



# Choose hio First

2013-2014 ANNUAL REPORT

 Ohio

Board of Regents  
University System of Ohio



## Student Testimonials

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*"The Wittenberg experience is both positive and supportive. The COF scholarship has been such an incredible support for me. I work three jobs in the summer and the COF covers the last bit of money so that I can afford to only work part-time during the school year. Being able to work part time is the only way I can fit in doing research...and has allowed me the opportunity to partake in a fantastic research experience. I hope the program continues."*

**–Wittenberg Scholar**

*"I had a lot of help from Dr. Nagi and the UT business incubator, along with Dr. Ariss, who all played an instrumental role in helping me to establish my business and give me practical guidance to get things moving forward."*

**– Former University of Toledo COF Scholar,  
Lead Engineer and Business Owner, Resonance Group, Ltd.**

*"As a single mother of two and a person with physical disabilities, the BOSEF (Building Ohio's Science and Energy Future) scholarship program has been invaluable in not only a monetary facet, but also has allowed me to connect with students on campus...relationships are necessary to be successful in engineering. I would like to take this opportunity to thank Choose Ohio First for the gift of education."*

**– Stephanie, University of Toledo**

*"Without the Choose Ohio First scholarship funds, I would have been in a situation where I did not know how I was going to finish paying for my tuition. The scholarship put me over the edge. More importantly, I think, the program itself has introduced me to many new connections and has opened many doors that might not have been opened elsewhere."*

**–Veteran, Transfer, and First-generation COF Scholar,  
Baldwin Wallace University**





*“Since graduation I have been heavily involved in the implementation of 3D printing technologies at Humtown Products. I have helped Humtown become a leader in the casting industry for our innovative approach and implementation using 3D printing technology. The work is gaining Humtown regional and even national recognition. I have been very busy since my recent graduation and I owe a lot of thanks to YSU as well as COFSP for my success...”*

**– Bronson, 2013 Graduate, Youngstown State University**

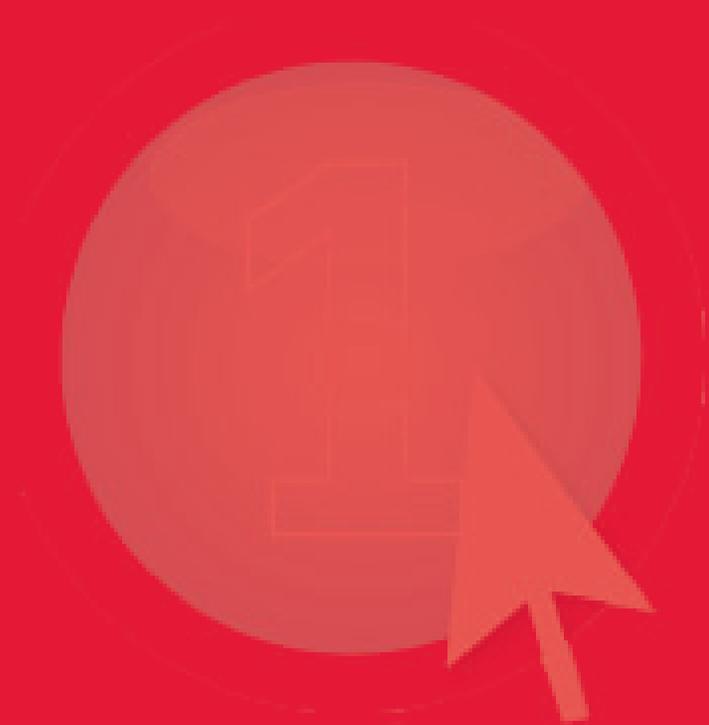
*“The program was a great way for me to meet with others in my degree... the research we did as sophomores was a perfect way to get some experience in research so we knew a little more about the overall process. This was also great to have as a discussion point on a resume. Most of all, I really appreciated a scholarship that required the recipients to participate in these learning opportunities.”*

**– COF Scholar, Miami University**

*“I was born in Ohio and have lived and worked here my whole life. As a carpenter, when the housing market collapsed, I found myself in dire straits financially. Choose Ohio First has enabled me to pursue a new career in health care. Soon, I will be a physician assistant. I am very grateful for the opportunity. The beautiful state of Ohio will benefit as well. Thank you!”*

**– COF Scholar, Cuyahoga Community College**







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## Executive Summary

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Science, Technology, Engineering, Math, and Medicine (STEMM)-related disciplines are critical to the future success of the state of Ohio and the nation. According to a recent report released by the Inclusive Competitiveness Subcommittee of the Ohio Board of Regents, many employers in Ohio cannot find the STEMM talent they need to stay competitive and grow in the global marketplace. Even during the most recent economic downturn, STEMM skills have remained in high demand – data from “STEMtistics”, a compilation of state-level STEMM data from Change the Equation, suggest that for the STEMM workforce there are 2.3 jobs for every unemployed person; for the non-STEMM workforce there are 3.9 unemployed people for every job. Additionally, not only are STEMM graduates more likely to land a job, but those jobs also pay more and make better use of their skillsets. STEMM jobs are growing at a rate that is 1.7 times faster than non-STEMM jobs; a recent report positing a case for inclusive excellence in STEMM in the spring 2014 Peer Review publication from the Association of American Colleges and Universities shows that labor market projections require a need for an expansion of those trained in science, technology, engineering, math, and medicine.

The primary objectives of the Choose Ohio First (COF) scholarship program are to support increased participation and persistence of students majoring in STEMM and STEMM education fields and, in so doing, to advance the economic growth of each region of the state. According to the October 24, 2014 issue of the Great Lakes Philanthropy newsletter, fewer than 40 percent of students who enter college intending

**The total number of STEMM degrees awarded at Ohio's public colleges and universities increased from 25,635 in FY 2007 to 37,126 in FY 2014.**

to major in a STEMM field actually complete a STEMM degree; the numbers are far more bleak for women, students of color, those who are low-income, and those who are the first in their families to attend college. COF has become the state's premier model for recruiting and retaining talented students in STEMM and STEMM education fields. The COF scholarship program ensures that an increased number of students enter into the STEMM teaching profession and graduate from some of the most innovative programs that the state has to offer.

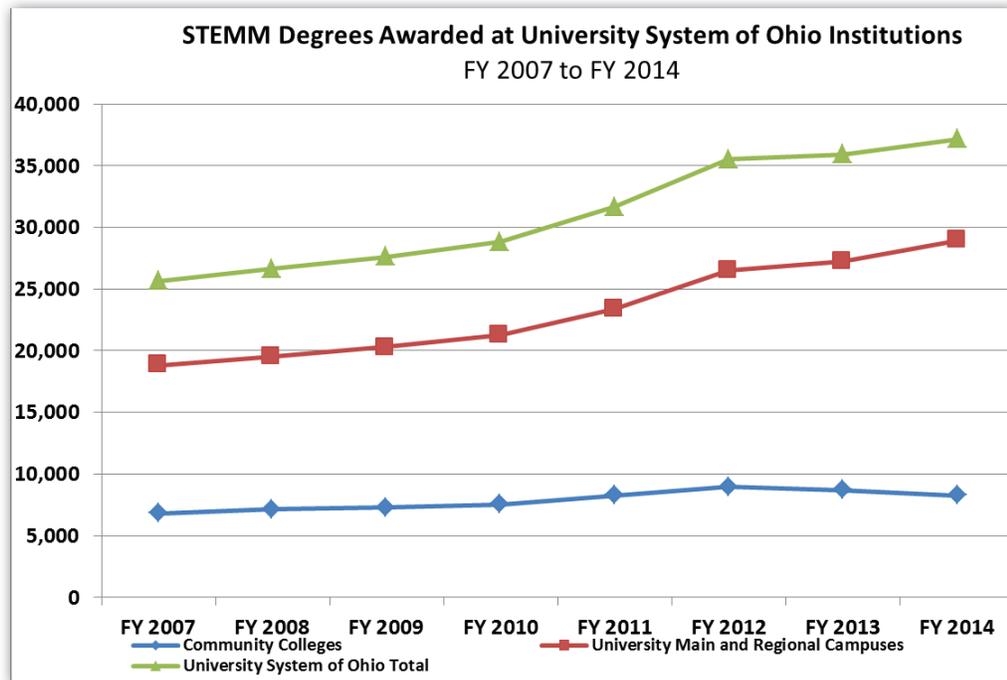




In the 2013-2014 academic year, more than \$17 million was awarded and disbursed to over 4,200 COF Scholars attending an Ohio college or university. To date, 49 public and private campuses have received COF funds. The participating institutions report contributions totaling more than \$20,562,810 in cost-share through June 2014. These matching funds are used to revise and develop new curricula in the STEMM disciplines that are awarded COF funds; supplement student travel to industry conferences and research symposia; and leverage the involvement of businesses in the professional development of Ohio's future innovators. Matching funds are also generated by local and national competitive grant projects leveraged by many of the Choose Ohio First programs.

### Choose Ohio First Programs are Producing Results

- Growth in STEMM degrees awarded increased from 25,635 total students in FY 2007 to 37,126 total students in FY 2014, representing a 44.8 percent increase – achieved despite a slight decline in enrollments at some of the institutions involved in Choose Ohio First. This increase has also occurred in spite of a decrease in the number of high school graduates statewide.





