Choose Ohio First

FY21 RFP
PROPOSAL SUMMARIES
Executive Summary – Ashland University

Ashland University is proposing a new Choose Ohio First (COF) program to support 105 undergraduate students over five years majoring in natural sciences, computer science, cybersecurity and mathematics. Our proposal builds on the strengths of our past COF programs dating to 2009 by serving a unique regional population with high financial need, leveraging strong academic programs in biology, chemistry, computer science and mathematics, while working with business partners to provide work based learning opportunities for our scholars and fulfilling regional and state needs for graduates in STEMM areas.

As a medium-sized institution in north central Ohio, Ashland University hosts the only COF funded program serving our immediate region. The majority of our undergraduate students come from high schools in Ashland and surrounding counties, making us well located to provide this important state STEMM scholarship support to our region. The high proportion of first generation college students and Pell eligible students in our current COF program illustrates the support needs of our region. Along with our local Community College partner, North Central State College, we provide an affordable pathway for students to earn their Bachelor degree and enter the STEMM workforce. Our close relationship with multiple business partners, including Charles River Laboratory, which manages a pharmaceutical testing facility here in Ashland, Ohio, provides internship and employment opportunities for our COF students.

Ashland University has identified the programs included in this proposal as strengths, committing funding for targeted marketing and exploring development of new internally funded scholarship programs. New faculty positions have recently been added to biology and cybersecurity. The proposed programs have a long history of student success and faculty achievement, including many University, regional and national teaching and research awards and federal funding of faculty mentor ed undergraduate student research programs. While our biology and chemistry programs, including biochemistry and toxicology, have been well integrated for decades, we propose plans to strengthen interdisciplinary training in the natural sciences with computer science to prepare students for growing careers in this space.

Our programs proposed for support educate students in STEMM areas of strong demand in Ohio. Job opportunities are expected to grow faster than average in at least 17 occupations defined by the US Bureau of Labor Statistics that are typical employment locations for graduates of our proposed programs of study. The non-profit BioOhio provides annual data indicating the strong and positive impact of the Bioscience industry on our State, and lists our business partner Charles River Laboratory as a notable growing bioscience company. Charles River and another of our business partners, Lubrizol, note the special training of our undergraduate toxicology majors, while also employing our biology, biochemistry and chemistry majors. In this proposal we describe our plans to integrate education in biology and computer science. Our business partners at the Seidman Cancer Center of University Hospitals will work with us to inform COF scholars about career paths that combine natural science and computer sciences, while also promoting career paths into cybersecurity, an area of exceedingly strong demand in Ohio. We believe that the addition of math and computer science majors to our long-standing COF program will allow us to better fill Ohio’s workforce needs, integrate training across the natural and computer sciences in unique ways and leverage the strengths of these academic programs at our University.
Executive Summary - Aultman College

The perfect storm is building in the health care industry: a nursing shortage, underrepresented diversity in the workforce, and increasing costs for health care degrees—and it has the potential to devastate the health and well-being of countless patients for decades to come. The demand for health care jobs has skyrocketed in Ohio as more of the baby boomer generation retires, patient census increases as more medical tests and procedures are ordered, and far too few students are entering the nursing field. A long-term nursing shortage often leads to higher patient-to-nurse ratios, poorer communication and patient outcomes, lower patient satisfaction, and decreased access to care for minority patient populations. Maintaining a diverse workforce of nurses, physicians, and staff allows health care institutions to better represent the communities they serve and create a welcoming environment to foster better communication and patient trust—leading to better patient outcomes.

Filling the vacant Ohio health care jobs in the future requires a growth strategy today of increasing the number of well-educated graduates with experience in their field. Many students find higher education unaffordable and cannot attend without the help of government-backed student loans, grants, and scholarships. As a result, the Choose Ohio First (COF) scholarship program at Aultman College was developed to provide underserved students with an interest in health care careers an opportunity to further their education through a work-based learning opportunity, a consistent mentorship program, and financial scholarship support.

The mission of Aultman College is to prepare health care professionals who lead our community to improved health. As a partner in a unique integrated health care delivery system, Aultman College is a higher education institution offering a premier health sciences education. Aultman College serves current and emerging needs in Northeast Ohio and beyond through academically challenging and relevant health care degree and community education programs. In response to the need for additional trained health care workers, Aultman College has created a Choose Ohio First scholarship program for its Nursing, Medical Assisting, and Radiography programs. Each year, a cohort of (4) COF scholars will be selected to join Aultman College’s COF scholarship program and receive $5,000 to help cover tuition costs and other billable transactions.

Aultman College will provide a COF scholars workshop before classes start each fall to introduce them to Aultman College staff, their mentors from the health care community, and present an overview of the program. Because of Aultman College’s unique existing partnerships with area health care facilities, COF scholars will take part in exclusive mentoring and work-based learning opportunities. The COF mentors will be selected from the local health care industry and will provide pertinent information, encouragement, and networking opportunities for the COF scholars. The mentorship program has been designed to fit within the scholars’ busy academic course load while seeing them through to graduation and employment.

Toward the end of their academic program, COF scholars will participate in a work-based learning opportunity at one or more of Aultman College’s COF business partners: Aultman Health Foundation, Aultman Hospital, Aultman Orrville Hospital, Aultman Alliance Community Hospital, AultCare, or Altercare. The work-based learning component will provide a leadership or career exploration opportunity for COF scholars at local health care organizations to better understand career paths, build relationships with health care leaders, and secure employment upon graduation.
Executive Summary - Baldwin Wallace University

Baldwin Wallace University (BW) has strong STEM (Science, Technology, Engineering, Mathematics, Medicine) programs and a history of excellent performance with Choose Ohio First (COF). More than 300 students have participated in the BW COF STEM Scholars program since its inception in 2008, the first year that COF funds were made available. Of particular note and described in the proposal is BW’s success at recruiting, educating and graduating students from disadvantaged backgrounds. This is consistent with the BW commitment to access and inclusion. As cited in the Sections B.1 (Project Rationale) and B.2 (Recruitment), 62% of students selected as COF STEM Scholars were from socially disadvantaged backgrounds, including 50% who were first-generation. 40% of students selected were from an economically disadvantaged background (Pell-eligible). Among students entering as BW COF STEM Scholars in cohort years 2008-09 through 2016-17, 165 of 240 (69%) were STEM graduates and BW COF STEM Scholars. That ratio goes up to 79% if one considers students recruited to the program that did not remain as BW STEM Scholars but did complete their degree (190 of 240). The retention rate of students in the BW COF STEM Scholars program was 81% (202 of 251; excludes 2020-21 cohort). That number increases to 82% if one considers students still at BW but not part of the program. 48 of 240 (20%) were BW COF STEM Scholars graduates that were both economically and socially disadvantaged upon entering BW. Given the clear success in student retention and completion related to the BW COF STEM Scholars program and model (Section B.3: Student Support), we will continue to recruit, educate, support, and graduate in a manner consistent with the University mission (Section B.5: Programs of Study) and “affordable excellence” (Section B.2: Recruiting).

