

Committed to Serving Our Community
George Fox University



Economic Impact Study

**A Christ-centered community that prepares students spiritually,
academically, and professionally to think with clarity, act with integrity, and
serve with passion**

Preface

The following report highlights many of the economic and non-economic contributions George Fox University makes to the local community. The study was completed during the spring of 2015 by Dr. Nathanael Peach and 13 students enrolled in an economic development course. The student co-authors of the study are Tyler Bowman, Taylor Dunn, Victoria Freitag, Connor Hansen, Heather Kahl, Shannon Kephart, Sean Mansfield, Emily Mavrakis, Emma Newman, Sarah Ng, Stephen Partin, Noah Smith, and Megan Westby. Each made invaluable contributions to the project through their intelligence, work ethic, and congeniality. After the semester was completed Emily Mavrakis made substantial contributions to the final draft of the study.

This study epitomizes the University's commitment to its mission to be a "Christ-centered community, preparing students spiritually, academically, and professionally to think with clarity, act with integrity, and serve with passion." The University's belief in its students made this report possible.

All errors, and omissions are the responsibility of the authors. Please direct questions to: Nathanael Peach, Assistant Professor of Economics, George Fox University, 414 N. Meridian St. #6263, Newberg, OR 97132; npeach@georgefox.edu or (503) 554 – 2815.

TABLE OF CONTENTS

Preface 2

I. Introduction 4

II. Highlights..... 8

III. George Fox University Community 9

IV. Economic Impact..... 14

V. Community Outreach..... 19

Appendix 1: Works Cited 26

Appendix 2: Methodology 27

LIST OF TABLES

Table 1: George Fox University Community, 2014 9

Table 2: George Fox University, 2013 - 2014 Revenues..... 15

Table 3: George Fox University, Undergraduate Student Spending, 2014 - 2015 16

Table 4: George Fox University, Resident Graduate Student Spending, 2014 - 2015 16

Table 5: George Fox University, FY-2014 Purchases of Goods and Services 17

Table 6: George Fox University, New Construction 17

Table 7: George Fox University, FY-2014 Salaries and Benefits 18

I. Introduction

Established in 1891, George Fox University is the second largest private university in the state of Oregon. The University was founded by Quakers (also known as the Society of Friends or Friends Church). In 1949 its name was changed from Pacific College to George Fox College, in honor of the founder of the Quaker movement. In 1996 the institution officially became a university.

George Fox University is a nationally recognized Christian University, accredited by the Northwest Commission on Colleges and Universities. The main university campus is located in Newberg, Oregon, 23 miles southwest of Portland. The University also offers courses and academic programs across Oregon in Portland, Salem, and Redmond. George Fox University offers bachelors' degrees in over 40 areas of study, six adult degree programs, six seminary degrees, and 12 masters' and doctoral degrees. During the 2014-2015 school year, a total of 3,793 students were enrolled in the University. The University's alumni can be found in all 50 states and reside in 51 different countries.

George Fox University's commitment to academic excellence, value, and affordability, has been validated by several third party organizations. Annually, it ranks among the top Christian universities in the nation. In 2014 alone, *Forbes* ranked George Fox University among the top Christian colleges, *Money Magazine* considered it the most affordable Christian school in Oregon, *U.S. News & World Report* classified it as a first-tier "Best Regional University (West)," and the *Princeton Review* placed the University among the "Best in the West." It is also one of only 100 institutions on the John Templeton Foundation's "Honor Roll for Character-Building Colleges."

The University has experienced tremendous growth in recent years. Enrollment at the undergraduate level has increased by over 100 students each academic year since 2012-13. During this time a Doctor of Physical Therapy program was also launched. A Masters of Social Work program has begun, in the fall of 2015. In 2014, the Stoffer Family Stadium, Lemmons Field, and the Duke Athletic Center were completed as the University re-launched football after a 46-year hiatus. This multi-million dollar facility hosts numerous games and events throughout the year. A new residence hall housing approximately 150 students has opened for the fall of 2015. It is anticipated that new facilities, and extensive renovations of existing buildings, will occur in the near future to serve the needs of the University's students.

George Fox University's mission is to be a Christ-centered community that prepares students spiritually, academically, and professionally to think with clarity, act with integrity, and serve with passion. Central to this mission is educating the hearts and minds of students. These students are then empowered to exceptional life outcomes. While pursuing its mission, the University bolsters the local community in a number of ways. It provides well-paying jobs and attracts students that support local businesses during their time at the University. In this report, the economic impact of the University on the economies of Yamhill and Washington County will be presented.

Included in the Economic Impact Study

Colleges and universities have a tremendous economic impact on their communities. They provide jobs that would not exist in the area otherwise. Additionally, they bring students to the area who spend significant amounts of money in the local economy during their years of

study. An underappreciated benefit of utilizing undergraduate students to support an economy is their relatively low demand for public spending. Few undergraduate students take advantage of, or are eligible for, social programs that are supported by local tax dollars. For example, few have children in the public school system and most reside on campus and therefore do not deteriorate local roads. Undergraduate students contribute extensively to the local economy while requiring little of its government.

This report highlights a few dimensions of the economic impact George Fox University has on its community. We focus on the University's revenues from undergraduate and graduate tuition; spending on new buildings, operating expenses, and capital expenditures; employee compensation; and undergraduate student spending in the economy. To quantify the impact of the University, the direct, indirect, and induced effects of the aforementioned dimensions are considered. Direct effects capture the money directly spent, or revenue generated, by the University. Because the local economy is a network of markets, direct effects do not fully capture the economic impact of spending. An initial increase in spending creates indirect effects. Indirect effects are the response of local suppliers to spending. Consider the example of a university constructing a new residence hall. Assuming the university contracts with a local construction company, this will have the direct effect of increasing the revenues of the construction company by the price of the building. The construction company in turn is able to employ workers. In the language of this report, the University has indirectly contributed (i.e. the indirect effect) to the employment of said construction workers. The final component of the economic impact considered in this study is referred to as the "induced effect." The induced effect captures the spending behavior of households. For example, the aforementioned construction workers will in turn spend money in the local economy on things such as housing and food. The induced effect of the university's decision to build a new residence hall is the spending of workers in the local economy. For the purposes of this study, the economic impact is the sum of the direct, indirect, and induced effects.