- Graduation outcomes for the fall 2010 entering cohort of Choose Ohio First Scholars exceed those of non-COF students.
  - » The impact of COF is particularly profound on two-year campuses. At Ohio’s community colleges, 63 percent of Choose Ohio First students earned a certificate or degree within four years. Of that figure, 24 percent of COF students who started at a community college completed a bachelor’s degree in four years. The graduation outcomes for non-COF students show 18 percent of students earning a certificate or degree in the same timeframe, and only one percent earning a bachelor’s degree.
  - » At Ohio’s colleges and universities, 41 percent of COF students earned a degree within four years. Of the remaining students, 50 percent were still enrolled despite not yet obtaining a degree.
- The graduation outcomes for the fall 2009 entering cohort trend slightly higher.
  - » 63 percent of COF community college students obtained a degree or certificate; 41 percent of COF college/university students earned a degree. This compares to 18 percent and 33 percent, respectively, for non-COF students.
- On average, COF students earn more credits than their non-COF counterparts over the same period of time, leading to shorter time to degree completion.
  - » On average, the most recent class of COF graduates earned 71 credits at a community college and 104 credits at a college or university. This compares to 62 credits and 98 credits, respectively, for non-COF students during the same timeframe.

## **Woodrow Wilson Ohio Teaching Fellowships**

**The Woodrow Wilson Teaching Fellowship institutions**, including John Carroll University, The University of Akron, University of Cincinnati, The Ohio State University, Ohio University, University of Toledo, and The University of Dayton are poised to produce 300 highly qualified teachers in mathematics and science, resulting in a positive impact on the lives of thousands of secondary students. The most recent cohort of Fellows includes 81 teacher candidates with extensive credentials and experience. Many of the new cohort of Fellows hold







advanced degrees, and some entered the program with 10 or more years of workplace experience in companies such as Lockheed Martin, GE, and Owens Corning. Several newly selected Fellows are also veterans of military service. Three cohorts of Fellows have graduated from the program; 169 Fellows have accepted permanent teaching positions and are now serving in high-need schools around the state.

- 314 Fellows have been named since the program’s inception.
- Choose Ohio First supports stipends for Fellows and their ongoing mentoring during their first three years of teaching.
  - » There is a focus on instructional mentoring, including frequent contact and high-quality interactions between mentors and Fellows.
- The Woodrow Wilson Ohio Teaching Fellowship program has made a direct connection to the workforce needs and academic standards critical to the success of schools.
  - » In Dayton, the public school district wanted to enhance the quality of math and science teachers in its secondary classrooms. Recognizing the potential impact several cohorts of Woodrow Wilson Fellows might have on student success, the superintendent sent “intent to hire” letters to every Fellow of the 2013-2014 cohort.
  - » The Dayton Public Schools strategized to group several Fellows together in each school to enhance professional development opportunities and to maximize the positive impact the Fellows have on the school’s academic culture.
- Steps have been taken at each campus to sustain the program, including integrating Woodrow Wilson Fellowship program activities into their established Master of Education programs.
  - » Program data and lessons learned have been disseminated to other Woodrow Wilson campuses, at conferences for Ohio teacher educations, and at national events.





**The Woodrow Wilson program focuses on three key aspects of the teacher education continuum:**

1. Program Transformation

- » Woodrow Wilson Foundation staff facilitates strong collaboration between arts and sciences, education, engineering, and technology faculty in program development and delivery.
- » Woodrow Wilson Foundation staff establishes clear methods of evaluation to monitor program quality.
- » Opportunities are provided for networking with other universities participating in the program.
- » The program assists university partners in establishing deep and ongoing partnerships with local school districts or sets of public schools.

2. Student Recruitment and Selection

- » The Woodrow Wilson Foundation provides mechanisms for recruitment of high-potential students, including current college seniors, recent college graduates, and career changers.
- » Woodrow Wilson Foundation staff members lead the Fellowship application review and intake process for each participating campus, including a day-long interview process.

3. Ongoing Mentoring Support

- » The Woodrow Wilson Foundation provides assistance with the placement of graduates in high-need urban and rural schools.
- » The Woodrow Wilson Foundation provides a structured, proven mentoring program for Fellows for three years following graduation.
- » Students gain lifetime access to a network of more than 20,000 Fellows around the world who have participated in Woodrow Wilson Foundation programs and fellowships.

The Woodrow Wilson Ohio Teaching Fellowship program is made possible through COF, Ohio's Race to the Top initiative, and \$2.4 million dollars in support from private foundations.





## Primary Care Medical and Nursing Scholarships

As part of Ohio HB 198 changes for care in the state of Ohio, the **Primary Care Scholarships in Medicine and Nursing** were launched as an arm of Choose Ohio First. Ohio's medical providers labor every day to take care of their patients, but data from the Ohio Colleges of Medicine Government Resource Center highlights concerns that too few of some types of health professionals are not located where they are needed. Rural Ohioans and those living in other underserved areas across the state are especially vulnerable to health sector workforce shortages. The problem is actually two-fold. First, Ohio trains more physicians than it retains. According to data from the Association of American Medical Colleges, only 44 percent of physicians who graduated from public medical school in Ohio actually stay in Ohio. As a result, Ohio ranks 24th among the states in primary care physicians per capita. The second issue is that areas underserved by primary care physicians have populations that are disproportionately minority and low-income. These populations would benefit from a primary care presence within the community.

To address a statewide shortage of primary physicians and advanced practice nurses, the program will offer scholarships to **50 medical students** for up to four years of medical school, and **30 nursing students** for up to three years of graduate education. The recipients agree to remain in Ohio following their residency for no fewer than three years and to work in medical practices that accept Medicaid patients. These COF Scholars will impact the lives of thousands of



Ohioans they will serve in high-need practices and positively affect the quality of care provided in high-need areas around the state. A strong primary care workforce is a critical element of the Patient Centered Medical Home (PCMH) model, and the scholarships are a strategy to recruit and retain students dedicated to medical education and training in promising models of care.

The participating medical schools in Primary Care Scholarships in Medicine and Nursing are The Ohio State University, Case Western Reserve University,

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Northeast Ohio Medical University, The University of Toledo, Wright State University, Ohio University, and University of Cincinnati. The participating nursing schools are The University of Akron, Kent State University, Ohio University, The University of Toledo, and Wright State University. The goal of the program is to integrate primary care concepts into the learning of medical and nursing students around the state, while incentivizing students to stay and practice in Ohio. Some of the innovative practices developed on the campuses include:

- The University of Cincinnati College of Medicine teaches PCMH curriculum longitudinally in three required courses for students: The Longitudinal Primary Care Clerkship (LPCC), Physician and Society, and the Family Medicine Clerkship (FMC).
- Wright State University College of Medicine is committed to a curriculum that expands primary care opportunities, especially in patient-centered medical homes and in rural Ohio. Students currently rotate in patient-centered medical homes, and the College is finalizing an agreement that will provide opportunities for rotation in family medicine and pediatric sites.
- Northeast Ohio Medical University has incorporated the PCMH curriculum across the four years of medical school. The College of Medicine also plans to work directly with the practice sites transformed into PCMH model sites through funding provided by HB 198.
- Ohio University Heritage College of Osteopathic Medicine provides discussions and field assignments that engage students with the basic tenets of the PCMH model: access, comprehensiveness, integration/coordination of care, and relationships.
- The nursing program at the University of Akron graduated three nursing students. All three are currently in the primary care nursing workforce in Ohio.
- Students at the University of Toledo are engaged in innovative learning experiences, including shared medical appointments with family medicine students/residents, monthly interprofessional case conferences, and simulations with an interprofessional team.
- The nursing program at Ohio University introduces students to the PCMH model and provides a foundational context for the curriculum, through standardized patient, osteopathic manipulative medicine labs, and interactive learning experiences.





The PCMH partnership embeds 10 goals in the curriculum and programmatic activities, which are:

1. Students will demonstrate understanding of the importance of a personal clinician to the health of individual patients and the population as a whole.
2. Students will recognize the importance of patient-centeredness in successful healthcare outcomes.
3. Students will recognize the importance of the team approach to patient care in successful health care outcomes.
4. Students will recognize the importance of integrated, coordinated care in successful health care outcomes.
5. Students will apply the principles and practices of evidence-based population management and public health in an equitable manner to advance the health of the community.

### **From Clark State Community College to Wright State University**



“Receiving the STEMM scholarship truly was the key factor for me in completing my degree in registered nursing. I was able to focus on my education instead of focusing on the financial side of it. I am grateful for the scholarship and the opportunity it gave me to know that reaching my goals and pursuing my dream career was possible. After I pass my state boards, I will continue my education at Wright State University with the dream of receiving my Bachelor of Science in nursing. Thank you Choose Ohio First Scholarship.”

