# The Economic Impact of CFA Institute on the Charlottesville Region





January 31, 2017



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#### **EXECUTIVE SUMMARY**

CFA Institute is a longstanding member of the Charlottesville business community and has grown steadily since its inception in 1962. Starting as a two-person office housed at the University of Virginia's Monroe Hall, it now employs nearly 460 full-time employees at its recently opened Global Operations Center, located on the former Martha Jefferson Hospital campus. That makes CFA Institute today one of the region's largest employers. Based on 2015 data, CFA Institute was the 5th largest private employer in the City of Charlottesville and the 13th largest private employer in the Charlottesville Metropolitan Area. This ranking is likely even higher now, based on CFA Institute growth since 2015.

CFA Institute is also one of the region's highest paying employers. It paid average wages and salaries of \$81,513 in FY2015, more than 60 percent higher than the regional average wages and salary rate of \$49.668 in 2015.

CFA Institute infuses tens of millions of dollars into the local economy through its payroll and procurement. In FY2016, CFA Institute spent over \$53 million in the local economy: \$46 million of this total is employee payroll, and \$7 million is procurement. In addition, CFA Institute paid nearly \$1.2 million to local governments in the form of taxes and fees.

When the multiplier effects resulting from CFA Institute payments to Charlottesville region businesses and labor are considered, the total economic contribution of CFA Institute to the Charlottesville region is over \$261 million in total industry output, approximately \$105 million in value added, and nearly \$63 million in labor income. The total employment impact of CFA Institute is 1,005 jobs, which includes 458 employees working at CFA Institute as well as 547 indirect and induced jobs supported by CFA Institute spending on area goods and services and employee spending in the community. The five-locality Charlottesville Metropolitan Area (Charlottesville City and Albemarle, Fluvanna, Greene, and Nelson counties) has an estimated 159,000 total employment and \$12.6 billion in gross domestic product (GDP) for 2016. Thus, CFA Institute accounts for roughly 1 in 160 jobs and 1 in 120 dollars of GDP within the metropolitan area.

CFA Institute also had a major economic impact in the region when it renovated and expanded buildings on the former Martha Jefferson Hospital campus in downtown Charlottesville in 2013 for its new 144,000 square foot Global Operations Center. This \$35.7 million investment resulted in \$11.7 million spent with 10 local subcontractors in 2013. The project spending generated 132 jobs, \$6.1 million in labor income, \$8.4 million in value added, and \$17.1 million in total industry output for the local economy.

CFA Institute creates a number of other economic advantages for the region that are often difficult to quantify but still important. As a global organization, it fosters personal and economic connections with other regions around the world. Strengthening these connections and enhancing global engagement are increasingly recognized as important elements for metropolitan economic competitiveness. CFA Institute also helps to diversify the local economy. It is an educational and business services provider that provides stable employment opportunities around an upward growth trajectory. CFA Institute is an important local asset for regional efforts to promote a competitive financial services industry cluster that will stimulate additional regional growth and competitiveness. CFA Institute presence also creates a pool of highly skilled and educated employees who confer regional benefits. Three-quarters have college degrees. One-third have graduate/professional degrees. These employees contribute to the economic vitality of the region not only by making it a more attractive location for other firms, but also by being patrons and benefactors for the area's copious arts and cultural offerings.

CFA Institute supports a culture of corporate social responsibility and has adopted sustainability as a guiding principle for its operations and impact within the community. As a demonstration of its commitment to sustainability, CFA Institute elected to renovate an older, historical building on the Martha

Jefferson Hospital campus in the downtown area to house its new Global Operations Center rather than seek out greenfield sites. This act averted the possibility of an aging, blighted structure detracting from the surrounding neighborhood. The goal of the project was to preserve a local historical asset, minimize its environmental impact, and promote neighborhood revitalization. The building itself is LEED certified and possesses many environmentally friendly features that minimize water and energy use. The building's rooftop solar generation panels generated 73,162 kWh of solar power in FY2016, which avoided the equivalent to 51.4 metric tons of CO<sub>2</sub> emitted by conventional fossil fuel energy generation sources. The building uses a "graywater" reuse system that decreases public water use by 70 percent and public sewer discharges by 30 percent. CFA Institute also promotes office recycling and composting. In FY2016, it recycled 423.6 cubic yards of waste, which re-routed 53 dumpster loads from local landfills.

CFA Institute also invests in the local community. In FY2016, the organization spent a total of \$25,000 on local grants and nearly \$75,000 on local sponsorships. CFA Institute also donated gifts in kind to benefit local organizations. They included food equivalent to approximately 1,775 meals to the Salvation Army; 1,363 toiletries to The Haven, a local homeless shelter; and hundreds of iPads, iPhones, and Kindle Fires to local nonprofits with an estimated total fair market value of \$24,220. CFA Institute has provided approximately 55 Access scholarships (needs-based scholarships) and Awareness scholarships (merit-based scholarships available to qualified applicants in media, academic, and financial organizations) to Charlottesville area residents from

2012 to the present. These scholarships provide financial assistance to cover the costs of program enrollment and registration for the CFA Program.

CFA Institute senior staff and employees are active in the local community and serve on a wide variety of local organization boards and commissions. A survey of just 80 local employees found that employees had served on a diverse array of boards, with a total of more than 100 years of combined service. Senior staff serve on the board of the Charlottesville Regional Chamber of Commerce, Charlottesville Women in Tech (CWIT), and the Charlottesville Police Foundation. CFA Institute is also active in several area business organizations, including the Charlottesville Chamber of Commerce and Central Virginia Partnership for Economic Development.

CFA Institute promotes volunteerism both on and off the clock. The organization offers a "Volunteer Time Off" benefit, which provides employees with eight hours of paid time off to serve in the community with a civic or nonprofit organization. From January to October 2016, CFA Institute employees had used the benefit to contribute nearly 1,000 hours of volunteer time in the community. Eighty-eight CFA Institute employees participated in the United Way's 25th annual Day of Caring in the Charlottesville region, donating a total of 616 hours on six different projects. More than 120 local CFA Institute employees attended the 2016 Volunteer Fair (co-hosted with the Thomas Jefferson Area United Way) to learn more about volunteering opportunities in the Charlottesville area. One-third of attendees visited 10 or more nonprofits, and attending nonprofits identified approximately 117 prospective volunteers.

