The Potential Impact of DOD Agency Relocation on the Northern Virginia and Statewide Economies

Prepared for

The Northern Virginia Regional Commission

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Introduction

The adoption and implement of regulations affecting the safety setback and perimeter and other security conditions of Department of Defense Agencies located in leased or government-owned office space in Arlington and Fairfax Counties, Virginia could have significant impact on the local, regional and statewide economies. With the exception of the Pentagon and government-owned buildings located on military installations or reservations, government-owned and commercial office buildings in Northern Virginia, as in other urban centers nationwide are built to maximize the utilization of land and to facilitate and encourage pedestrian circulation and use of public transportation and other supporting infrastructure. Few if any existing privately owned office buildings would conform to the proposed setback requirements being considered. Enforcement of these regulations could result in Department of Defense Agencies having to relocate from their present buildings to remote military installations or compounds outside of Northern Virginia.

The loss of these Agencies as tenants and employers would have a measurable impact on the local economies but their indirect impacts are likely to be even greater than their direct impacts. In addition to the potential loss of jobs and associated payroll and consumer spending potential, these DOD Agencies represent a source of local business that has strong linkages to the private sector in Northern Virginia and the Washington metropolitan area and also extends more broadly to and affects the economy of the Commonwealth of Virginia. These potential impacts can be measured as losses of income within the economies of all effected jurisdictions, losses of jobs, and losses of economic activities supported by and dependent on the spending of the effected DOD Agencies. Besides the potential loss of DOD uniform military and civilian jobs if these Agencies were forced to relocate to conforming buildings, it is likely that some or all of their local contractors would follow them to their new locations. The requirements and benefits of locational proximity have brought many DOD and other federal contractors to Northern Virginia. Consequently, it is not illogical to expect that many of these contractors would follow their contracting agency if it were forced to relocate from its current site.

The potential economic cost of the relocation threat can be described and its magnitude measured. The significance of this economic cost can be established by comparing it with the effected economy as a loss or subtraction. While the potential loss of economic activity is measured on an annual basis, it is also cumulative and continuing annually thereafter. In the long run, the cumulative effects become large and provide the full measure of the potential losses that could result from the relocation of federal agencies from the local economy. The economic analyses herein are presented in 2005 dollars even though the most recently available federal procurement data are for fiscal year 2003. The multipliers relied on for calculating economic, employment and income effects are calculated by the US Department of Commerce's Bureau of Economic Analysis for the

Commonwealth of Virginia, the Washington metropolitan area (PMSA) and for the individual jurisdictions comprising Northern Virginia. For purposes of this assessment Northern Virginia has been defined to include: Arlington, Fairfax, Loudoun, Prince William and Stafford Counties and the Cities of Alexandria, Falls Church, Fairfax, Manassas and Manassas Park.

Potential Direct Economic Impacts

Data provided by the City of Alexandria, and Arlington, Fairfax Loudoun and Prince William Counties identified 40 Department of Defense agencies that occupied leased but nonconforming office and warehouse space in 94 separately locations (distinct leases). These agencies currently occupy 8.023 million square feet of space (see Appendix Table 1 for agency list). It is estimated that these DOD agencies employ 44,431 workers with a payroll of \$4.44 billion.

Table 1

The Potential Economic Impact of Lost Federal Employment Due to the Relocation of DOD Agencies in Nonconforming Office and Warehouse Space from Alexandria, and Arlington, Fairfax, Loudoun and Prince William Counties, 2005 (in billions of 2005 dollars)

Direct Outlays	Total Output	Personal Earnings	Jobs Supported
\$4.438	\$6.493	\$1.069	41,419
	7.541	2.230	86,246
	8.786	2.414	98,538
	Outlays	Outlays Output \$4.438 \$6.493 7.541	Outlays Output Earnings \$4.438 \$6.493 \$1.069 7.541 2.230

Source: GMU Center for Regional Analysis. *includes Northern Virginia. Notes: Total Output is total value of goods and services produced; personal earnings is income accruing to residents living in specified jurisdiction; jobs supported includes workers than may reside outside the specified jurisdiction.

