

The Economic Value to Washington, D.C. of George Washington University and the Medical Faculty Associates



GEORGE WASHINGTON UNIVERSITY (GW) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. The university facilitates new research and company developments and also draws visitors and students to the district, generating new dollars and opportunities for the District of Columbia (Washington, D.C.). GW provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, GW is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

GW influences both the lives of its students and the district's economy. The university supports a variety of industries in Washington, D.C., serves the district's businesses, and benefits society as a whole in Washington, D.C. from an expanded economy and improved quality of life. Additionally, the benefits created by GW extend to the district government through increased tax revenues and public sector savings.

This study measures the economic impacts created by GW on the business community and the benefits the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

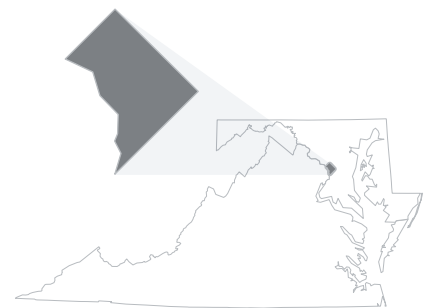


Economic impact analysis



Investment analysis

All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2019-20 (July 1, 2019 to June 30, 2020). Impacts on the Washington, D.C. economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in Washington, D.C. are reported under the investment analysis.



WASHINGTON, D.C.

GW influences both the **lives of its students** and the **district's economy**.



GW promotes economic growth in Washington, D.C. through its direct expenditures and the resulting expenditures of visitors, students, and the district's businesses. The university serves as an employer and buyer of goods and services for its day-to-day, research, and clinical operations. Numerous start-up and spin-off companies have formed as a result of programs and knowledge at GW. The university's reputation and activities attract visitors and students from outside Washington, D.C., whose expenditures benefit the district's vendors. In addition, GW is a primary source of higher education to Washington, D.C. residents and a supplier of trained workers to the district's industries, enhancing overall productivity in the Washington, D.C. workforce.

Operations spending impact



GW adds economic value to Washington, D.C. as an employer of district residents and a large-scale buyer of goods and services. In FY 2019-20, the university employed 5,379 full-time and part-time faculty and staff (excluding research and Medical Faculty Associates, Inc. (MFA) employees), 27% of whom lived in Washington, D.C. Total payroll at GW was \$901.9 million (excluding payroll from research and MFA employees), much of which was spent in the district for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$402.3 million on day-to-day expenses related to facilities, supplies, and professional services (excluding research and clinical expenditures).

GW's day-to-day operations spending added \$872.9 million in income to the district during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-district spending of the university and its employees, and a downward adjustment to account for funding that the university received from district sources. The \$872.9 million in added income is equivalent to supporting 5,554 jobs in the district.

Research spending impact



Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. Over the last four years, GW received 273 invention disclosures, filed 148 new patent applications, and produced 26 licenses.

In FY 2019-20, GW spent \$91.7 million on payroll to support research activities. This, along with \$140.9 million in other research spending, created a net total of \$168.3 million in added income for the district economy. This added income is equivalent to supporting 1,261 jobs.

Clinical spending impact



The Medical Faculty Associates, Inc. in Washington, D.C. is related to GW and would not exist without the university. The clinical system provides a hands-on learning and research environment for students and employs hundreds of workers. Although broader health-related impacts are outside the scope of this analysis, the clinic is known for providing quality patient care.

In FY 2019-20, GW spent over \$326.4 million on clinical operations. These expenditures added a net impact of \$299.9 million in added income to the district. This is equivalent to supporting 2,825 jobs.

Construction spending impact



GW invests in construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands. While the amount varies from year to year, these quick infusions of income and jobs have a substantial impact on the Washington, D.C. economy. In FY 2019-20, GW's construction spending generated \$1.0 million in added income, which is equivalent to supporting 14 jobs.

Start-up and spin-off company impact



GW creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of GW start-up and spin-off companies created in the district. Start-up companies,

¹ This report assesses all GW sites and locations within Washington, D.C. For this reason, the operational and student activity attributable to the GW School of Nursing and the GW Virginia Science & Technology Campus are not captured in this report.

