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The Economic Impact of George Washington University on the Washington Metropolitan Area

"Interim Report"

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by

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Table of Contents

Greater Washington Research Center Preface i

Executive Summary 1

Introduction 2

Direct Economic Impacts 3

Economic Impacts of GW Capital Spending 14

GW's Direct and Indirect District Fiscal Effects 18

The Importance of GW in the District of Columbia and
Washington Metropolitan Area Economies 19

Preface

This report, commissioned by the George Washington University, advances the Greater Washington Research Center's goal of improving our understanding of the large and complex Washington area economy by analyzing key elements of it. The analysis of George Washington University by Stephen S. Fuller describes the significant economic contribution that is made by non-profit colleges and universities. While the Washington area economy is undergoing rapid growth and change as a result of its emergence as a technology center, government and tax-exempt service firms continue to be important to the Washington area and, especially, the District of Columbia.

Philip M. Dearborn
President

Executive Summary

The direct spending by George Washington University -- its students, faculty and staff, retirees, and visitors -- totaled an estimated $1.018 billion in 1999. Of this total, $780.5 million was spent in the Washington area. This local spending generates and supports additional employment and income as it is re-spent, resulting in a total estimated economic impact of $1.32 billion and 12,180 jobs for the Washington area. In addition, the university has $96 million of construction in progress. These economic impacts do not include the George Washington Hospital that was sold, but they do include Mt. Vernon College that was acquired.

The university is the largest private employer in the District of Columbia, with 6,210 full and part-time employees. It accounted for direct spending of $330.1 million in 1999, with a total estimated economic impact of direct and indirect spending of $422.9 million and 1,542 jobs held by District residents. The university is estimated to have generated $21.8 million in District property, sales and income taxes in 1999.

This report confirms that George Washington University, and the area's other universities and colleges with their 300,000 students, are one of the area's principal sources of non-government jobs and income.

Other key findings about the university's role in the local economy include:

- University payrolls in the Washington area totaled $239.8 million in 1999, of which $61.0 million or 21.5 percent was paid to District residents

- Purchases for goods and services totaled $431.0 million in FY 1999. Of these purchases, 16,854 area businesses received $248.8 million. In the District of Columbia 6,266 vendors received $83.8 million.

- Students spent an estimated $115.3 million for food, retail goods, entertainment and other services, and $37.6 million for off-campus housing within the metropolitan area. About two-thirds of this spending was in the District.

- Capital spending by the university in 1999 included completed projects totaling $11.5 million and on-going construction valued at $95.9 million with an additional $94.1 million in new projects planned over the next five years. Current capital spending will support 1,296 jobs within the Washington area with income increased by $42.6 million.

The Economic Impact of the George Washington University on the District of Columbia and Metropolitan Washington Area

Introduction

The District of Columbia economy generated almost $51 billion of goods and services in 1999. The sources of this economic activity--the District's core industries--traditionally have been seen as the federal government, the hospitality industry, and business service firms. More recently, technology-based businesses have been pointed to as having significant economic potential within the District, building from their rapid growth in the suburban Washington economy. The building industry also has been a major driver of the District and metropolitan area economies.

The area's universities with their 300,000 students are not usually included on this short list of major forces within the local economy. An economic impact study prepared by the Greater Washington Research Center for the George Washington University reported that in 1993 the university and hospital generated a total of $1.2 billion of direct and indirect economic activity within the Washington metropolitan area. Of this total economic impact, $248 million accrued to the District of Columbia economy. The university had 7,695 full- and part-time employees including hospital personnel (but excluding students and temporary staff).

The Consortium of Universities of the Washington Metropolitan Area estimated that in 1992 its twelve member institutions generated a total of $9 billion within the Washington area economy. If this total had included all of the area's institutions of higher education, it would have equaled an estimated $14.4 billion. Today, this total economic impact could be as much as $20 billion or 9.4 percent of the region's gross regional product. This economic activity by the area's institutions of higher education equals or exceeds all other core industries with the exception of the federal government and technology-based businesses at the metropolitan scale and may only be exceeded by the federal government within the District of Columbia's economy.

The economy of the District of Columbia has undergone major changes since 1993. It has experienced substantial restructuring since mid-1993 as a result of federal and District government workforce downsizing and has lost employment each year since then until 1999, which was the first year since 1990 in which the District's employment base experienced net job growth. During the 1995-1997 period, the District's Gross City Product (GCP) declined. Beginning in 1998, GCP reversed its three-year decline and in 1999 it registered its greatest gain since 1992.

