

***Economic Impact of
George Mason University on the
Northern Virginia Economy***

by
Lisa Fowler
and
Stephen S. Fuller

Center for Regional Analysis
George Mason University
Fairfax, Virginia

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The Impact of George Mason University On the Northern Virginia Economy

The total economic impact of George Mason University was \$1.6 billion in fiscal year 2005. The Northern Virginia region received \$599.5—or 37.5%—of the total economic benefits (Figure 1). The economic impact of the university is driven primarily by employee earnings, procurement spending and student spending. Combined, these three categories account for almost 94% of total output created by the university (Table 1).

The total economic impacts reflect the sum of university outlays (direct and related university spending) and their indirect and induced effects as this spending is re-spent by businesses and their employees in the local economy. Total direct and related university spending was \$582.7 million in fiscal year 2005 (Table 2). Direct spending associated with employee earnings and current period benefits totaled \$255.2 million and procurement spending totaled \$151.3 million. Other spending—student, retiree, and visitor spending—represents related, rather than direct spending, and totaled \$161.8 million in fiscal year 2005. The George Mason University Foundation had an additional \$14.4 million in various expenditures that occurred outside of the university payroll and procurement systems.

Nearly 70% of total university spending occurred in Northern Virginia, primarily because most employees and students live in Northern Virginia. Approximately 90% of employee earnings went to faculty and staff living in Northern Virginia and more than 90% of student spending occurred in Northern Virginia. More than half of retiree spending occurred in the region. However, only 31% of procurement expenditures went for goods and services bought from Northern Virginia firms.

University spending in Northern Virginia contributed almost \$600 million to the local economy, generating over \$101 million in personal earnings and supporting 4,530 area jobs (Table 3).

Figure 1. Economic Impact of George Mason University
by Geographic Area, FY2005

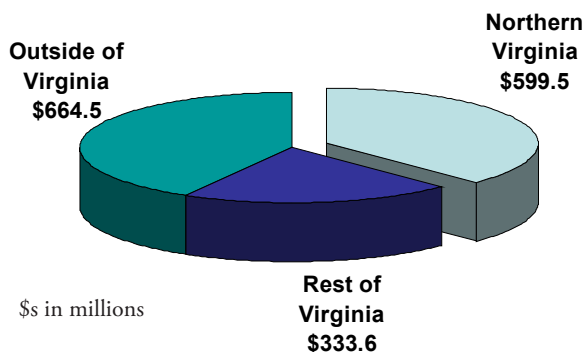


Table 1. Total Output by Category of University
Spending, FY2005

Category	Total Output	Percent
Employee Earnings	\$610.5	38.2
Procurement	500.9	31.4
Student Spending	384.7	24.1
Retiree Spending	33.3	2.1
Visitor Spending	20.5	1.3
Foundation Spending	47.7	3.0
Totals	\$1,597.6	100.0

\$s in millions

Table 2. Total Direct and Related University
Spending by Category, FY2005

Category	Total Direct Outlays	Northern Virginia Share	Percent
Employee Earnings	\$255.2	\$206.5	80.9
Procurement	151.3	47.0	31.0
Student Spending	137.7	125.3	91.0
Retiree Spending	16.9	10.0	59.2
Visitor Spending	7.2	7.2	100.0
Foundation Spending	14.4	10.0	69.7
Totals	\$582.7	\$405.9	69.7

\$s in millions

Table 3. Total Impact of George Mason University
on the Northern Virginia Economy, FY2005

Source of Impacts	Total Output	Personal Earnings	New Jobs
Employee Earnings	\$301.1	\$49.4	2,247
Procurement	74.6	14.4	557
Student Spending	182.7	30.0	1,363
Retiree Spending	14.6	2.4	109
Visitor Spending	10.6	1.9	119
Foundation Spending	15.9	3.1	122
Totals	\$599.5	\$101.2	4,530

\$s in millions

Total Output = contribution to the total value of goods and services generated in Northern Virginia

Personal Earnings = new wages and salaries earned by residents of Northern Virginia

New Jobs = new full-time, year-round equivalent jobs supported by the direct outlays associated with Mason and their indirect impacts

Wages and Benefits

In fiscal year 2005, the university employed 2,775 full-time and 5,087 part-time personnel for a total of 7,862 employees. Of these totals, 1,680 were full-time faculty, 1,095 were full-time staff, 1,517 were part-time faculty, 2,562 were part-time staff, and 1,008 were student workers.