In order to quantify the economic impact, the Bureau of Economic Analysis' Regional Input-Output Modeling System (RIMS II) is applied. RIMS II is a standard model applied by economic development practitioners. RIMS II is a mathematical representation of the network of markets which comprise a local economy. The culmination of direct, indirect, and induced effects from an economic shock is represented with a "multiplier." The multipliers within RIMS II are based upon local market conditions. The local economy is aggregated into 62 sectors via the North American Industry Classification System (NAICS). For the purposes of this study the local economy is defined by Yamhill and Washington Counties. The Bureau of Economic Analysis (BEA) does not endorse the estimates and conclusions found in this study. The reader interested in a more thorough discussion of the RIMS II framework is advised to consult the appendix or BEA (2015).

Excluded in the Economic Impact Study

While this study provides robust measures of George Fox University's contribution to the local economy, there are several omissions that should be noted. These omissions primarily occur due to issues of data availability. First, the report does not include information on the spending of visitors that George Fox University brings to the community. Activities such as sporting events, Welcome Weekend, graduation, Homecoming, and Family Weekend draw large numbers of people to the area. These individuals will spend money at local businesses on

lodging, food, and entertainment. Including the impact of visitors would significantly increase the economic impact estimates. Second, only a portion of the University's many contributions to quality of life in the local community are provided. This discussion is abbreviated primarily for the sake of brevity. Additionally, the opportunity cost the University incurs in providing these contributions is not quantified. For example, when the University closes its doors for Serve Day it directly and indirectly provides monetary funds for the purpose of serving the community. These funds could be used for a number of other purposes with a higher "economic" value. In light of this, community outreach is presented in a qualitative rather than quantitative perspective. Third, the spending of graduate students is not considered as the report focuses solely on the spending of undergraduate students. Undergraduate students were surveyed on their spending habits but graduate students were not.

For the purposes of the study, the local economy is defined as Yamhill and Washington County. Thus economic impacts are limited to this area. The economic impacts of George Fox University in other Portland metropolitan counties, Salem, and Redmond are not considered.

The last, and perhaps most important, exclusion is related to the University's mission of educating students. Helping to meet the employment needs of the community has a tremendous economic and social value. Local businesses, churches, schools, and non-profits benefit from this service each time they employ an alumni. Additionally, communities with higher levels of education are likely better places to live. They typically have lower crime rates, higher civic participation, better performing schools, and so on. The contribution of George Fox University to local labor markets and communities is profound. Unfortunately, this contribution is not quantified in this study.

Other Considerations

As with any study, decisions must be made which in turn impacts the nature of the results. Every attempt is made throughout the study to make the reader aware of decisions made by the authors that are atypical to economic impact analysis, or unique to this study. The most important has been mentioned, defining the local economy as Yamhill and Washington County. At the onset of the study there are a few other key decisions worth highlighting. First, capital and operating expenditures are only considered in aggregate. In order to accurately determine the impact of this spending on the local economy, one must reconcile where funds were spent. Money spent outside the local economy does not impact the local economy. Further details regarding operating and capital expenditures can be found in Section IV. Finally, the report does not account for where faculty and employees of the University live. If faculty and employees live outside of the defined area, much of their spending would not occur in the local economy.

The study proceeds as follows. Section II Highlights, presents key findings of the study. Section III the George Fox University Community, provides the reader with data on employees, current students, and living alumni for 2014. This section also includes a number of testimonials from members of the community on their impressions of George Fox University and its students. Section IV Economic Impact, considers ways the University impacts the local economy. Dimensions considered include the University's recent growth at the undergraduate and graduate level; spending on new buildings, operating expenses, and capital expenditures; employee salaries and benefits; and undergraduate student spending in the economy. For each of these activities the total economic impact and number of jobs sustained by them in the local economy have been estimated. Section V Community Outreach, provides a small sample of the many non-

economic contributions the University makes to the community. Appendices with works cited and a more thorough discussion of the study's methodology conclude the study.

II. Highlights

The following economic impact study was completed by Dr. Nathanael Peach and 13 undergraduate students enrolled in “Economic Development” during the spring of 2015. The study is an extensive analysis of the many ways George Fox University contributes to the local economy. Because the University is deeply committed to serving its community, its non-monetary contributions are also considered. This allows for robust understanding of the University’s relationship with the community.

The economic impacts considered in this report include revenues from undergraduate and graduate tuition, revenue from auxiliary enterprises, undergraduate student spending, capital and operating expenditures, and employees’ salaries and benefits. In 2014, the University was responsible for approximately \$140,065,887 of the local economy’s total income. Additionally, 1,588 full-time jobs were sustained. The total number of jobs does not include the University’s 1,367 student employees. Additionally, these estimates do not account for many important economic contributions, such as attracting visitors to the area through sporting events, the University makes to the local economy. The study’s full methodology is outlined in the body of this report.

The report will also present many of the University’s non-economic contributions to the community. These range from service activities to providing a highly trained workforce. Interviews were also conducted to find out the impression local businesses and non-profits have of George Fox University and its students.

III. The George Fox University Community

George Fox University has experienced steady growth in recent years. For the 2014 – 2015 academic year enrollment reached 2,219 for traditional undergraduates, 296 adult degree completion, and 1,278 graduate students. The University’s student population is diverse in many ways. Students come to study at the University from over 40 states. Approximately 30% of the student population are ethnic minorities and 4% are international students.

The George Fox University community extends from the main campus in Newberg to the Portland metropolitan area, Salem, Redmond, and around the world. In 2014, the University had 25,063 living alumni. While the vast majority reside in Oregon, there are alumni in each of the 50 states. Additionally, 457 live in 51 foreign countries and U.S. territories.

In 2014, George Fox University employed 2,370 people. This number includes 509 full-time employees (staff, administration, and faculty); 1,367 student employees, and 973 part-time workers. Table 1 presents the University’s community of students, employees, and living alumni.

Table 1	
George Fox University Community, 2014	
<i>Current Students</i>	
Undergraduate	2,515
Graduate	1,278
<i>Total</i>	3,793
<i>Employees</i>	
Full Time	509
Part Time*	1,861
<i>Total</i>	2,370
<i>Alumni</i>	
Living in Oregon	12,708
Living in Washington	2,739
Living in the United States	9,159
Living Outside the United States	457
<i>Total</i>	25,063
<i>Total Community**</i>	30,338

Note: Data are for 2014. * Part time includes 1,367 student employees. ** Total Community is the sum of current students, employees (excluding student workers), and living alumni.