Throughout this period of economic change, the George Washington University also has changed. It acquired Mt. Vernon College. It sold the university hospital and now retains only a 20 percent ownership. It has initiated a major renovation and construction program to update and expand its physical plant. And, it continues to expand and strengthen its undergraduate education programs. While these and other important changes have given GW

greater recognition locally, nationally, and internationally as a leading institution of higher education, its importance to the District's economy is still not always recognized in public policies and strategies designed to strengthen the District's economic base.

This study identifies the economic activity generated directly by the George Washington University, its students, and visitors in the District of Columbia and the Washington metropolitan area. It also presents calculations of the indirect impacts that this spending generated within the local economy; that is, the jobs and personal earnings this spending supports and the accumulated value of these economic flows in terms of its contribution to the District's Gross City Product (GCP) and the Washington area's Gross Regional Product (GRP). One major change from the 1993 GW Economic Impact Study is the exclusion of the university hospital from this analysis. Only the medical school, the Medical Faculty Associates, and the George Washington Health Plan are included in this current study.

Identifying and measuring the economic flows associated with the George Washington University involves documenting outlays of the university for its annual operations by the geographic location of its employees and vendors. These are primarily payroll and procurement expenditures. The economic flows generated by GW students, retirees, and visitors cannot be exactly documented because there is no central registry for these types of activities. Universities are open economies and only major events can be counted, but GW attracts hundreds of individual visitors daily throughout the year to use its educational resources and facilities. There is no accurate means of even estimating the economic impacts of these visitors nor is there any accurate way to place economic value on the intangible benefits accruing from the educational achievements and cultural resources that flow from a university to its host community.

The impacts reported, therefore, reflect only the major economic benefits flowing from the George Washington University to the District and Washington metropolitan area. While the reported economic impacts do not account for all of the university's contributions to the local economy, their sources and magnitudes confirm the continuing importance of GW to the local economy, not only as a source of higher education, but also as a source of local business. GW and the other institutions of higher education in the District and metropolitan area constitute a major economic force that helps to stabilize and broaden the local economy by attracting non-local money into it and by re-circulating this money among area businesses and residents through payroll, procurement and retail spending.

Direct Economic Impacts

George Washington University's direct economic impacts stem from both its own spending and spending associated with students and visitors. Direct spending is principally for operations and capital outlays. While both are important, its operating expenditures for payroll and procurement provide a more regular flow of economic activity as these recur annually and span the full operation of the university. Capital outlays for major renovation and construction are reported here as a separate component of this study. They are a major source

of employment and personal income but these are not continuous and the benefits only span the construction period and do not recur annually, as is the case with spending for the university's operations.

Both the operating and capital spending reported in this section, as well as student and visitor spending, support indirect impacts in the form of jobs and income. When combined, the direct and indirect effects will constitute the total economic impact associated with GW within the District and metropolitan area economies. The indirect and total impacts will be reported in a later section.

Wages and Benefits

The George Washington University is the largest private employer[1] in the District of Columbia. As of October 1, 1999, GW employed 4,664 full-time and 1,546 part-time personnel for total of 6,210 employees. This workforce excludes the university hospital, with its reported 1,387 personnel, and all student and temporary employees.

A broader measure of the impact the university has as an employer and source of jobs within the local labor market is provided by the total number of persons that worked for some period at the university over the course of a calendar year and their total payroll and benefits. Over the course of calendar year 1998, a total of 13,155 different persons were employed by the university (Table 1). Of this total, 1,410 or 10.7 percent were regular faculty, 1,666 or 12.7 percent were temporary faculty, 4,635 or 35.2 percent were regular staff, 1,275 or 9.7 percent were temporary staff and 4,169 or 31.7 percent were students. Eighty percent (80%) of the faculty and staff were residents of the Washington metropolitan area for tax purposes while 70 percent of the students who worked for the university reported local addresses. The District was the place of residence for 21.9 percent of the faculty and staff and 51.3 percent of the student employees. Altogether, 31.2 percent of the university's workforce reported District addresses as their place of residence for tax purposes.

[1] Chief Executive Officers of the Top 200, Major Employers in the District of Columbia, DC Department of Employment Services, December 1999

Table 1
GW Employment 1998
Washington Metropolitan Area and Sub-State Portions

Job Classification	District of Columbia	Suburban Maryland	Northern Virginia	Other	Total
Regular Faculty	283	438	506	183	1,410
Temporary Faculty	264	331	534	537	1,666
Regular Staff	1,081	1,378	1,348	829	4,636
Temporary Staff	339	354	350	232	1,275
Subtotal	1,967	2,501	2,738	1,781	8,987
Percent	21.9%	27.8%	30.5%	19.8%	100.0%
Students	2,140	187	579	1,263	4,169
Percent	51.3%	4.5%	13.9%	30.3%	100.0%
Totals	4,107	2,688	3,317	3,044	13,155
Percent	31.2%	20.4%	25.2%	23.1%	100.0%

The total university payroll for its 13,155 employees during calendar year 1998 was $266.9 million (Table 2). The payroll for faculty and staff (regular and temporary) totaled $257.7 million with 85 percent of this payroll being paid to employees residing within the Washington metropolitan area and 20.7 percent was paid to employees residing in the District. The student employees' payroll totaled $9.23 million with 44 percent paid to students residing in the District.

