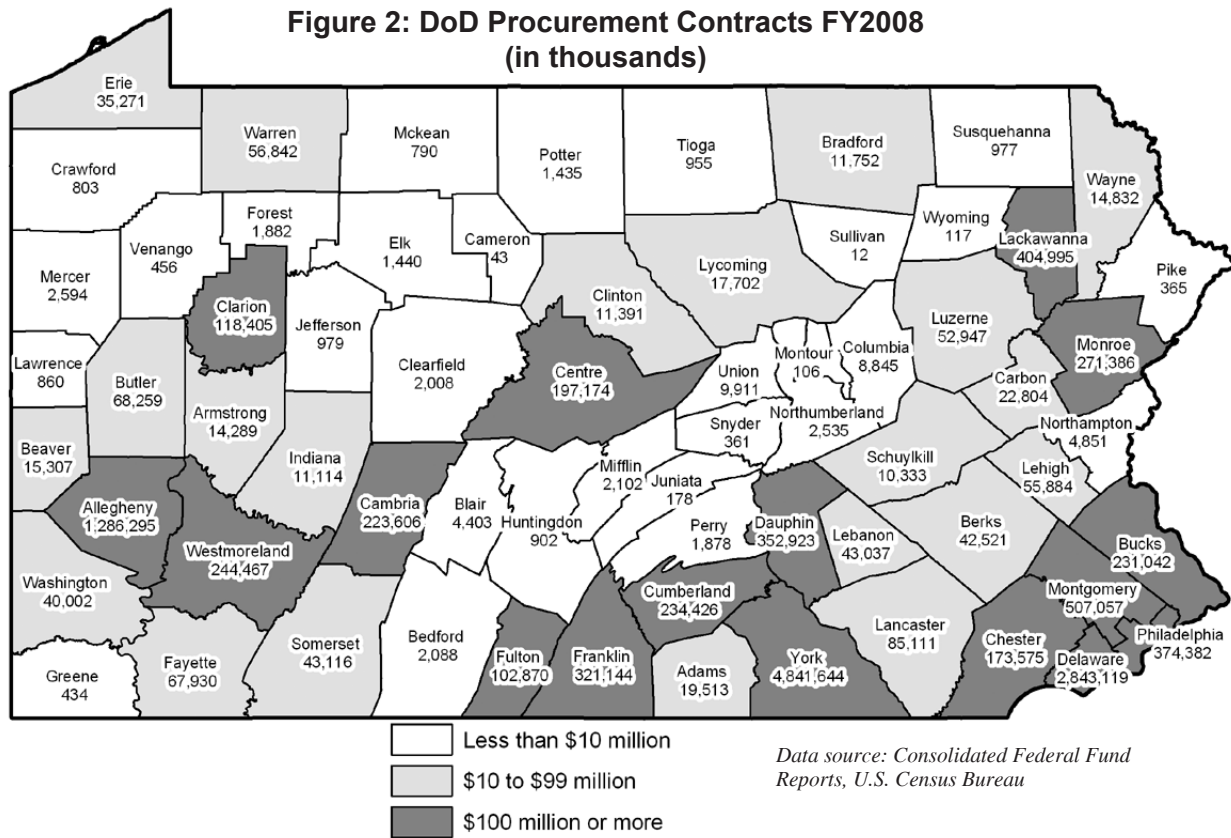
The same year, DoD spent almost \$2 billion, or \$494

Figure 1: Per Capita U.S. Department of Defense Procurement Contract Spending, FY2000 to FY2008



Data adjusted for inflation with CPI-U = 100. Data source: Consolidated Federal Fund Reports, U.S. Census Bureau

**Figure 2: DoD Procurement Contracts FY2008
(in thousands)**



per person, in procurement contracts in Pennsylvania's 48 rural counties. These contracts accounted for 6 percent of all federal expenditures in rural Pennsylvania.

Among Pennsylvania's 19 urban counties, DoD spent almost \$12 billion, or \$1,311 per person, in procurement contracts. These contracts accounted for 14 percent of all federal spending in urban Pennsylvania.

From 2000 to 2008, Pennsylvania saw a 174 percent increase in DoD procurement spending. Pennsylvania rural counties saw a 262 percent increase and urban counties saw a 165 percent increase.