— Kathy, Licensed Registered Nurse

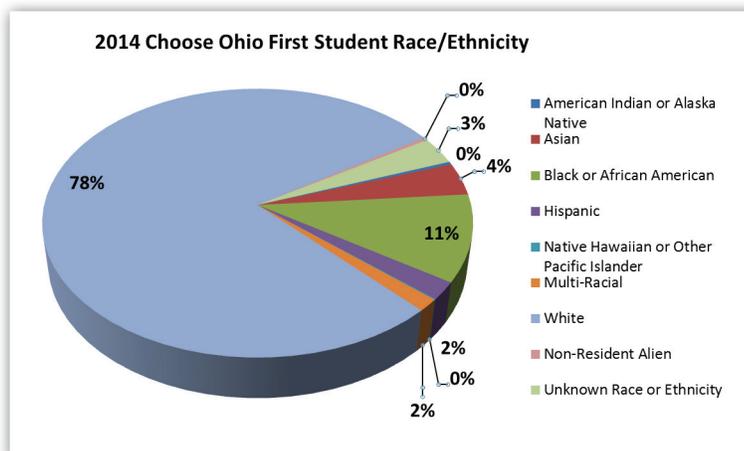


6. Students will recognize the importance of access to care that is high in quality and equitably applied in a way that meets the needs of the patient with respect to time of service and manner of delivery.
7. Students will recognize the importance of continuous quality improvement, using best current evidence to develop and refine best practices for patient care.
8. Students will understand the importance of information systems to the functionality of the patient-centered medical home.
9. Students will demonstrate appropriate leadership skills.
10. Students will advocate for the Patient Centered Medical Home as a means of improving the health of the community.

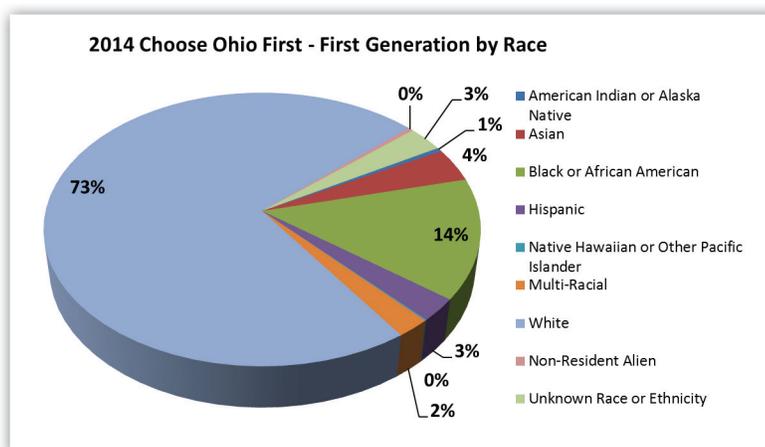




## Demographic Data

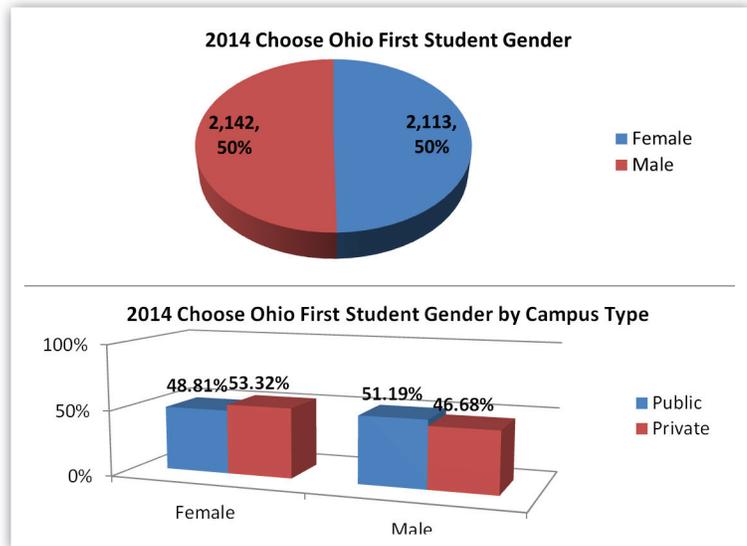


**Over 22 percent of COF Scholars are from a racial or ethnic minority.** Approximately 11 percent of COF Scholars are African American and slightly more than two percent of COF Scholars are Hispanic/Latino. African Americans (14 percent first-generation/low-income) and Hispanic Scholars (three percent first-generation/low-income) are also categorized as first-generation or low-income at rates that exceed their representation in Choose Ohio First. These data elements are of particular interest, as Ohio will need the participation of all its citizenry to move the needle toward its increased degree attainment goals.

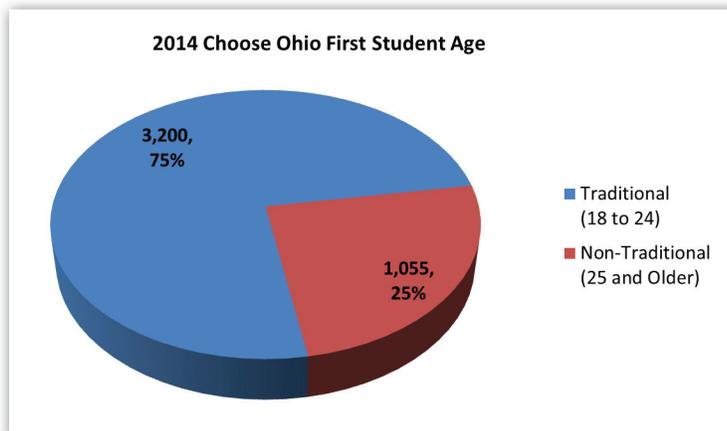




The gender of COF students is evenly split with only slightly fewer than 50 percent of COF Scholars identifying as female (n=2,113). Although not a statistically significant difference, females are more likely to be enrolled at private campuses. Future studies will look at this difference. The proportion of females participating in COF slightly exceeds their share of the college-age population in the state (49 percent), and exceeds the average of all females earning STEMM degrees in Ohio (28 percent).

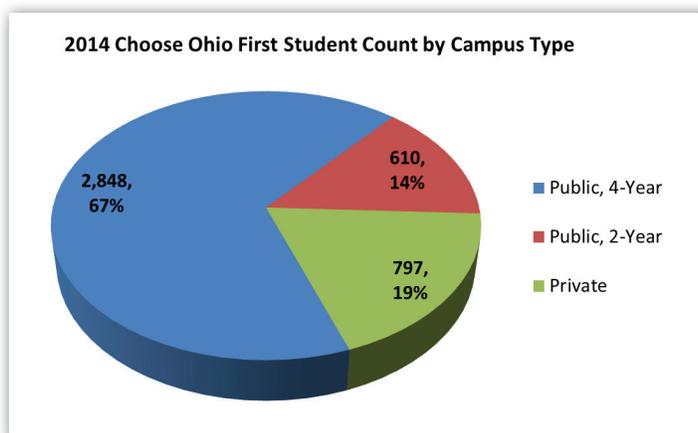


**Approximately 25 percent of COF Scholars are non-traditional students over the age of 25 (n=1,055).**

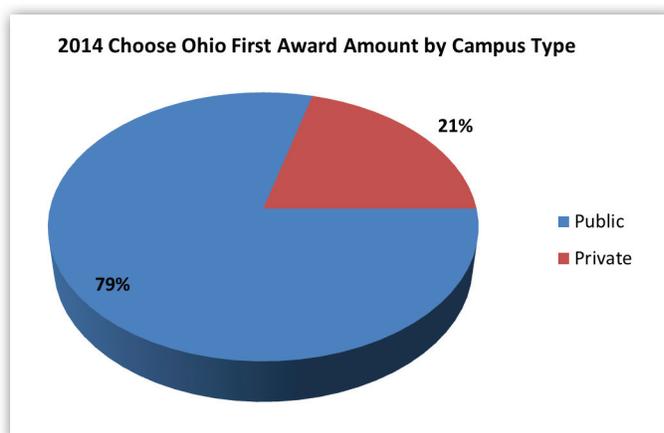


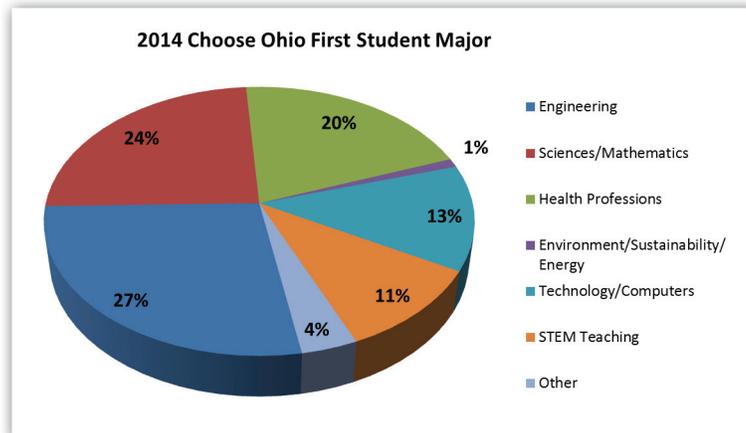
A large number of non-traditional COF students (29 percent) study at Ohio's community and technical colleges. Interestingly, the state's four-year campuses are also serving more non-traditional students, with **71 percent of non-traditional COF students enrolled on four-year campuses.**