In addition to payroll, the university makes contributions on behalf of its employees for a variety of fringe benefits including payments into retirement programs and social security, health insurance, and unemployment insurance. These contributions do not represent cash disbursements that can be spent in the current year. These payments, however, may show up in the economy as health expenditures, unemployment compensation disbursed by the District to unemployed resident workers, and spending by retirees of the university. In 1998, the university made contributions totaling $59.8 million in the form of fringe benefits on behalf of its workforce (Table 3).

Table 2
GW Payroll Distribution 1998
Washington Metropolitan Area and Sub-State Portions
(dollars in millions)

Job Classification	District of Columbia	Suburban Maryland	Northern Virginia	Other*	Total
Regular Faculty	$21.8	$36.3	$39.3	$11.9	$109.3
Temporary Faculty	1.5	2.1	3.1	3.0	9.7
Regular Staff	28.0	37.8	42.2	22.3	130.3
Temporary Staff	2.0	2.0	2.7	1.6	8.3
Subtotals	$53.3	$78.2	$87.3	$38.8	$257.6
Percent	20.7%	30.3%	33.9%	15.1%	100.0%
Students	$4.1	$0.5	$1.9	$2.8	$9.3
Percent	44.0%	5.3%	20.3%	30.4%	100.0%
Totals	$57.3	$78.7	$89.2	$41.7	$266.9
Percent	21.5%	29.5%	33.4%	15.6%	100.0%

Source: GW Comptroller's Office from W-2 reports. *reflects home address for students.

Table 3
GW Fringe Benefits, CY 1998
(dollars in millions)

Job Classification	Payroll	Benefit Value
Regular Faculty	$109.4	$26.3
Temporary Faculty	9.7	0.8
Regular Staff	130.3	31.3
Temporary Staff	8.4	0.7
Students	9.2	0.8
Totals	$266.9	$59.8

Source: GW Comptroller's Office

The 1998 payroll information was developed from W-2 files for the calendar year. By applying the average 1999 payroll increase of 6.5 percent to the 1998 total, an estimated payroll for 1999 was derived. The payroll increase reflects both the incremental salary

increase and changes in the size and salary structure of GW's workforce. The resulting total payroll expenditures for 1999 are estimated to be $284.3 million with $61.0 million received by employees who reside in the District and $239.8 million received by employees residing within the Washington metropolitan area. GW employees residing outside the metropolitan area received the remaining $44.5 million in payroll expenditures in 1999.

Non-Salary Earnings by GW Faculty

GW faculty have historically supplemented their income through consulting and lecture fees and royalties. A survey of GW regular faculty in 1993, found that its supplementary income equaled 24.4 percent of its university income, as reported on W-2 forms. At that time additional income of $18.9 million was estimated from supplemental employment.

Updated and inflation-adjusted estimates for supplemental income generated by GW regular faculty show this source of regional income to have increased to $42.7 million in 1999 (Table 4). Adding this additional personal income to the GW payroll of these faculty shows its direct economic impact on the metropolitan area to total $144.0 million and increases the total overall payroll of the university to almost $315 million in 1999. This estimated additional income excludes income generated by temporary faculty including non-regular Medical and Law School faculty as well as any additional income generated by university staff beyond their GW payroll and therefore under-reports these earnings.

Table 4
Total GW Faculty Earnings
Including Non-GW Income, 1999
(dollars in millions)

Place of Residence	GW Faculty Payroll	Estimated Non-GW Earnings	Total Income
District of Columbia	$22.7	$9.6	$32.2
Suburban Maryland	37.7	15.9	53.7
Northern Virginia	40.9	17.2	58.2
Subtotals	$101.3	$42.7	$144.1
Other	12.4	5.2	17.7
Totals	$113.7	$47.9	$161.8
Percent	70.3	29.7	100.0

Source: Updated 1993 GW faculty survey

University Purchases

The university's total procurement spending was $431 million (excluding the hospital) in fiscal year 1999 (July 1998-June 1999). This spending was spread over 27,583 vendors, with 61 percent of these being based in the metropolitan area -- 22.7 percent of the vendors had District of Columbia addresses. Of the total $431 million spent by the university for goods and services to support its operations, 57.7 percent went to firms in the metropolitan area and 19.4 percent went to District-based firms (Table 5).