Testimonials

The full nature of the relationship between George Fox University and the surrounding community extends far beyond economic considerations. From the student that calls GFU home for a for a few years to the professor with decades long tenure, members of the University support local businesses, volunteer for events, and make substantial investments in the community. To understand how members of the George Fox University community are perceived by those living in the local area, a selection of local businesses, non-profits, and churches were interviewed. There are many more organizations that could of have been contacted for such purposes. Those that were contacted represent a sample of the organizations, both commercial and non-profit, that make Newberg a thriving town.

Local Business

Local businesses are the lifeblood of Newberg's economy. They provide jobs, goods, and services to citizens. GFU students have the opportunity to partner with local businesses in this endeavor through working for them or by purchasing their goods and services.

Coffee Cottage

Oregonians are known for their love of coffee. Even in a town as small as Newberg a world-class cup of coffee is never far away. Coffee lovers have their pick from many excellent venues in the area which all offer something unique. You can purchase a cup at a drive-thru if you're in a rush, at a book store if you need to pick up some reading material, or at a cottage with a lovely country garden. Sally Mehler, owner of the Coffee Cottage (located across the street from the University) recognizes just how many of her customers are affiliated with the University in some manner. Additionally, she appreciates being able to employ students from the University because of the Christian values they bring to the workplace.

Creative Kidz Preschool

When AJ Wilson, owner of Creative Kidz, was deciding where to start a preschool, Newberg quickly became the obvious choice. Newberg is recognized as a family friendly, small town. Local businesses such as A-dec, or those in the Portland metropolitan area such as Nike and Intel, are only a short commute away. Such a community needs pre-K education opportunities and Creative Kidz Preschool is just one of the many providers in the area. AJ Wilson has employed many GFU students at Creative Kidz. Their eagerness to learn how to teach small children and understand what it takes to run a small business is appreciated. AJ also notes that many parents in the local area, regardless of whether they are affiliated with GFU, take their kids to events on campus. In 2015, Creative Kidz is hoping to have a get-together with parents of preschoolers at one of the University's home football games.

Domino's Pizza

What would college be like without late night pizza? Students have many dining options on and off campus. Late at night, when the dining hall and most restaurants are closed, excellent pizza is just a phone call away. Tina, owner of Domino's Pizza in Newberg, has operated many franchises in her years as a small business owner. She appreciates that George Fox University is not a "party school" and that her employees are treated with respect. Beyond the ways in which George Fox University supports her business, Tina values the "college town" experience of Newberg. New ideas and fresh perspectives make Newberg feel like a bigger city than it is.

Grocery Outlet

Just a short walk from campus is Grocery Outlet. Grocery Outlet offers a wide selection of food and groceries at discounted prices. Jenna, a manager at Grocery Outlet, described the impact of the University positively. She states that students are “in here all the time,” and make up a significant portion of the business’s customer base. In gratitude to George Fox University, Grocery Outlet offers many promotional activities throughout the year specifically for members of the University. Grocery Outlet also offers discount cards to students and employees of the University that participate in the annual Serve Day. It’s a token of appreciation for the acts of service performed that day.

Ray’s Produce

One of the many small businesses in Newberg is a family run fruit and vegetable store, Ray’s Produce. This store offers great prices, friendly customer service, and a wide variety of fruits and vegetables, most of which are locally grown. The owner, Ray Sosa, holds a very high opinion of George Fox University and its role in the community. He considers George Fox University to be one of the top colleges in Oregon, and has a very positive impression of its students. Ray states that in his time in Newberg, he has heard hardly anything negative about the college and its students. He also adds how impressed he is with the percentage of students who find employment directly after graduating from the University. In regards to the success of his own business, Ray is quite happy that George Fox University exists in the Newberg community. Ray explains that George Fox University students, faculty, and employees make up a great proportion of his customers. This charming, family run business providing inexpensive, healthy, and locally grown food, positively impacts Newberg’s community and lifestyle, and George Fox University has played a large role in the prosperity of Ray’s Produce.

Velour

Downtown Newberg offers shoppers a break from big box stores and malls filled with national chains. Its streets are lined with boutiques offering everything from Oregon’s world renowned wine to exotic pets. Many of these small businesses were founded by alumni of George Fox University; Critter Cabana, Owen Eye Care, and Velour being just three examples. Jessica and her husband created Velour after noticing a lack of apparel options for residents of Newberg. Velour’s unique charm and elegance complement other business on Newberg’s main street by serving the needs of tourists and residents alike.

Non-Profits & Churches

Students provide much more to the community than their spending money. The number of excellent non-profits in the area are a testament to students and employee's willingness to volunteer their time and expertise to pursue worthy causes.

Chehalem Cultural Center

George Fox University has a rich relationship with the Chehalem Cultural Center (CCC). The CCC is a dynamic forum for community events and workshops. It offers fine art and historical galleries, classes and workshops, performances and events, and space for other community groups. Members of the University have partnered with the CCC on a number of ventures. For example, a marketing class recently provided at the CCC conducted market research to develop a more effective approach to advertising. Artists affiliated with GFU are regularly featured in the CCC's galleries or offer performances.

Friendsview Retirement Community.

Each year more and more retirees move to Newberg and the surrounding area. According to Peggy Hanson, the director of community life for Friendsview, residents of Friendsview deeply value the interaction they have with students from GFU. She says "I value student involvement and I have found that the students from George Fox have just been outstanding. I think that they really understand the culture here. They are personally caring and compassionate and conduct themselves with a balance of professionalism and friendliness." In the world of long-term care, being in close proximity to a university is highly valued. Residents are able to form relationships with students and enjoy aspects of campus life such as libraries, public lectures, and workout facilities.

Grace Baptist Church

One unique aspect of Newberg is its active church community. Grace Baptist Church is one of the many options residents have for religious worship. Bobby Gaither, Associate Pastor of Young Adult and Worship Ministries, has worked for Grace Baptist Church for six years. It is clear that Bobby greatly admires GFU's students:

I find the students of GFU to be quite intelligent and joyful, more so than I remember other college students to be ... They bring energy, vibrancy and joy to our congregation ... The students here have a better and deeper appreciation for the important things in life and are more actively in pursuit of them. That ultimately makes this place a better place to live.