IMPACTS CREATED BY GW AND GW MFA IN FY 2019-20¹



Operations spending impact
\$872.9 million



Research spending impact
\$168.3 million



Clinical spending impact
\$299.9 million



Construction spending impact
\$1.0 million



Start-up & spin-off company impact
\$73.5 million



Visitor spending impact
\$3.2 million



Student spending impact
\$73.5 million



Alumni impact
\$147.5 million



TOTAL ECONOMIC IMPACT
\$1.6 billion

OR

Jobs supported
12,694

created specifically to license and commercialize GW technology or knowledge, have a strong and clearly defined link to GW. Spin-off companies, created and fostered through university programs or faculty and alumni, have a clear but weaker link to GW.

In FY 2019-20, GW start-up and spin-off companies added \$73.5 million in income to the Washington, D.C. economy, which is equivalent to supporting 501 jobs. Of this added income, \$7.3 million was due to the start-up companies, with the remainder due to spin-off companies.

GW supports start-ups: pilot program to boost entrepreneurs

The GW Office of Innovation and Entrepreneurship (GWOIE), in partnership with Howard University, offered a program to support diverse start-up owners in Washington, D.C. A pilot initially seeded by a \$100K grant from the Wells Fargo Foundation, PEPCO, and the Washington, D.C. Economic Partnership in 2020, provided 75 DC-based entrepreneurs with diverse backgrounds access to instructional programs to supplement their existing resources and support the local economy. The pilot program has been renewed for another two years, and is looking to expand its activity.

Visitor spending impact



Thousands of visitors from outside the district were attracted to GW during the analysis year to attend commencement, sports events, and other activities sponsored by the university. While in the district, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's visitors from outside the district generated a net impact of \$3.2 million in added income for the Washington, D.C. economy in FY 2019-20. This \$3.2 million in added income is equivalent to supporting 50 jobs.

Student spending impact



Around 92% of students attending GW originated from outside the district in FY 2019-20, and some of these students relocated to Washington, D.C. to attend GW. These students may not have come to the district if the university did not exist. In addition, some students who lived in Washington, D.C. prior to their enrollment at GW, referred to as retained students, would have left the district if not for the existence of GW. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$73.5 million in added income for the Washington, D.C. economy in FY 2019-20, which supported 1,196 jobs in Washington, D.C.

GW alumni's health care start-up began as a dream

As a student in the Milken Institute School of Public Health, Khang Vuong's goal was to become a health system industry executive. But while researching health care disparities in Washington, D.C., he became committed to helping uninsured people find affordable health care. With little entrepreneurial experience, he turned to the GW Office of Innovation and Entrepreneurship to refine his business plan solution. He eventually launched TalktoMira, an online platform that helps patients book primary care appointments. Today, the company has \$2.8 million in funding, and Mr. Vuong, M.H.A. '18, was included among the 2021 Forbes 30 Under 30 Health Care honorees.

Alumni impact



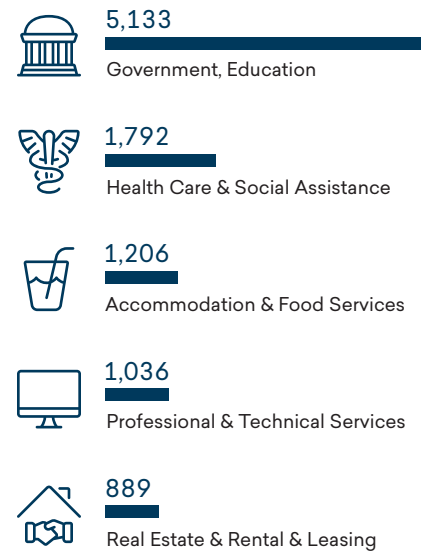
The education and training GW provides for the district's residents has the greatest impact. Since the university's establishment, students have studied at GW and entered the Washington, D.C. workforce with greater knowledge and new skills. Today, thousands of former GW students are employed in Washington, D.C. Using Emsi Burning Glass's Alumni Outcomes data, many of the university's alumni are employed in the district's workforce in occupations such as lawyers, chief executives, personal service managers, management analysts, public relations specialists, and marketing managers. As a result of their education from GW, the alumni receive higher earnings and increase the productivity of the businesses that employ them. In FY 2019-20, GW alumni generated \$147.5 million in added income for the Washington, D.C. economy, which is equivalent to supporting 1,292 jobs.

Total impact

GW added \$1.6 billion in income to the Washington, D.C. economy during the analysis year, equal to the sum of the operations, research, clinical, and construction spending impacts, the start-up and spin-off company impact, the visitor and student spending impacts, and the alumni impact. For context, the \$1.6 billion impact was equal to approximately 1.2% of the total gross regional product (GRP) of Washington, D.C.