The STEM programs selected for this project are aligned to meet the talent and workforce needs of regional and state-wide businesses and industry in in-demand occupations (Section B.6: Regional and Statewide Economic Needs and Strengths and Table B.6-1). 26% of the 253,000 jobs added state-wide by 2026 will be in the following occupational groups (BW academic programs): Healthcare Practitioners and Technical (Nursing, Public Health, and Primary Healthcare Advancement Program), Computer and Mathematical (Computer Science, Cybersecurity Analyst, Software Engineering, Mathematics, Data Science, and Data Analytics), Architecture and Engineering (Engineering), and Life, Physical, and Social Sciences (Biology, Environmental Science, Chemistry, Neuroscience, and Physics). Although projected job growth may be slowed by the current COVID-19 pandemic, certainly these programs and occupational sectors will be an essential part of the regional and state economic recovery. BW will contribute to developing the talent and leadership necessary to drive the economic recovery of Ohio.

The BW plan to address regional and state-wide economic strengths and needs goes beyond the simple alignment of academic programs. The Baldwin Wallace Strategic Plan, Thriving through Collaborative Leadership, is intimately tied to regional and state development, as is the subject BW COF Choose Ohio First program. Our proposal will provide BW STEM Scholars with programming to explore the NE Ohio business and R&D ecosystem and discover, maybe even be surprised by the career path that best fits their interest, passion, and purpose (Section B.4: Work-Based Learning).
Executive Summary - Belmont College

The rationale for our targeted population is easy: we are trying to include as many people as possible in this program. Our recruitment efforts will span graduating high school students to adult students seeking a STEMM certificate or degree for the first time. The criteria for inclusion will be used as the only means to limit potential applicants. We want to get this information to as many people as possible in our service area. Additionally, we want to stress this program is a vehicle for those who may not otherwise be able to afford college to be able to afford a college education.

We had several meetings to determine the programs to include in our Choose Ohio First application. We decided to include our Practical and Registered nursing programs, Radiology, Civil Engineering, Energy and Natural Resources, HVAC (Degree and Certificate), Industrial Electronics, Instrumentation and Control, Process Technician, Engineering Applications, and Maintenance Technician I and II. We chose these programs because they lead to in-demand jobs and are popular among prospective students. We wanted to provide a variety of options to include as many potential applicants as possible.

Each of these programs leads to a job in an area of great need regionally as well as state wide. We have had a lot of success working with business partners in these programs due to the overwhelming need for graduates to help fill the gap in the workforce. Part of the cohort model will be educating the students on the regional and statewide needs in their chosen field. This will allow us to utilize local partners to provide work-based learning as well as expand our students’ thinking to consider employment across the state of Ohio.
Executive Summary - Bowling Green

The Choose Ohio First (COF) Initiative of Bowling Green State University (BGSU) is based on Initiative 3 of its Strategic Plan which states that the university shall “…add or enhance academic programs in areas of workforce demand…and applied STEMM fields…” From this, as well as from an economic scan of Northwest Ohio, the university identified three broad categories of academic programs to include in its COF initiative. These are: 1) Programs in Areas of High Workforce Demand, 2) Programs that are Vital to the Regional Economy, and 3) Programs that are Aligned with Other Priorities of the University. Twelve current programs of study were thus included in this initiative with an additional one anticipated to be approved for AY22. These are as follows:

**High Workforce Demand:** Nursing, Pre-Physical Therapy, Computer Science, Software Engineering, Statistics (Data Analytics).


**Alignment with Other Priorities:** Environmental Science, Forensic Science, Biology, Chemistry.

Because these programs will best address the Northwest Ohio regional economic strengths and workforce needs in STEMM fields, the BGSU COF initiative will intentionally recruit students into these programs, including women and socially disadvantaged individuals. Recruitment efforts will identify both new first time students as well as internal and external transfer students.

The recruitment, student success, experiential learning, and career placement activities of BGSU's COF initiative will be the responsibility of the COF Coordinating Committee comprised of leading administrators from Academic Affairs, Enrollment Management, the Career Center, and Student Success & Life Design. These offices will work together, providing a comprehensive array of resources and supports, to ensure the success of BGSU's COF Initiative in recruiting, graduating, and placing students in high value STEMM work-based learning experiences and careers in Ohio which will in turn address regional and statewide economic strengths and needs.
Executive Summary - Case Western Reserve University

Case Western Reserve University (CWRU) respectfully requests funding for Choose Ohio First (COF) Scholarships for six undergraduate programs: Supporting STEMM Success (SSS); Frances Payne Bolton School of Nursing - Research, Education and Practice; the Case School of Engineering; Advanced Manufacturing; Neuroscience; and Data Science and Analytics. At CWRU, nearly 80% of our applicants indicate an interest in STEMM fields. SSS is designed for any STEMM major who needs additional support to be successful; the program targets students who have identified interest in STEMM majors but are less well prepared in mathematics. Students work closely with their course instructors to develop a plan for successful completion of their mathematics requirements. Through mentorship, additional instruction and other activities, such as the Spring Northeast Ohio Choose Ohio First Student Research Conference, now in its twelfth year, CWRU COF scholars participate with groups at Cleveland State University, Kent State University, Cuyahoga Community College and Youngstown State University. The program also works with GE Lighting, Explorys, Avery Dennison and others to place students in internships and co-ops. The Nursing Research Education and Practice program supports students seeking careers in this high-demand field; registered nursing has the most job openings annually in Ohio according to the Ohio Department of Job and Family Services (ODJFS), with 8,848 job openings forecasted per year from 2016 - 2026. Choose Ohio First nursing scholars receive academic support, mentorship and help with resume writing and interviewing skills from the CWRU Career Center. The COF program in Data Science and Analytics is designed to encourage students to pursue careers in data science and analytics – an interdisciplinary field that combines computing, data engineering, mathematics, statistics and other disciplines. Organizations of all size increasingly rely on data to manage operations and drive decision-making; ODJFS included “management analysts” on its list of high-growth, high-wage occupations for 2016-2026, with 2,219 new jobs predicted in Ohio in that period. CWRU launched its applied data science minor in 2014 in response to feedback and guidance from the Business Higher Education Forum (BHEF), a consortium of higher education and business leaders working to meet current and future workforce needs. BHEF has deemed the CWRU data science minor a “national model” for higher education. The Ohio Department of Higher Education recently approved CWRU’s new undergraduate major in Data Science and Analytics.

Overall, CWRU's COF scholarship program will help prepare students for occupations in fields identified by the Ohio Office of Workforce Development as “in demand” as well as assist students in maintaining and graduating with STEMM majors. All the COF programs emphasize career opportunities in STEMM fields and prepares students to participate in internship and cooperative experiences. For example, COF students supported through the manufacturing program will receive hands-on exposure to advanced manufacturing practices through CWRU's innovative maker-space, Think[Box]. And our new program in Neurosciences leverages the local strength in healthcare and biomedical research to prepare students for a variety of related careers with an estimated number of 4,013, according to the ODJFS.
Executive Summary - Cedarville University

Cedarville University is recognized nationally for its rigorous academic programs, strong graduation and retention rates, accredited professional and health science offerings, and high student engagement ranking. We are excited for the opportunity to apply for the FY2021 Choose Ohio First STEMM award. As a recipient of the 2019 Computer Science and Related Areas award, we understand the value of the COF program and firmly believe in its ability to strengthen Ohio’s economy and our state’s academic programs—two things that are inextricably linked. We also understand the importance of stewarding state of Ohio dollars well, and we believe that making an investment in Cedarville University will further the goals of the COF Program to “significantly strengthen Ohio’s competitiveness within STEMM disciplines and STEMM education.”