Nearly 80 percent (79.5%) of university faculty and staff were residents of Northern Virginia. More than 50 percent (53.1%) lived in Fairfax County or the independent cities of Fairfax and Falls Church. Another 1,618 employees—or 20.6% of all employees—lived in Arlington, Prince William, and Loudoun Counties.

The salaries paid by the university in fiscal year 2005 totaled \$202.7 million, with 81.2% paid to employees living in Northern Virginia (Table 4). Almost 60 percent of salaries (58.3%) were paid to residents of Fairfax. A total of 17.1% of all salaries were paid to employees living in Arlington, Prince William and Loudoun counties.

In addition to salaries, the university makes contributions on behalf of its employees for a variety of fringe benefits including payments into health insurance, disability, and unemployment insurance. While these contributions do not represent cash disbursements that can be directly spent in the current year, these payments may show up in the economy as health expenditures and unemployment compensation disbursed by the Commonwealth to unemployed resident workers. In fiscal year 2005, the university made contributions totaling \$22.8 million in the form of current period fringe benefits on behalf of its employees (Table 5).

University faculty members have historically supplemented their income through consulting and lecture fees and royalties. No information on extra-university earnings is available specifically for George Mason University faculty; however, based on a survey of George Washington University faculty, it can be estimated that full-time faculty earn supplementary income in the amount of 24% of their university income. Therefore, non-university earnings for full-time faculty was an estimated \$29.7 million in fiscal year 2005 (Table 6). Adding this extra-university personal income to the university payroll increases the total overall earnings of university personnel to \$232.4 million. Combining this amount with current period benefits paid to the university results in total earnings and benefits earned by the university workforce to over a quarter of a billion dollars (\$255.2 million).

Table 4. George Mason University Payroll by Geographic Area, FY2005

Category	Northern Virginia	Rest of Virginia	Outside Virginia	Total
Full-Time Faculty	\$96.8	\$2.1	\$24.9	\$123.8
Full-Time Staff	36.6	1.3	2.5	40.5
Part-Time Faculty	10.2	0.2	2.4	12.9
Part-Time Staff	13.9	1.0	1.8	16.7
Students	6.9	0.3	1.5	8.7
Totals	\$164.5	\$4.9	\$33.3	\$202.7
Percent of Total	81.2	2.4	16.4	100.0

\$s in millions

Table 5. George Mason University Payroll and Current Period Benefits, FY2005

Category	Payroll	Benefits
Full-Time Faculty	\$123.8	\$14.5
Full-Time Staff	40.5	6.1
Part-Time Faculty	12.9	0.9
Part-Time Staff	16.7	1.2
Students	8.7	0.1
Totals	\$202.7	\$22.8

\$s in millions

Table 6. Total University Faculty Income Including Non-University Earnings, FY2005

Area	Faculty Payroll	Estimated Non-University Earnings	Total Faculty Income
Northern Virginia	\$107.1	\$23.2	\$130.3
Rest of Virginia	2.3	0.5	2.8
Outside Virginia	27.4	6.0	33.4
Totals	\$136.7	\$29.7	\$166.5
Percent of Total	82.1	17.9	100.0