GW's total impact can also be expressed in terms of jobs supported. The \$1.6 billion impact supported 12,694 Washington, D.C. jobs, using the jobs-to-sales ratios specific to each industry in the district. This means that one out of every 73 jobs in Washington, D.C. is supported by the activities of GW and its students. In addition, the \$1.6 billion, or 12,694 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, GW's spending and alumni in the Health Care & Social Assistance industry sector supported 1,792 jobs in FY 2019-20. If the university did not exist, these impacts would not have been generated in Washington, D.C.

GW IMPACTS BY INDUSTRY (JOBS SUPPORTED)



One out of every 73 jobs in Washington, D.C. is supported by the activities of GW and its students.



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers GW as an investment from the perspectives of students, taxpayers, and society in Washington, D.C.

Student perspective



In FY 2019-20, GW served 22,619 undergraduate and graduate students in Washington, D.C. In order to attend the university, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by GW's students in FY 2019-20 amounted to a present value of \$1.1 billion, equal to \$770.3 million in out-of-pocket expenses (including future principal and interest on student loans) and \$325.3 million in forgone time and money.

In return for their investment, GW's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average GW bachelor's degree graduate from FY 2019-20 will see annual earnings that are \$63,900 higher than a person with a high school diploma or equivalent working in Washington, D.C.²

Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$2.7 million in higher earnings per GW graduate who remains in the district. The present value of the cumulative higher future earnings that GW's FY 2019-20 students will receive over their working careers is \$3.0 billion.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN GW



Average annual return for GW students
11.2%



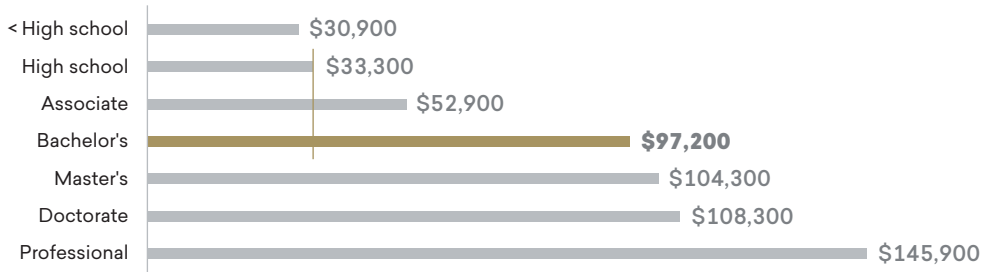
Stock market 30-year average annual return
10.6%



Interest earned on savings account (National Rate Cap)
0.8%

Source: Forbes' S&P 500, 1991-2020. FDIC.gov, 6-2021.

The average bachelor's degree graduate from GW will see an increase in earnings of **\$63,900** each year compared to a person with a high school diploma or equivalent working in Washington, D.C.



Source: Emsi Burning Glass employment data.

² Earnings data was calculated using complete Emsi Burning Glass earnings data supported by GW Alumni Outcomes data.

The students' benefit-cost ratio is 2.8. In other words, for every dollar students invest in GW in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$2.80 in higher future earnings. Annually, the students' investment in GW has an average annual internal rate of return of 11.2%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.6%.

Taxpayer perspective



Even though GW is a private university, it still creates significant benefits for Washington, D.C. taxpayers based on unduplicated historical headcounts of GW students who graduate and choose to remain in the district over the course of their professional careers. These benefits to taxpayers consist primarily of taxes the district government will collect from the added revenue from the earnings of D.C.-based GW alumni. As D.C.-based alumni earn more, they will make higher tax payments throughout their working lives. Employers of D.C.-based alumni will also make higher tax payments as they increase their output and purchases of goods and services. Based on historical data about the number of students expected to remain in Washington, D.C. over the course of their careers, by the end of the FY 2019-20 students' working lives, the district government will have collected a present value of \$100.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of GW D.C.-based alumni and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. For a list of study references, contact the university for a copy of the main report. Altogether, the present value of the benefits associated with a GW education will generate \$14.0 million in savings to Washington, D.C. taxpayers. Total taxpayer benefits amount to \$114.3 million, the present value sum of the added taxes and public sector savings.