The procurement spending of the university ($431 million) exceeds its total payroll spending ($284.3 million), but only 58 percent of procurement was received by area vendors while 85 percent of the payroll was paid to employees residing in the metropolitan area. The $182 million in procurement spending outside the metropolitan area economy in 1999 is a slightly higher percentage (42% vs. 40%) than in 1992. With the area's limited manufacturing and wholesale trade sectors, some of this non-local purchasing is understandable. Still, these potential sales continue to represent a business opportunity for District and other area businesses.

Table 5
GW Procurement Spending 1999
Washington Metropolitan Area and Sub-State Portions
(dollars in millions)

Area	Number of Vendors	Expenditures	Percent
District of Columbia	6,266	$83.9	19.5%
Suburban Maryland	5,484	100.7	23.4
Northern Virginia	5,104	64.3	14.9
Metro Area	16,854	248.9	57.7%
Percent of Total	61.1%	57.7%	
Outside Metro Area	10,729	182.2	42.3%
Percent of Total	29.9%	42.3%	
Totals	27,583	$431.1	100.0

Source: GW Comptroller's Office

Student Spending

Over the spring and fall semesters of 1999, GW's average enrollment included 12,010 full-time and 6,812 part-time students, or a total of 18,822 students. Additionally, there were 814

other students tied to the university through continuing research and enrollment status. In terms of raw head count, 40 percent of the university's students were classified as undergraduates while in terms of full-time equivalent counts, the undergraduate students accounted for 47 percent of the on-campus student body. This level of enrollment characterizes the student population over a 35-week period each year.

Summer school enrollment in 1999 totaled 7,106 with 1,375 or 19.3 percent enrolled as full-time students. Undergraduates accounted for 24.2 percent of total enrollment. Converted to full-time equivalents, summer school enrollment totaled 4,063 students of which 27 percent was classified as undergraduate. Summer school spans several terms of varying lengths. For purposes of this analysis, the period during which summer school students would be contributing to the local economy was set at 10 weeks.

The percentage of students who are local residents (prior to enrollment) is difficult to determine. University records, however, indicate that 2,425 students or 14.5 percent were District residents in 1998, 2,554 or 15.3 percent were Maryland (state) residents and 4,540 or 27.3 percent were Virginia (state) residents. While these students appear to account for 57 percent of GW's total enrollment, this percentage does not actually reflect the original state of residence of the university's students prior to enrollment. Most of the university's students move here from other part of the U. S. and from 130 foreign countries.

The value of GW's international students to the local economy is substantial. In order for international students to secure J-1 visas to attend GW, they must demonstrate their financial capability through funds on hand or promised in the form of fellowships. For a single international student, this financial requirement is $35,000 annually. For international students with dependents this minimum amount is higher. Those financial resources would cover the cost of attending the university (tuition and books), housing, foods, and normal living expenses (excluding international travel). The 2,306 international students enrolled at GW represent a potential economic impact within the Washington area totaling at least $80.7 million.

A sample survey of student spending was undertaken during the 1999 fall semester. The results of this survey were used to estimate annual student spending in the Washington area and its sub-state portions (Table 6). This estimate of student spending in 1999 ($115.3 million) excludes housing, utilities, telephone and internet services, medical services, education expenditures, and travel outside of the region. It excludes expenditures of family members for those students living with their families. Also excluded are beginning-of-the-semester one-time outlays for furniture. This estimate only covers spending of GW students during the 35 weeks of the two regular semesters and 10 weeks of summer school. Spending by students working in the area or in residence during the seven weeks when school is not in session or not attending summer school but remaining in the area for the other 17 weeks of the calendar year are not included. Therefore, the student spending data presented in Table 6 reflects a narrow definition of non-educational outlays by GW's student body.

This limited definition of GW student spending shows food purchases to account for $54.25 million or 47 percent of the total. Entertainment (including food and beverages in restaurants) totaled $15.5 million or 13.4 percent. Retail outlays, principally for clothing and drugstore items, totaled $33.5 million or 29.0 percent of spending. Based on student surveys, it was found that 75 percent of this student spending occurred in the District of Columbia. Excluding on-campus sales, District businesses still captured student sales totaling $63.5 million or 69 percent of all off-campus spending.