\$s in millions

Figure 2. Total University Earnings and Benefits, FY2005

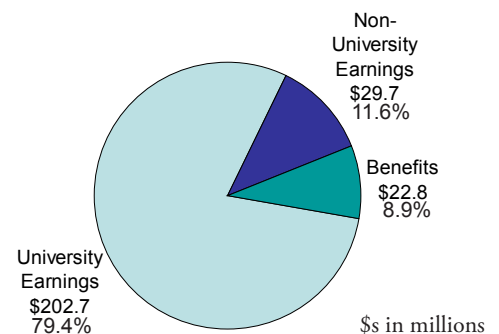


Table 7. University Procurement Spending by Category, FY 2005

Category	Northern Virginia		Rest of Virginia		Outside Virginia		Totals	
	No. of Vendors	Spending	No. of Vendors	Spending	No. of Vendors	Spending	No. of Vendors	Spending
Goods	2,180	\$10.8	285	\$12.5	1,120	\$22.5	3,585	\$45.7
Services	5,607	\$27.5	848	\$9.8	1,799	\$33.7	8,254	\$71.0
Leases, Rentals and Utilities	203	\$5.1	24	\$0.4	72	\$1.9	299	\$7.3
Capital	73	\$3.6	17	\$6.6	49	\$17.1	139	\$27.3
Totals	8,063	\$47.0	1,174	\$29.2	3,040	\$75.1	12,277	\$151.3

\$s in millions

Figure 3. University Procurement Spending by Geographic Area, FY2005

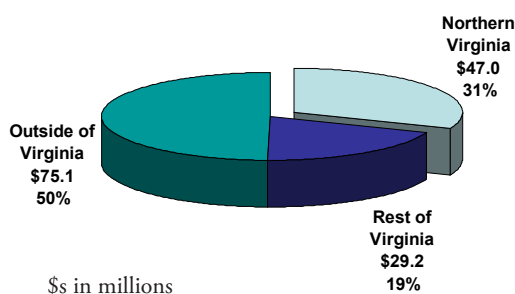
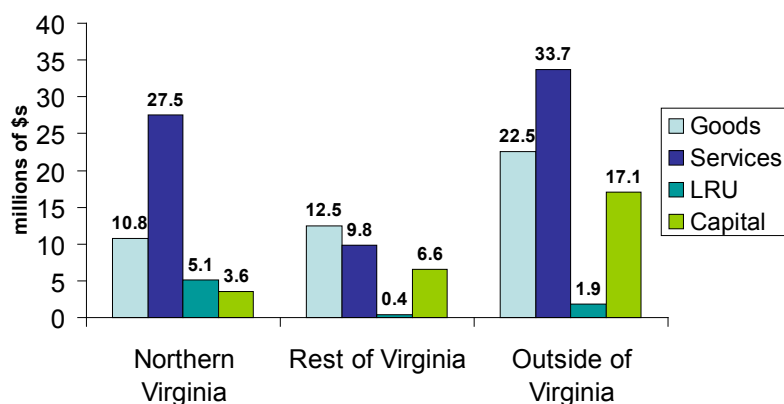


Figure 4. University Procurement Spending by Category and Geographic Area, FY2005



Procurement

The university's total procurement spending was \$151.3 million in fiscal year 2005 (Table 7). This spending was spread over 12,277 vendors. Nearly half (46.9%) of university procure spending was for Services, 30.2 percent was for Goods, 18.0 percent was for current year Capital expenses, and 4.8 percent went to Leases, Rentals and Utilities.

The location of vendors was determined as best as possible by the location actually providing the good or service to the university and not necessarily the vendor's billing address, which could be a national headquarters address. While more than 80% of payroll spending went to Northern Virginia residents, a much smaller share of procurement spending went to Northern Virginia vendors. Only 31.0 percent of total procurement spending was received by Northern Virginia vendors, while 19.3 percent was paid to vendors in other parts of Virginia, and the largest share—49.7 percent—was paid to vendors in other states (Figure 3). Northern Virginia captured \$27.5 million of university spending on Services and \$10.8 million of spending on Goods (Figure 4).

Because the region's manufacturing and wholesale trade sectors are small, some of this non-local purchasing is understandable. However, these potential sales continue to represent a business opportunity for the Northern Virginia region and the state.

Student Spending

George Mason University's total student enrollment in Fall 2004 was 30,452 (Table 8). This total includes full-time and part-time undergraduate, graduate and law students, as well as other students enrolled in university classes through English Language Institute, Continuing Education, and other non-degree programs. In addition, there were 13,669 students taking summer school classes in 2004. Of these, 9,707 were also enrolled in Fall 2004 classes.