The relocation of these DOD Agencies from Northern Virginia and the Washington metropolitan area would cost the region jobs and income and the related consumer spending associated with the Agency jobs relocated from Arlington and Fairfax Counties. The magnitudes of these economic losses are shown in Table 1. Additionally, the ramifications of this direct loss of jobs and consumer spending potential can be measured in terms of lost retail sales and reduced demand for housing. Based on the effected work force, these potentials losses would total \$1.065 billion in the metropolitan areas with \$799 million of these lost retail sales occurring in Northern Virginia. The loss of this

workforce, if they relocated from the Washington area, would reduce housing demand by an estimated 27,770 housing units region wide with 16,680 of these housing units in the Northern Virginia market. These reductions in housing demand are equivalent to one year's new housing construction. Such a reduction in housing demand would be reflected in decreased housing sale prices with stabilization at a lower value requiring at least two full years also have significant secondary impacts on the economy as well as have substantial negative impacts on state and local tax revenue flows.

While these losses of directly and indirectly related jobs and monetary flows have been shown to be significant, the potential threat to federal contractors linked to these DOD agencies could yield additional economic costs to the host and surrounding Northern Virginia jurisdictions. The economic impacts of displacing the federal contractors with contracts from the 40 DOD agencies identified in Appendix Table 1 are estimated based on the funding levels that can be identified (many DOD agencies do not have independent contracting authority and their contract values are reported in the Department total) and analyzed in the follow section.

Potential Federal Contractor Impacts

Federal contracting has become the principal driving force of the Northern Virginia economy. In FY 2003, the federal government purchased a total of \$22 billion of goods and services from firms located in Northern Virginia (for work to be performed locally). Included in this total is \$13.6 billion from all DOD agencies. An analysis of the federal contracting of the 40 identified DOD agencies in non-conforming leased office and warehouse space identified 736 distinct federal contractor in Northern Virginia that received a total of 3,628 contracts with a total value of \$1.56 billion in 2003.

It is important to recognize that the identified contracting activity (Appendix Table 1) understates the full magnitude of potential contracting losses as only 9 of these agencies reported contract activity. The other 31 DOD agencies either did not have independent contracting authority (their contracting activity was reported by another unit) or they did not have any local contracts. Still, if all 40 DOD agencies were forced to relocate and their contractors relocated with them, the agency impacts identified in Table 2 would be substantially larger and could include contracts with non-DOD agencies.

The loss of this contracting activity from the Northern Virginia, metropolitan and statewide economies will impact the total value of their economies, result in the loss of contractor jobs and related payroll as well as the indirect and induced spending that is generated by this local contracting activity. These impacts are summarized in Table 2 below.

Due to the economic interdependencies within the Washington metropolitan area, the loss of federal contract dollars of \$1.56 billion in Northern Virginia will also have consequences in the District of Columbia and Suburban Maryland. While there is substantial commuting and cross-jurisdictional shopping and business transactions tying

the metropolitan area economy together, these interdependencies also extend to the remainder of the Commonwealth.

Direct Impacts

The loss of federal contract value has widespread employment and income impacts. In direct terms, it is estimated that \$1.56 billion in federal procurement outlays supports 10,872 local contractor jobs with a payroll totaling \$815.4 million. If these contractor jobs occupied 250 gross square feet of office space on average, this relocation would release 2.72 million square feet of space back to the Northern Virginia office market. This would have the effect of adding 1.8 percentage points to the current office vacancy rate.

This payroll represents purchasing power. With approximately 24 percent of this payroll supporting taxable retail sales, the loss of personal income translates into \$195.6 million in lower retail sales in the region. The Commonwealth of Virginia's share of this potential loss of retail spending is estimated at 55 percent or \$107.6 million. The loss of this retail spending would cost the Commonwealth \$5.4 million in retail sales tax collections each year. It would also have impacts on retail space demand, vacancy rates and retail jobs.

Indirect Impacts

If the federal contractors located in Northern Virginia follow the relocation of the 40 DOD agencies currently located in Alexandria, and Arlington, Fairfax, Loudoun and Prince William Counties in nonconforming space, the Northern Virginia economy is exposed to the potential loss of \$1.56 billion in federal contracting (this is only the federal contracting associated with the DOD agencies that could be identified and that is occurring in Northern Virginia). While the loss of this federal contracting has regional and statewide implications, its principal impact would be felt in Northern Virginia, as 74 percent of its impacts would accrue locally.