#### INTRODUCTION

CFA Institute is a longstanding member of the Charlottesville business community and has grown steadily since its inception in 1962. Starting as a two-person office housed at the University of Virginia's Monroe Hall, CFA Institute now employs nearly 460 full-time employees at its recently opened Global Operations Center located on the former Martha Jefferson Hospital campus. In addition, it has established several overseas offices in major international financial centers to serve global customers and CFA charterholders. Its offices in Hong Kong, London, New York, Brussels, Beijing, and Mumbai employ a total of 147 additional employees.

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CFA Institute is a worldwide association of investment professionals that establishes professional standards and awards credentials. It is categorized by the North American Industry Classification System (NAICS) used by federal and state agencies as falling within the professional organizations industry. The organizational mission is "to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society." It accomplishes this mission by providing education, training, and continuing education materials; administering certification and membership services; and disseminating research, data, and information to advance knowledge. CFA Institute has more than 140,000 members in 150 countries and territories and over 140 member societies.

This study provides a description and analysis of CFA Institute economic impact on the Charlottesville Metropolitan Area, with an additional focus on its history and growth in the Charlottesville region. It describes the role of CFA Institute in the economic vitality of the region. It presents information on local spending within the region and the economic impact of this spending on the Charlottesville Metropolitan Area for fiscal year 2016. It also presents the local economic impact of a major 2013 downtown renovation and addition project to accommodate expanded operations at its new Global Operations Center. Lastly, the study explores other economic and social contributions that the organization and its employees make to the region. These contributions include promoting environmental stewardship; expanding professional diversity; volunteering within the community; making charitable contributions to local organizations; and participating in regional civic, social, and business leadership.

To conduct the economic impact analysis, the study uses input—output analysis and the IMPLAN (IMpact analysis for PLANning) model, an industry standard input—output model that has been used in many economic impact studies. The report estimates the overall employment, output, and income impacts of CFA Institute. Economic impacts are identified as direct (the sales and employment of CFA Institute), indirect (impacts attributable to purchases of local products and services), and induced (impacts attributable to household spending).

The report is divided into four parts. The first section examines characteristics of CFA Institute and its growth in the region. The second section describes the methods and data used in the study to measure local economic impact. The third section presents the results of this analysis. The fourth section examines other quantitative and qualitative impacts of the organization on the economic and social vitality of the region.

This industry (NAICS Code 813920) is described by the US Census as comprising "establishments primarily engaged in promoting the professional interests of their members and the profession as a whole. These establishments may conduct research; develop statistics; sponsor quality and certification standards; lobby public officials; or publish newsletters, books, or periodicals, for distribution to their members" (US Census Bureau 2016).

#### **SECTION 1 CFA INSTITUTE CHARACTERISTICS AND GROWTH**

CFA Institute was started over a half century ago, following extensive discussions among members of the investment profession on the need for professional standards for financial analysts. Benjamin Graham, the "Dean of Wall Street" and co-author with David Dodd of the seminal financial investment book Security Analysis, was a leading proponent of establishing a professional credential, drawing on the successful model of the CPA (Certified Public Accountant) that is awarded

The establishment of CFA Institute in Charlottesville in 1962 was a fortuitous event for the region.

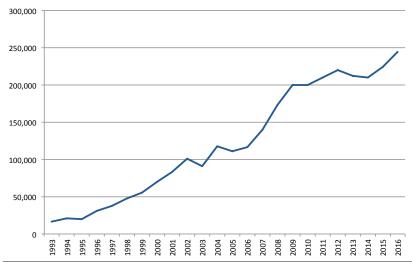
to qualifying accountants who pass a rigorous multipart exam (Regan 2012). Many other financial industry leaders were in agreement. Local financial analyst organizations came together in 1947 to create the National Federation of Financial Analysts Societies (NFFAS), which formed the nucleus of this effort to establish industry standards and a formal credentialing process. In 1959, the NFFAS board of directors approved the creation of the Institute of Chartered Financial Analysts (ICFA), one of the

predecessor organizations of CFA Institute. In 1961, the NFFAS changed its name to the Financial Analysts Federation (FAF) and hired its first executive director

The establishment of CFA Institute in Charlottesville in 1962 was a fortuitous event for the region. When the ICFA scouted for potential headquarter locations, it considered other major universities, such as Harvard University, Columbia University, the University of Chicago, the University of Pennsylvania, Source: CFA Institute and the University of Michigan (Regan 2012). It selected the University of Virginia because of the eagerness of university administration to host the organization, the recent establishment of a Graduate School of Business Administration (later called the Darden School of Business) that was on track to become a top-tier business school, and its relatively remote location "far from the pressures of Wall Street."2 Although CFA Institute could relocate its headquarters anywhere in the world, it retains its Charlottesville hub for a variety of reasons. They include the area's wealth of historical, cultural. and recreational amenities; school and labor force quality: and the ease with which it is able to recruit qualified staff to settle in the area. CFA Institute is also welcomed by local government and businesses as an essential part of the business, professional, and community fabric.

Staffing and facility growth have been driven by several factors. Most important is the rapid rate of increase in the number of CFA candidates (see

Figure 1. Number of CFA® Candidates by Fiscal Year, 1993-2016



Ed Cony, "New Testing Program Establishes Standards for Security Analysis." Wall Street Journal (May 6, 1963).

**Figure 1**) and charterholders. In addition, CFA Institute has increased the number of programs offered, the variety and complexity of services, and marketing/advertising. With continued expansion and the gradual development of its own infrastructure, staffing, and support services, CFA Institute gradually outgrew its university locations and no longer needed a university affiliation to meet its mission. The Long-Range Planning Committee for CFA Institute decided in 1981 that it was time for the organization to become independent.

CFA Institute capacity has grown rapidly over the last 50 years through organizational mergers, new product and service offerings, and international expansion. The CFA Institute Research Foundation, a 501(c)(3) nonprofit organization, was created in 1965 to fund research and create investment management learning material. In 1985, CFA Institute began a voluntary continuing education program for charterholders that offered professional development through independent study, seminars, and workshops (Regan 2012). In 1990, the FAF and ICFA were consolidated under a new parent company, the Association for Investment Management and Research (AIMR). In 2000, they were completely absorbed into AIMR. In 2004, AIMR was renamed CFA Institute.