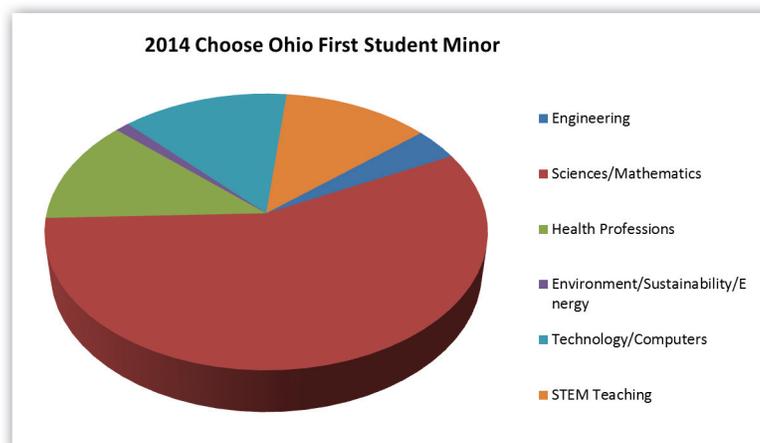
**Nearly 14 percent of all COF Scholars are enrolled at a community or technical college.** Of the students who enrolled at a participating two-year campus, 259 (as reported by campuses) moved on to programs at the baccalaureate level in STEMM fields. Important to note as well, 66 COF Scholars moved from another college or university into a community college. Students cited the need for additional training or targeted expertise as the rationale for moving from a four-year campus to a two-year campus. While the overwhelming majority of COF funds were expended at Ohio’s public colleges and universities, **nearly 19 percent of COF students participated in programs at a private college or university**, amounting to nearly 21 percent of the funding.

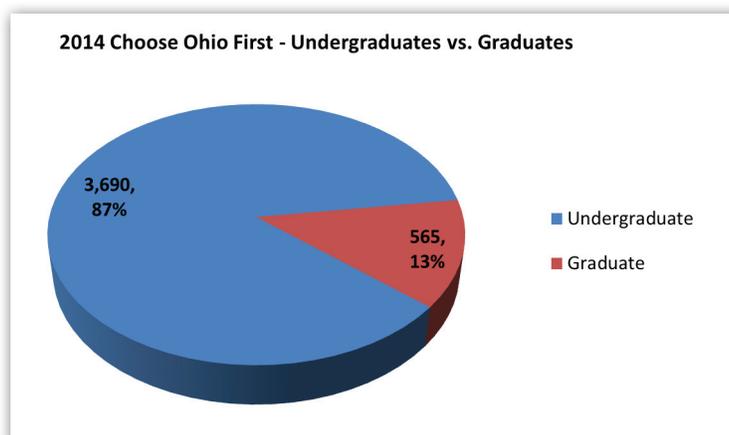




Data as reported from Choose Ohio First campuses, August 2014

Nearly 80 percent of COF Scholars are enrolled in academic majors linked to one of the JobsOhio industry sectors: BioHealth, Energy, Polymers, Aerospace and Aviation, or Information Technology. STEMM teaching students comprise 11 percent of COF Scholars. A surprising statistic emergent from the data was the number of new students entering the technology/computing fields. This is an area of economic opportunity in the state, and the number of COF students increased from **five percent in FY13 to 13 percent in FY14**. The chart below highlights the academic minors that Choose Ohio First students select. Many Scholars strengthened their marketability in STEMM areas by adding to their portfolio with a STEMM minor.





More than 565 COF Scholars are graduate students, slightly up from 540 last year. The enrollment of many of these students may be attributed to the inclusion of the graduate nursing and medical programs incorporated into Choose Ohio First through the PCMH work. Inclusion of graduate students will help to ensure that the pipeline of Ohioans holding advanced degrees in STEMM disciplines will meet private sector industry needs and the ongoing demand for STEMM faculty at the postsecondary level.





## Programs of Innovation

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All COF campuses offer innovative approaches to instruction and persistence in the STEMM majors eligible for scholarships. All COF campuses utilize approaches that aim to expand access to all Ohioans, and in doing so, meet the urgent need for more individuals trained in science, technology, engineering, and mathematics. Campuses are preparing Ohio's future innovators in high demand fields including, petroleum engineering, geological sciences, health information management, and bioinformatics. Summer bridge programming, mentoring opportunities, research projects, co-operative learning offerings and internships are just a few examples of the holistic approach to STEMM education in COF programs around the state.

### Program Descriptions by Primary Focus Area

COF offers programs in numerous majors at campuses that touch every region of the state. There are themes or clusters present in the COF program, and it is easy to identify the main focus of each program by its primary target population.

#### K-12 Outreach and Pre-College Engagement

Several COF programs reach out to K-12 students to ensure early exposure to concepts and subjects central to success in the STEMM disciplines. These programs reach out to middle and high school students, helping them to see value in a STEMM career and to provide them with the tools necessary to succeed is critical to increasing the number of STEMM graduates in Ohio.

“The COF experience was very gratifying in three regards: the teaching experience, the planning process of science lessons, and the students’ reactions.”

— Paige, The Ohio State University



- The **University of Cincinnati** leveraged an existing UC STEP Project on its campus to give COF scholarships to students who completed a summer bridge program part of a comprehensive pathway to success in engineering.
- A unique aspect of the **Youngstown State University** COF program is its recruitment of students from surrounding urban high poverty districts and its focus on recruiting diverse students. Additionally, the program has a pipeline preparedness bridge program as a key component.
  - » The current six-year YSU graduation rate is 32 percent; the current six-year YSU College of STEM graduation rate is 44.3 percent; **the current six-year COF graduation rate at YSU is 73.68 percent.**
- **The Ohio State University** COF program, the *Ohio House of Science and Engineering: Success in STEMM through Collaboration COF Scholarships*, allows COF Scholars to conduct science outreach programs in central Ohio. Wonders of Our World (W.O.W.) serves grades K-5. W.O.W.2 serves students grades six through 12.
  - » The project has built a strong community of STEMM Scholars from more than 25 majors (n=145).
  - » **The attrition rate of nine percent is low compared to non-COF students, which is 17 percent.**
- As a major campus presence in a predominately rural geographic area, **Muskingum University** offers science outreach, mentoring, and tutoring services to elementary, intermediate, and high school students to encourage participation in STEMM areas.
- The Choose Appalachian Teaching program at **Ohio University** develops and mentors future teachers ready to teach in the high-need areas of southern and eastern Ohio. The preparation and support is designed to create strong teachers ready to teach in the nearly 200 districts of Appalachian Ohio.
  - » A corollary goal is to positively impact the challenges many Appalachian Ohio districts face when educating students.
  - » In addition to providing rigorous science and math instruction, **CAT Scholars also act as college access and completion champions**, combating college completion rates in the area as low as 6 percent.





- At **Kent State University**, the COF program is housed in the STEM Research and Education Center, designed to increase K-12 pre-college outreach programs and connecting academic departments to external constituents.
  - » By providing students with an interdisciplinary learning experience and the opportunity to be engaged in living/learning communities, the project will increase the number of underrepresented students in science.
  - » A pathway from the community college to a four-year university is made clear to non-traditional students who may be returning to school after a long absence.
- **The Cincinnati STEMM Hub Partnership at the University of Cincinnati** works to transform the knowledge of COF students through innovation in multidisciplinary collaborative education and research, leveraging UC's relationships within the community.
  - » **COF students in engineering are paired with teachers** in local schools to do mini presentations on real-life applications of content specific subject matter – relating engineering in the real-world.
  - » COF students are also able to serve as role models for students in the classroom, which has led some students to want to pursue teaching as a profession.

“Due to the experiences through the COF program, I will be the first person in my family to graduate with a bachelor’s degree... I’m looking forward to making a difference in the world.”

— Brittany, Kent State University



## Co-op and Internship Participation

COF projects offer a mechanism for students to be engaged in a rigorous academic curriculum, while gaining real world experience applicable in a STEM field. Employers value educational practices that involve students in academic and applied learning. Offering students flexible class options and diverse teaching and learning methods allows students to be focused in the classroom and simultaneously focused while participating in a cooperative learning opportunity or internship. This early exposure to the real-world applicability of a STEM major reduces the likelihood that graduates will choose employment in another field. Direct experiences with practical problem-solving also makes COF students competitive candidates for jobs.

- The **University of Cincinnati's** program in Global Product Design and Manufacturing integrates product design, manufacturing, and business to closely mimic global competition in design and manufacturing.

- » Business partners provided mentoring to students as they worked on projects – unique, real-life simulations for students solving real-world problems.

“It was a pleasure working... to complete this project. We will use the information [from students] in our planning. We are sure we will benefit from the results.”

— Owner, SunSpot Pool & Patio

- **Wright State University** provides COF Scholars with the opportunity to engage in real-world opportunities through a partnership with Wright Patterson Air Force Base. The program, *Growing the STEM Pipeline in the Dayton Region – Becoming an International Center of Excellence for Human Effectiveness/Human Performance*, is designed to ensure a ready and able workforce for the Base in future years.
- The *Choose Ohio First for Engineering Entrepreneurship* (COFEE) Scholarship at **The University of Toledo** equips students with the entrepreneurial training needed to translate their ideas into economic growth for Ohio.