A total of 3,904 students—mostly undergraduates—lived on-campus in Fall 2004. Another 23,594 students lived off-campus in Northern Virginia. Residence of university students was derived based on students' self-reported current mailing address and/or permanent address information. It would be very useful to know the number of students who moved to the Northern Virginia region for the express purpose of attending the university. Unfortunately, there is no reliable information on the place of residence of Fall 2004 students at the time of application. However, using data from the university's Institutional Research and Reporting (IRR) office on 2004 admissions, it is estimated that 41.4 percent of off-campus students living in Northern Virginia moved into the region specifically to enroll at the university.

The value of George Mason University students to the local economy is substantial. Student spending associated with university enrollment was conservatively estimated for full-time and summer school students only. While part-time students also incur expenses in the region, it is not possible to separate the proportion of their expenses associated with being a university student and the proportion related to their other commitments (e.g. job). Furthermore, it was assumed that off-campus undergraduate students lived with their parents and therefore did not incur expenses for off-campus food or for housing. Also excluded from these student spending estimates are beginning-of-the-semester one-time outlays for furniture. Thus, total university student spending is underestimated in this report.

No survey of the spending patterns of George Mason students has been done, so estimates of total student spending were based on data collected through spending surveys at Virginia Tech and George Washington University, both done in 1999. Spending data were adjusted to 2005 dollars using the CPI-U.

Students spent a total of \$141.0 million dollars on non-housing purchases in 2004-2005 (Table 9). Meals, Beverages and Groceries accounted for 36.9 percent of expenditures. Retail and Other Goods accounted for 26.7 percent. Entertainment and Recreation expenditures comprised 12.5 percent and Transportation accounted for 12.3 percent of total expenditures. Based on the residence of students, more than 90 percent (92.2%) of all full-time student spending occurred in Northern Virginia, with 19.1 percent by on-campus students and 73.1 percent by off-campus residents living in Northern Virginia.

Total student spending on off-campus housing was estimated at \$22.3 million with \$19.3 million (86.2%) spent in Northern Virginia (Figure 5).

Table 8. University Students by Classification, Fall 2004

Student Classification	On-Campus Students	Off-Campus Students			Total
		Northern Virginia	Rest of Virginia	Outside Virginia	
Undergraduate	3,828	11,989	656	334	16,807
Graduate	56	6,963	457	711	8,187
Law	0	686	49	41	776
Other	20	3,956	249	457	4,682
Totals	3,904	23,594	1,411	1,543	30,452
Pct. Of Total	12.8	77.5	4.6	5.1	100.0
Total Full-Time	3,800	10,421	610	482	15,313
Pct. Of Full-Time	24.8	68.1	4.0	3.1	100.0

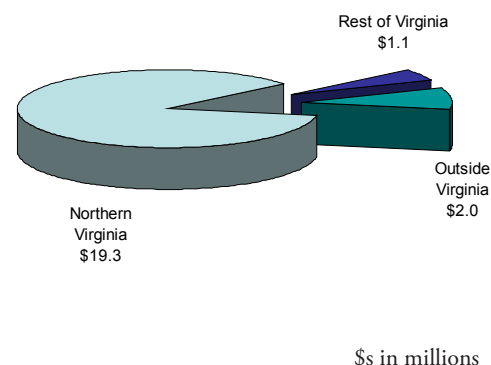
Source: University registrar

Other includes English Language, Continuing Education, Consortium, Non-Degree and Unclassified Students

Table 9. Full-Time Student Spending by Major Type, Except Housing, FY 2005

Type of Purchase	On-Campus Students	Off-Campus Students			Total
		Northern Virginia	Rest of Virginia	Outside Virginia	
Meals, Beverages & Groceries	\$10.5	\$37.4	\$2.1	\$1.9	\$52.0
Entertainment & Recreation	3.2	12.9	0.7	0.7	17.6
Services	0.8	3.2	0.2	0.2	4.4
Health	2.2	8.9	0.5	0.5	12.0
Transportation	3.2	12.8	0.7	0.7	17.4
Retail & Other Goods	6.9	27.7	1.6	1.4	37.6
Total	\$26.9	\$103.0	\$5.8	\$5.3	\$141.0
% of Total	19.1	73.1	4.1	3.8	100.0