At the county level, Allegheny, Delaware and York acquired the most in DoD contracts; each with more than \$1.25 billion in contract procurements. Counties with

Table 1: Distribution of Defense Procurement Contracts in U.S. Rural and Urban Counties, 2008

	# Counties	% of Total	Procurement Contract Amount (\$1,000)	% of Total
United States Rural Counties				
No Procurement	616	26.6%	\$0	0.0%
\$1 to \$499,999	791	34.2%	\$96,837	0.2%
\$500,000 to \$999,999	174	7.5%	\$128,848	0.3%
\$1.0 million to \$9.9 million	449	19.4%	\$1,587,349	3.5%
\$10.0 million to \$49.9 million	164	7.1%	\$3,788,332	8.3%
\$50.0 million to \$99.99 million	44	1.9%	\$2,977,452	6.5%
\$100.0 million to \$999.9 million	66	2.9%	\$20,047,881	43.8%
\$1.0+ billion	10	0.4%	\$17,132,420	37.4%
Total United States Rural Counties	2,314	100.0%	\$45,759,119	100.0%
United States Urban Counties				
No Procurement	26	3.3%	\$0	0.0%
\$1 to \$499,999	103	13.1%	\$17,089	0.0%
\$500,000 to \$999,999	34	4.3%	\$25,960	0.0%
\$1.0 million to \$9.9 million	194	24.7%	\$791,210	0.3%
\$10.0 million to \$49.9 million	143	18.2%	\$3,429,583	1.1%
\$50.0 million to \$99.99 million	60	7.6%	\$4,365,426	1.5%
\$100.0 million to \$999.9 million	156	19.9%	\$57,087,486	19.1%
\$1.0+ billion	69	8.8%	\$233,919,727	78.1%
Total United States Urban Counties	785	100.0%	\$299,636,481	100.0%

Source: Consolidated Federal Funds Report for Fiscal Year 2008, U.S. Census Bureau. Total rural counties do not equal 2,349 because 35 rural counties were "deobligated" from procurement contracts during 2008. Total urban counties do not equal 790 because 5 urban counties were "deobligated" from procurement contracts during 2008.

the lowest amounts in contract procurements were Cameron and Sullivan, each with less than \$50,000.

National Comparisons

Across the U.S., in 2008, DoD authorized about \$345 billion in procurement contracts, or \$1,136 per person. Pennsylvania received the nation’s fourth highest procurement amount after Texas, Virginia, and California. Each of these states received more than \$37 billion in contracts. States with the least amounts in procurement contracts were Delaware, North Dakota, Wyoming and Idaho, each with less than \$250 million in contracts.

Among the nation’s 2,349 rural counties, DoD procurement contracts totaled almost \$46 billion or \$559 per person. Among the nation’s 790 urban counties, procurement contracts totaled almost \$300 billion, or \$1,348 per person.

From 2000 to 2008, DoD procurement contracts nationwide increased 126 percent. Pennsylvania had the nation’s 14th largest increase at 174 percent. Connecticut, Kentucky, Illinois and Oregon had the largest increases, each with a more than 300 percent increase. Maine and Minnesota, on the other hand, had a decline in DoD procurement contracts.

When comparing Pennsylvania counties with counties across the U.S., the analysis showed no statistically significant difference in per capita DoD procurement spending in 2008. The same was true when comparing

Pennsylvania’s rural and urban counties to other rural and urban counties nationwide.

Rural/Urban

Nationally, and within Pennsylvania, there was a significant difference in per capita DoD procurement contracts between rural and urban counties. In Pennsylvania, there was an \$817 per capita gap in contract spending between rural and urban counties. Nationwide there was a \$789 rural-urban gap.

One similarity between rural and urban counties, both nationally and within Pennsylvania, was the rate of change in DoD procurement contracts. From 2000 to 2008, rural and urban counties in Pennsylvania and the U.S. saw a doubling of their procurement contract awards.

Distribution of DoD Procurement Contracts

Most spending on procurement contracts was skewed toward a handful of rural and urban counties. For example, 27 percent of rural counties and 3 percent of urban counties had no procurement contracts in 2008.

When examining the total money spent on contracts, 81 percent of the total rural procurement contracts went to just 76 counties (3 percent). For urban counties, 97 percent of the total procurement contracts went to 225 counties (29 percent).