- » The program leverages the scholarship to recruit new students who enhance diversity in a way that is reflective of Ohio’s population.
- » The UT College of Engineering has experienced **strategic enrollment growth for consecutive years**, partly attributable to the COFFEE scholarships.
- » The investment of Choose Ohio First funding for the Scholars is far exceeded by the earnings the students generate at the Co-Op/ Internship placements.
- » **First to second year persistence rates exceeded 90 percent** last year.
- **The University of Akron** was selected as one of the top recipients of state funding to support workforce development strategies and enhance student success through the Ohio Means Internships and Co-ops program, receiving more than \$900,500.
  - » The initiative will create at least **250 new co-op and internship opportunities** across five colleges on campus and 34 programs linked to key industries in Ohio.
- The *Science and Math Education in ACTION* program at **Bowling Green State University**, utilizes unique cooperative learning opportunities to produce innovative and highly effective science and math teachers in Ohio.
  - » In addition to a residential summer bridge program before their freshman year, students are engaged in a business/ industry during their sophomore year, which culminates in a pedagogical research project during their junior and senior.
  - » *BGSU ACTION Scholars* are among the top in the state – the **average ACT score is 28** and the **high school GPA is above 3.9**.
  - » The persistence rate of *BGSU ACTION Scholars* is **more than 97percent**.

“As an environmental science student... there were many career options open to me. BOSEF was an invaluable tool in making all of this happen. I hope future students will have the opportunity to participate.”

— Annie, Bowling Green Student Environmental Science Graduate





- The Bioinformatics program at **Ohio University** supports students as a means of preparing them for Ohio's STEM workforce.
  - » Scholars strengthen research at the institution, with many **working as interns in laboratories** in biological sciences, the college of medicine, and the school of engineering.
  - » Nearly 88 percent of Bioinformatics students responded that participation in Choose Ohio First allowed exposure to important concepts in the field.
  - » Students are required to participate in the Great Lakes Bioinformatics Conference (GLBIO), which promotes computational biology and bioinformatics within the eight U.S. states and two Canadian provinces that comprise the North American region.
- **Miami University** COF Scholars participate in a program that has a national reputation for excellence.
  - » Students participate in faculty mentored research or other independent research projects, designed to increase the workforce in bioinformatics.
  - » Miami Scholars credit COF with helping them stand out from other applicants when it came time to apply for a job or making it through the interview process.

## **Inclusive Competitiveness/Excellence and Diversity in STEMM**

Non-traditional students and those underrepresented in higher education, including low-income or first generation students, are given the opportunity to excel as a result of COF. Programs offer the financial assistance necessary for academically at-risk students to enroll and persist to completion of post-secondary education credentials, while ensuring students are engaged in a rigorous curriculum that prepares them for employment. Programs also focus on increasing the number of students from diverse backgrounds in STEMM, including women, racial/ethnic minorities, those from rural areas, and students with disabilities. For example:

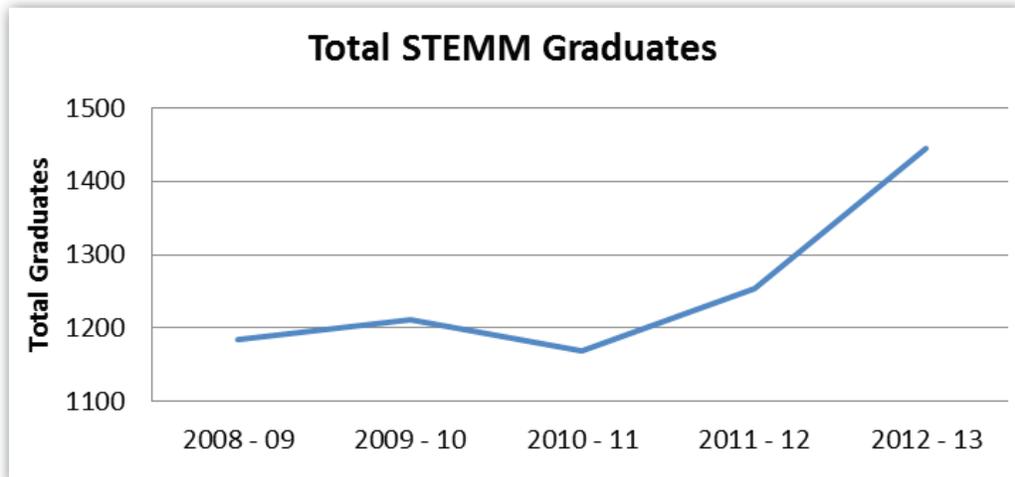
- **Shawnee State University** aims to increase the number of college graduates for a regional population of primarily first-generation college students in an impoverished part of Ohio.





- » The Choose Ohio First Bioinformatics Scholarship provides assistance to talented students; as a result, the graduation rate for the COF Bioinformatics program is considerably higher than the rate for any other program on campus (100 percent of the 2010-2011 cohort graduated within four years compared to eight percent of their counterparts).
- » The Choose Appalachian Teaching (CAT) program has produced three graduates who are teaching mathematics in Ohio Appalachian counties.
- The Choose Ohio First program at **Muskingum University** serves a non-traditional, predominately rural population.
  - » Working adults are able to benefit from scholarship support, making it feasible to enter into or complete a STEMM degree, including engagement in Muskingum’s RN-to-BSN completion program.
- **Wright State University** has seen a significant spike in the total number of STEMM graduates at WSU since the inception of the Choose Ohio First program.

“I am a pre-med... commuter student and I live approximately 40 minutes away from Shawnee. I am very thankful for this scholarship!”  
— Megan, Shawnee State University





- **Central State University** is one of the nation’s oldest Historically Black Colleges and Universities (HBCU), with a student population that is **93 percent African American**.
  - » The COF Diversifying Ohio in STEM program at Central State boasts a high persistence rate – **70 percent versus the campus average of 44 percent**.
  - » Faculty report that the scholarship not only helps the students financially, but also motivates them by enhancing self-esteem.
- **The University of Akron (UA)** has graduated 309 COF Scholars since the inception of the program.
  - » At UA, the **COF graduation rate is currently 81 percent** over the span of the program, which is more than 30 percent higher than the six-year graduation rate of the university’s overall student population.
  - » COF Akron staff work closely with all academic advising units to ensure that students are supported throughout their undergraduate journey.
  - » The institutional cost-share is funding used for administration, advising, facility upgrades, and other important needs of COF UA, providing an annual operations budget of more than \$200,000 for COF.
  - » The Innovation Alliance is one of the few COF programs with full-time, dedicated staff. The director, educational specialists, and secretary are all full-time UA employees. There are also 10 peer mentors that are part of the team.

“During college, I received a bioinformatics scholarship that introduced me to the field of research. Working in a research lab helped me realize that I really enjoy putting ideas together... and being able to test my own ideas.”

— Angela, Akron COF Graduate and current cancer researcher at Cornell University; featured in a recent Cosmopolitan Magazine article





- » UA has shown that failure to persist from one year to the next is minimized when the student is a COF participant. In some cases, **attrition is zero** when the student is a COF Scholar. In other cases, attrition is less than half of the non-COF population.
  - The *Building Ohio's Sustainable Energy Future* at **Bowling Green State University** supports the persistence and success of underrepresented minority students and women.
    - » The program is built on the foundations of the Academic Investment in Math and Science (AIMS) program, which has demonstrated a high level of achievement since its founding in 2006.
    - » Students at community colleges in the region (e.g., Owens, Terra, and Northwest State) have access to coordinated program content and advising activities so they can easily enter baccalaureate degree programs at Bowling Green.
  - **Cleveland State University** seeks to diversify the STEMM disciplines through active and targeted recruitment for students who are underrepresented, particularly minority or disadvantaged students.
    - » COF Scholars have shared that they may have delayed college or would have been part-time without the support of the scholarship.
  - The **University of Cincinnati's** program in Diversifying Yield and Retention in Engineering, Mathematics, and Science leveraged a multi-million dollar federal STEM Talent Expansion Program (STEP) grant.
    - » The significant persistence efforts begin with a recommended seven-week bridge program for socioeconomically disadvantaged and first-generation Scholars and/or a more targeted virtual program for those whose math placement test scores were low (ALEKS). ALL summer bridge students enroll in Supplemental Cooperative Learning Courses in calculus, chemistry, and physics.
    - » All COF Scholars are expected to participate in **six quarters of co-op work**, expanding on the strengths of UC's well-established co-op program. The development of a Corporate Mentoring Program increases the STEMM internships available for COF Scholars and has resulted in a mentoring practice model that can be used throughout the state.
  - **The Ohio State University** also serves Ohioans with disabilities through a partnership designed to leverage OSAA National Science Foundation Funding.
-



- » Ohio's population of persons with disabilities is a largely untapped resource for meeting the demand of STEM professionals for the state; currently, individuals with disabilities represent the 2nd largest underrepresented minority group in Ohio's public schools preparing to enter the state workforce.
- » **Students with disabilities are recruited into STEM majors** and transitioned through the use of STEM academies, learning communities, mentoring, and residential experiences on campus to develop independent living skills.
- » Ability Advising allows the institution to meet the needs of the student through review of academic progress, arranging technological accommodations, and tutoring assistance. Ability Advising also fosters tailored opportunities for STEM co-op and internship experiences.