In recent decades, the organization has expanded globally, branching out from its base in the United States into Canada, Europe, Asia, and elsewhere. Its educational and professional materials and services have also been continuously improved. Its offerings incorporate the latest advancements in financial analysis. Testing products and services reflect improvements in educational and psychometric testing methods. It has kept up with the latest developments in information technology by disseminating digital materials and services. Since it launched its website in 2000, it has posted study materials on the site, introduced distance learning, and offered interactive testing and membership services through online portals (Regan 2012).

The cornerstone of CFA Institute is the Chartered Financial Analyst® (CFA) Program. This program has been declared the "Gold Standard of Investment

Education" by leading financial newspapers, such as The Economist and Financial Times (Regan 2012). In fact, many regulatory agencies across the globe have used the CFA exams in lieu of creating their own state licensing exams (Regan 2012). The program "bridges current practice, investment theory, and ethical and professional standards to provide investment analysis and portfolio management skills." The charter is awarded after passing three test levels and agreeing to adhere to the ethical requirements of CFA Institute. The exams test knowledge in the areas of ethical standards, economics, accounting, portfolio management, statistics, equity, and fixed income. The Level I exam tests knowledge and comprehension using multiple-choice questions. Level II consists of item set (mini-case) questions that test application and analysis. Level III asks item set and essay questions and tests synthesis and evaluation. This final exam requires individualized grading by professional graders (Regan 2012).

In recent years CFA Institute has begun to offer other educational programs. The Certificate in Investment Performance Measurement (CIPM®) Program (originally named CGIPS—Certificate in Global Investment Performance Standards) was created in 2005, and 1,600 people have completed the program. It offers skills for evaluating and communicating investment performance and risk that adheres to a group of standards called the Global Investment Performance Standards (GIPS®). The CFA Institute Investment Foundations program (formerly the "Claritas Program" or "Certificate of Knowledge") was launched in 2013, and more than 10,000 people have been awarded the certificate. It offers a broad understanding of the global investment management industry for those working within financial and investment services organizations who are not investment management staff.

CFA Institute and the CFA Institute Research Foundation offer a wide variety of professional development materials and services. These materials include study guides for Levels I–III, CFA Digest, CFA Institute Magazine, CFA Institute Conference Proceedings Quarterly, and the Financial Analysts Journal®. The latter journal has been ranked 35th

among all academic finance journals. The Research Foundation also publishes books and monographs on the financial industry, occasional papers, and literature reviews. CFA Institute and the CFA

## Rapid growth has required CFA Institute to move to larger facilities about every decade.

Institute Research Foundation provide a variety of other services, including online test preparation, conferences, professional seminars, and continuing education classes.

CFA Institute has also established close working relationships with colleges and universities. The CFA Program Partners initiative was started in 2006. This program recognizes universities that incorporate the CFA curriculum into their undergraduate and graduate programs. To date, over 300 universities across the world have done so. In addition, each year CFA Institute sponsors a competition called the Global Investment Research Challenge. The competition awards a prize to schools represented by student teams who compete

Figure 2. CFA Institute Locations



Clockwise from upper left (a) Monroe Hall, (b) Faulkner House, (c) Fontaine Avenue Research Park, (d) 915 E. High Street, (e) Boar's Head Inn Complex

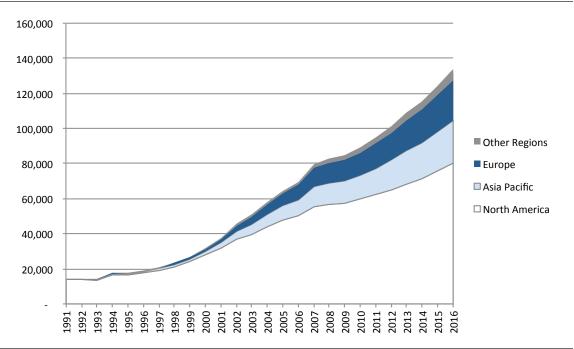
in assessing the financial performance of a publicly traded company (Regan 2012). In 2015, over 4,000 students representing 865 universities across the globe competed in the challenge.

Rapid growth has required CFA Institute to move to larger facilities about every decade. Starting out in the University of Virginia's Monroe Hall in 1962, CFA Institute quickly outgrew these quarters and moved to university-owned offices at the Faulkner House (now the Miller Center) in 1966. In 1972, it moved to an office complex at 5 Boar's Head Lane (see Figure 2). In 1999, all offices were consolidated into 50,000 square feet of office space in a newly constructed 70,000 square foot building at 560 Ray C. Hunt Drive in the Fontaine Research Park. In 2013, CFA Institute moved into its Global Operations Center, a 144,000 square foot building office space that is an adaptive reuse of buildings at the former Martha Jefferson Hospital campus. With vigorous international growth, it has expanded its global footprint with successive global offices opened in Hong Kong (1997), London (2001), New York (2005), Brussels (2009), Beijing (2015), and Mumbai (2015).

The outlook for the financial analyst profession is bright. The Bureau of Labor Statistics projects the number of US-based financial analysts will grow 12 percent from 2014 to 2024, which is above the average growth rate for all occupations (Bureau of Labor Statistics 2016). However, the lion's share of applicant and charterholder growth is anticipated to be outside the United States. International financial assets rose 66 percent from \$177 trillion in 2005 to \$294 trillion in 2014.3 As emerging nations continue to develop, increases in financial market participation, greater demand for professional asset management and diversified financial investment products, and more exacting licensing and certification standards by government agencies are likely to drive growing global demand for certified financial analysts and investment managers (Regan 2012). Reflecting

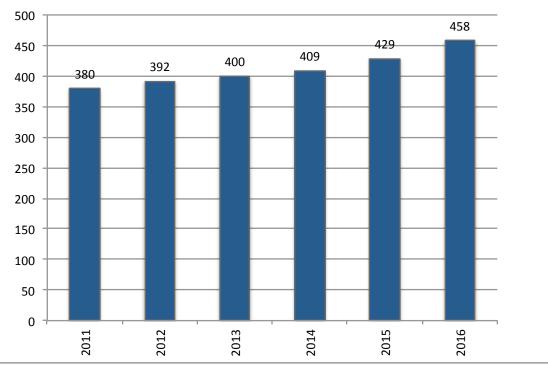
Business Insider, "Here's What the \$294 Trillion Market of Global Financial Assets Looks Like" (February 12, 2015): http://www.businessinsider.com.au/global-financial-assets-2015-2 (accessed November 1, 2016).