For this award, which focuses on innovative academic programs that connect students to work-based learning experiences and careers in STEMM fields, Cedarville is proposing to strategically use COF scholarships to recruit and retain top Ohio talent into some of our most distinguished programs. Our professional programs in particular are well-known in our region for producing highly capable graduates of strong character who bring substantial value to their employers. The reputation built by our alumni precedes our new graduates into the workforce and paves the way for employment opportunities in in-demand fields in Ohio, such as nursing, the number one In-Demand Job in our region and Cedarville’s largest major. Our STEMM students also enjoy tremendous access to jobs and research opportunities at Wright Patterson Air Force Base, the largest single site employer in the state of Ohio, through our many connections to organizations like the Air Force Research Labs and the Air Force Institute of Technology.

We are proposing a cohort size of 30 Choose Ohio First scholars across 6 CIP codes: Cyber Operations, Pharmaceutical Sciences, Nursing, Environmental Sciences, Physics and Mathematics. These STEMM programs enjoy strong support from faculty and administration, and every COF scholar in these areas will be provided tailored work-based learning experiences to better equip them for employment after graduation. COF dollars will enhance these programs by making them more affordable and competitive and by helping to retract and retain top Ohio high school talent.

Cedarville has consistently set aside financial aid funds for the recruitment of minority and other diverse/underrepresented groups on campus, both through formal scholarship funds, and informal processes in the Financial Aid office. Cedarville will leverage COF scholarships to help students who could otherwise not attend Cedarville come to Cedarville to achieve STEMM-focused degrees, furthering our diversity recruitment goals, and strengthening our undergraduate programs.
EXECUTIVE SUMMARY - Central State University

Central State University (CSU), an Historically Black College and University (HBCU) and 1890 Land-grant institution in collaboration with area school districts: Dayton Early College Academy, Dayton Public Schools, Jefferson Township Local Schools, Springfield City Schools, Xenia Community Schools -- submits the Marauder Choose Ohio First (M-COF) proposal to the Ohio Department of Higher Education. The M-COF aims to significantly strengthen Ohio’s competitiveness within STEMM disciplines and STEMM education and broaden Ohio’s workforce as economically disadvantaged individuals must be recruited into the STEMM fields to increase the state’s capacity to compete in a global environment. Therefore, the M-COF program targets students with the academic potential and grit to succeed in college and beyond. The M-COF’s goal is to recruit, enroll, and graduate 96 high-quality students majoring in STEM and STEMM education from CSU during the project period. The program will grow on a gradient scale reaching full capacity in the fourth year. Sixteen students will enter the program in year 1, 21 in year 2, 26 in year 3 and 33 in the fourth year.

To achieve the project goal, we will employ two strategies. First, we will focus on recruiting and retaining 32 high-achieving and highly motivated students who enter CSU’s honors college as a condition of receiving the COF scholarship. Honors students must be admitted to the College with an unweighted 3.5 grade point average and maintain that GPA to remain in the College. Further, honors students must continue to show progress in meeting the requirements for General Honors, Honors in the Major and University Honors. Each honors’ scholar will receive the full $8,221 scholarship that, combined with CSU matching funds, will cover the full tuition, room and board, and other specified fees for a normal course of study for degree completion. Our second focus is to recruit and retain 64 incoming or transfer students with a 3.0 grade point average. Each student will receive an average scholarship of $4,000 that combined with CSU scholarship funds will significantly alleviate their financial burden. The combination of COF Awards, CSU Institutional Aid, and federal Pell Grants will provide 100% of Honors Program and more than 64% of the funding necessary for low-income students to attend CSU. COF Scholarships will yield the highest rate of return for the state as CSU’s tuition is the lowest of all of Ohio’s public institutions.

M-COF scholars must major in computer science, mathematics teacher education, biology teacher education, chemistry teacher education, water resources engineering, environmental engineering, manufacturing engineering, industrial technology, biology, mathematics, and chemistry. CSU’s selected programs will produce graduates necessary in the key industries identified by the Dayton Development Coalition as driving economic growth in the Dayton Region. Our targeted industrial areas are: advanced manufacturing, aerospace and aviation automotive, bio health, food processing, information technology, and polymers & chemicals.

CSU has a demonstrated record of success producing underrepresented student groups STEMM graduates and particularly with women. Though, the University has enrolled 8% of undergraduate African-American students in Ohio, it has provided 11% of Ohio’s African-American graduates in STEMM in the last five years (IPEDS). This record of achievement is enhanced by the fact that 85% of CSU students are from low-income families. Students from low-income families are eight times less likely to graduate from college than students from upper-income families. Central State will enhance students’ outside the classroom academic experience to ensure students success. The support services will include tutoring and mentoring, personal and professional development sessions, internships, and undergraduate research experiences.
EXECUTIVE SUMMARY - Cincinnati State Technical and Community College

1) Rationale for the selected populations for recruitment

Choose Ohio First (COF) scholarships will enhance Cincinnati State Technical and Community College's mission of preparing students to directly enter in-demand careers that will contribute to the growth of the regional and state economies, as well as to prepare students who wish to continue their education at four-year institutions. COF scholarships will also enhance the college's ability to serve promising students with an economic need and those who are students of color. More than a third of our students are Pell eligible, and students of color have a significantly higher rate of Pell eligibility than white students. COF scholarships will strengthen the likelihood that these students complete college. COF scholarships, along with the activities and opportunities for work-based learning that will be part of the program, will also help validate for students the college's and Ohio's belief in them. Cincinnati State will utilize COF Scholarships to recruit and retain STEMM students from several populations:

- **Students graduating from high school** — Cincinnati State will focus on public and private secondary school systems, Ohio Technical Centers, and students who have been homeschooled. COF scholarships will be actively promoted to high school students and their parents by recruiters and program chairs as well as digitally.
- **Adult students seeking a new career** — The college will actively inform adult learners about COF Scholarships through online marketing and on the college's website. Information will also be available through the College's Welcome Center.
- **Incumbent workers seeking enhanced skills, in-demand careers and a living wage** — For example, in partnership with Mercy Health and the Greater Cincinnati Health Collaborative, Cincinnati State has developed an apprenticeship program that will allow non-credentialed hospital workers to complete a Medical Assisting certificate program and enter an in-demand field with a living wage. This is a replicable model for other in-demand jobs that will fill workforce needs while improving the lives of Ohio families.

2) Overview and rationale of the selected academic programs

Cincinnati State began with a review of all the college's bachelor's degree, associate degree, and certificate programs that were included within the eligible STEMM CIP codes as set forth by ODHE for the Choose Ohio First program. From there, we considered how well each program:

- Addresses current and emerging regional and state workforce needs;
- Provides a strong platform to bachelor degree programs at Ohio universities;
- Provides, in the case of some of the certificates, an opportunity to begin earning a living wage in an in-demand job that is a stepping-stone to additional education and careers;
- Includes a program chair who is committed to recruiting, monitoring COF Scholar progress, and developing action plans as needed for COF Scholars who are having challenges progressing toward completion.