Table 6
GW Student Spending by Major Type, 1999
(dollars in millions)

Type of Purchase	District of Columbia	Suburbs	Total*
Food	$43.9	$10.4	$54.3
On-campus	23.4		23.4
Off-campus	14.7	4.6	19.3
Groceries	5.8	5.8	11.6
Entertainment	13.1	2.3	15.5
Other Retail	21.8	11.7	33.5
Transportation	4.7	3.2	7.9
Personal/Professional Services	3.3	0.8	4.2
Sub-total Non-Food	43.0	18.1	61.1
Total	$86.9	$28.4	$115.3
Percent	75.4%	24.6%	100.0%

Source: GW Student Spending Survey, 1999
*Washington Metropolitan Statistical Area (1989)

The District's large share of student spending is the result of a substantial percentage of GW students who reside in the District. In addition to the approximately 4,300 full-time students who live in GW housing, it is estimated that 3,439 other full-time GW students live in private housing within the District. The value of GW students to the vitality of the area's rental housing market is substantial (Table 7). The fall 1999 student survey found that the average per student monthly rental cost (excluding utilities) was $487.25. Rentals are based on one-year leases. The value of GW students to the area's real estate market is at least $37.6 million annually with District landlords collecting $16.8 million of this total.

Table 7
Spending For Off-Campus Housing
By Full -Time GW Students, 1999
Washington Area and Sub-State Portions
(dollars in millions)

Area	Students Housed	Housing Outlay	Percent
District of Columbia	3,439	$16.8	44.4%
Suburban Maryland	1,218	5.9	17.2
Northern Virginia	3,049	14.9	39.4
Totals	7,710	$37.6	100.0%

Source: GW Office of Institutional Research; GW Student Spending Survey

Spending By GW Retirees

The university reports that it had 849 retired employees in 1999 of whom it is estimated that 80 percent reside in the Washington area (Table 8). In 1999, these local GW retirees spent an estimated $23.2 million within the local metropolitan area economy. This spending impacts the economy in a manner similar to the wage-based spending by GW's current employees.

Table 8
GW Estimated Retirement Spending, 1999
Washington Area and Sub-State Portions
(dollars in millions)

Area	Retirees	Total Spending
District of Columbia	202	$6.9
Suburban Maryland	248	8.5
Northern Virginia	229	7.8
Metropolitan Total	679	$23.2
Non-Local	170	5.8
Total Retirees	849	$29.1

Source: GW Department of Human Resources

Spending By Visitors to GW

Off-campus spending by visitors to the university is difficult to estimate. For major events, however, such as commencement, alumni events, and organized visits to the campus by prospective applicants, attendance can be estimated and related spending calculated. These calculations provide only a partial measure of these categories of economic benefit as the uncounted single and small-group visits to individual faculty, departments, and campus events in aggregate can represent large numbers of additional people who also may patronize local shops, restaurants and hotels. This visitor traffic represents continuing market opportunities for District-based businesses, especially those in proximity to the campus.

The three major categories of visitors identified in Table 9--commencement, alumni, and admissions-related campus visits--generated a total of 52,983 visitors in 1999. Estimated spending by these visitors, including overnight lodging, meals, and retail outlays has been calculated based on survey data developed in 1993 and adjusted to reflect current prices.

The total value of these visitors to the area economy is estimated at $4.2 million. For the commencement visitors, 72 percent or $1.7 million of this spending was captured by businesses located in the District of Columbia. Hotel and motel expenditures accounted for 52 percent of all commencement-related outlays in the metropolitan area.

Admissions-related visitors spent an estimated $1.5 million in the metropolitan area with 63 percent of this spending for lodgings. Visitors associated with alumni events include a much higher proportion of area residents and their outlays involve parking fees, transportation, restaurant sales and retail purchases. In 1999, it is estimated that visitors for alumni programs generated $395,900 in off-campus sales. Similar types and magnitudes of spending are generated by other visitors to the campus for continuing education programs, cultural events scheduled in Lisner Auditorium and the Marvin Center Theater, and for sporting events at the Smith Center.

Table 9
Spending By Visitors to GW
in the Washington Metropolitan Area, 1999
(dollars in millions)

Visitor Group	Number	Spending
Graduation	18,500	$2.4
Campus Visitors	19,942	1.2
Alumni Events	14,541	0.4
Totals	52,983	$4.2

Sources: GW Visitor Center, GW Office of Special Events; GW Alumni Office

Investment Properties

The economic impacts flowing from GW into the local economy reflect a wide range of sources. Beyond the university's spending to support its educational programs and related operations and the spending of allied activities (students and visitors), GW owns two office buildings, one including ground floor retail space. The expenditures involved in operating these two buildings support economic activities within the District of Columbia and the metropolitan area. The range and magnitudes of these expenditure flows are reported in Table 10.