Figure 3. Number of CFA Charterholders by Region and Fiscal Year, 1991-2016



Source: CFA Institute

Figure 4. CFA Institute Global Operations Center Employment by Fiscal Year, 2011-2016



Source: CFA Institute

these trends, CFA Institute reached the milestone in FY2004 where more than half of CFA exam registrations originated from outside North America (Regan 2012). Today, 39 percent of charterholders (see **Figure 3**) and nearly 70 percent of applicants are from outside of North America.

CFA Institute invested in an enlarged and refurbished Global Operations Center in 2013 to accommodate such additional growth. It also represented a commitment to continue to anchor its operations in Charlottesville for the "foreseeable future." The facility was designed to make it possible to consolidate its then 400 employees, who were dispersed among city offices, at one location and allow room for continued expansion. CFA Institute added 58 additional jobs by 2016 (see **Figure 4**), well above the expected milestone announced at the ground breaking ceremony of adding "45

jobs over the next five years." This project was economically significant for the region because of the number of jobs created during construction and, more importantly, for allowing the organization to improve its efficiency and productivity and expand its regional economic footprint.

CFA Institute today is one of the region's largest employers. Based on 2nd quarter 2015 records from the Virginia Employment Commission's Quarterly Census of Employment and Wages (QCEW), CFA Institute was the 23rd largest employer in the Charlottesville Metropolitan Area and its 13th largest private employer. Within the City of Charlottesville, CFA Institute was the 8th largest employer and 5th largest private employer. This ranking is likely even higher now, because of CFA Institute growth since 2015.

### SECTION 2 METHODOLOGY AND DATA

The CFA Institute Global Operations Center exports virtually all of its services outside of the region and, increasingly, outside of the United States. Of its more than 130,000 charterholders, only a very small number (142) reside in the Charlottesville Metropolitan Area. Thus, the removal of this spending from the Charlottesville Metropolitan Area due to closure or relocation would leave a large economic vacuum in the area. Purchases of supplies and services from other local firms would be lost, and payments to resident personnel would not occur. Firms and employees that provide services and supplies to those firms would be similarly affected. The cumulative effect of subsequent rounds of reduced spending would create a "multiplier effect" resulting from the subsequent loss of money that is not re-spent in the local economy. Quantifying CFA Institute expenditures in the region and their associated multiplier effect in the region is the role of economic impact analysis.

This study uses input-output analysis to evaluate the economic impact of CFA Institute on the Metropolitan Area Charlottesville Input-output analysis produces industry-specific economic multipliers that show how firm spending affects the metropolitan economy (Miller and Blair 2009). The total economic impact consists of three parts: a "direct effect," an "indirect effect," and an "induced effect." The direct effect measures CFA Institute activity (e.g., output, employment) in the region. Expenditures made by the organization on procurement of goods and services and payments on payroll cause a "ripple effect" on the local economy when money is re-spent. For instance, local businesses provide supplies and services to CFA Institute, such as furniture, stationary, utilities, and advertising. These businesses spend a portion of their sales revenues on their supplies and services from other local firms that, in turn, purchase a portion of their supplies and services from other local firms. This cascading sequence of spending continues until the subsequent rounds of spending dissipate due to leakages in the form of spending outside the metropolitan area. The cumulative effect of these initial expenditures on local firms' goods and services and cascading rounds of inter-industry purchases is referred to as the *indirect effect*. The final component of total impact (the *induced effect* or "induced impact") is attributable to the spending of households. CFA Institute pays its employees for their services. The households of these workers then purchase goods and services from local firms, which, in turn, receive a portion of their labor, material, and service inputs from within the area. Again, leakages occur at each round due to purchases outside the area. The induced effect is the sum of the impacts associated with these household purchases.

The impact analysis for this study used IMPLAN (IMpact analysis for PLANning) (Day 2013). It is based on the most recent 536-sector model using 2014 data released in December 2015. A model is constructed for the Charlottesville Metropolitan Area using data for the constituent localities: the City of Charlottesville and Albemarle, Fluvanna, Greene, and Nelson counties.

Indirect and induced effects are computed by IMPLAN using information from the regional model, including information on inter-industry transactions and industry labor payments. In addition, the model provides estimates of how much industry demand for an individual commodity demand is satisfied by local production. This information is combined by IMPLAN to produce a Type I multiplier (reflecting direct and inter-industry effects only) and a Type II/SAM (Social Accounting Matrix) multiplier (reflecting direct, inter-industry, and household spending effects), which are used to compute the total impact and disaggregate it into direct, indirect, and induced impact components. A more extensive presentation of the theoretical basis

<sup>&</sup>lt;sup>4</sup> IMPLAN SAM-type multipliers can include the effects from employee household spending as well as the effects of spending of firm profits, transfer payments, government, and other institutions. This study uses only the household sector in computing induced impacts. This model "closure" is standard practice in local economic impact analysis.

of this methodology using mathematical notation can be found in Miller and Blair (2009).

Economic impacts are evaluated within IMPLAN using four different measures: (a) total sales or total industry output, (b) value added, (c) labor income, and (d) employment. Total sales or industry output is the total value of industry production during a period. It measures sales of intermediate inputs for use in production as well as sales of products to final consumers. Value added is a subset of total industry output. It reflects only sales to final consumers and therefore avoids the double counting that occurs when intermediate inputs are included. It is the most commonly used measure of economic activity. Value added is the concept behind gross domestic product (GDP) and can be compared to the GDP numbers provided by the Bureau of Economic Analysis for states and metropolitan areas. It can also be represented as total factor income plus indirect business taxes. Labor income represents the flows to workers and business owners in the form of employee compensation and proprietors' income. Employment is measured in terms of person-years of employment. A person-year of employment is a job of one year in duration. Employment includes full-time and part-time employment as well as the self-employed and is measured by place of work.