- The STEM Ability Alliance program at **Wright State University** has had significant impact on the retention and graduation outcomes of students with disabilities.
  - » The one-year retention rate for the Scholars in the Alliance is 93.4 percent, compared to an overall retention rate for WSU students of 62 percent.
  - » In the year prior to funding through Choose Ohio First, enrollments in STEM for students with disabilities was approximately 28 percent - in fall 2012 the enrollment of students with disabilities at WSU stood at 40 percent.





## Community College Participation – Access and Pathways

**More than 14 percent of COF students spent the 2013-2014 academic year at a community or technical college.** Community colleges offer a low-cost pathway for traditional students to start a degree. Displaced workers often have to make tough choices about their education and the feasibility of entering careers that require additional training. The presence of COF on a community college campus increases the likelihood that laid-off workers will return to school to either enhance their skills for employment in their current industry or be trained for a different career field altogether. Community colleges also offer unique opportunities for traditional-age students to be trained and enter the workforce quickly with skills employers demand. As examples:

- Choose Ohio First students at **Stark State College** are offered a variety of stackable STEM education credentials to meet their education goals. A student can obtain a career enhancement certificate, a one-year certificate and then an associate degree. Articulation agreements provide easy transfer to a bachelor's degree.
- At **Clark State Community College**, COF Scholars are required to complete an internship or clinical experience, providing them hands-on experiences and exposure to networking opportunities.
- **Lakeland Community College's** has embedded the COF program into the fabric of the biotechnology program. The graduates from this program have over a **95 percent placement rate into jobs** or four-year degree programs.
  - » The COF biotechnology program leveraged a Department of Labor grant and, as a result, COF students had **no tuition charges**.

“With your scholarship, I plan to become a GIS analyst and GIS image analyst. My ultimate goal is to receive a job in the Dayton area... to create positive changes within my community. I am a proud Ohioan. I am committed to Ohio.”

— Nick, Clark State Community College



- **Edison Community College's** COF Scholars have consistently shown higher graduation rates, persistence rates, and GPAs than their non-COF STEMM peers.
  - » The starting cohort of COF Scholars at Edison (fall 2008) has a **63 percent graduation rate versus 15.3 percent** for their non-COF counterparts.
  - » On average, 2008 COF Scholars earned **72.4 credits compared to 35.1 credits** for non-COF students who entered at the same time.
  - » Out of 87 graduates, **77 Scholars are currently working in STEMM** areas in Ohio.
- The COF Scholars at **Washington State Community College** establish close ties with their advisors from completion of the associate degree through matriculation to a four-year degree program.
- **Lorain County Community College** aligns measures to support and encourage COF Scholars to pursue their STEMM studies. As a result, they stress the importance of low-cost pathways for students who go on to pursue bachelor's degrees:

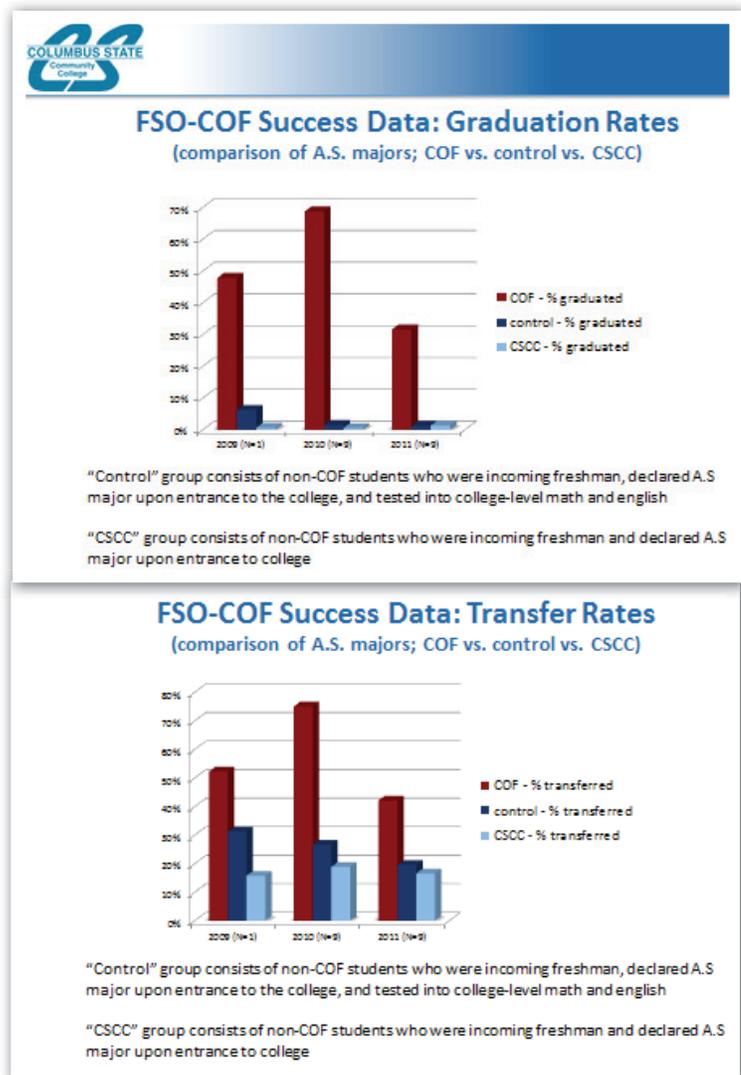
<b>Your Best Value in Higher Education</b>			
<i>Cost Savings of Attending LCCC's University Partnership</i>			
College/University	Tuition, Room & Board for 4 years (Actual costs may vary by program)	Cost of Bachelor's Degree Completion at LCCC's University Partnership	Cost savings by pursuing degree through University Partnership
Ashland University, B.S. in Education	\$157,416	\$38,798	\$118,618
Bowling Green State University, B.S. in Biology	\$75,400	\$20,301	\$55,099
Cleveland State University, B.A. in Psychology	\$85,227	\$23,104	\$62,123
Hiram College, B.A. in Accounting & Fin. Mgmt	\$160,600	\$30,554	\$130,046
Kent State University, Bachelor of Bus. Admin.	\$77,408	\$23,682	\$53,726
University of Akron, B.S. in Sport Studies	\$80,578	\$22,316	\$58,262
University of Toledo, B.S. in Computer Science & Engineering	\$83,177	\$34,765	\$48,412
Youngstown State University, B.S. in Applied Science, Major in Allied Health	\$66,297	\$19,180	\$47,117

**\*\* LCCC's in county tuition is \$2,977 per year for a full-time student**





- The *Future Scientists of Ohio* program at **Columbus State Community College** leverages COF with institutional programs to attract students who would not consider CSCC as a “first-choice” for college.
  - » Approximately 27 percent of FSO Scholars are from under-represented groups. **50 percent are first-generation students.**
  - » FSO data from Columbus State are particularly compelling – graduation rates of COF students is far higher than other CSCC students:
    - » The aim of the Columbus State program is to support non-traditional and low-income students in STEM by providing them a pathway to higher education from a two-year to a four-year campus.





- The Choose Ohio First program at **Zane State College** focuses on persistence and graduation.
  - » The program boasts an overall **COF graduation rate of 74.2 percent**. The persistence rate for COF students in the occupational therapy assistant program specifically is 87.5 percent
  - » In 2014, graduating students from the Zane State College COF program had an **average GPA of 3.80**.
- **Sinclair Community College**, an urban, open access community college with tuition rates less than \$100 per credit hour, serves a range of COF Scholars with an **average age of 32**.
  - » The average GPA for Sinclair COF Scholars in academic year 2013-2014 was 3.365.
  - » Many of the Scholars in the program are also participating in Ohio's STEMM Ability Alliance, a program designed to increase the completion rates of students with disabilities.
- The COF program at **Cuyahoga Community College (Tri-C)** provides faculty mentoring and financial assistance to students, aiming to increase timely degree completion and transfers to four-year institutions.
  - » COF is aligned completely with core tenets of the campus strategic plan: *Access & Engagement, Quality & Innovation, and Completion and Success*.
  - » The campus has successfully leveraged COF when participating in other initiatives, including the NSF-funded Louis Stokes Alliance for Minority Participation and an Ohio Means Internships and Co-ops grant.
- **Cincinnati State Technical and Community College (CSTCC)** serves a largely non-traditional aged population – nearly **56 percent of COF Scholars are non-traditional** and the **majority are women** (n=55).
  - » An analysis of CSTCC scholarship recipients conducted through Cincinnati State's Office of Research and Strategic Planning indicated that scholarship students trend higher in graduation rates than their peers – **3.5 to 4.0 times greater**.