This reduction in total output of \$2.3 billion (\$2.87 billion in 2005\$s) in a single year would represent 2 percent of Northern Virginia's gross regional product (GRP). With GRP projected to grow 5.1 percent in 2005, if this loss occurred this year, it would reduce the year's growth rate to 3.1 percent, a 40 percent reduction in growth and to a rate of growth that could be sustained with little of no net increase in jobs. At the metropolitan and Commonwealth levels this loss of GRP would account for approximately 1% each.

The spending and re-spending of the federal contract dollars—flows resulting from payroll and vendor spending—generate secondary impacts within the economy. Overall in Northern Virginia, the loss of \$1.56 billion in federal contracting would cost it 14,568 jobs in supporting sectors with Northern Virginia resident's income declining by \$375 million (see Table 2). The metropolitan area and statewide impacts would be larger due again to the patterns of commuting, shopping and business transactions.

The Potential Economic Impact of Lost Federal Contracting Due To
The Relocation of DOD Agencies in Nonconforming Office and Warehouse Space
From Alexandria and Arlington, Fairfax, Loudoun and Prince William Counties, 2003
(in billions of 2003 dollars)

Table 2

Direct Outlay	Total Output	Personal Earnings	Jobs Supported
\$1.626	\$2.282	\$0.375	14,568
	2.652	0.785	30,337
	3.088	0.850	34,660
	Outlay	Outlay Output \$1.626 \$2.282 2.652	Outlay Output Earnings \$1.626 \$2.282 \$0.375 2.652 0.785

Source: GMU Center for Regional Analysis. *includes Northern Virginia. Notes: Total Output is total value of goods and services produced; personal earnings is income accruing to residents living in specified jurisdiction; jobs supported includes workers than may reside outside the specified jurisdiction.

In Northern Virginia, this ancillary job loss, spanning all sectors, could increase the vacancies in office-type space by another 1.8 million square feet, adding another 1.5 points to the vacancy rate. The impacts on the retail and consumer service sectors would also be measurable. With about one-third of this job loss impacting the retail sector and restaurants and other personal services, retail spending in Northern Virginia could decline by up to \$96 million annually.

This loss of indirect and induced jobs would impact the local housing market dropping demand by 9,100 units; statewide, decreased demand for residential units could decline by an additional 12,560 housing units.

As these secondary effects of decreased spending and business transactions extend their impacts statewide, the magnitude of employment and income effects are shown to double their respective impacts in Northern Virginia. The job loss impact could total 34,660 if these DOD agencies were to relocate out of the State with the loss of \$85 0 million in personal (taxable) earnings statewide.

Summary of Impacts

What may appear to be a localized impact in fact has far reaching effects. While Northern Virginia would feel the brunt of the direct and indirect economic impacts from the relocation of DOD agencies and their contractors from non-conforming office and warehouse space, including both the loss of 44,431 federal agency workers with a payroll of \$4.44 billion and the loss of federal contracting activity involving at least 736 firms with at least \$1.56 billion in contract value (in 2003), the job and income losses would extend across all local jurisdictions in the metropolitan area as well as impact businesses and workers elsewhere in the Commonwealth of Virginia. This direct federal job loss and payroll could cost the Washington Area \$7.5 billion in total direct impact while the total economic impact on Northern Virginia and the Commonwealth of this lost spending could total \$6.5 billion and 8.7 billion respectively.

Beyond the direct loss of federal jobs, Northern Virginia could expect to experience a loss of 56,000 jobs across all other sectors with associated personal earnings of \$1.44 billion from the combined losses in direct agency spending and federal contracting activity with firms located in Northern Virginia. Statewide, these combined losses could total 133,200 jobs and \$3.26 billion in earnings. If these DOD agencies relocated from the Commonwealth and took all of their federal contracting activity with them, these losses could be even greater as many of these federal contractors also have contracts with other DOD and non-DOD federal agencies.

The spending, income and employment impacts that have been identified and documented herein confirm the potential threat that relocation of DOD agencies leasing non-conforming office and warehouse space in Northern Virginia could have on the Northern Virginia and Commonwealth economies. These impacts could affect all sectors of the economy, reduce consumer spending and undermine the local housing market. These losses could also have significant local and state level fiscal impacts. And, while these economic impacts have been found to be substantial in the first year, it is important to recognize that they will recur annually thereafter.