CFA Institute provided organization spending for payroll and spending on vendors and contractors located within the Charlottesville Metropolitan Area. This information was used to implement an analysis-by-parts or "bill of goods" approach to gauge the economic impact. This method separates the modeling into two tasks: modeling the purchase of goods and services from local firms using expenditure totals by IMPLAN industry and the payment of wages and salaries as an increase in resident household income.<sup>5</sup> Table 1 shows the expenditures by CFA Institute within the Charlottesville Metropolitan Area by major category. Appendix Table A.1 shows the results of mapping the expenditures described in Table 1 to the IMPLAN sectors. The final stage involves running

the IMPLAN model and generating the economic impact results.

Table 1 indicates that employee payroll accounted for 85 percent of CFA Institute spending in FY2016 (\$46.3 million) within the Charlottesville Metropolitan Area.<sup>6</sup> Over \$6.7 million was spent on other operational expenditures paid to regional firms and vendors (i.e., facility, utilities, services, retail purchases, and transportation). Although not considered in this regional analysis, an additional \$5.2 million was spent on goods and services outside the region but within Virginia. The second largest major category of local expenditures (\$5.8 million or 11 percent) was for services, including \$2.2 million for lodging and conference facilities. The remaining 4 percent included transportation, utilities, retail purchases, and miscellaneous expenditures. The largest single item in this group was local taxes and fees (\$1.2 million). Not shown in the operational spending table was an additional \$124,639 in local capital spending as part of \$1.3 million total capital spending during the fiscal year.

The numbers presented represent only a partial accounting of the economic impact of charterholder graders who travel to the area and work for short periods to grade Level III CFA exams. Each year, CFA Institute brings over 600 graders to the region, many of whom are accompanied by their families. CFA Institute covers the costs of meals and lodging for the graders and also pays a stipend for their services. Although the costs of lodging and meals provided by CFA Institute are reflected in the local expenditures for lodging and meals reported previously and in the economic impact, other incidental spending or tourism-related spending within the region is not included. For the purposes of this analysis, the stipends paid to graders were assumed to be entirely spent outside the Charlottesville region.

CFA Institute also has a significant impact on the region when it changes and expands its facilities. During the 2013 fiscal year, for example, CFA

<sup>5</sup> Employee compensation was entered into the IMPLAN model as household income using the Sector 10008 (Household Income \$100,000-\$150,000 institution-spending pattern.

<sup>6</sup> The fiscal year for CFA Institute begins on September 1st and ends on August 31st.

Table 1. CFA Institute Operational Spending in Charlottesville Metropolitan Area by Major Category and Item, FY2016

Category	Item	Amount (\$)
Payroll		46,326,000
	Full- & part-time employees	46,326,000
Facility		512,361
	Building rent	512,361
Utilities		220,820
	Electric	204,690
	Other utilities	16,130
Services		5,754,789
	Advertisement	39,890
	Catering	257,561
	Outside counsel	135
	Photographer	2,630
	Printing	445,679
	Security	285,390
	Shipping	7,363
	Speaker	14,319
	Event planning	159,008
	Health club	117,454
	Employment (temp) services	713,137
	Contracted services	398,507
	IT and related services	279,675
	Equipment rental	305,841
	Hotel/conference center	2,227,213
	Subscriptions	6,500
	Food & entertainment	318,833
	Landscaping, cleaning, and other services	175,653
	Landscaping, cleaning, and other services	175,055
Retail Purch		167,481
	Furniture/fixtures	76,636
	Office equipment	7,916
	Promotional products	54,275
	Other retail	13,780
	Signage	14,874
Transportati	on	57,259
	Gas	2,374
	Rental car	39,782
	Parking	15,104
Other		1,291,167
	Local taxes and fees	1,178,294
	Professional dues and development	12,906
	Grants	25,000
	Sponsorships	74,968

Source: CFA Institute

Institute undertook a major adaptive reuse project to convert buildings on the former Martha Jefferson Hospital campus in downtown Charlottesville into its new 144,000 square foot Global Operations Center. This \$35.7 million project was undertaken by Whiting Turner, a construction management and general contracting company based in Baltimore, Maryland. The firm used 10 Charlottesville region

subcontractors for masonry work, electrical work, signage, furniture and equipment, landscaping, and engineering and design services that resulted in \$11.7 million in local expenditures. **Appendix Table A.2** shows the results of mapping these expenditures to the IMPLAN sectors. The effect of these expenditures in 2013 will also be estimated in the next section.

#### **SECTION 3 ECONOMIC IMPACT RESULTS**

The Global Operations Center directly accounts for an estimated \$213 million in total industry output<sup>7</sup> or sales, \$46 million in labor income, \$76 million in value added, and 458 employees (see Table 2). These are the direct impacts. The injections of to household spending was \$38.9 million in total industry output, \$23.1 million in value added, \$12.9 million in labor income, and 297 jobs. Adding these impacts together for the metropolitan area, the total impact of CFA Institute is \$261 million

Table 2. CFA Institute Economic Impacts in FY2016: Employment, Labor Income, Value Added, and Total Industry Output

	Employment	Labor Income (\$)	Value Added (\$)	Total Industry Output (\$)
Direct	458	46,326,000	76,025,546	213,353,062
Indirect	250	3,417,293	5,425,712	9,029,866
Induced	297	12,918,348	23,142,736	38,930,767
Total	1,005	\$62,661,641	\$104,593,994	\$261,313,695

Source: CFA Institute and the Weldon Cooper Center for Public Service using IMPLAN

payroll and procurement spending and subsequent rounds of business and household spending result

...the total impact of CFA Institute is \$261 million in total industry output. \$104.6 million in value added, \$62.6 million in labor income, and 1,005 jobs.

in the indirect and induced effects described earlier. The indirect effect attributable to FY2016 business

spending on inputs was \$9 million in total industry output, \$5 million in value added, \$3.4 million in labor income, and 250 jobs for the Charlottesville Metropolitan Area. The induced effect attributable

iii totai iiiaabtij output,
\$104.6 million in value
added, \$62.6 million in
labor income, and 1,005
jobs. For comparison
purposes, Charlottesville
Metropolitan Area
employment was 150,717
and GDP was \$12.2
billion in 2015. In
2016, employment and
GDP are projected to be

156,000 and \$12.6 billion

in total industry output,

respectively. Thus, CFA Institute accounts for approximately 1 in 160 jobs and 1 in 120 dollars of GDP within the region.