## Private Campus Partnerships and Collaborations

Independent higher education institutions are very important to the academic attainment of Ohio's citizenry, including in STEM areas. According to a recent AICUO report, private colleges and universities comprise more than 40 percent of bachelor's degrees awarded in Ohio in mathematics, the physical sciences, and biological sciences. During the 2013-2014 academic year, **18.73 percent of COF Scholars were housed at Ohio's private colleges and universities.** Partnerships and collaboration among the University System of Ohio's public colleges and universities and private institutions around the state have resulted in more students being served, and more efficient use of Ohio's fiscal and human resources. For example:



- The COF Scholars at **Ohio Northern University** participate in a nationally accredited and recognized teacher education program, specifically in engineering education.
  - » The campus is currently finalizing articulation agreements with Owens Community College, Rhodes State College, and Marion Technical College to provide opportunities for students completing two-year degrees to seamlessly transfer to ONU.
  - » COF was leveraged in an application for an NSF grant designed to increase the number of minorities focusing on STEM-area teaching licenses.
- **The University of Rio Grande** is uniquely positioned to meet the needs of its COF Scholars. A public community college, Rio Grande Community College, is co-located on the campus and offers opportunities for seamless transfer in many degree areas.
  - » Scholars from the starting cohort (fall 2008) pursuing a bachelor's degree had a **graduation rate of 61.5 percent compared with a rate**





- of 7.5 percent** for their non-COF counterparts who started at the same time.
- » The percentage of students who left the institution with no degree was 13.5 percent for COF Scholars versus 61.2 percent for non-COF Scholars.
  - » COF Scholars on average **earned 119.75 credits in comparison to the 55 credits** earned by their non-COF counterparts over the same timeframe.
- **Baldwin Wallace University's** STEMM Scholars are assigned a success coach and receive holistic financial, academic, and social support designed to provide clear and consistent expectations, support, assessment and feedback, and involvement.
    - » **75 percent of BWU COF Scholars are from underserved groups**, compared to the campus average of 21 percent from minority or ethnic backgrounds and 40 percent being Pell-eligible. Also, 51 percent of BWU Scholars are first-generation.
    - » BWU's COF Scholars have a **four-year graduation rate that is nearly double their non-COF peers** (67 percent versus 34 percent respectively).
    - » Of the graduates from the program to-date, **81 percent have been from underserved populations**.
  - **The University of Dayton** focuses on recruiting, retaining, and graduating female, minority, and first-generation students in STEMM through intentional and targeted program activities.
  - **Heidelberg University** attracts and retains students in the area of environmental science.
    - » The goals are to simultaneously grow the academic enrollment of the institution, while improving the academic abilities of the students at Heidelberg.
  - **Hiram College** established formal learning communities composed of Choose Ohio First Scholars, Igniting Streams of Learning in Science faculty, and campus staff. The result was a mentoring network for learning and support that has expanded to non-COF students as well.
    - » The Integrated Entrepreneurship program encourages understanding and using tenets of entrepreneurial thinking, including creativity, problem solving, and solution mapping.





- **Wittenberg University** offers its COF Scholars individualized attention and unparalleled access to collaborative faculty research opportunities.
  - » COF Scholar Lisa Sampson was awarded the Chambliss Astronomy Student Achievement Student Award, the highest award in the field of astrophysics from the American Astronomical Society.
  - » COF is a perfect incubator for students who will enroll in an innovative *1-2-1 Pathway Nursing Program* with **Clark State Community College**, where students interested in a Bachelor of Science degree in nursing will enroll at Wittenberg and take classes at Clark State during their sophomore and junior years (still pending HLC and OBR approval).
- The Scholars at **Notre Dame College** are provided with service-learning research, undergraduate research, career development, and internship opportunities through the program.
  - » COF Scholars have earned, on average, **49.4 credits since starting the program** in 2012, compared to 42.1 credits earned by their counterparts.
  - » Other STEMM students in the same major who left with no degree totaled 54.3 percent of the 2012 starting cohort; during that same time, **58.3 of the starting COF cohort is still enrolled** and pursuing their baccalaureate degree.
  - » The first entering cohort in fall 2012 show exemplary persistence rates – **100 percent of the Scholars are still enrolled in STEMM** compared to 72 percent of non-COF students who entered at the same time.
- The Program of Innovation at **Marietta College** increased the number of students in key programs, e.g., petroleum engineering (34 percent) and geology (100 percent) since the inception of Choose Ohio First.
  - » COF has transformed the niche programs of petroleum engineering and physician assistant studies into signature programs of the college.
  - » The college participates in the **Ohio Third Frontier Internship program**, connecting COF students to Ohio employers and paid internships.
  - » Petroleum engineering has historically been dominated by men; a female COF Scholar organized a chapter of Women in Petroleum Engineering at the college and during the 2013-2014 academic year, the chapter had **25 active members**.
  - » Notably, **100 percent of petroleum engineering graduates had full-time, permanent jobs within six months of graduation** with an average salary of \$90,000.





- » The **persistence rate is extremely high** in all COF programs – more than 90 percent.
- **The University of Findlay** attracts high achieving Scholars into its program while building conduits to business and industry.
  - » The biology COF program has **retained 96 percent** of its Scholars.
  - » Education COF students had a **100 percent passage rate** on the Praxis II licensure tests in 2013. They also scored considerably higher than the state average in the areas of student satisfaction, field experience, and alumni performance (21.7 percent versus 14.4 percent).
  - » The computer science program has seen incremental growth related to COF; from 63 students enrolled in the major in fall 2012 to 88 students in fall 2014.
- The *Northeast Ohio Biosciences Pathway Initiative* at **Ashland University** boasts a **high persistence rate of 83 percent**, even with a large number of first-generation students (46 percent).
  - » The program at Ashland University has substantially **increased the number of incoming students with a declared major in the bioscience areas**. Also, the program has had a positive impact on connection to STEMM careers. As of 2012, 95.3 percent of graduates in COF-related areas have entered a STEMM-related career.
- **Franklin University** leverages the attention and support of the university community to positively impact recruitment of students into STEMM disciplines and market the career potential associated with STEMM majors.
  - » The graduation rate of COF Scholars far exceeds that of other computer science/management information systems students.

“As an adult student with a family to care for, I don’t believe I would have been able to return to school without the financial assistance of the COF scholarship.”

— COF Scholar, Franklin University





» More than **80 percent of COF Scholars work full-time**, with 60 percent currently employed within the technology industry. As many are already personally and professionally established, it is likely that many will stay in Ohio after graduation.



» Franklin provides innovative solutions in keeping distance learners engaged in STEMM, and allows COF Scholars to participate virtually or on any of their rapidly expanding co-located campuses.

## **Excellence in Graduate and Advanced Studies**

COF offers graduate students an opportunity to excel in STEMM fields. Graduate students comprise approximately 14 percent of the total number of COF students, an assurance that individuals seeking to obtain advanced degrees in subjects such as engineering, science, and mathematics are able to receive financial assistance from this program as well.

- **The University of Findlay** has seen nearly 80 percent of its COF graduates in biology enter graduate programs.
- The bioinformatics COF program at **Bowling Green State University** ensures that Scholars are prepared for post-graduate programs by establishing a record of laboratory research experiences. Students are more competitive candidates for graduate programs as they have demonstrated evidence of their ability to plan and conduct research.





- **Marietta College** offers scholarships in a two-year graduate program for physician assistant studies.
  - » **100 percent of the 2012 cohort graduated** with their degree (n=20).
  - » COF Scholars hold **seven of the eight leadership positions** in the Student American Academy of Physician Assistants.
- The **University of Cincinnati** program, *Master's Degrees as Conduits to Recruiting, Retaining, and Upgrading the Ohio STEMM Workforce* is designed to attract students into a master's degree program and ultimately into medical school, with the goal of retaining more Ohioans with advanced degrees.
  - » Educational collaborations between STEMM and non-STEMM (e.g., business, design) sectors give students enhanced value in the workplace. From an early stage of their education, students learn the connections between designers, engineers, and medical professionals for medical device innovation projects.
- **Ohio University's** College of Nursing is shoring up the reserves of those prepared to meet the needs of Ohio's healthcare industry by recruiting and retaining master's degree nursing students.
  - » Graduate nursing students utilize the Heritage College of Medicine's innovative learning laboratory and skills laboratory.
  - » **Retention for graduate COF Scholars is 100 percent** versus an 88 percent return rate for non-COF graduate students.
- In the *Engineering Across the Pipeline Program* at **Cleveland State University**, there is a heavy focus on

"Being a Choose Ohio First STEMM scholar has allowed for me to develop a diverse mindset that will allow me to differentiate myself from competitors when pursuing a job... opened my eyes... allowing me to think outside the box. I have really enjoyed the experience of developing my mind."

— First-generation STEMM Scholar,  
Biomedical Engineering/Medical  
Physics at Cleveland State University



recruiting STEM majors to further their education by completing a graduate education in engineering.

- » Females, an underrepresented group in engineering, consistently represent one-third of the COF Scholars in the program. This is also meaningful, given that women are outnumbered in the professoriate in STEM.
- » Each COF student's experience is customized, with one-on-one interactions to identify opportunities and connections, incorporate activities, and tailor events toward specific majors.
- **The University of Toledo (UT)** has a core mission of generating graduates with employable graduate degrees in high-demand STEM areas.
  - » The *Building Ohio's Sustainable Energy Future Program* attracts graduate students as a Center of Excellence for Energy and the Environment and provides community-oriented research projects that allow for student development in ways that a curriculum cannot.
  - » UT also aims to increase the number of graduates with a professional science master's degree in photovoltaics, equipped with the technical training needed to translate their skills into economic growth in renewable energy.