The feeling is mutual, Bobby is well-loved on campus as an adjunct professor of music and for his contributions to the University's chapel services.

Love Inc.

Love Inc. partners with local churches to connect people in need with specific services that churches offer. Polly Siler, founder and former director of Love Inc., has worked with countless students during their time volunteering or working as interns for the organization. Love Inc. participates in the University's annual Serve Day and receives between 150 to 200 hours of volunteer labor each year. When asked how George Fox University students contribute to the community, Siler responded "GFU students contribute in many ways to the ministry of Love Inc. Partnering with GFU was, and continues to be, a great blessing to the community... GFU

students have been instrumental in several new ministries that will benefit the community for years to come.” Love Inc. has benefited from not only volunteers and interns from George Fox University, but has also been the beneficiary of student-initiated fundraising projects.

Newberg Church of the Nazarene

Shannon Kephart, a student co-author of this study, wanted to better understand the relationship between GFU and smaller churches in Newberg. To do so she met with Wendy Dial, administrator at Newberg Church of the Nazarene. Below are a few quotations from their conversation:

My impression is that they [GFU students] are a blessing to the church. The students at George Fox University embody the servitude characteristics found in Christ by leading by example for the younger children. By lending a hand to landscaping projects, and offering their intellectual skills by agreeing to tutor our congregation’s children at a fraction of the price other tutors charge.

[If George Fox University was not in Newberg] we would lose our childcare during our weekday Bible studies. The Church would have to recruit more members for projects with heavy lifting, look elsewhere for sports entertainment, and face a burden of higher costs for assisting our children’s education.

What the University does for our community should not go unnoticed. It provides a mentorship program for children whose parents were never exposed to higher education. [GFU] holds summers camps that re-excite the children about learning, provides entertainment, and once a year sets an entire day aside to serve our community’s needs.

YMCA

The Pacific Northwest is known for its wet, rainy climate. During the winter months exercising and outdoor recreation become a daunting proposition. To escape the rain, Oregonians are forced indoors as they wait for the sunny days of summer to return. The YMCA is just one of the many community centers in the area that provides countless recreational opportunities from yoga classes to an indoor swimming pool. Tanner Parsons, Lifeguard Supervisor at the Sherwood Regional Family YMCA, has worked with a number of George Fox University students in both entry and supervisory positions. He describes GFU students as “extraordinarily reliable, dedicated, and highly effective employees” and “role models” for others.

IV. Economic Impact

In the following section, various dimensions of the University's economic impact on the local economy are presented. As noted in Section I Introduction, this is not a comprehensive evaluation but rather a limited analysis of a select group of activities. Activities included in the analysis are the University's growth at the undergraduate and graduate level, spending on new buildings, operating expenses, capital expenditures, employee compensation and benefits, and undergraduate student spending. Economic impacts and employment created in the economy are estimated with the Final Demand and Direct Effect Type II multipliers from the BEA's RIMS II model. Type II multipliers are applied to capture the direct, indirect, and induced impacts of an activity. See Section I Introduction, Appendix 2 Research Methodology, or BEA (2015) for a more thorough discussion of the RIMS II multipliers. Within the North American Industrial Classification System (NAICS) George Fox University is part of the 'Educational Services' industry. Other industries considered in the analysis include 'Retail;' 'Food Services;' 'Amusements, Gambling, and Recreation;' 'Real Estate;' and 'Other Services.'

The Final Demand multiplier is applied when a change in the net purchases of goods and services from an industry are known. Examples of demand in this study include students' demand for higher education at George Fox University or the University' building a new residence hall. In each of these examples there is an increase in net purchases in the local economy. In the following analysis other changes in demand considered include demand for graduate education in physical therapy and demand for goods and services in the local economy from undergraduates and the University's employees.

In order to determine the economic impact of an activity from a change in demand, the Final Demand 'output' multiplier is applied. The output multiplier represents the ratio of the total change in local output, defined as total sales, to the change in local sales to final users. Results from calculations using the output multiplier are akin to measures of gross domestic product. The monetary value of economic impact thus is interpreted as the increase in local income that occurs because of the activity. For example, the University's revenue in 2013 – 2014 increased income in the local economy by \$109,713,504 during this time period. See Table 2 and its description for an explanation of the derivation of this number.

A change in demand for an industry's output also creates jobs. In order to determine the number of jobs created from such a shock the Final Demand 'employment' multiplier is applied. The aforementioned revenue generated from tuition has created 1,384 jobs in the local economy. Note: This is the total number of jobs facilitated, it includes those at George Fox University.

The second category of multipliers applied are the Direct Effect multipliers. The Direct Effect multiplier is applied when there is data related on an organization's employment of individuals in the local economy. In contrast to Final Demand multipliers, the Direct Effect multipliers do not capture changes in demand but rather the way changes in employment within an organization impact the rest of the economy. Direct Effect multipliers include 'earnings' and 'employment.' The earnings multiplier measures the total change in total household earnings due to employment within a particular organization or industry. For example, George Fox University employing individuals facilitates spending at local businesses in the economy, raising household earnings in industries outside of higher education. The Direct Effect employment multiplier measures the total change in local jobs for a given amount of jobs provided by the organization.

Tuition Revenue from Undergraduate and Graduate Students

In the 2013-2014 school year, 3,614 undergraduate and graduate students were enrolled at the University’s Newberg and Portland campuses. For the 2013 – 2014 academic year full undergraduate tuition, room and board, and fees was \$40,730. However, many students do not pay full tuition due to financial aid and scholarships. Bui (2015) estimates that the average student from a family that earns less than \$48,000 per year will pay 47% of the full price while a student from a family earning more than \$110,000 per year, 71%. During the 2013-2014 academic year George Fox University generated \$67,993,000 of revenue from tuition and auxiliary enterprises. Table 2 presents the economic impact of the University’s revenue in the local economy. A total of \$109,713,504.80 in income and 1,384 jobs were sustained as an indirect result of University.