**Table 3** shows a breakdown of total employment impact by major sector. The principal sector affected by the presence of CFA Institute is the service industry. Services account for 921 jobs or 92 percent of the total impact. The next largest industry category is wholesale and retail trade (57 jobs or 5 percent). Transportation, information and

Table 3. CFA Institute Employment Impacts by Major Sector, 2016					
Industry	Direct	Indirect	Induced	Total	
Agriculture	0	0	2	2	
Mining	0	0	0	0	
Construction	0	2	4	6	
Manufacturing	0	3	1	4	
Transportation, information, and public utilities	0	1	10	11	
Trade	0	3	54	57	
Service	458	241	222	921	
Government	0	0	4	4	
Total	458	250	297	1,005	

Source: CFA Institute and the Weldon Cooper Center for Public Service using IMPLAN

Sales at the Global Operations Center estimated by prorating Institute wide revenues on the basis of employment at the Charlottesville location as a proportion of total CFA Institute global employment.

Table 4. Global Operations Center Construction Economic Impacts: Employment, Labor Income, Value Added, and Total Industry Output, 2013

	Employment	Labor Income (\$)	Value Added (\$)	Total Industry Output (\$)
Direct	95	4,287,595	5,338,120	11,917,722
Indirect	13	752,260	1,181,947	2,080,902
Induced	24	1,032,576	1,861,088	3,128,656
Total	132	\$6,072,431	\$8,381,155	\$17,127,280

Source: CFA Institute and the Weldon Cooper Center for Public Service using IMPLAN.

public utilities (11 jobs); construction (6 jobs); manufacturing and government (4 jobs each); and agriculture (2 jobs) round out the total impact. There are three reasons for the concentration of service industry impacts. First, the entire direct economic impact is attributed to services because CFA Institute is a services firm, providing business and professional association services. Second, the single largest category of non-payroll operational expenditures by CFA Institute is on services. Third, about half of local household spending is on services.

The CFA Institute employment multiplier obtained by dividing the total employment impact by the direct employment impact (1,005/458) is estimated to be 2.2. This multiplier compares favorably to other metropolitan area industries. If it were its

Table 5. Global Operations Center Construction Employment Impacts by Major Sector, 2013

,,,,						
Industry	Direct	Indirect	Induced	Total		
Agriculture	0	0	0	0		
Mining	0	0	0	0		
Construction	86	0	1	87		
Manufacturing	0	1	0	1		
Transportation, information, and public utilities	0	1	1	2		
Trade	1	3	4	8		
Service	8	8	18	34		
Government	0	0	0	0		
Total	95	13	24	132		

Source: CFA Institute and the Weldon Cooper Center for Public Service using IMPLAN

own industry, CFA Institute would rank 26th among the 148 local industries that employ at least 100 employees and 55th among all 260 industries with a presence in the region. The average industry multiplier within the metropolitan area is

1.6. A multiplier of 2.2 is indicative of the fact that CFA Institute pays excellent wages and salaries and relies on local firms to supply a significant portion of its goods and services purchases.

The construction of the Global Operations Center in 2012-2013 also provided a boost to the area economy. The general contractor, Whiting Turner, spent \$11.7 million on local subcontractors in 2013. Charlottesville Metropolitan Area businesses directly created 95 jobs (see **Table 4**). These jobs generated \$4.3 million in total labor income (in terms of 2016 dollars) for an estimated \$45,091 per job. Indirect and induced impacts accounted for an additional 37 area jobs, \$1.8 million in labor income, \$3.0 million in value added, and \$5.2 million in total industry output. The total economic impacts for the area during construction were 132 jobs, \$6.1 million

in labor income, \$8.4 million in value added, and \$17.1 million in total industry output.

The bulk of those directly employed by the project were unsurprisingly in the construction industry (86), with 8 jobs in the service industry and 1 job in the wholesale trade industry (see **Table 5**). Indirect and induced employment impacts were distributed among the service (26 jobs), retail and wholesale trade (7 jobs), transportation, information, and public utilities (2 jobs), and manufacturing (1 job) sectors.

### SECTION 4 OTHER REGIONAL ECONOMIC AND SOCIAL CONTRIBUTIONS

CFA Institute supports a culture of corporate social responsibility. It formally created and staffed a Corporate Social Responsibility Office (Organizational Environment, Social. Governance) in 2015 to manage and monitor its impacts. The organization affects the local community in many ways though various initiatives and activities in the areas of philanthropy, volunteerism, community leadership, diversity, and sustainability. This section examines the specific ways that the organization affects the Charlottesville region. Quantitative and qualitative information on CFA Institute impacts is provided for each of these areas.

#### Volunteer/Donations

CFA Institute employees are encouraged to volunteer in the community. The organization offers a "Volunteer Time Off" benefit, which provides employees with eight hours of paid time off to serve with a civic or nonprofit organization. From January to October 2016, CFA Institute employees had used the benefit to contribute 998.5 hours of volunteer time in the community. Eighty-eight employees participated in the United Way's 25th annual Day of Caring in the Charlottesville Area. They donated a total of 616 hours working on six projects that benefited six different organizations, including Habitat for Humanity of Greater Charlottesville, Oakland School, Carysbrook Elementary School, Moss-Nuckols Elementary School, Project Linus, and Fluvanna Middle School. More than 120 local CFA Institute employees attended the 2016 Volunteer Fair (co-hosted with the Thomas Jefferson Area United Way) to learn more about volunteering opportunities in the Charlottesville area. One-third of attendees visited 10 or more nonprofit booths, and participating nonprofits identified approximately 117 prospective volunteers.