## The Economic Impact of Choose Ohio First

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The Choose Ohio First program has led to a fundamental re-thinking of how STEM education can be achieved on a college campus. With **no administrative dollars** available to program staff on the campuses, each institution's commitment of cost share and matching dollars is a testament to the dedication and commitment campuses have in administering the program. Cost share purchases include purchases of torso, eye, and skull models for use by medical and laboratory COF students. Staff and support personnel have been hired on campuses explicitly to work with COF students.

An analysis of the COF program by *Tripp Umbach* found that the program is having a positive effect on the state's economy. The analysis conservatively estimates that receipt of COF funds led to the support of **477 jobs and more than \$59 million in economic output within the state since its inception**. Economic output includes the institutional expenditures made for COF

“Since graduation last month, I was offered a lab position at a molecular diagnostics lab. I am fortunate to be working in the field I trained for...I owe so much credit and gratitude to Choose Ohio First!”

— Julia, Lakeland Community College

Scholars, the personal spending of staff and students of the program, labor income from the co-op/internship opportunities, innovations and entrepreneurship opportunities led by COF Scholars, and other local economic activity. By the same conservative estimates, it was found that by 2016 COF programs will lead to the support of **843 jobs**, resulting in **more than \$110 million in annual economic output around the state**, and **\$4.5 million in annual state and local tax revenue**. These are conservative estimates based on annual impacts and do not take into consideration cumulative effect. Moderate and aggressive estimates trend much higher.





Several evaluations led by external entities support the continuation and expansion of offering COF Scholarships. In a study conducted by *The Strategy Team, Ltd.* for the Ohio Board of Regents, students positively attributed COF with strengthening the existing levels of STEMM interest in the Scholars and with attracting the attention of Scholars who may not have seriously considered STEMM. The scholarship also appeared to have a greater influence on the students' choices of institutions and academic major declarations. This is good news for Ohio employers.

*Tripp Umbach's* COF study included several interviews with business leaders; of the 25 leaders interviewed, a majority (n=16) would prefer to hire graduates from Ohio colleges and universities. However, they are unable to find the science, technology, engineering, mathematics, and medical talent necessary to remain competitive. According to a report by the National Science Foundation in 2003, Ohio was in the bottom quartile for the percentage of science and engineering degrees conferred. Ohio's economic prosperity hinges on the development of talent in STEMM. Nine out of the 25 employers interviewed indicated they would employ talented candidates regardless of whether they are in-state or out-of-state. However it is important to note that employers, no matter the preference to hire from within Ohio, view COF potentially as a key factor in helping meet workforce demands locally.

Employers are eager to work with Choose Ohio First students. At **Zane State College**, nearly every COF student participates in either a clinical, internship, or field work experience relevant to their area of study. **All but one of the 2013 graduates at Zane State were employed within six months in their field of study.** This type of response is not an isolated event. Numerous campuses report that employers are eager to work with Choose Ohio First Scholars, touching nearly every corner of the state.





## **An Abbreviated List of Business Partners Connecting COF to Industry**

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Abbott Nutrition	Global Cleveland
Accenture	Goodyear
Acusport	Hanger Prosthetics
Aerial Corporation	Honda
Affymetrix	Honeywell
Alkermes	Hoxworth Blood Center
AT&T	Image IQ
Athersys	Interhack Corporation
Audio-Technica	IYA Technologies
Avetec	JM Smucker
BioFit	John Deere
BioInVision, Inc.	LG Fuel Cell Systems
Blue Water Satellite	Licking Memorial Hospital
BP Refinery	Lubrizol
Brush Wellman	Mass Mutual
BWI Group	NASA
Caron Products & Services, Inc.	Neo Proteomics, Inc.
Chantest	Ricerca Biosciences
Cleveland Clinic	Steris
Clinical Tissue Eng. Center	Summa
Conagra	Swagelock
Cooper Tire and Rubber Co.	Sysco
Diebold, Inc.	Tec^Edge
E. Muskingum Local Schools	Timken
Farrar Scientific	Verizon
FC Stone	Woolpert
FirstEnergy	WordPress
GE Transportation	Wright Patterson Air Force Base
Genesis Healthcare System	





## Choose Ohio First: Keeping the Momentum



The COF Scholarship Program aims to continue the positive momentum of past years. However, the program must continuously adapt and adjust to accommodate changing workforce needs. When possible, opportunities for the growth and expansion of the programs on campuses to meet workforce needs are highly encouraged. As these adjustments occur, the intent of the program to increase access to high-achieving first-generation, low-income, and under-represented students has remained constant.

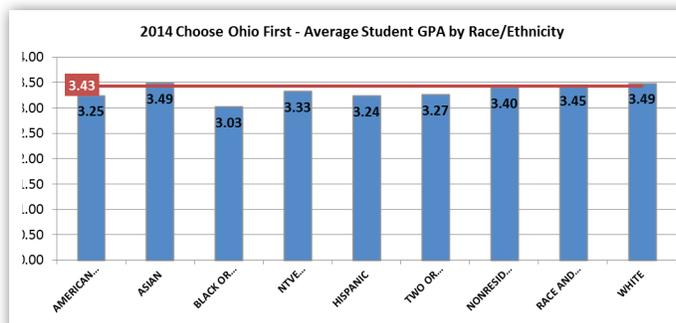
### **Focus: Academic Performance of Scholars**

The average GPA for a COF Scholar in the 2013-2014 academic year was 3.43, up slightly from the 2012-2013 academic year average of 3.39. One area of focus in future years will be the academic performance of students of color. Currently, the majority of students of color trend very close to the overall GPA average. However, African Americans trend lower than their peers. Nearly 16 percent of all COF Scholars are enrolled at a community or technical college. Of the students who enrolled at a participating two-year campus, nearly 27 percent (as reported



by campuses) moved on to programs at the baccalaureate level in STEM fields. Nearly 16 percent of COF students participated in programs at a private college or university.

It will be a priority for Choose Ohio First programs to identify threats to academic performance among students of color, and address gaps with targeted interventions and supports.



### Focus: Persistence, Completion, and Employment

Persistence from year to year in COF has also increased, particularly when compared with non-COF students in the same major. With a national study from the United States Department of Education’s National Center for Education Statistics reporting that half of all bachelor’s degree candidates in STEM leave the field before completing their degree, Choose Ohio First programs have extremely high comparable persistence rates, with some programs achieving 100 percent.

Based on data compiled from Annual Reports from participating Choose Ohio First campuses, approximately 1,290 Choose Ohio First Scholars graduated in the 2013-2014 academic year. Of this number, 279 plan to enter graduate school. **More than 660 (n=663) COF graduates have secured jobs and are staying in the state to contribute to the Ohio workforce, with the majority (82 percent) reporting jobs in STEM areas directly related to their degree.** Only 72 students reported accepting out-of-state employment or graduate school offers. Even students who left the state reported a strong desire to return and contribute to the state that invested in them. Campuses have formalized steps to monitor Scholar progress after graduation, including targeted alumni surveys, special mailings to former COF Scholars, and monitoring through the Ohio Department of Job and Family Service UI Wage Data.

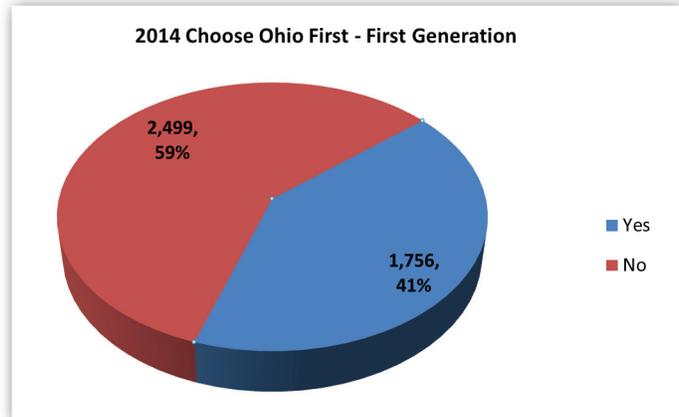




The data from the COF campuses have progressively become more robust and meaningful. As we move toward more years of graduating classes of COF Scholars, the data are clearly showing that the funding has a positive impact on student persistence and completion. It is also important to note the promising data points of persistence and completion are being achieved with a population that is largely first-generation/low-income. The chart below illustrates that **41 percent of COF Scholars identify as first-generation or low-income.**

Moving forward, in collaboration with the Governor's Office of Workforce Transformation, the Ohio Board of Regents will also be able to offer data on the degree attainment of graduates and the persistence of the COF Scholars in the Ohio workforce, including wage information through the connection with UI Wage data. Connecting

directly to workforce need and demand that are constantly changing is also a goal of Choose Ohio First moving forward.



### **Focus: Increasing Awareness of Choose Ohio First**

Numerous inquiries about COF continue to come in at the state level, and campuses report that the substantial progress in marketing COF using social media and other online materials has resulted in increasing numbers of applications for the scholarship each year. At the 2014 COF Scholar Showcase, Secretary of State Jon Husted, founder of Choose Ohio First, presented each Scholar with a personalized commendation. The Ohio Board of Regents is in a continuous improvement mode with COF to build on its success and enhance the scope and depth of its positive effects on Ohio's economy. As the COF scholarships are available on more campuses and in more disciplines, increasing numbers of students will have to the opportunity to apply for a COF award and pursue their academic and career goals in STEMM fields.







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 **OhioHigherEd.org**

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