Table 2
George Fox University
2013-2014 Revenue

<i>Total Revenue</i>	\$67,993,000
<i>Economic Impact*</i>	\$109,713,504
<i>Employment**</i>	1,384

Note: *Economic Impact is the total change in household earnings in the local economy. ** Employment is the total number of jobs in the local economy supported by the University.

Student Spending

Undergraduate Spending

Each year individuals come from around the world to study at George Fox University. One of the many benefits to the local community of students attending the University is the money they spend at local businesses. In order to determine how much students contribute to the local economy, a survey was administered to undergraduates during the spring of 2015. See Appendix 2 for a description of this survey. The survey gauged student spending on items in five local industries: retail; food services; amusements, gambling, and recreation; real estate; and other services. Examples of spending in each industry include: new clothes, a restaurant meal, a local concert, renting an apartment, and car repairs, respectively. These industries were chosen based upon national studies of undergraduate spending. It is important to note that the estimates of economic impact and employment facilitated are conservative estimates; students certainly spend money in industries not accounted for in the survey. Table 3 presents the economic impact of undergraduate student spending on the local economy. Undergraduate student spending in 2014 - 2015 will contribute \$17,053,121 to the local economy and sustain 126 jobs.

Table 3
George Fox University
Undergraduate Spending, 2014 - 2015

<i>Industry</i>	<i>Total Spending</i>	<i>Average Spending</i>
Retail	\$3,418,800	\$1,540
Food	\$1,751,200	\$789
Recreation	\$297,000	\$134
Real Estate	\$5,808,000	\$2,616
Other Services	\$217,437	\$98
<i>Total</i>	<i>\$11,492,437</i>	<i>\$5,177</i>
Economic Impact*	\$17,053,121	-
Employment**	126	-

Note: Spending estimates are based upon a survey administered during the spring of 2015. *Economic Impact is the total change in household earnings in the local economy. ** Employment is the total number of jobs in the local economy supported by student spending.

Resident Graduate Students

A second dimension of student spending in the local economy is that of graduate students. In order to estimate the economic impact of resident, graduate students we apply the average spending of undergraduates to the number of students in the full-time Masters of Business Administration (MBA), Doctor of Psychology (PsyD), and Doctor of Physical Therapy (DPT). Other graduate programs were not included because they are primarily delivered through on-line courses. In 2014, there were 241 students enrolled in the MBA, PsyD, and DPT programs. Their spending adds \$1,851,252 and 14 jobs to the total impact of students on the local economy. It is important to note that this is likely a conservative estimate. Because graduates students are typically older, more likely to have a spouse or partner and children they likely spend more in the economy than their undergraduate counterparts. Unfortunately a survey was not administered to graduate students to estimate their spending.

Table 4
George Fox University
Resident Graduate Student Spending, 2014 - 2015

<i>Total</i>	\$1,247,602	\$5,177
Economic Impact*	\$1,851,252	-
Employment**	14	-

Note: Spending estimates are based upon a survey of undergraduate students administered during the spring of 2015. *Economic Impact is the total change in household earnings in the local economy. ** Employment is the total number of jobs in the local economy supported by student spending.

International Students

A unique characteristic of the GFU's student population is the number of international students. In 2014, there were 138 undergraduate and 23 graduate international students enrolled in the University. The National Association of Foreign Student Advisers (NAFSA) (2015) estimates that international students attending GFU contribute \$10.6 million to the local economy and support 66 jobs. It is important to note that this estimate was derived in a separate study and ought not to be added to this study's estimations. The estimate is useful in that it highlights the contribution of an important subset of students. According to NAFSA, the economic contribution of GFU's international students, compared to other colleges and universities, is the seventh largest in the state.

Capital and Operating Expenditures

George Fox University contributes to the local economy in more ways than bringing students to the area. One of the largest contributions it makes is through its direct purchase of goods and services from local suppliers. These purchases contribute to a number of industries ranging from utilities to retail to construction. Operating expenditures are those made for day-to-day functions, and capital expenditures are for long-term needs. As BEA (2015) notes, in order to properly determine the economic impact, one must be able to determine whether the expenditure occurred within the local economy, and in which industries the expenditure occurred. As this data is not available, the multipliers cannot be applied to the University's purchases of goods and services, and therefore only the total spending of the University in 2014 is presented in Table 4. In 2014 the University spent \$70,915,695 on operating and capital expenditures.

Table 5
George Fox University
FY-2014 Purchases of Goods and Services

Operating Expenditures	\$24,918,402
<i>Capital Expenditures</i>	
Current Expenditures	\$44,452,685
Construction in Progress	\$1,544,608
<i>Total Expenditures</i>	\$70,915,695

In order to meet the needs of a growing student population, the physical landscape of George Fox University has changed dramatically in recent years. These changes include equipping classrooms with the latest technology, as well as large capital expenditures. It is likely that capital improvements such as these will continue well into the future as the University looks to serve its larger student body.

In 2014, the Stoffer Family Stadium, Lemmons Field, and the Duke Athletic Center were completed. Broughton (2014) estimates the cost of these three projects as \$7.2 million. In addition to new athletic facilities, the David and Melva Brandt residence hall has been completed for the 2015 – 2016 academic year. Table 5 presents the economic impact of these two projects. The economic impact of these two projects are a \$22,663,200 increase in income and 127 jobs.

Table 6
George Fox University
Recent Construction

Stoffer Family Stadium, Lemmons Field, & Duke Athletic Center	\$7,200,000
David & Melva Brandt Residence Hall	\$7,000,000
<i>Total</i>	\$14,200,000
Economic Impact*	\$22,663,200
Employment**	127

Note: Cost of Stoffer Family Stadium, Lemmons Field, and Duke Athletic Center are reported by Broughton (2014). *Economic Impact is the total change in household earnings in the local economy. ** Employment is the total number of jobs in the local economy supported by this construction.

Employment

George Fox University is a significant employer in the local community, as it is the second largest provider of jobs in Yamhill County (“Grow Yamhill County,” 2014). In 2014, George Fox University employed 509 individuals on a full-time basis, 1,367 student employees, and 973 part-time workers. In addition to employees’ salaries, the University provides benefits to many of these workers. Table 6 presents the economic impact of the salaries and benefits paid by the University. The University’s payment of salaries and benefits facilitates \$49,650,263 in household income in the local economy. Additionally, 117 (the number of full-time jobs at the University minus the total number created, 626) full-time jobs outside of the University are sustained. Given the University’s use of student and part-time employees this number is a conservative estimate.