CFA Institute also helps the local community through philanthropic giving and sponsorships. During FY2016, CFA Institute employees donated 71 units of blood over the course of four blood drives. CFA Institute partnered with the Salvation Army Angel Tree program to provide gifts for 75 local children in need at the holidays in collaboration with the Salvation Army of Charlottesville. CFA Institute made a number of in-kind donations benefitting local organizations in FY2016. They included donating the equivalent of approximately 1,775 meals to the Salvation Army; 1,363 toiletries to The Haven, a local homeless shelter; and hundreds of iPads, iPhones, and Kindle Fires to local nonprofits, with an estimated total fair market value of \$24,220.

CFA Institute began a new Community Partnership initiative in FY2016 that forges partnerships with area nonprofit organizations to improve investor education. CFA Institute partnered with TEDx Charlottesville to sponsor its 2016 event called the "Power of One." The program was held on November 11th at the Paramount Theater and included a full day of live speakers, activities, and discussion involving several hundred community members drawn from different backgrounds and professions.

In FY2016, CFA Institute spent a total of \$25,000 on local grants and nearly \$75,000 on local sponsorships.

#### Education

CFA Institute sponsored several activities to cultivate greater awareness and interest in financial management and financial issues by area students and the general public during FY2016. The organization hosted 14 student interns from educational institutions. It also provided a table at a Piedmont Virginia Community College (PVCC) volunteer fair for 10th graders during a two-day period, during which employees made contact with hundreds of students, held conversations with over 60 students who were interested in the finance field, and distributed 400 pieces of printed informational material. During the year, CFA Institute sponsored two educational events within the area that were

open to the general public: (a) "Beyond Analysis," a Studio Seminar held on February 4-5 that featured five speakers and focused on less tangible ways to assess investments, and (b) "2016 Tax Strategies for High-Net-Worth Clients," a Studio Seminar held on June 23, which featured tax expert Robert N. Gordon, who discussed the implications of the 2016 elections on the US tax code.

From 2012 to the present, CFA Institute has provided approximately 55 Access scholarships (needs-based scholarships) and Awareness scholarships (merit-

The CFA Institute Leadership Team and other employees are active in the local community and serve on a wide variety of local organization boards and commissions.

based scholarships available to qualified applicants in media, academic, and financial organizations) to Charlottesville area residents. These scholarships provide financial assistance to cover the costs of program enrollment and registration for the CFA Program.

#### Community Leadership

The CFA Institute Leadership Team and other employees are active in the local community and serve on a wide variety of local organization boards and commissions. Stephen Horan, the Managing Director of Credentialing, serves on the board of the Charlottesville Regional Chamber of Commerce. Elaine Cheng, Managing Director and Chief Information Officer, is a founding and current board member of Charlottesville Women in Tech (CWIT) and serves as its sponsorship chair. Darin Goodwater, Chief Compliance, Risk, and Ethics Officer, is a member of the Charlottesville Police Foundation. A survey of just 80 local employees found that they serve on a wide array of community boards with a total of more than 100 years of combined service. CFA Institute is also active in several area business organizations, including the Charlottesville Regional Chamber of Commerce and Central Virginia Partnership for Economic Development.

CFA Institute encourages community leadership. Two employees attended the Center for Nonprofit Excellence (CNE) Board Development Academy (BDA) during the year. Both employees received Corporate Social Responsibility scholarships to help defray the costs of attendance, and both successfully completed the program.

#### Sustainability

CFA Institute has adopted sustainability as a guiding principle for its operations and impact within the community. For this reason, it was a natural decision for it to choose adaptive reuse of an older, historical building on the Martha Jefferson Hospital campus in the downtown area rather than build on a greenfield site. This decision also helped the community avert the possibility of aging and blighted vacant structures detracting from the surrounding neighborhood. The new Global Operations Center was announced in 2011 as part of a project developed by Octagon Partners in 2012 to preserve a local historical asset, minimize environmental impact, and promote neighborhood revitalization. The renovated office space occupies what were once the 7-story South Tower and 5-story South Wing, as well as the Patterson Building that was built in 1929. It is part of a larger project designed to stimulate development in the remaining buildings of the campus, including the adjacent Rucker Building and Cardwell Center, for mixed-use development and additional commercial development in the surrounding commercial corridor.

The building earned gold certification for Leadership in Energy and Environmental Design (LEED) and features many environmentally friendly features that minimize water and energy use. Its rooftop solar generation panels generated 73,162 kWh of solar power in FY2016. This clean energy avoided the equivalent of 51.4 metric tons of CO<sub>2</sub> that would be emitted by conventional fossil fuel energy generation sources. Moreover, the building uses a "graywater" reuse system that decreases public water use by 70 percent and public sewer discharges by 30 percent.

CFA Institute also promotes office recycling and composting. The organization has begun to track annual progress on metrics connected to this initiative. In FY2016, employees recycled 423.6 cubic yards of waste. This total included 148 cubic yards of office paper, 151.8 cubic yards of mixed paper, 13.3 cubic yards of aluminum, 15.3 cubic yards of plastics, and 0.3 cubic yards of glass. Total recycling volume was equivalent to 53 dumpster loads—all waste that was diverted from local landfills. Office composting re-routed an additional 33.4 cubic yards (not including cafeteria composting). To promote electronics recycling, CFA Institute holds an electronic recycling event on Earth Day. In 2016, this event yielded 5,176 pounds of sustainably recycled electronics.

#### Diversity

CFA Institute values a diverse workforce in order to build a high-performance organization that generates new ideas and innovative thinking. Sixty-five percent of its workforce is women. It strives to recruit a diverse pool of talent and promote greater diversity within the investment management profession at large. It collaborates with the Charlottesville Recruiters Network to find the best local talent. It also advertises positions on national/global sites—such as LinkedIn, Glassdoor, top university alumni job boards, and professional associations' sites—and employs international executive recruiting firms in employee searches.

CFA Institute is also committed to promoting diversity within the investment management profession. The Women in Investment Management Initiative is a CFA charterholder led initiative to encourage greater diversity in the profession by improving female recruitment and retention and illustrating how greater employee, management, and board diversity can enhance firm and financial performance.

#### Other Economic Contributions

CFA Institute creates a number of economic advantages for the region that are often difficult to quantify but still important.