Figure 5. Student Spending on Off-Campus Housing, FY2005



Retiree Spending

The university reports that it had 424 retired employees in 2005 of whom it is estimated that 251 (59.2%) lived in Northern Virginia. In fiscal year 2005, these local university retirees spent an estimated \$10.0 million within the Northern Virginia economy (Table 10). This spending impacts the economy in a manner similar to the wage-based spending by George Mason's current employees.

Table 10. University Retiree Spending, FY2005

Area	No. of Retirees	Spending	Percent
Northern Virginia	251	\$10.0	59.2
Rest of Virginia	31	1.2	7.3
Outside Virginia	142	5.7	33.5
Total	424	\$16.9	100.0

\$s in millions

Visitor Spending

It is difficult to accurately estimate the number of off-campus visitors to George Mason each year and it is even more difficult to generate annual visitor expenditures. Spending has been estimated for visitors to campus for graduation events, admissions visits, and freshmen move-in day. These calculations provide only a partial measure of the economic benefits associated with visitor spending. Furthermore, these visitor estimates exclude the untold number of single and small-group visits to individual faculty, departments and campus events which, in aggregate, represents large numbers of additional visitors who also may patronize local hops, restaurants and hotels.

Table 11. University Visitor Spending, FY2005

Event	Total Visitors	Spending
Graduation	29,984	\$4.2
Admissions Visits	36,000	2.7
Move In Day	2,175	0.3
High School Graduations	75,000	nc
Concert Hall Events	121,600	nc
Aquatic Center Events	217,000	nc
Freedom Center Events	225,668	nc
Other Patriot Center Events	270,016	nc
Total	973,443	\$7.2

\$s in millions
nc=not calculated

The three major categories of visitors identified in Table 11—graduation, admissions visits and move in day—generated a total of 68,159 visitors in fiscal year 2005. These visitors spent an estimated \$7.2 million on lodging, meals and retail goods. Most of the visitors attending other events at the Patriot Center and Concert Hall are local residents and therefore their spending does not represent new expenditures in the local economy. These visitors would be likely to spend their money on other events in the North Virginia area if the George Mason events did not exist.

University Foundation Spending

The George Mason University Foundation is a non-profit organization that was established to assist the university in generating private support, and to manage, invest, and administer private gifts, including endowment and real property. Some of the Foundation's operating expenses are cycled through the university procurement system, but a significant amount is managed outside of university procurement and is therefore not included in the university procurement tables.

Table 12 lists the additional Foundation expenditures. These expenditures totaled \$14.4 million in fiscal year 2005. The largest category of expenditures was for Grants and Scholarships, followed by Salaries and Benefits. No information was available about the geographic area where the Foundation purchases took place; therefore, it was assumed that the shares of Foundation spending in Northern Virginia, Rest of Virginia and Outside of Virginia were equal to the average for all other spending categories.

Table 12. University Foundation Expenditures, FY2005

Category	Spending	Percent
Grants & Scholarships	\$4.3	30.2
Salaries & Benefits	3.1	21.6
Eminent Scholars & Honoraria	1.4	10.0
Services	1.4	9.8
Conferences/Seminars	1.1	8.0
Meals & Entertainment	0.7	4.7
Special Projects/Events	0.5	3.5
Goods	0.5	3.3
Trust Payments	0.5	3.3
Transfers to Endowment Fund	0.3	2.1
Fees	0.2	1.7
Miscellaneous	0.2	1.1
Dues & Memberships	0.1	0.7
Total	\$14.4	100.0

\$s in millions

Economic Impacts of George Mason University Capital Spending

George Mason University has numerous of major on-going and planned capital improvement projects. These capital outlays impact the Northern Virginia economy in different ways than university operating spending and the expenditures of students and visitors. The economic impacts generated by construction and renovation only last as long as the construction period so the economic impacts are not recurring. Furthermore, annual estimates of capital spending cannot be meaningfully calculated because large projects are generally under construction for several years. However, this does not diminish the economic importance of the university's capital projects.