Each of these expense items supports jobs and generates personal earnings within the local economy. The District is the beneficiary of this property's real estate taxes totaling $2.6 million. The sales taxes generated within the retail space is not included in this tabulation or are the economic impacts associated with the business activities housed within these buildings including the daily spending by office workers and visitors. These buildings' operating expenses recur on an annual basis.

Table 10
Operating Expenses of GW Investment Properties, 1999
(dollars in millions)

Expense Category	2000 Pennsylvania	2100 Pennsylvania	Total
Payroll	$0.4	$0.4	$0.8
Utilities	0.5	0.5	1.0
Services	0.9	0.5	1.4
Repairs and Maintenance	0.3	0.5	0.8
Insurance	0.04	0.02	0.06
Administration	0.3	0.3	0.6
Taxes	1.5	1.1	2.6
Total Operating Expenses	3.9	3.3	7.2
Capital Expenditures*	1.4	0.4	1.9
Total All Expenditures	$5.3	$3.8	$9.1

Source: GW Office of Vice President and Treasurer
*capital expenditures include leasing costs

Economic Impacts of GW Capital Spending

The George Washington University is in the midst of a major capital improvement program. These capital outlays impact the District and area economies in a different way than university operating spending and the expenditures of students and visitors. The economic impacts generated by construction and renovation outlays only last as long as the construction period, so the economic impacts are not recurring. However, this does not diminish the economic importance of capital projects.

GW completed three major renovation and construction projects in 1999. These had a total construction cost of $11.5 million (Table 11). These projects supported 154 full-time equivalent annual jobs over the construction period and generated total personal income of $5.2 million. Presently, the university has four major construction projects underway (Table 11). The total cost of these projects is $95.9 million. This level of construction spending supports 1,296 full-time equivalent jobs. Total personal earnings generated by these jobs are estimated at $42.3 million with $15.0 million accruing to DC residents. The university's capital budget identifies five construction and renovation projects expected to be undertaken in the coming five years (Table 11). These five projects have an estimated total cost of $94.1 million.

The facilities presently under construction and planned will increase the university's operating budget, and they will generate additional annual economic benefits to the District and surrounding metropolitan area upon their completion. The economic impacts calculated above only represent those related to the buildings' construction.

Table 11
Economic Impacts on the District of Columbia from GW Construction and Renovation Projects: Recently Completed, Under Construction, and Proposed (dollars in millions)

Projects	Direct Cost	Jobs Supported*	Personal Earnings	Total Output
Recently Competed				
Howard Johnson's	$1.9	9.2	$0.3	$2.2
Gelman Renovation	6.0	36.6	1.1	6.9
University Club	3.6	22.1	0.6	4.1
DC Subtotals	11.5	67.9	2.0	13.2
Total Metro Area	$11.5	154.0	$5.2	$19.2
Under Construction				
Health & Wellness	$37.0	170.3	$5.8	$45.9
Marvin Center	26.0	119.7	4.1	32.3
Media & Public Affairs	27.0	124.3	4.2	33.5
Parking Garage Ext.	5.9	27.2	0.9	7.3
DC Subtotals	95.9	441.5	15.0	119.0
Total Metro Area	$95.9	1,296.4	$42.3	$159.5
Proposed				
West End Renovation	$9.7	44.4	$1.5	$11.2
Law Addition	10.0	46.0	1.6	12.4
AGC Site Offices/Hsg	71.0	326.8	11.1	88.1
Aston Renovations	0.6	2.5	0.1	0.6
Schenley & Dakota Renovations	2.8	13.3	0.4	3.2
DC Subtotals	$94.1	433.0	$14.7	$115.5
Total Metro Area	$94.1	1,272.1	$20.1	$156.5

Source: Direct Costs from GW Proposed FY00 five-year Capital Budget
*Estimated on-site and off-site jobs supported in the District and Washington metropolitan area in all sectors.

GW's Direct and Total Economic Impacts

The direct spending by the university, its students, faculty and staff, retirees, and visitors in 1999 totaled an estimated $1,018.2 million (Table 12). Of this total, $780.5 million or 76.6 percent, was spent within the Washington metropolitan area economy. The balance went primarily to non-local vendors ($182.2 million) and to faculty and staff ($44.5 million) who do not reside within the metropolitan area.