CFA Institute is truly a global organization. It exports almost all of its services outside the region. Over two-thirds of its program candidates reside outside the United States, and in the next two decades, the majority of its charterholders are predicted to originate from other countries as well. The organization's linkages with its international charterholders and board members help to create global connections with the Charlottesville region. Strengthening these connections and enhancing global engagement are increasingly recognized as important elements for metropolitan economic competitiveness (Katz and Bradley 2013).8

The CFA Institute presence also contributes to the area's pool of talent. The organization draws employees from inside and outside the community who are highly skilled and educated. Three-quarters have college degrees. One-third have graduate/ professional degrees. By comparison, 41 percent of adults 25 years and older in the Charlottesville Metropolitan Area have college degrees and 20 percent hold graduate/professional degrees. CFA Institute employee presence in the region contributes to the thickening of the local skilled labor market and increases the possibilities for other educated workers in the region to realize horizontal career opportunities. The organization's highly educated employees are visible members of the area's "Creative Class" (Florida 2002).9 They contribute to the "creativity climate" and economic vitality of the region, make it an attractive location for other creative firms and individuals, and are patrons and benefactors for the area's impressive array of arts and cultural offerings.

CFA Institute helps to diversify a local economy that is highly dependent on higher education and health care and a single dominant employer (the University of Virginia and UVA Health System). CFA Institute is a service industry employer that provides stable

<sup>8</sup> See also the Brookings Institute Global Cities Initiative: https://www.brookings.edu/project/global-cities-initiative-ajoint-project-of-brookings-and-jpmorgan-chase/.

<sup>9</sup> Florida's (2002, p. 8) "Creative Class" includes "creative professionals in business and finance, law, health care and related fields . . . people [who] engage in complex problem solving that involves a great deal of independent judgment and requires high levels of education or human capital."

employment opportunities around an upward growth trajectory. Its products and services are less sensitive to economic fluctuations than cyclically sensitive sectors—such as durable manufacturing, transportation, retail trade, or tourism—and it draws on a diverse international market of customers. Lower levels of economic volatility lead to more stable employment in supplying firms and local government revenues.

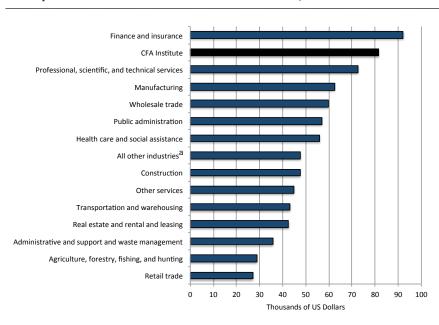
## CFA Institute helps to diversify [the] local economy...

CFA Institute average wages and salaries compare

region. Its average wage and salary is \$81,513, more than 60 percent higher than the regional average of \$49,668 in 2015 (see Figure 5). This compensation level is slightly below the average finance insurance industry wage and salary rate of \$92,092 but higher than other leading industries for which data are disclosed, such as professional. scientific, and technical services; manufacturing; and health care: and social assistance

CFA Institute may also be an important area asset for attracting other financial services firms to the region. The organization is loosely connected to the local business service industry cluster. Industry clusters are formed by interconnected firms within a region that sell similar products, buy products from one another, and share production resources, such as labor and R&D. Promoting competitive industry clusters forms an important part of state and regional economic development strategy because of the synergistic effects of industrial recruitment and expansion. Both the Central Virginia Economic Development Partnership and Albemarle County Economic Development Offices have identified the financial services industry cluster as an area of focus.

quite favorably with Figure 5. Average Wages and Salaries for Major Charlottesville leading industries in the Metropolitan Area Industries and CFA Institute, 2015



Source: Virginia Employment Commission, Quarterly Census of Employment and Wages, Annual for 2015

Note: CFA Institute average wage and salary is for FY 2015.

services region.

<sup>a</sup> The category "All other industries" includes undisclosed industries in aggregate. They are accommodation and food services; arts, entertainment, and recreation; educational services; information; management of companies and enterprises; mining; and utilities.

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#### **APPENDIX**

Table A.1
CFA Institute Local Expenditures by IMPLAN Sector, FY2016

IMPLAN SECTOR	Sector Description	Amount (\$)
10008	Households 100-150k	46,326,000
49	Electric power transmission and distribution	204,690
51	Water, sewage, and other systems	16,130
154	Printing	445,679
388	Sign manufacturing	14,874
395	Wholesale trade	7,916
397	Retail - Furniture and home furnishings stores	76,636
402	Retail - Gasoline stores	2,374
405	Retail - General merchandise stores	13,780
406	Retail - Miscellaneous store retailers	54,275
415	Couriers and messengers	7,363
418	Periodical publishers	6,500
140	Real estate	512,361
142	Automotive equipment rental and leasing	39,782
145	Commercial and industrial machinery and equipment rental and leasing	305,841
147	Legal services	135
<b>1</b> 51	Custom computer programming services	279,675
154	Management consulting services	398,507
157	Advertising, public relations, and related services	39,890
158	Photographic services	2,630
164	Employment services	713,137
167	Investigation and security services	285,390
168	Services to buildings and dwellings	175,653
170	Convention and trade show organizers	159,008
188	Performing arts companies	40,292
189	Commercial sports except racing	1,752
191	Promoters of performing arts and sports and agents for public figures	178,687
192	Independent artists, writers, and performers	14,319
196	Other amusement and recreation industries	12,263
197	Fitness and recreational sports centers	117,454
199	Hotels and motels, including casino hotels	2,227,213
501	Full-service restaurants	49,927
502	Limited-service restaurants	35,913
503	All other food and drinking places	257,561
512	Other personal services	15,104
514	Grantmaking, giving, and social advocacy organizations	25,000
515	Business and professional associations	87,874

Table A.2
Global Operations Center Construction
Expenditures by IMPLAN Sector, 2013

IMPLAN SECTOR	Sector Description	Amount (\$)
57	Construction of new commercial structures, including farm structures	10,331,575
395	Wholesale trade	692,404
449	Architectural, engineering, and related services	179,800
450	Specialized design services	271,805
469	Landscape and horticultural services	188,000