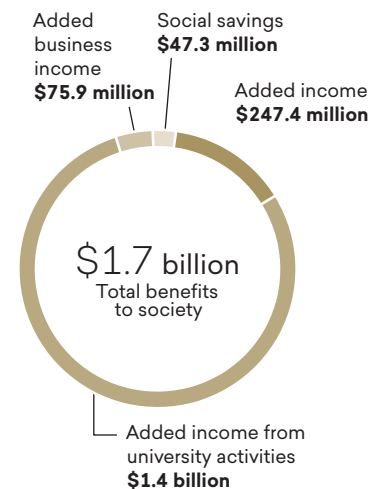
Washington, D.C. taxpayers will receive a cumulative value of **\$114.3 million** over the course of the GW D.C.-based alumni's working lives

Social perspective



Society as a whole in Washington, D.C. benefits from the presence of GW in two major ways. Primarily, society benefits from an increased economic base in the district. This is attributed to the added income from GW D.C.-based alumni increased lifetime earnings (added income) and increased business output (added business income), which raise economic prosperity in Washington, D.C.

SOCIAL BENEFITS IN WASHINGTON, D.C. FROM GW



Source: Emsi Burning Glass impact model.

Benefits to society also consist of the savings generated by the improved lifestyles of GW D.C.-based alumni. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with healthier lifestyle choices. Justice system savings include avoided costs to the government and society due to less judicial activity. Other savings include reduced claims for government support. For a list of study references, contact the university for a copy of the main report.

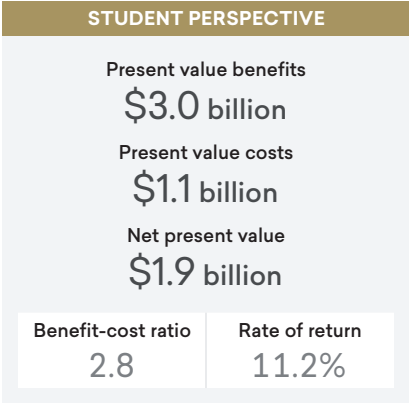
Mental health care for Washington, D.C. artists

During FY 2019-20 GW launched “Care for Creatives,” a program offered through the Graduate School of Education and Human Development. The program is aimed at providing affordable mental health services to members of Washington, D.C.’s creative community throughout all eight wards, using a pay-what-you-can service model. Under a new partnership with the Washington, D.C. Office of Cable TV, Film, Music, and Entertainment and the Creative Affairs Office, arts and cultural workers are matched with a clinical intern to support them through a solution-oriented therapy approach. All services are confidential and provided through telehealth.

Altogether, the social benefits of GW equal a present value of \$1.7 billion. These benefits include \$247.4 million in added student income, \$75.9 million in added business income, \$1.4 billion in added income from university activities, as well as \$47.3 million in social savings related to health, the justice system, and other government-support programs in Washington, D.C. The benefits of this investment will occur for as long as GW’s FY 2019-20 students remain employed in the Washington, D.C. workforce.

Summary of investment analysis results

The results of the analysis demonstrate that GW is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in a GW education. At the same time, GW creates a wide range of government and social benefits throughout Washington, D.C.



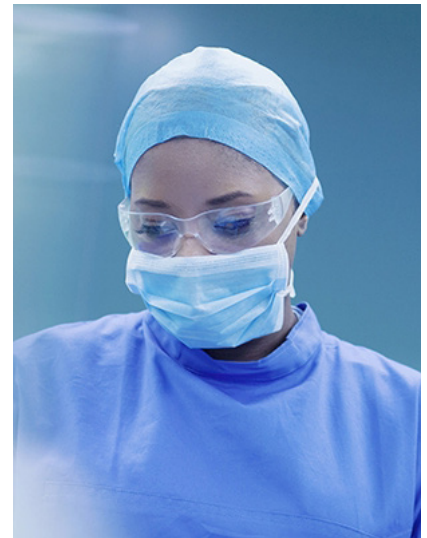
CONCLUSION

The results of this study demonstrate that GW creates value from multiple perspectives. The university benefits the district's businesses by increasing consumer spending in the district and supplying a steady flow of qualified, trained workers to the workforce. GW enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits district taxpayers through increased tax receipts from GW alumni who remain in the district over the course of their professional careers and a reduced demand for government-supported social services. Finally, GW benefits society as a whole in Washington, D.C. by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of GW D.C.-based alumni.

About the study

Data and assumptions used in the study are based on several sources, including the FY 2019-20 academic and financial reports from GW, the university's alumni records matched to Emsi Burning Glass Alumni Outcomes database, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi Burning Glass's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the university for a copy of the main report.

The results of this study demonstrate that GW creates value from **multiple perspectives**.



Emsi Burning Glass provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Emsi Burning Glass to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit economicmodeling.com/higher-education to learn more or connect with us.