Table 12
Summary of Total Direct GW and Related Spending
in the by Geographic Area, 1999
(dollars in millions)

Spending Category	Total Outlays	Washington Area*	Percent in Area
GW Payroll	$284.3	$239.8	84.4%
GW Fringe Benefits	59.8	59.8	100.0
Other Faculty Income	47.9	42.7	89.1
GW Procurement	431.0	248.8	57.7
GW Student Spending	115.3	115.3	100.0
Off-Campus Rental Housing	37.6	37.6	100.0
Spending by GW Retirees	29.1	23.2	80.0
Spending by GW Visitors	4.2	4.2	100.0
Outlays by Income Properties	9.1	9.1	100.0
Totals	$1,018.2	$780.5	76.6%

Sources: Tables 2-10.
*Washington Metropolitan Statistical Area (1989)

The Washington area spending generates and supports additional employment and it creates payroll that can be re-spent within the local economy to generate and support additional employment and income. The magnitude of this re-spending can be calculated by applying sector-specific "multipliers" that account for the retention and recycling of direct outlays within the local economies.[2] On this basis, GW's total economic impact within the Washington metropolitan area in 1999 was $1.3 billion consisting of $780.5 million in direct

[2] The magnitude of these multipliers is affected by the geographic size of the jurisdiction and the complexity of its economy; that is, the degree to which it is self-sufficient. Because of the small geographic size of the District of Columbia compared to the Washington metropolitan area and its dependency on the suburban economies for labor resources and suppliers, the District's multipliers are smaller than respective multipliers for the region. These multipliers have been calculated by the Bureau of Economic Analysis of the U. S. Department of Commerce. The most recently available regional multipliers are dated May 1992.

spending and an additional $539.6 million in indirect spending within the area economy. The indirect spending resulted directly from the re-spending and recycling of the initial payments through the economy calculated by using an aggregate multiplier of 1.691.

Table 13
Economic Impacts of GW and Related Spending, 1999
(dollars in millions)

Spending Category	District of Columbia		Metropolitan Area*	
	Direct Outlay	Total Impact	Direct Outlay	Total Impact
GW Payroll	$61.0	$78.1	$239.8	$383.7
GW Fringe Benefits	59.8	76.5	59.8	95.7
Other Faculty Income	9.6	12.3	42.7	68.4
GW Procurement	83.8	111.3	248.8	484.8
GW Student Spending	86.9	109.4	115.3	181.0
Off-Campus Housing Rented By GW Students	16.8	19.4	37.6	48.7
Spending by GW Retirees	6.9	9.0	23.2	36.8
Spending by GW Visitors	1.7	2.2	4.2	6.6
Outlays by Income Properties	3.6	4.7	9.1	14.4
Total Outlays and Impacts	$330.1	$422.9	$780.5	$1,320.1
DC Percent of area	42.3%	32.0%		

Sources: Direct Outlays from Tables 2-10; multipliers from: U. S. Department of Commerce, Bureau of Economic Analysis, Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II), 2nd edition, May 1992.
*Washington area is defined as the Washington Metropolitan Statistical Area (1989)

The direct spending by GW and its related activities within the District of Columbia economy in 1999 totaled $330.1 million, or 42.3 percent of the area total. Including the indirect economic activity, GW's economic impact on the District's economy totaled $422.9 million and accounted for 32.0 percent of the area total. Because of the District's smaller multipliers (the aggregate multiplier was 1.281), its economy was not able to capture the same proportion of secondary or indirect impacts from GW's direct outlays as were retained within the much larger metropolitan area economy.

Beyond these annual flows of direct and indirect spending within the Washington area economy, the university's capital spending generates additional economic benefits. While these do not recur annually in the predictable magnitudes of operating outlays, they do span multiple years and generate and support significant levels of employment. The range of these economic flows is presented in Table 11 for 1999 as well as for projects currently underway and planned for the coming five years.

In addition to the 6,210 full and part-time regular jobs that the university supports directly and the temporary staff and student positions filled on less-than-an-annual basis, the spending of this workforce and the spending of students, visitors, retirees, and employees of GW's area vendors generate and support additional jobs and payroll in the District and region. The job and income impacts supported by this spending are shown in Table 14.

Table 14
Job and Income Impacts from GW and Related Spending in the District of Columbia and Washington Area, 1999 (income in millions)

Spending Category	District of Columbia		Washington Area*	
	Jobs	Income**	Jobs	Income**
GW Payroll	355.8	$9.6	3,920.0	$94.0
Other Faculty Income	55.7	1.5	698.7	16.7
GW Procurement	436.1	16.7	4,147.6	126.1
GW Student Spending	613.6	16.5	2,671.1	55.8
Off-Campus Rental Housing	10.5	0.4	111.4	3.5
Spending by GW Retirees	40.2	1.1	379.2	9.1
Spending by GW Visitors	10.7	0.3	86.3	1.7
Outlays by Income Properties	19.7	0.9	165.4	5.8
Totals	1,542.3	$47.0	12,179.7	$312.7

*Washington Metropolitan Statistical Area; **personal earnings
Note: GW fringe benefit outlays are not included here as a portion of the benefits accrue in future years.

