

**The Impact of the Consortium of Universities of the
Washington Metropolitan Area on the Economies of the
Washington Metropolitan Area and District of Columbia**

Research Summary

Prepared for

The Consortium of Universities of the Washington Metropolitan Area

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Research Context

The Consortium of Universities* of the Metropolitan Washington area, with its fourteen member institutions, is a major source of economic activity within the Washington metropolitan area and the District of Columbia. While universities impact their host communities in many ways—cultural, educational, social and economic—their economic impacts are frequently undercounted or overlooked altogether. The analyses presented here identify the measurable direct outlays that flow from the Consortium’s member universities and calculate their total economic impacts—the sum of the direct outlays and their subsequent employment and income effects as these monies are re-spent within the local economies.

While the annual payroll and non-payroll expenditures of these universities comprise the most visible sources of their direct annual outlays, student spending, spending in the local area by out-of-town visitors to the campuses and spending by retirees from the universities who have continued to reside locally represent additional sources of economic benefits that would not have been realized had these universities not existed.

Additionally, there are sources of economic impact that cannot be easily quantified on an annual basis that are excluded from these analyses that represent important sources of economic benefits for the local and area economies. These would include: the value of the education and skills transferred to the area’s workforce as a consequence of the presence of these institutions of higher education within the region; the business attraction and interaction linked to the presence of these institutions and their faculties; the intellectual property generated on these universities’ campuses that contribute to the region’s business base and competitiveness; the in-kind and voluntary services provided by these universities and their staffs and students to the community’s betterment; and there are many others. The operating outlays and capital spending by university foundations also have been excluded from this analysis.

*American University, The Catholic University of America, The Corcoran College of Art and Design, Gallaudet University, Georgetown University, George Mason University, The George Washington University, Howard University, Marymount University, National Defense Intelligence College, National Defense University, Trinity Washington University, University of the District of Columbia, and the University of Maryland, College Park.

The true measures of these universities' economic impacts are their contributions to the regional and local economies that would not have taken place in their absence. Consequently, only those outlays that are generated by students who were not residents of the Washington area prior to their matriculation and only non-local visitors are considered here as sources of "new" spending in the Washington area economy. Similarly, employees who do not reside in the Washington metropolitan area and vendors not located within the metropolitan area are not included in the calculations of local economic impact.

Research Findings

The Consortium's member universities are a major source of economic activity within the Washington metropolitan area, as employers, generators of personal income and business transactions, and as sources of direct and indirect spending that span the breadth of the local and area economies. The total economic impact of these universities' direct and indirect outlays, that is, the total contribution of this spending to the Washington area's gross regional product (GRP), totaled \$11.2 billion in 2010 and comprised 2.8 percent of its GRP, a percentage greater than the contribution to the Washington area economy of the region's hospitality industry or its more than 2,500 membership associations. The magnitude of the Consortium's member universities are presented in Appendix Table 1 and summarized below:

- The 14 member universities employed 68,117 full- and part-time workers in 2010 with 97 percent residing within the Washington metropolitan area, 23 percent in the District of Columbia, 45 percent in Maryland, 28 percent in Virginia and the remainder residing elsewhere beyond the metropolitan area.
- Payroll outlays by the member universities totaled \$3.0 billion in 2010;
- Non-payroll outlays for the annual operations of the member universities totaled \$2.2 billion in 2010;
- Capital outlays by these universities during 2010 totaled \$575.2 million;
- Student enrollment during the 2009-2010 academic year averaged 154,884 with 64.3 percent of these students enrolled as undergraduates;
- Sixty-four percent (63.6%) of all students attending the Consortium's member universities were non-residents of the Washington metropolitan area prior to matriculation;
- These universities report that 70 percent of their 3,347 retirees continue to reside within the Washington metropolitan area;

- In 2010 it is estimated that 306,670 out-of-town visitors were attracted to the campuses of these fourteen universities.

The economic impacts of the direct annual outlays by the Consortium’s member universities and spending by the their students, retirees and visitors can be calculated employing multipliers provided by the U.S. Bureau of Economic Analysis from its RIMS II Model for the Washington metropolitan area and for the District of Columbia. These multipliers determine the total contribution of the direct local outlays, as shown in Appendix Table 3, to the Washington metropolitan area’s gross regional product (GRP). These multipliers also permit the calculation of the new personal earnings that this new spending will generate to the benefit of workers residing within the Washington area (or within the District of Columbia) and the number of jobs this direct spending will support.