Table 7
George Fox University
Salaries and Benefits, 2014

Salaries	\$32,311,371
<i>Benefits</i>	
Medical Insurance	\$3,956,628
Dental Insurance	\$100,019
Long Term Disability	\$50,454
Retirement Match	\$1,375,481
Basic Life	\$69,435
<i>Total Benefits</i>	\$5,552,019
<i>Total Salaries and Benefits</i>	\$37,863,390
Economic Impact*	\$49,650,263
Employment**	626

Note: *Economic Impact is the total change in household earnings in the local economy. ** Employment is the total number of jobs supported in the local economy.

V. Community Outreach

George Fox University funds, and facilitates, numerous opportunities for its students to serve the local and global community. Each year its students volunteer more than a quarter of a million hours to the service of others. The University's commitment to serving its community is epitomized by its annual Serve Day. Since 1999, the University has closed for one day in September to allow students and employees to work on service projects in the community. In 2014, over 2,000 students and employees worked at 102 sites. A conservative estimate of the market value of the service performed in 2014 is \$129,500. The University's engagement in the community has resulted in it being placed on the 2013 President's Higher Education Community Service Honor Roll.

In this section a representative list of the various opportunities, programs, and events that the University facilitates are presented. Though it is certainly substantial, the economic impact of the service of members of the University is not considered. The following list is presented in alphabetical order and is not exhaustive. Rather, it is an overview of some programs. The reader interested in learning more about any of the programs listed, or other ways the University serves the community, is encouraged to contact the authors of the study, or visit the 'Community Contributions' page on the University's website, www.GeorgeFox.edu.

Community Outreach Initiatives

Accounting Club

The Accounting Club is engaged with the community in a number of ways. One of its primary responsibilities is facilitating internships for students at accounting firms across the Portland metropolitan area. The Accounting Club also leverages its expertise to the benefit of those outside the accounting industry. Through the VITA Tax Assistance program students help numerous individuals complete their tax returns free of charge. This service is provided members of the community that do not have the financial means to pay to have their taxes done at a for-profit company.

America Reads/America Counts

Using student-employee funds, George Fox University students work with the America Reads and America Counts programs in Newberg public schools. Through this program college students serve as tutors in local pre-school and elementary schools.

Art Reach

Art Reach is an annual summer camp devoted to the arts. The program was started by Professor Mark Terry as a way to provide local children an immersive art experience close to home. Students have the opportunity to participate in 10 different week-long camps devoted to drawing, painting, ceramics, sculpture, photography, creative writing, illustration, and graphic design.

Athletic Events

The University is home to 17 athletic teams competing in the Division III of the National Collegiate Athletic Association. Men's sports include baseball, basketball, cross country, football, golf, soccer, tennis, and track and field. Women's sports include basketball, cross country, golf, lacrosse, soccer, softball, tennis, track and field, and volleyball. The University hosts numerous regular season and playoff games throughout year. These games are open to the public.

Athletic Facilities

George Fox University allows members of the public, including the Newberg School District, church groups, and many others, access to its athletic facilities. Providing access to these facilities makes it easier for residents of Newberg to lead an active and healthy lifestyle. During the summer months, the Chehalem Park and Recreation District uses the University's fields for park programs and the University hosts many sports camps.

Behavioral Health Clinic

The Graduate Department of Clinical Psychology operates a behavioral health clinic for residents of Yamhill County. The clinic is located at the University's Villa Academic Complex. The clinic provides low-income and uninsured county residents numerous services including individual and couples therapy, mental health consultation, parenting counseling, and diagnostic assessment. Doctoral students, under the supervision of licensed psychologists, provide these services.

Breast Cancer Research

George Fox University is the home of many renowned scholars. One example of the important research happening at the University is that of Professor John Schmitt. Under the guidance of Professor Schmitt, the University was awarded a \$39,500 from the M.J. Murdock Charitable Trust. This grant was combined with \$6,500 from the University to be used by Professor Schmitt and a team of undergraduates to research the regulation of vitamin D in breast cancer cells. In addition to furthering our understanding of breast cancer, research such as this paves the way for the next generation of scientists to tackle the most pressing issues facing humanity.

Chehalem Symphony Orchestra

The University's Music Department houses numerous vocal, instrumental, chamber, and instrumental chamber ensembles. These ensembles perform a number of concerts open to the public throughout the year. The Chehalem Symphony Orchestra is composed of students, professors, and members of the community. It performs music by the master composers of the Baroque, Classical, Romantic, and Modern eras. Concerts are performed at the Bowman Auditorium on the campus of George Fox University.

Citizenship George Fox

Students and employees volunteer on numerous city and county commissions and committees. These include the Newberg Planning Commission, Newberg Downtown

Association, Focus on Newberg's Future Commission, Chamber of Commerce, and the Traffic and Safety Committee.

Elementary Education After-School Program

This program is composed of Elementary Education majors that teach classes after school at Edwards Elementary in Newberg. Classes are taught to second grade and fifth grade students. GFU students implement original class plans as they help elementary aged students improve their understanding of language arts and reading.

Fox and Friends

Fox and Friends is a weekly outreach ministry aimed at building relationships between college students and the elderly. According to the director of the ministry, the goal is to foster relationships that "enhance the quality of life for both parties." Activities range from weekly game nights to informal afternoon tea. Much of the activity is in partnership with Friendsview Retirement Community in Newberg.

Health and Counseling Clinic

The Health and Counseling Center clinic is available to George Fox University employees, students, their spouses and dependents. The Health and Counseling Clinic provide its services at a low cost to its patients.

Hess Creek Canyon Restoration

The University has worked to improve a large, wooded portion of campus just north of Hoover Park in Newberg. Native foliage has been planted, invasive species removed, and a walking path installed. The Hess Creek Canyon now offers a quiet, natural retreat in the heart of Newberg.

IDEA Center

Launched in 2015, the IDEA Center is devoted to helping organizations and businesses find the talented workers they need. This is done through networking events and hosting an on-line job and internship portal.