Within Pennsylvania there was a similar distribution pattern. Among Pennsylvania’s 48 rural counties, six

counties, namely Cambria, Centre, Clarion, Franklin, Fulton and Monroe, accounted for 73 percent of contracts. Among the commonwealth’s 19 urban counties, Allegheny, Delaware and York accounted for 76 percent of procurement contracts.

DoD Procurement Contracts and Economic Development

In 2008, DoD procurement contracts totaled more than \$345 billion in the U.S. and about \$14 billion in Pennsylvania. To determine if these contracts had an economic impact in Pennsylvania, the Center analyzed the statistical correlation between DoD procurement contract spending and four economic indicators:

Table 2: Distribution of Defense Procurement Contracts in PA Rural and Urban Counties, 2008

	# Counties	% of Total	Procurement Contract Amount (\$1,000)	% of total
Pennsylvania Rural Counties				
No Procurement	0	0.0%	0	0.0%
\$1 to \$499,999	9	18.8%	\$2,072	0.1%
\$500,000 to \$999,999	7	14.6%	\$6,266	0.4%
\$1.0 million to \$9.9 million	12	25.0%	\$41,121	2.4%
\$10.0 million to \$49.9 million	11	22.9%	\$216,848	12.8%
\$50.0 million to \$99.99 million	3	6.3%	\$193,031	11.4%
\$100.0 million to \$999.9 million	6	12.5%	\$1,234,585	72.9%
\$1.0+ billion	0	0.0%	-	-
Total Pennsylvania Rural Counties	48	100.0%	\$1,693,923	100.0%
Pennsylvania Urban Counties				
No Procurement	0	0.0	0	0.0%
\$1 to \$499,999	0	0.0%	0	0.0%
\$500,000 to \$999,999	0	0.0%	0	0.0%
\$1.0 million to \$9.9 million	1	5.3%	\$4,851	<0.1%
\$10.0 million to \$49.9 million	4	21.1%	\$136,163	1.2%
\$50.0 million to \$99.99 million	3	15.8%	\$193,942	1.6%
\$100.0 million to \$999.9 million	8	42.1%	\$2,522,867	21.3%
\$1.0+ billion	3	15.8%	\$8,971,058	75.8%
Total Pennsylvania Urban Counties	19	100.0%	\$11,882,854	100.0%

Source: Consolidated Federal Funds Report for Fiscal Year 2008, U.S. Census Bureau

wages, change in wages, the unemployment rate, and the change in the number of business establishments.

The analysis found that, in Pennsylvania, there was no significant correlation between procurement contracts per capita and the four economic indicators. Nationally, however, wages and change in wages were significantly correlated with procurement contracts per capita in both rural and urban counties.

This finding could suggest that, within Pennsylvania, DoD procurement contracts have a limited impact on economic development indicators. Since procurement contracts are generally skewed to a handful of counties, the overall economic effect may be diluted. Another possible explanation is that the procurement process has a long lead time that does not produce immediate economic changes.

Nationally, defense procurement contracts appear to have some impact on wages, but not on unemployment or the number of businesses. This finding could suggest that procurement contracts are important for individual businesses and their employees, but have limited impact on unemployment and business starts.

Conclusions

In 2008, DoD procurement contracts in rural Pennsylvania totaled almost \$2 billion. Nationally, DoD had procurement contracts of about \$46 billion.

Both rural and urban Pennsylvania counties have seen significant increases in procurement contracts over the last nine years, 2000 to 2009. Among rural counties, the amount spent on procurement contracts tripled while urban counties saw a doubling of spending. There was a similar pattern among nation's rural and urban counties.

In Pennsylvania and U.S., the lion's share of DoD procurement contracts went to a small number of counties. For example, within Pennsylvania, three counties received two-thirds of procurement contracts.

There are significant differences in procurement contracts between rural and urban counties. On a per capita basis, rural counties through the U.S. received \$789 less than urban counties. Within Pennsylvania, the rural/urban gap equaled \$817 per capita.

Within rural and urban Pennsylvania, spending on DoD procurement contracts appeared to have a marginal economic impact. Per capita spending was not significantly correlated with wages, change in wages, unemployment, or changes in the number of businesses. Nationally, DoD procurement contracts were significantly correlated with wages and change in wages.

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