The result was a list of 42 CIP Codes within which there are 71 degree and certificate programs, which will allow the college to cast a wide net for recruiting and offer choice for potential COF Scholars among high school students, current Cincinnati State students, and nontraditional students, with a special emphasis on students underrepresented in STEMM fields, including minorities and women.

3) Synopsis of the plan to address regional and statewide economic strengths and needs for these targeted academic programs

Each CIP code in the Cincinnati State Choose Ohio First Scholars Program leads to at least one in-demand occupation as identified by OhioMeansJobs, the Ohio Department of Job and Family Services, or regional employers. In-demand occupations in Southwest Ohio are clustered in Health Care and EMT, Engineering/Manufacturing, Construction and Surveying, Supply Chain, Aviation Maintenance, and Information Technology. All of these industries are well represented in the Cincinnati State COF Scholars Programs. This means COF Scholars can expect excellent employment prospects, magnified by their participation in one or more work based learning experiences as part of the COF Scholar Program.
Executive Summary: Viking Workforce of Tomorrow, the new Choose Ohio First (COF) Program at Cleveland State University (CSU), will build on the success of our current COF programs. It will support both financially and academically, a diverse cadre of undergraduate students at CSU who are pursuing a variety of STEMM majors. We plan to enhance the structure of our current COF program to emphasize recruitment and work-based experiences. The program actively recruits traditional first year students, students transferring from external institutions, as well as current Cleveland State University students (internal transfers) who add or change to an eligible STEMM major. Particular consideration will be given to applicants who are first generation students as well as those displaying a high level of financial need (Pell eligible). We will actively recruit minority student applicants and women who are under-represented in particular majors such as those in the School of Engineering. The requested $1.6 million will support about 30 new students per cohort for support of ~150 different students over the five-year duration of the grant.

We will continue to fulfill existing and emerging statewide needs by supporting students in STEMM degree programs offered by the College of Engineering and the College of Science and Health Professions which can fill in-demand jobs in Ohio. Students in the following disciplines will be eligible to participate in our COF Program: Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Mechanical Engineering Technology, Electrical Engineering Technology, Computer Science, Mathematics, Chemistry, Physics, Environmental Science, Biology, Health Sciences, Pharmaceutical Science, Speech & Hearing, and Pre-Professional programs.

Our program will aid our scholars in finding clarity in their educational and career goals. For underclassman and transfer students, placement in one of two lower divisions will be based upon their enrolled major. Programming at this level will provide scholars with access and information as they begin exploring their degree pathways. These scholars will attend regularly scheduled weekly cohort meetings where they will hear presentations from industry affiliates, faculty members, and other applicable resources on campus. Numerous sessions will also be dedicated to students learning about the scientific research process as they work towards effectively creating and presenting a group research project. Social activities will be infused to aid in building rapport amongst peers. Our upperclassman scholars will select one of three upper division tracks that is best aligned for their individual pursuits: co-op, internship, or research. This will ensure that students participate in a required work-based learning experience to learn valuable transferrable skills. To facilitate these efforts and ensure compliance and forward progress, these COF scholars will be required to attend check-in meetings with COF faculty and staff as well as complete a work-based learning experience. Finally, prior to graduation students will present their activity either as a poster or oral presentation. An additional living learning community option, entitled “STEMM Fellows” will be made available to freshman COF scholars. These students will be housed together in our all-freshman dorm, take a common freshman seminar class together during their initial fall semester, and be invited to various social activities to strengthen their bond with one another.

There will be continued support for our COF efforts from CSU administration from both a financial and programming standpoint. Matching funds surpassing the 1:1 requirement have been identified including substantial support for student programming. Commitments from various departments on campus, including Career Services and the Center for Engineering Experiential Learning (CEEL), mean that COF scholars will have streamlined support for more technical and specialized needs. External support from various industry partners has been promised in the form of guest speakers, site location tours, work-based learning opportunities, etc.

Our competitively sought-after program will provide undergraduate students with the tools needed to successfully graduate from CSU within a four year-time frame prepared for either additional educational pursuits or for direct entrance into the world of work.
Executive Summary - Columbus State Community College

Columbus State Community College (CSCC) is a comprehensive urban community college that serves more than 46,000 students per year at two campuses in Columbus, Ohio, and eight off-campus locations. Columbus State Community College has extensive experience serving non-traditional students. On average, three-fourths of the student body are enrolled part-time, many are working and need financial support while completing their program of study. About one-third of students are between the ages of 20 and 24. Specifically for this project, the College will target recruitment of under-represented populations in STEM. This includes women, minorities, and socioeconomically disadvantaged students. CSCC has experience serving these students in scholarship programs such as Choose Ohio First, National Science Foundation S-STEM, Louis Stokes Alliances for Minority Participation (LSAMP), TRIO, and the ODHE Short Term Certificate program.

Selected Academic Programs

Columbus State proposes the following academic areas for inclusion in the Choose Ohio First program:

1. Biological and Physical Sciences, Arts & Sciences (A.S.)
2. Engineering Technology, Career Tech (A.A.S.)
   a. Electronic Engineering Technology
   b. Electromechanical Engineering Technology
   c. Mechanical Engineering Technology
   d. Logistics Engineering Technology

Columbus State has been part of the COF program since 2009 under the Biological and Physical Sciences department in the Arts and Sciences division. Of the 274 scholars accepted into the program between 2009 and 2018, 223 or 81%, either completed an associate degree and have transferred to continue their studies in Ohio, or successfully transferred before completing a degree at CSCC. In addition, the Biological and Physical Sciences Department has a strong partnership with The Ohio State University and corresponding STEM program. Scholarship funding to seamlessly support students transferring from CSCC to OSU is included in this proposal.

The Engineering Technology department offers four pathways for students to participate in a co-op program called Modern Manufacturing Work Study (MMWS). Participating in the MMWS program is not required to graduate but supports the COF program mission of providing work-based learning opportunities.

Plan to Address Economic Strengths and Need for Program

Columbus State emphasizes employer engagement and continues to expand relationships with industry regionally and nationally. The infrastructure continues to redesign itself around changing careers and is responsive to adapting itself to fill the gaps in employment demand. The College has been working with an established Workforce Advisory Council to continue the feedback loop with regional employers. The College has engaged in a strategic planning initiative this year with Regionomics, a consultant providing data and analysis on the regional economy and trends.

Ohio identifies and publishes jobs that are in-demand and critical for the state’s economy. In-demand jobs earn $14.10 or more, have job growth higher than state average growth, and have annual job openings of at least 585. Critical jobs are those that support the health and well-being of Ohioans, their families, and communities. Occupations that are aligned to the proposed programs of study are lists on the Ohio’s Top Jobs list.
The Christ College was ranked 1st in the region for post-graduate salaries by The Cincinnati Business Courier (2017) and 1st in the region/12th in the nation by Payscale (2018) for producing the highest paid graduates entering the workforce. Through a diverse group of generous partnerships and philanthropist, The Christ College has been able to establish a sound financial base to support our students.