James Project

James Project is a Yamhill community service initiative which provides students the opportunity to give back to Newberg and the surrounding area. Every Saturday, the Project sends groups of students out to volunteer at a variety of partner organizations such as Faith in Action, Habitat for Humanity, and Love Inc.

La Bellezza del Chiaroscuro

La Bellezza del Chiaroscuro is a fashion show put on by Fashion Design majors. The event provides students the opportunity to practice their craft while raising money for others. Proceeds from ticket sales are donated to Dress for Success, a Portland non-profit supporting women in poverty by providing professional clothing at deep discounts. In doing so, women are empowered to interview and get back into the labor force in order to improve their economic and social success.

Libraries

The George Fox University Murdock Learning Resource Center and Portland Center Library have vast collections. They are also part of an extensive network of academic and public libraries in the Pacific Northwest and across the United States. Both the Murdock Learning Resource Center and Portland Center Library allow the public to use their array of resources.

Little Bruins

The Little Bruins program is an initiative that pairs George Fox University students with elementary and middle school aged children. In order to be a part of the Little Bruins program, students undergo a thorough application process. The program provides role models and a caring friend to children in need of extra support and encouragement. Students spend an hour a week with their Little Bruin doing things such as playing games together or helping with homework. The Little Bruins program also partners with Love Inc. to provide mentorship for high school students.

Martin Luther King, Jr. Serve Day

Each year, on Martin Luther King Jr. Day, students and employees gather together with the goal of performing service for others. This day honors Martin Luther King Jr.'s spirit of community service and social justice. Volunteers spend the day partnering with other colleges and universities to provide service to organizations and individuals around the Portland metropolitan area.

Mental Health Consultation

Staff and graduate students in the Doctor of Clinical Psychology program provide 24-hour, seven days a week coverage in the emergency department at Providence Newberg Hospital. They provide consultations to patients with mental health concerns. They also participated in the National Depression Screening Day. In 2014, 59 students in the Doctor of Clinical Psychology program provided a total of 50,000 hours of free services to children and adults in 20 clinic, health and community settings.

Meeting Facilities

The University opens its group and conference facilities for non-university meetings, conferences, and other events. Groups have access to projectors, whiteboards, and IT services.

Mr. Bruin

George Fox University holds an annual male beauty and talent contest to raise funds for local charities. This on-campus event is hosted by students. Proceeds from ticket sales typically range between \$5,000 and \$10,000. Each year a local charity is selected as the beneficiary of the proceeds.

Night to Shine

George Fox University students have partnered with the Tim Tebow Foundation to host Night to Shine. Night to Shine is a prom night for teens with special needs. This red carpet event occurs at over 50 cities across the nation.

Oregon Campus Compact AmeriCorps Retention Program

In 2010, George Fox joined the Oregon Campus Compact AmeriCorps Retention Program. The goal of this program is to increase retention and academic advancement rates among students at Newberg High School who are at-risk of dropping out. AmeriCorps leaders are connected with approximately 30 George Fox University students to partner in service learning. These students are involved in mentoring and service projects with first-generation, college-bound students. Service Learning opportunities in the community help to improve academic achievement, create strong civic engagement, and improve workforce skills of participants.

Public Lectures

Each year George Fox University hosts many lectures that are open to the public. Renowned speakers are brought to campus through a myriad of programs such as the College of Business Executive in Residence, Chapel, Dalton Lecture Series, Liberal Arts and Critical Issues, William Penn Honors Program, and the Woolman Peacemaking Forum. Recent guest speakers have included William Phillips, a Nobel Prize winning physicist, and Peggy Fowler, an alum that served as Portland General Electric's CEO and president.

Red Cross Blood Drives

George Fox University has hosted more than 65 Red Cross Blood Drives. Faculty, staff and students have donated more than 1,500 gallons of blood, averaging more than 70 gallons per year since 2000.

Science Education at the K-12 Level

George Fox University offers many resources to improve K – 12 education in the sciences. Undergraduates teach science courses in campus laboratories to about 360 home school and local elementary students each year. Six to nine classes, lasting eight weeks, are offered each year to local students. This includes a class offered entirely in Spanish. The only cost for the classes are to cover the materials used. Since 1998, George Fox University students and professors have offered five-day science camps during the summer to children ages 9-12. These camps include hands-on labs and field trips to locations such as the Columbia River Gorge, Mount St. Helens, and the Oregon Coast. During the academic year, approximately 45 elementary, middle, and high school classes make use of the University's laboratories and visit with professors. More than 70 public and private K-12 schools throughout Oregon and Washington borrow science equipment from the University that they are unable to afford themselves.

Servant Engineering

The Servant Engineering course provides a venue for senior engineering students to work with outside professionals on solving problems faced by organizations committed to serving others. Past projects include postural assist devices for blind students at the Oregon School for the Blind, design of augmentative communication and physical therapy devices for patients and staff at Providence Center for Medically Fragile Children, and development of facilities control systems for Friendsview Retirement Community.

Serve Day

Serve Day is an annual event in which George Fox University students and employees go out into the Portland Metropolitan area to serve the community. The tradition was started in 1999 by University President David Brandt. Serve Day is founded on the belief that the University should “demonstrate the heart of Jesus.” Locations visited include residential homes, local churches, non-profits, and nursing homes. On a typical Serve Day, projects include painting, yard work, cleaning, home construction, and assisting seniors. In 2014, more than 2,000 people participated at 102 locations. At the current minimum wage, the market value of the University’s service to its community is \$129,500. This is a certainly a conservative estimate as many of the tasks performed would be far more expensive than the minimum wage.

Start Making a Reader Today

Start Making a Reader Today (SMART) is a program devoted to improving the reading skills of children for whom English is not their first language. Students majoring in Spanish partner with children in the local area that are at risk of falling behind in their studies.

Serve Trips

Each year employees and students provide service to communities outside of the Pacific Northwest. Serve Trips typically last from one to three weeks. Serve Trips go to many areas on the West Coast as well as nations around the world. The services provided by the students and employees on these trips include building projects, medical clinics, ministry, and working with other non-profit organizations.

Test Proctoring

George Fox University is a qualified institution to proctor official and standardized tests, such as College Level Examination Program (CLEP) and language certification. This service facilitates increased access to important tests such as these for those in the local area. Increases access saves time and money for residents.