Federal Contract Activity of Northern Virginia DOD Agencies In Leased Space, FY2003

	NUMBER OF	NUMBER OF	TOTAL CONTRACT
AGENCY	CONTRACTORS	CONTRACTS	VALUE (\$'000)
DEFENSE LOGISTICS AGENCY	165	553	144,452
DARPA CONTRACT MANAGEMENT DIR.	59	181	89,619
DISA, NATIONAL CAPITAL REGION	182	884	439,778
MISSILE DEFENSE AGENCY	70	367	382,243
NAVAL FACILITIES ENGINEERING COM	17	69	10,727
OFFICE OF NAVAL RESEARCH, HEADQU	133	806	173,138
U.S. ARMY CORPS OF ENGINEERS - CI	90	202	15,395
DEPT OF TRANS/COAST GUARD	19	140	11,289
DEFENSE THREAT REDUCTION AGENCY	137	426	293,865
TOTAL	872	3,628	1,560,506
TOTAL UNDUPLICATED NUMBER OF CONTRACTORS	736		
OTHER DOD AGENCIES (SEE NOTE)			
ACQUISITION REFORM COMMUNICATIONS CENTER	#N/A	#N/A	#N/A
ADVANCED DISTRIBUTED LEARNING INITIATIVE CO_LAB	#N/A	#N/A	#N/A
AFIS	#N/A	#N/A	#N/A
ARMED FORCES RADIO & TELEVISION SERVICE	#N/A	#N/A	#N/A
ARMY COMMUNITY AND FAMILY SUPPORT CENTER	#N/A	#N/A	#N/A
ARMY CONTRACTING	#N/A	#N/A	#N/A
ARMY ENTERTAINMENT	#N/A	#N/A	#N/A
ARMY TOTAL PERSONNEL COMMAND	#N/A	#N/A	#N/A
ASS'T SEC., ARMY MANPOWER AND RESERVE AFFAIRS	#N/A	#N/A	#N/A
DEFENSE ACQUISITION UNIVERSITY	#N/A	#N/A	#N/A
DEFENSE CONTRACT AUDIT AGENCY	#N/A	#N/A	#N/A
DEFENSE INTELLIGENCE AGENCY	#N/A	#N/A	#N/A
DEFENSE INVESTIGATIVE SERVICE	#N/A	#N/A	#N/A
DEFENSE LOGISTICS SERVICE	#N/A	#N/A	#N/A
DEFENSE MEDICAL LOGISTICS SUPPORT	#N/A	#N/A	#N/A
DEFENSE PRINTING SERVICE	#N/A	#N/A	#N/A
DEFENSE SECURITY SERVICE	#N/A	#N/A	#N/A
DIRECTOR, TEST SYSTEMS ENGINEERING AND EVALUATION3	#N/A	#N/A	#N/A
EXPLOSIVES SAFETY BOARD	#N/A	#N/A	#N/A
HQ USMC	#N/A	#N/A	#N/A
HQ, DEPARTMENT OF THE ARMY	#N/A	#N/A	#N/A
JOINT CHIEFS OF STAFF	#N/A	#N/A	#N/A
MARINE RESERVE OFFICERS	#N/A	#N/A	#N/A
NAVAL FACILITIES ENGINEERING COMMAND	#N/A	#N/A	#N/A
OFFICE OF THE SECRETARY OF DEFENSE	#N/A	#N/A	#N/A
PENTAGON MOTOR POOL	#N/A	#N/A	#N/A
PENTAGON SWING SPACE	#N/A	#N/A	#N/A
PPRO	#N/A	#N/A	#N/A
RECLASSIFICATION MANAGEMENT BRANCH	#N/A	#N/A	#N/A
U.S. ARMY INTELLIGENCE & SECURITY COMMAND (INSCON)	#N/A	#N/A	#N/A
WASHINGTON HEADQUARTERS SERVICE	#N/A	#N/A	#N/A

THESE AGENCIES ARE NOT INDEPENDENT CONTRACTING AGENCIES AND PROCUREMENT INFORMATION IS NOT AVAILABLE.