Amid the continuing pandemic this fall, The Christ College welcomed students back to campus with a hybrid learning model of virtual instruction and on-site socially distanced classes. Despite these circumstances, the College welcomed its largest enrollment in the 118-year history. In recent days, WLWT News featured two stories on how our Nursing grads are being asked to rise to the challenge as we see Ohio hospitals being overwhelmed by COVID-19 hospitalizations.


The need continues to grow as the student base expands and we welcome more of tomorrow’s healthcare leaders to campus. With each academic year, a growing number of students seek scholarship and financial aid for their education. Currently, of the entire student body, 98% require some form of financial assistance. College resources can provide partial support for only 20% of students, making scholarships essential.

Our Request for Proposal seeks to recruit a cohort of fifteen students into three of The College’s degree earning programs; Associate of Applied Science in Medical Assisting, or Bachelor of Science in Nursing. Our Nursing program offers three academic tracks, 4-year BSN, 16-month Accelerated BSN and the online RN-BSN Completion Program. Each academic year, our goal will be to recruit and enroll five incoming students; totaling 15 students across the three academic programs. As a Choose Ohio First Scholarship recipient, each student will be awarded up to $3,000 each academic year.

The opportunity to expand our recruitment efforts in Ohio and prepare them to care for the health and well-being of a dynamic society aligns with our mission, vision and purpose as regionally accredited, private institution of higher learning. Through our partnership with The Christ Hospital Health Network, our Nursing students are guaranteed clinical placement and advantageous opportunities for our Medical Assistant and Health Care Administration students to experiential pathways. We are uniquely positioned to educate and train, offering career-focused learning and development. Admissions Counselors, Academic Advisors and Faculty collaborate and commit to creating a professional path and strive to connect each student with valuable opportunities along the way.

*Between a proven curriculum and The Christ Hospital Network, students at The Christ College are statistically set for success.*

1,015 students enrolled to begin Fall 2020

73% Four-year graduation rate

*May 2020 graduates have an employment rate of over 97%*

Thank you in advance for considering The Christ College of Nursing & Health Sciences for the Choose Ohio First scholarship and in doing so help our students as they pursue their healthcare careers and education dreams. We look forward to continuing the conversation and our potential partnership.
Executive Summary - Cuyahoga Community College

The Northeast Ohio region is experiencing high unemployment rates and low educational attainment, and is in the midst of a social justice public health crisis. This landscape is further challenged by thousands of unfilled jobs with family sustaining wages. Tri-C is focused on helping community members in this misaligned region become the talented workforce that will drive the recovery of the economy.

Cuyahoga Community College will focus Choose Ohio First (COF) scholarship opportunities to attract high school students, undeclared college students and adult learners to STEMM fields of study. Targeted outreach will be directed at women and those who are socially disadvantaged by leveraging Tri-C’s Black Diamonds Women’s Conference, learning communities, federal TRIO programs, and Access Centers.

Cuyahoga Community College has selected 45 CIP codes to participate in Choose Ohio First with particular attention to health careers, information technology and manufacturing as these are the industries in the region with the largest skills gaps. These industries offer in-demand occupations with excellent job outlook. Other industries seeking STEMM talent are also supported through COF. Programs were chosen for their effective approaches to work-based learning, their capacity to implement cohort models, and if the occupations are expected to be permanently impacted by the pandemic.

COF is more than a scholarship opportunity. It ensures mentoring and work-based learning are available to scholarship recipients so that they are technically skilled and ready for the workplace upon graduation. A cohort approach, managed by the STEMM programs, provides additional formal and informal interventions that are critical to student engagement and success. The COF project director will facilitate the COF application process, program-program collaboration for best-practice sharing, and continuous improvement to COF student recruitment, retention and completion practices. The goal is to engage 100 new COF students each year of the grant.

The region’s most challenged industries are also its strengths. Health care, information technology and manufacturing include the region’s largest employers and contributors to regional economic development. Workforce Connect has launched sector partnerships following national best practices, for these three leading industries. Tri-C serves as the sector intermediary for health care and it is a key education partner for the other two sector partnerships. By combining opportunities like COF with the sector partnership, the talent supply and demand will become aligned.
EXECUTIVE SUMMARY - Defiance College

Defiance College, founded in 1850, is a private four-year institution that provides a strong liberal arts-based education in rural northwest Ohio. Serving a large number of first-generation college students, students from low to middle socio-economic backgrounds, and a student population more diverse than the community surrounding it, the College must be attentive to the barriers that thwart students’ enrollment and persistence to graduation.

The College has made great strides in the last several years to improve its physical infrastructure, strengthen academic program offerings, hire well qualified faculty, improve student support services, and integrate work-based learning opportunities through fundraising initiatives and significant grants acquisitions. While scholarships for STEMM majors have grown they have not increased sufficiently to insure that our STEMM programs are fully enrolled to the level that the College can now accommodate. The scholarship funding provided by the Choose Ohio First grant would break down the remaining economic barrier for STEMM students to attend Defiance College, persist to graduation, and contribute significantly to the strength of the workforce in Ohio.

This grant funding will allow Defiance College to focus on recruiting Ohio STEMM students from populations often less represented in the STEMM fields – minority students, students of low economic status, women, and first generation College students. As we have done with the COF Computer Science grant, we will work with area school districts to target these individual students. This grant will fund Ohio students in the following majors: Environmental Science, Biology, Clinical Laboratory Science, Molecular Biology, Life Science (Biology) Education, Life Science / Chemistry (Chemistry) Education. This list of majors is inclusive of two NEW majors at Defiance College – Environmental Science and Clinical Laboratory Science. The addition of these majors was prompted by noted prospective students’ requests, the current need in the regional workforce for graduates in these majors, and Defiance College’s ability to build these majors with recent extremely qualified science faculty hires. The quality of the College’s programs in Biology, Molecular Biology, and Education will serve as a foundation to effectively development of these new majors. The Institution feels that it is critical to the growth of STEMM graduates in Ohio to reach into the pipeline of potential students by placing its graduates in STEMM education into Ohio high schools. Since 2015, 76% of graduates in Teacher Education are now teaching in Ohio. This number is likely to go higher since placement of our 2019 graduates has been slowed by the pandemic. Thus we have chosen to include two critical Science (Biology and Chemistry) Education majors in this request for Choose Ohio First Scholarship funding.

Defiance College’s mission statement evidences its commitment to move students beyond the boundaries of a classroom through the application of their academic knowledge and skills in real world contexts, in order to develop leaders who will positively impact communities in Ohio and beyond. The College has been developing clear strategies to support student success most especially within STEMM majors and its reach is currently limited by the lack of scholarship funding for those students with exceptional potential who lack sufficient resources to enroll and persist at the Institution.
**Executive Summary - Edison State Community College**

Edison State’s FY 2021 Choose Ohio First (COF) Scholarship program, Supporting Students Toward In-demand STEMM Careers, will focus on both traditional and non-traditional student populations. The reason for this wide scope is based in the reality of the current economic environment in relation to the COVID-19 pandemic. There is no one group of students in need of monetary support for their education; all are facing financial challenges. Businesses in our region are less able to afford the costs of paying for employees' schooling, and Edison State’s ability to provide assistance is only on a last dollar basis. Students of all types need money up front to help them take that all-important first step toward earning a degree or certificate that will secure their economic futures. Furthermore, it has been Edison State’s experience in the past with Choose Ohio First funds that limiting the target population of students or limiting the programs of study that qualify for COF funds will make it difficult to award the scholarship dollars.