The university has several major projects planned for 2005, including completion of Housing V and Parking Deck II in Fairfax, Khan Renovation in Arlington, and Academic II in Prince William. The university expects to spend \$231 million on new capital projects and capital improvements between 2004 and 2008 and the university Foundation will spend an additional \$67.0 million during this period (Table 13). The majority of capital spending is for projects on the university's Fairfax campus but the Arlington campus will also experience significant development activity over the next several years (Figure 6)

Figure 6. Capital Construction Spending by Campus, 2004 - 2008

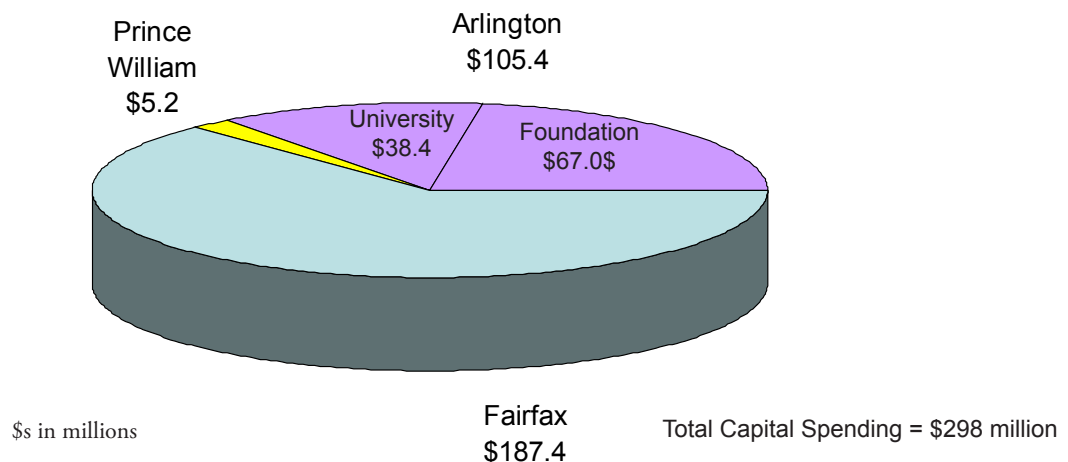


Table 13. Capital Construction Spending, 2004-2008

	Estimated Construction Cost	Estimated Completion Date
Fairfax Campus		
Academic IV - Fairfax	\$0.2	Q4 2004
Housing V - Fairfax	\$3.0	Q2 2005
Parking Deck II - Fairfax	\$9.8	Q2 2005
CHCP Expansion	\$2.3	Q3 2005
Tennis Courts	\$0.5	Q3 2005
Music Rooms	\$1.1	Q3 2005
Utility Infrastructure - Phase A	\$0.2	Q4 2005
Research I - Fairfax	\$17.0	Q2 2006
Aquatic Center Expansion	\$5.8	Q3 2006
Commonwealth/Dominion Renovation	\$4.2	Q4 2006
Krasnow Addition	\$3.6	Q1 2007
Field House Addition	\$4.0	Q3 2007
Patriot Center Addition	\$8.4	Q4 2007
Academic V - Fairfax	\$15.5	Q1 2008
Presidential Park Renovations	\$3.0	Q3 2008
Housing VII	\$77.0	Q4 2008
Thompson/West Renovation	\$11.5	Q4 2008
Parking Deck III	\$20.4	Q4 2008
Total	\$187.4	
Prince William and Arlington Campuses		
Academic III - Prince William	\$5.2	Q2 2005
Arlington (Khan) Renovation	\$1.3	Q4 2005
Arlington Phase II	\$37.1	Q4 2008
Total	\$43.6	
University Total		
	\$231.0	
Foundation Office Building		
	\$67.0	Q3 2006
Grant Total		
	\$298.0	

\$s in millions