GW's Direct and Indirect District Fiscal Effects

Calculating the fiscal benefit of the university to the District government is made difficult by the wide variety of direct and indirect spending it generates and the lack of information about university use of District services. To illustrate the potential magnitude of the tax flows within the District of Columbia, three major sources of tax revenues are calculated in Table 15--personal income, retail sales and restaurant sales (meals). The university's investment property real estate taxes also are included.

In 1999, the university generated directly or indirect a total of $21.8 million in estimated tax revenues for the District in the form of real estate, personal income, sales and meals taxes. These revenue totals are subdivided into direct and indirect sources with the direct outlays deriving either from university outlays or from spending by students, visitors and retirees. Taxes paid by DC-based GW vendors are not included. The indirect outlays include spending

in the District of Columbia that is generated as a result of the direct spending by the university and its students, retirees and visitors. Also, construction projects underway during 1999 generated income, sales and taxes to the benefit of the District. The revenues identified here indicate that even though the university itself is tax exempt, it generates economic activities that result in substantial tax revenues to the District

Table 15
Fiscal Impacts from Direct and Indirect Spending
Generated By GW in the District of Columbia, 1999
(in millions of dollars)

Sources	Total Outlays	Estimated Revenues**
Real Estate Taxes*		$2.6
Personal Income		
Direct	$77.5	5.0
Indirect	47.0	3.0
Total	124.5	8.0
Retail Sales		
Direct	44.7	2.6
Indirect	16.4	0.9
Total	61.1	3.5
Restaurant Sales		
Direct	68.3	6.8
Indirect	8.5	0.9
Total	76.8	7.7
Total Revenues**		$21.8

*GW investment properties; **excludes parking, utilities and corporate franchise taxes and local revenues from non-GW employees working in university-owned buildings; also excluded are GW bookstore sales subject to taxes, all taxes paid by District-based GW vendors, and the real estate taxes by paid DC residents working for GW or whose jobs depend on GW and related spending within the District. Unemployment taxes paid by GW to DC are not included. Income tax is calculated based on 80 percent of gross income being subject to an average tax rate of 8 percent.

The Importance of GW in the District of Columbia and Washington Metropolitan Area Economies

The value of a business to the local economy is generally judged by how many jobs and how much income its generates and whether it supports the expansion of the locality's economic base. Universities are not usually thought of as economic engines or basic industries but rather are considered to be centers of education and culture. Yet, it is generally accepted that a university is an important asset to the locality's economic health and that having a university

helps make the District more attractive as a business location. From this perspective, the university's contributions to the economy are thought of as intangible and not monetary. However, the George Washington University also has been found to be a major source of economic activity in the District and metropolitan area.

The total economic impact of the George Washington University on the District and Washington area economies is the sum of its direct and indirect monetary flows associated with its operations and the spending of its employees, students, visitors, retirees, and vendors. These direct and indirect economic impacts are summarized in Table 16.

Table 16
Summary of GW's Impacts On The
District of Columbia and Metropolitan Area Economies, 1999
(in millions of dollars)

Economic Impact	District of Columbia	Metropolitan Area
Direct Spending	$330.1	$780.5
Total Impact	$422.9	$1,320.1
GW full and part-time jobs	1,360	6,210
Additional jobs created	1,542	12,180
Personal Earnings*	$47.0	$312.7

*excludes GW's payroll

The university's $422.9 million contribution to the District's economy in 1999 accounted for 1.3 percent of the private sector's contribution to the District's $50.8 billion economy. At the metropolitan level, the $1.3 billion represented 0.8 percent of the private sector's contribution to the area's $213.6 billion economy. In terms of the District's resident workforce, GW directly and indirectly accounts for 1.1 percent of all jobs. At the metropolitan level, its total job impact (direct and indirect jobs total 18,390), accounts for 0.9 percent of all non-government jobs.

While these measures of total impact may not appear large, it should be remembered that the District and area's economies are made up of more than 200,000 individual firms. In the District, the George Washington University is the largest private sector employer. At the metropolitan scale, GW employs 1.44 times the area employment of METRO (bus and rail).

The university represents a major source of business for area vendors In addition, businesses are substantially enhanced by the university's presence as a center of economic activity involving the various people attracted to the District and region because of its educational and cultural resources. This added economic dimension is what makes the George Washington University and the other universities with their 300,000 students a major economic force within the District and metropolitan area.