Edison State has chosen 38 different Classification of Instructional Programs (CIP) codes in which we would like to award COF scholarships. These codes encompass approximately 94 degrees, certificates, and short-term technical certificates offered by the college in in-demand fields. As with the populations for recruitment, we are casting a wide net in an effort to award as many scholarships as possible. All of the programs on our list lead to careers that are much needed in Edison State’s service area, and a thorough feasibility study was conducted for each program when it was developed. Veterinary Technologist, Manufacturing and Engineering Technology programs, Computer Information Systems majors, Welding, Professional Pilot, and Health Science career pathways are included in our proposal, and Edison State has a history of success with educating students in these fields as our outcomes data will show.

As our economic data will demonstrate, Edison State's programs of study are focused on meeting the workforce needs of our state and region. Every single career pathway in our proposal can be found on either the statewide or the regional list of top in-demand jobs. Moreover, Edison State’s strong partnerships with businesses in our service area will ensure that the students in these programs have quality work-based learning experiences during their education, and for graduates, Edison State’s relationships with these companies mean that a promising career is likely waiting for them immediately after completing their studies. Each of the programs in our proposal requires students to complete some type of work-based learning, whether that be an internship, co-op, clinical hours, or job shadowing opportunity. Furthermore, Edison State has been a statewide leader over the past three years in developing and maintaining a robust registered apprenticeship program. The College is clearly well-positioned with its academic programs, support services, and strategic focus to deliver on its promise to graduate students who are career-ready, equipped with the knowledge, skills, and abilities to thrive in the workforce of the future.
Executive Summary - Franklin University

Franklin University, founded in 1902, is an accredited private non-profit institution located in downtown Columbus, Ohio. Franklin serves the needs of multiple demographics of students, but most significantly, working adult learners who are looking to complete their education, reskill, upskill, or change their careers. Because of this, Franklin is uniquely positioned to provide education and opportunities to non-traditional students who make up the majority of the central Ohio workforce, and who are invested in their Ohio communities.

Franklin University is looking to extend its current COF funding to include academic programs, particularly at the graduate-level, in the following subjects: computer science (110103, 110107, 111003); analytics (307101, 307102); health, healthcare administration, and healthcare management (510701, 510707, 512706); and nursing (513801, 513802). (See Appendix 1: Selected CIP codes). Each program included provides an opportunity to leverage existing partnerships and increase opportunities to bridge the employment gap in central Ohio.

In support of the COF initiative, Franklin University has established educational partnerships, and pathways with community college partners (Ohio and surrounding states), industry and regional employers, and high schools (College Credit Plus). Each of these populations provides a robust opportunity to recruit students for COF opportunities. With our community college partners, Franklin has established articulation agreements with 23 unique 2-year schools in Ohio, and an additional 9 schools in Indiana and Pennsylvania. We have also created educational partnerships with more than 70 regional employers allowing their employees to maximize their tuition benefits and reduce the cost of a college degree. Finally, our CCP program allows us to engage high school students early in their educational journeys by providing opportunities to earn industry-aligned credentials that correspond to COF disciplines. This also provides opportunities to promote additional pathways in these high-demand fields.

As a private non-profit, Franklin University is able to respond quickly to meet the needs of industry and employers. This is demonstrated, not only by the partnerships above, but our ability to quickly implement high quality undergraduate, graduate, and doctoral programs in numerous fields, many that are not only applied, but align to COF disciplines. Franklin has been able to create new programs in informatics, analytics, cybersecurity, information technology, nursing, and healthcare, all of which directly benefit our community and their workforce development needs, especially in this current environment. Our programmatic advisory boards populated with industry professionals help to guide and shape our offerings and curriculum so that our graduates immediately meet the needs of employers in the region. Further, our centers of academic excellence provide a vehicle for incorporating applied experiential learning opportunities that prepare students for immediate employment and deliver additional training and opportunities to the community.
Executive Summary - Heidelberg University

The disparity in access to higher education is a primary driver of the continued shortfall in the numbers of college-educated and highly-trained Ohio residents entering the workforce. This is especially true in STEMM careers. This disparity is primarily caused by the affordability gap for those who are first generation, minority and also Pell eligible students and their families. The Choose Ohio First Program allows Heidelberg University to create opportunities for these demographic groups to gain access to quality higher education in a supportive environment where they can succeed and contribute to a region of the state that has a dramatic shortage in a workforce trained in the various fields targeted with this plan.

The fields of healthcare, science, and STEMM education are represented in this application by strong programs at Heidelberg University with a history of success in graduating and placing students in top jobs throughout the region. Heidelberg has created a structure that supports students in these degree programs from the recruitment process through graduation and placement in their careers. The university has a long history of success in each sector as well as exciting and developing capacity in health sciences and nursing. Collectively, these programs represent some of the strongest in terms of faculty, job placement and institutional support.

In the case of nursing, the program provides even greater access through the partnership with Terra State Community College, where students gain increased affordability by the partnership. In years two and three of this program, students pay the lower tuition rate offered by Terra, while pursuing their BSN. As a collaboration, this program has already been developed to provide greater access and will only be improved by this grant request.

Heidelberg’s teacher education in STEMM as well as our natural science programs have outstanding graduation rates and are a part of the pipeline of success that has placed Heidelberg at the top of Ohio colleges and universities at creating social mobility by retaining and graduating Pell eligible students. This funding request builds on this success and provides greater opportunity for students to pursue their education and focus on studies without having to work excessive hours to afford their degree and to also graduate without high debt. This will enable those students choosing to pursue professional degrees with even greater flexibility and opportunity to focus on the activities and academics necessary for entry into graduate school.

Heidelberg University has had an exceptional history in placement in professional degree programs, and the students supported by this grant will be in the same programs that have resulted in over 80% placement in medical school, an excellent opportunity to enroll in the Heidelberg University master’s in athletic training, or any of the numerous other pre-professional paths available.

As these students enter the regional workforce, they will fill the shortages in teachers, practitioners, scientists and other vacancies that fill the JobsOhio platform. Heidelberg University will serve as the best path for many of Ohio’s students to find occupations throughout North Central Ohio.
Executive Summary - Hiram College

In Hiram College’s current Choose Ohio First Scholars program, students studying in the life sciences—biochemistry, biology, biomedical humanities, chemistry, environmental studies, neuroscience, and nursing—have access to specialized programming, mentoring, and high-impact experiences. Given the impact of COVID-19 over the past year, Hiram College recognized that the efforts to protect and improve the public health are being made by individuals across the spectrum of science, technology, engineering, mathematics, and medicine. In order to support a larger number of students whose scientific studies will have a major impact on the real-world problems facing us today, Hiram is looking to expand its current COF offerings to computer science and physics in addition to the previously mentioned STEMM programs. These COF Scholars will join a distinct learning community that is centered around their unique co-curricular experiences, providing a cohort of like-minded students to support their experiential learning.