In 2010, local and non-local spending by the Consortium’s member universities, their students, retirees, and visitors totaled \$7.12 billion with \$5.64 billion or 79.2 percent representing “new” money within the Washington area economy (see Appendix Table 3). Of this \$5.64 billion in total spending in the Washington metropolitan area, \$1.42 billion or 25.2 percent was captured directly within the District of Columbia economy. These economic impacts are presented in detail in Appendix Tables 4 and 5 and are summarized below.

Summary of Economic Impacts of the Consortium of Universities of the Washington Area on the Washington Area and the District of Columbia, 2010
(in billions of dollars)

Area of Impact	Direct Outlays	Total Output(1)	Personal Earnings(2)	Jobs Supported(3)
Washington Area	\$5.638	\$11.234	\$3.573	124,895
District of Columbia	\$1.419	\$1.978	\$0.228	6,636

Source: GMU Center for Regional Analysis; Appendix Tables 4 and 5.

Notes: (1) the total value of goods and services generated directly and indirectly as a result of direct spending; (2) additional earnings generated as a result of the direct outlays being re-spent within the local economy; (3) jobs supported locally and elsewhere by the spending and re-spending of direct outlays within the economy.

Annual operating outlays (payroll, non-payroll and construction) by the Consortium’s fourteen member universities in the Washington area economy totaled \$4.7 billion in

2010 with \$2.9 billion or 61.1 percent of this spending being composed of payroll disbursements (fringe benefits are not included as these consist of mainly deferred recipient spending). These direct local university outlays contributed \$9.6 billion to the Washington area economy, reflecting an aggregate multiplier of 2.0225; that is, for each \$1 of a university's direct outlays, the Washington metropolitan area economy (GRP) grew by a total of \$2.02.

This spending generates personal earnings beyond the direct payroll paid by the universities to their employees as these payroll dollars are re-spent in the Washington area economy. In 2010, the direct and local university outlays generated an additional \$3.1 billion in new personal earnings to workers residing within the Washington metropolitan area as these monies were re-spent and recycled within the local economy. These direct university outlays supported a total of 104,973 full-time equivalent year-round jobs locally and elsewhere in the national economy of which an estimated 69,289 or two-thirds were jobs held by workers residing in the Washington area.

Student spending (excluding outlays for housing) totaled \$749.2 million in 2010. This spending included: meals, beverages and groceries, 36.9%; entertainment and recreation, 12.5%; health services, 8.5%; transportation, 12.3%; other retail goods, 26.7%; and services 3.1%. Housing outlays, while not included here, would have more than doubled the value of total student spending. However, this category of spending is difficult to tabulate accurately with many students living on campus and many others sharing housing expenses with non-students. The student spending included here focuses the majority of benefits on retail and consumer services, spending that supports a large number of jobs and has an important local income effect.

Spending by retirees residing in the Washington area totaled an estimated \$105.4 million in 2010 and spending by non-local visitors totaled an estimated \$36.8 million. This spending substantially benefited the retail and consumer services sectors as well as the food services and hotel sectors. This distribution of spending distributed these benefits across a broad cross section of the local economy generating additional payroll and subsequent spending in support of the local economy.

In total, the Consortium's member universities, their students (non-residents prior to matriculation), retirees still living within the Washington area, and non-local campus visitors spent \$5.6 billion in the Washington area economy in 2010 adding \$11.2 billion to its GRP reflecting a combined multiplier of 1.99. This spending also generated a total of \$3.57 billion in new personal earnings within the Washington area in support of local jobs; that is, for each \$1 in direct spending, \$0.63 in additional personal earnings (wages and salaries) were generated for local workers but not working directly for the universities. This spending supported 124,895 full-time equivalent year-round jobs locally and nationally with an estimated 79,400 or 64 percent of these jobs being in the Washington metropolitan area.

The share of the Washington metropolitan area's economic impacts captured within the District of Columbia economy can also be calculated based on the incidence of the spending—place of residence (or place of spending) of universities employees, vendors, students, retirees and non-local visitors (see Appendix Table 2). Based on the distribution of spending estimated by the Consortium's member universities, the share of the various categories of direct outlays associated with the universities and their associated activities captured to the benefit of the District of Columbia economy totaled \$1.4 billion in 2010, accounting at 25.2 percent of all direct spending by the Consortium members in the Washington metropolitan area.