Theatre Design Institute

The Theatre Design Institute is a summer workshop for high school educators. This workshop has been approved by the Oregon Teachers Standards and Practices Commission. Professor Bryan Boyd leads the Institute by leveraging his expertise in technical theatre to the benefit of visiting educators.

Theatre Shows

The Theatre Department puts on numerous performances throughout the year. These comedies, musicals, and dramas provide a unique entertainment opportunity for the community.

Urban Outreach

Urban Outreach is a ministry housed within the Spiritual Life Office. Urban Outreach works with marginalized populations in Salem and Portland. This ministry partners with organizations such as Bridgetown Night Strike, Dave’s Table, Home PDX, and Salem Leadership Foundation to serve food, clothing, and supplies to those in need. During a typical week there are multiple events which allows for relationships to be formed while seeing to physical needs.

Young Life

The University partners with Young Life in a number of ways. Students are taught how to successfully minister and effectively communicate the gospel to middle and high school aged students. This ministry occurs across the United States and around the world. Additionally, many George Fox University students have served as interns for Young Life.

Appendix 1
Works Cited

- Broughton, D. (2014, August 18). College construction heats up. *Street & Smith's Sports Business Journal*. Retrieved May 12, 2015, from <http://m.sportsbusinessdaily.com>.
- Bui, Q. (2015). What you'll actually pay at 1,550 colleges. Planet Money. Retrieved October 6, 2015, from <http://npr.org>.
- Bureau of Economic Analysis. (2015). *RIMS II: An essential tool for regional developers and planners*. Retrieved January 15, 2015, from <http://www.bea.gov>
- Grow Yamhill County. (2014). *Business sectors*. Retrieved May 12, 2015 from <http://www.growyamhillcounty.com/local-industry/>.
- National Association of Foreign Student Advisers. (2015). Oregon: Benefits from international students. Retrieved December 8, 2015, from <http://www.nafsa.org>.
- Refuel agency. (2014). *College explorer'14*. [Data file]. Retrieved April 29, 2015, from <http://www.refuelagency.com>.
- 21st Century Insurance. (n.d.). *How college students can save*. Retrieved April 29, 2015, from <http://21st.com>.

Appendix 2 Methodology

Geographic Scope & Timeframe

In order to calculate the impact of a university on a local economy, the local economy must first be defined. All results from the analysis pertain to the defined economy. The University's main campus is located in Newberg, Oregon, which is in Yamhill County, 23 miles southwest of Portland. In addition to the Newberg campus, courses and academic programs are offered in Portland, as well as in Salem and Redmond. The University's Portland center is located in Washington County. Because the University's presence (in terms of employees and students) is largest Newberg and Portland, Yamhill and Washington County are defined as the "local economy."

The second foundational decision is related to the timeframe considered. Unless noted, all data is from 2014. The most important exceptions to using 2014 data include capital improvements and a survey of student spending for the 2014 – 2015 academic year. For the purposes of this report, these exceptions to 2014 data allow for a more robust understanding of the University's economic impact.

Methodology

The fundamental challenge of an economic impact study is quantifying the impact of an organization beyond its direct spending. Direct spending is readily embodied in the organization's accounting and financial documents. Employing a person, purchasing a good, and so on directly injects money into an economy. To consider economic impacts beyond the direct effect of spending requires a formal, mathematical model of the economy. This model must be tailored to accounts for the idiosyncratic nature of markets within the area of study.

Creating a mathematical framework that accurately represents the economy of Yamhill and Washington Counties is beyond the scope of this analysis. The Bureau of Economic Analysis's (BEA) Regional Input-Output Modeling System (RIMS II) was used for this purpose. The RIMS II system has been utilized extensively by economic development professionals in government and private organizations. The RIMS II model is tailored to represent local supply and demand conditions by the BEA. An important feature of RIMS II is that of the "multiplier." The multiplier captures inter-industry linkages within an economy. Money spent in an economy triggers more economic activity. See Section I Introduction for an explanation of the multiplier process. Money that is spent in the economy "multiplies" itself leading to higher levels of economic activity than the initial amount of spending. During this process a portion of money "leaks" out of the economy. Leakage occurs when money is not spent in the economy, through savings, taxes, and the purchase of imports (any good or service purchased outside of the local economy). Multipliers for specific regional areas, in 62 different industry areas, are created by the BEA and provided in the form of RIMS II.

There are two categories of multipliers, Final Demand and Direct Effect, and two types, Type I and II. Final Demand multipliers applied in this study include the 'output' and 'employment' multipliers. Final Demand multipliers are used to capture the impact of demand-side shocks. The output multiplier represents the ratio of the total change in local output, defined as total sales, to the change in local sales to final users. This is akin to gross domestic product. The employment multipliers measure the total change in the number of jobs based upon a change in demand for an industry's output. The Direct Effect multipliers applied in the study are the

‘earnings’ and ‘employment’ multipliers. Direct Effect multipliers are utilized when an organization’s contribution to household earnings and the number of jobs within an industry are known. The earnings multiplier measures the total change in local household earnings based on a change in final demand earnings. Final demand representing an exogenous shock to the demand for a particular industry’s output. Similarly, Direct Effect employment measures the total change in local jobs for the amount of jobs in the final demand industry.

The Type I and Type II multipliers are differentiated by the treatment of household spending. Type I multipliers only take into account the inter-industry effects of multiplied spending; Type II multipliers account for these effects and induced household spending. The calculations presented in our report apply the Type II multipliers. The reader interested in a more thorough discussion of RIMS II is advised to consult BEA (2015).

Survey of Undergraduate Spending

In order to determine the amount undergraduates spend in the local economy, a survey was administered via email during the spring of 2015. The response rate was 37%. Students were asked a number of questions regarding their spending on items ranging from groceries to automotive repairs. Data on student spending from Refuel Agency (2014) and 21st Century Insurance (n.d.) were used to inform the items covered on the survey. All questions on the survey are original and written by the authors. The items considered are provided by one of five local industries: ‘Retail;’ Food Services;’ ‘Amusements, Gambling, and Recreation;’ Real Estate;’ and ‘Other Services.’ Respondents were asked about their spending on food, entertainment, goods (such as clothing and furniture), rent for off-campus housing, gas, and automotive maintenance. Annual average spending per student was calculated based upon the survey.