In previous COF funding cycles, the academically successful and passionate students included in the program have been more than appreciative of the financial and programmatic support provided to them. Hiram staff and faculty members have found that the support provided by the COF Scholars program has been especially helpful to the College’s high number of Pell-eligible and first-generation students. By submitting a proposal for continued participation in the COF program, Hiram hopes to support Pell-eligible, first-generation, and other under-represented student populations in STEMM fields. As Hiram’s physics program has seen an increased number of graduates who identify as female, the College would like to use COF funding to continue this trend.

During COF students’ time at Hiram, they will participate in several college-wide initiatives described in this proposal and graduate with well-rounded educations of program-specific knowledge, problem-solving skills, and other broad-based aptitudes. For instance, Hiram Connect requires that students participate in exercises of reflection at critical junctions throughout their academic journey. During these reflective exercises, students address their career goals and lessons they have learned in and out of the classroom that may have impacted those goals. Hiram has also implemented its Tech and Trek program, teaching students how to use current, mobile technology effectively and collaboratively. Through Hiram Health, faculty give students an overall view of modern healthcare issues by pairing life science courses with professional experiences. The COF Scholars program will weave throughout these initiatives, offering additional programming while also giving like-minded students a cohort in which to share, learn, and discover. As a result, graduates of the COF Scholars program leave Hiram ready to join regional and state employers and fill the soft skills gap that has challenged these employers in recent years.
Executive Summary - Hocking College

The Workforce Development Department at Hocking College is at the forefront of innovative learning concepts that seek to imbed apprenticeship opportunities, stackable learning credentials, and hands-on experience for each program and every student. As a leader in economic and workforce development in Southeast Ohio, Hocking College works with businesses and state and local agencies to deploy targeted training programs for meaningful, gainful employment for identified in-demand occupations. It is through these partnerships that we seek to diversify our student population with purposeful engagement to increase opportunities for underserved populations including women, veterans, individuals impacted by substance abuse, and socially disadvantaged.

Hocking College Workforce Development programs respond directly to job growth needs and projections as identified through JobsOhio, US Bureau of Labor Statistics, and State and Regional Agencies.

Hocking College seeks to recruit up to twelve (12) students per year to six focus programs that include 1) Advanced Manufacturing and Engineering, 2) Cabinetmaking and Architectural Millwork, 3) Construction Management Carpentry, 4) Construction Management Residential and Commercial Electricity, 5) HVAC, and 6) Welding. The College is seeking a total of $360,000 to be disbursed across the 5-year cohort.

Hocking College will utilize the funds received from Choose Ohio First (COF) scholarship to fulfill the pursuit of our mission of “teaching and inspiring all who seek to learn, growing careers and changing lives” for individuals who are unemployed, underemployed or recently graduated from a high school or GED program. Choose Ohio First scholarship funding will:

1. Provide funding to eligible students to attend applicable program at Hocking College to earn an Associate Degree in a STEMM and/or In-Demand job field.
2. Provide funding to eligible students to attend applicable programs at Hocking College to earn a certificate in a STEMM and/or In-Demand job field.

Strength of the Choose Ohio First program lies the leadership of the program managers and program focused Advisory Boards, comprised of industry partners, who work hand in hand to ensure that curriculum is aligned to industry needs, provide insight into how industry is expected to change in future years, and create applicable and relevant work-based learning opportunities for our students. It is through these programs and relationships that Choose Ohio First scholarship funding will provide meaningful impact to students in our region.

Central to the success of Choose Ohio First funding are the enrollment efforts that will be deployed to reach a diverse population. Hocking College will align targeted institutional goals and strategies with the Choose Ohio First program to ensure efforts for student recruitment reach the hard-to-reach populations who so desperately need this type of scholarship opportunity and focused educational opportunities.

Through Choose Ohio First, Hocking College is poised to increase enrollment in six (6) in-demand fields as identified by Jobs Ohio, impact 144 students, and impact business and employer needs through access to an expertly trained labor force.
EXECUTIVE SUMMARY - John Carroll

Unfortunately, only 40% of STEM-intended undergraduates nationwide complete a STEM program. John Carroll STEM students who started college from 2008-2010 achieved this same approximate level of success, but vulnerable populations of first-generation, underrepresented minority, and low-income students were graduating at lower rates. As part of our National Science Foundation and Choose Ohio First scholarships programs, we built support systems and interventions to increase retention, persistence, and completion. These structures have proven successful as 29 out of 31 Choose Ohio First scholars over three cohorts remain in STEMM fields, and their cumulative GPA is 3.834. These outcomes show that cohorting, living learning communities, and research preparation have a positive effect on vulnerable populations. We will expand our portfolio of programs to include job skills training and entrepreneurship. **Incorporating career skills and focusing on expanding internship opportunities will position our graduates to be critical contributors to Northeast Ohio’s STEM and healthcare economies.**

As a private, non-profit university, we have a small number of STEMM programs, but we have an outsized impact in our community. Although other regional institutions have programs in Biology, Chemistry, Physics and Mathematics, ours are distinguished by the degree of course-based research, even at the introductory level, and focus on hands-on, experiential learning and published research that students conduct. As a result, our STEMM students are highly sought after by graduate schools, healthcare professional schools, and employers. Cleveland Clinic researchers seek out John Carroll students and graduates to staff their laboratories and advance basic and clinical research, and our Healthcare IT students work with clinicians to develop tools to aid in collaborative diagnoses. Choose Ohio First funding will help focus our efforts and provide these opportunities to a greater number of students. **Engaged faculty and staff will include professional development and entrepreneurial thinking to help set our Choose Ohio First scholars apart from their peers.**

There is a growing need for a STEMM-educated workforce. Nationwide, there is a projected 8.0% increase in STEMM careers, with a median annual wage of approximately $87,000 (representing a wage gap of >$48,000 with non-STEMM careers). Further, six of the top ten fastest growing occupation groups in Ohio are in STEMM-focused areas such as healthcare and life and physical sciences, and Northeast Ohio is home to world-class hospitals and healthcare industries. We will leverage our JCU alumni who run or own over 500 companies in Northeast Ohio to hire and train Choose Ohio First scholars, since companies are more likely to hire from among their interns. **Therefore, the overall goal of our Choose Ohio First STEMM Professional Preparation Program is to not only enroll students who are interested in the sciences, but to retain, graduate, and train future STEMM professionals who will contribute to Ohio’s high tech and health economies.**
Kent State University is a leading regional university for Northeast Ohio, producing the most graduates of any of the universities in Northeast Ohio. Our overall vision is to be a community of change agents whose collective commitment to learning sparks epic thinking, meaningful voice and invaluable outcomes to better our society. This vision is supported by our core values; most notable for this Choose Ohio First proposal are our values to provide life-changing educational experiences for students with wide-ranging talents and aspirations, and to provide a distinctive blend of teaching, research and creative excellence. The number one priority at Kent State is our “Student First” approach and we strive to provide an inclusive and engaged living-learning environment where all students thrive, and graduate as informed citizens committed to a life of impact. We have implemented numerous initiatives to support student achievement and continue to enhance diversity and cultural competence of our students, which are aligned perfectly with the objectives of the Choose Ohio First program. Moreover, our mission at Kent State is to provide access to higher education, independent of financial background. Kent State University enrolls a diverse population of students with critical needs for financial aid and advising support. Notably, 38% of our undergraduate students are first generation and 29% are Pell eligible. Most striking are the financial needs among our underserved student populations: 49%, 52%, and 48% of African American, Hispanic, or multi-racial Kent State students (respectively) are the first generation in their families to attend college while 53%, 41%, and 40% (respectively) of these populations are Pell eligible. Thus, support from Choose Ohio First is essential to more broadly offer affordable higher education to students in Kent State’s STEMM programs. A comprehensive recruitment and enrollment strategy will be used that includes outreach to high school students in Ohio and emphasizes recruitment of women and socially disadvantaged individuals, and with a selection process to support these goals.