The contribution of this spending to the District's gross city product (GCP) was calculated to total \$1.98 billion, reflecting an overall multiplier of 1.394. The magnitude of this multiplier is a function of the small geographic size of the District and dependence on non-local workers and suppliers resulting in a smaller retention of indirect and induced benefits from the initial direct outlays than would be found at the regional scale. Still, this spending generated \$228.5 million in new personal earnings to the benefit of workers residing in the City and supported a total of 6,636 jobs of which District residents held an estimated 5,078 or 76 percent. The \$1.98 billion value of total output generated by DC spending by Consortium member universities represented 1.9 percent of the City's GCP in 2010.

Summary of Economic Impacts

The Consortium of Universities of the Washington Area have been shown to be a major source of jobs and income in the Washington metropolitan area and District of Columbia economies accounting for 2.8 percent of the metropolitan area's GRP and 1.9 percent of the District's GCP in 2010.

As employers and generators of jobs, the Consortium's member universities directly accounted for 68,117 full- and part-time jobs with a payroll of \$2.9 billion and indirectly supported a total of 124,895 full-time equivalent year-round jobs of which an estimated 79,400 or 64 percent were held by residents of the Washington metropolitan area with personal earnings (wages and salaries) totaling \$3.6 billion.

The Consortium's member universities also were shown to be a major source of direct business transactions purchasing goods and services from local and non-local vendors totaling \$2.2 billion in 2010 with local vendors capturing \$1.3 billion or 41.4 percent of these sales. Additionally, some of these universities contracted for new construction in 2010. These construction outlays totaled \$575 million and added \$1 billion to the Washington metropolitan area's GRP.

The Consortium's member institutions had an average enrollment totaling 154,884 students, of which 63.6 percent were not residents of the Washington metropolitan area prior to matriculation. These non-local students, over the course of the year (including summer school enrollments) spent \$749.2 million for goods and services (excluding housing) within the region's economy. This student spending contributed

\$1.4 billion to the Washington metropolitan area's GRP, generated \$383 million in new personal earnings and supported a total of 16,778 full-time equivalent year-round jobs of which an estimated 10,080 jobs or 60 percent were local.

Universities are widely recognized as being important as centers of learning, research, medical and other social and intellectual services, culture and innovation, but their contribution to the economy as a source of jobs and income is frequently under valued by elected officials and the general population. The research reported herein provides further evidence of the importance of these economic benefits that accrue to the Washington metropolitan area from the Consortium of Universities of the Metropolitan Washington Area. These fourteen universities, with their 68,117 faculty and staff, their combined local outlays of \$4.7 billion and associated local spending (students, retirees, and non-local visitors) totaling \$891.4 million provided a stabilizing force within the Washington metropolitan and City economies that was particularly important during the recent recession. Additionally, the substantial economic impacts generated by these universities make them a major source of future economic vitality that will gain increasing importance as the Washington area's historic economic base—federal spending—becomes less important as a source of long-term expansion.

Key to the realization of the economic potentials inherent in the Washington area's universities will be increasing their capacity to accommodate: (1) the increasing demands for higher education by a population projected to grow by 1.7 million residents over the coming twenty years; (2) the increasing demands for advanced professional and continuing education by workers already in the labor force as the mix of occupations changes and workers shift jobs reflecting new technologies and accelerating economic change; and (3) the increasing research and outreach activities that contribute directly to the region's competitive position in the national and global economies. This increased capacity will also enable these universities to further enhance the Washington area's quality of life that is so important to attracting and retaining the knowledge workers and creative and innovative businesses essential for achieving the region's future economic potentials.

The economic impacts presented here show that the Consortium's member universities are already a major source of economic activity in the Washington area, accounting for almost 3 percent of GRP. As significant as these economic impacts are, they only account for the easily measured benefits flowing to the regional economy and significantly understate the full magnitude of these universities' ongoing and evolving contributions that are essential to securing the Washington metropolitan area's future in an increasingly competitive global economy.

Appendix Tables

Table 1

Profile of the Consortium of Universities of the
Washington Metropolitan Area, 2010

Metrics	Number/Value
Number of Full and Part-Time Employees	68,117
Number of Full Time	41,551
Number of Staff	26,566
Number of Employees Residing in	
District of Columbia	15,970
Maryland	30,857
Virginia	19,141
Other	2,149
Total Payroll Outlays	\$3,004,809,723
Total Non-Payroll Outlays	\$2,172,346,858
Total Capital Outlays	\$575,227,651
Total University Outlays	\$5,752,384,232
Total Average Annual Enrollment	154,884
Percent Undergraduate	64.3
Percent Non-Residents Prior to Enrollment	63.6
Number of Retirees	3,347
Percent Residing in the Region	70.0
Non-Local Visitors To Campus	306,670

Sources: Survey of Consortium members, GMU Center for Regional Analysis

Table 2

Distribution of Consortium Member Spending
within the Washington Metropolitan Area, 2010
(percent)

Source	DC	Maryland	Virginia	Other
Payroll	20.1	47.2	29.3	3.4
Non-Payroll	22.2	22.3	14.1	41.4
Students*	53.7	23.7	22.6	0.0

Sources: Survey of Consortium members, GMU Center for Regional Analysis. *by location of university in which enrolled

Table 3

Total Outlays Associated with the Consortium of Universities
of the Washington Metropolitan Area, 2010
(dollars in millions)

Sources	Total Outlays	Local Outlays*	Percent Local*
Universities			
Payroll	\$3,004.810	\$2,898.190	96.4
Non-payroll	2,172.347	1,272,995	58.6
Construction	575.228	575.228	100.0
Total Universities	\$5,752.385	\$4,746.414	82.5
Other Sources			
Student Spending	\$1,177.948	\$749.175	63.6
Retiree Spending	150.615	105.435	70.0
Visitor Spending	41.686	36.810	88.3
Total Other	\$1,370.249	\$891.420	65.0
Total Spending	\$7,122.634	\$5,637.834	79.2

Sources: Survey of Consortium members, GMU Center for Regional Analysis
*spending retained in or new to the Washington metropolitan area.

Table 4

Economic Impacts Generated by the Consortium Members' Direct and Associated Outlays in the Washington Metropolitan Area, 2010 (dollars in billions)

Spending Sources	Direct Outlays	Total Output(1)	Personal Earnings(2)	Jobs Supported(3)
Universities				
Payroll	\$2.898	\$5.930	\$1.937	66,997
Non-Payroll	1.273	2.605	0.851	29,430
Construction	0.575	1.064	0.330	8,546
Sub-total	\$4.746	\$9.599	\$3.118	104,973
Students	\$0.749	\$1.374	\$0.383	16,778
Retirees	0.105	0.192	0.054	2,352
Visitors	0.037	0.069	0.018	792
Sub-total	\$0.891	\$1.635	\$0.455	19,922
Totals	\$5.638	\$11.234	\$3.573	124,895

Source: GMU Center for Regional Analysis.

Notes: (1) the total value of goods and services generated directly and indirectly as a result of direct spending; (2) the additional earnings generated within the Washington Area as a result of the direct outlays; (3) the additional new jobs supported nationwide by the spending and re-spending of direct outlays within the Washington area economy.

*columns may not sum to their total due to rounding.

Table 5

Economic Impacts Generated by the Consortium Members' Direct
and Associated Outlays in the District of Columbia, 2010
(dollars in millions)

Spending Sources	Direct Outlays	Total Output(1)	Personal Earnings(2)	Jobs Supported(3)
Universities				
Payroll	\$609.2	\$862.8	\$107.0	3,001
Non-Payroll	482.3	683.0	84.7	2,375
Construction	57.5	70.0	5.0	105
Sub-total	\$1,149.0	\$1,615.8	\$196.7	5,481
Students	\$247.2	\$332.2	\$29.0	1,045
Retirees	10.5	14.1	1.2	44
Visitors	12.2	16.2	1.6	66
Sub-total	\$269.9	\$362.5	\$31.8	1,155
Totals	\$1,418.9	\$1,978.3	\$228.5	6,636

Source: GMU Center for Regional Analysis.

Notes: (1) the total value of goods and services generated directly and indirectly as a result of direct spending; (2) the additional earnings generated within the District of Columbia as a result of the direct outlays; (3) the additional new jobs supported nationwide by the spending and re-spending of direct outlays within the District of Columbia economy.

*columns may not sum to their total due to rounding.