Kent State has been fortunate to receive generous support from Choose Ohio First in previous years. In the current proposal, we plan to continue to build on the strength of these current STEMM programs which include Mathematics & Computer Sciences, Chemistry, Biochemistry & Physics, Bioengineering & Life Sciences, and Mathematics & Life Sciences at the Stark campus, which were all awarded in 2016. In addition to these four programs of demonstrated strength, we are including four new and emerging programs that have incredible potential and are growing exponentially. These programs include Aeronautics & Engineering, Environmental Sciences, and Neuroscience at the Kent campus, and Engineering Technology at the Tuscarawas Campus. Each of these programs has outstanding leadership from Choose Ohio First Academic Program Leaders, dedicated to support Choose Ohio First students. Moreover, we have developed university-wide support for the Choose Ohio First students and the Academic Program Leaders for student support in order to facilitate retention and on-time completion. Students will be supported by teams of designated and dedicated advisors in college and campus offices, Academic Program Leaders and faculty in their majors. In addition, events are organized to engage the students as a community and further strengthen their professional skills and preparedness for employment.

A key goal of the Choose Ohio First Program at Kent State University is to retain our credentialed graduates by connecting them to full-time employment in our state via work-based learning experiences and internships. Therefore, we implement university-wide career exploration services and aim for participation of all students in work-based learning experiences such as internships with our many business partners and research lab experiences. Our selected programs prepare graduates for in-demand occupations in many occupation groups that are predicted to have substantial growth and need in Ohio.

In conclusion, Choose Ohio First resources will greatly enhance STEMM education at Kent State University for a diverse population of Ohio students with the goal to provide them with affordable high education and career opportunities in Ohio and fill the statewide need of STEMM-trained professionals.
Executive Summary - Lakeland Community College

Abstract

Lakeland Community College’s requests $375,000 over 5 years in COF scholarships for students in thirteen high-growth health care technology degree and certificate programs. Lakeland will provide a total match of $509,917. This proposal is well-integrated with Lakeland’s mission and with the strengths and opportunities of our regional and statewide economy. Nationally, health care is projected to account for almost one-third of job growth from 2016 to 2026, according to the Department of Labor, Bureau of Labor and Statistics. In the State of Ohio, and in Northeast Ohio, health care comprises the fastest growing job sector.¹ Health care providers in our region indicate that they experience difficulty in hiring enough skilled workers to fill critical job needs: regional employers fully support the need for graduates in the programs included in this proposal. Numerous letters of support include Lake Health, The Cleveland Clinic, University Hospitals, Metro Health, Steris, BioOhio and more (see Attachment 7).

The health care sector is a cornerstone needed to build a strong and vibrant economy in Ohio and in our region; it is critical that we increase the number of skilled graduates to meet the growing employment needs of this sector. Our region and state are facing a shortage of health care workers; Over five years, Lakeland’s COFS program will graduate an additional 450 health care providers in high-demand occupations including 150 providers with degrees in Nursing, Biotechnology, Occupation and Physical Therapy Assistant, Respiratory Therapist, Medical Lab Tech, Histotechnology, Radiologic Tech and 300 graduates in high demand certificate programs including Medical Coding, STNA, EMT (P) and (B), Dental Assisting, and Medical Assisting.

Lakeland’s COFS program will be fully supported by all academic and administrative departments including Academic Affairs, Recruitment Office, Student Engagement and Leadership, Career Services, Financial Aid and Enrollment, and the Health Technology Division. Our comprehensive COFS recruitment strategy targets incoming students and their parents, transferring students, incumbent workers, and those with bachelor’s degrees and above looking for professional development and marketable skills. Lakeland will use a wide range of strategies including social media (Facebook, Twitter, LinkedIn, YouTube, online and mobile ads, Pandora internet), mass media (cable, TV, radio, print, bus, billboard, advertising), targeted mailings (emails, letters, postcards), and site visits (high schools, community events business and industry fairs).

Lakeland students cite financial need as a leading reason they do not enroll in college or why they leave before graduating; the majority of Lakeland students (48%) are low-income and struggle to afford college and living expenses. Providing scholarships to students, most of whom are low-income and struggling, helps ensure they stay on track and graduate. The majority of Lakeland graduates remain in Lake County, work locally and raise their families here; without financial help, students struggle to stay in school and graduate, directly impacting NEO’s overall economic growth and social vitality. In turn, unmet healthcare needs and the associate costs dilute the economic growth and stability of Lake and surrounding counties.

Lakeland has a comprehensive support program to help COF scholars overcome these barriers. These programs are proven to be effective in increasing enrollment, retention, and completion rates and include Student Engagement & Leadership, the Hispanic Program, the Veterans Center, low-cost onsite child care via Campus Kids, the Women’s Center, the Men’s Resource Center, the Learning Center, Instructional Technologies, the Help Desk, Distance Learning, Financial Aid and scholarships, Career Services, the Counseling Center, the Test Center, Lakeland’s campus health clinic, the Student Service Center, the Library, and the Transfer Center.

Lakeland’s COFS program is cohort-based and a Navigator will support students to insure they stay on track and graduate. All scholars will participate in a 4-6-week internship as a qualification for receiving a COF award. Scholars will gain skills critical to success in the workplace.

¹ TEAM Neo, Quarterly Economic Review, December 2019, Quarterly Economic Indicators 18 Counties of Northeast Ohio.
EXECUTIVE SUMMARY - Lorain County Community College

1) Rationale for the selected populations for recruitment:
As part of LCCC’s Vision 2025 strategic plan, LCCC has committed to increasing equity for students to enable student success, which includes access to financial resources blended with other key (supportive) services that support enrollment, retention, persistence and completion. As such, LCCC is dedicated to increasing the degree attainment level of all students, and particularly low-income and minority students within Lorain County, including first-generation and adult learners which make up a large core of the student population. As part of this commitment, LCCC is working to adopt best practices to remove structural barriers in key areas of student progress to completion, and in 2020, strategic enrollment & completion planning by Enrollment Management & Student Services underscored this priority. Financial resources ODHE’s Choose Ohio First STEMM scholarships continue to be a key piece of this larger work.

2) an overview and rationale of the selected academic programs:
For the newest (competitive) COF program opportunity, LCCC is targeting 38 STEMM CIP-defined program areas in Math & Science, Health & Wellness, and Engineering-Business-IT, which are linked to career pathways in in-demand fields in Northeast Ohio, as detailed and validated via EMSI & Burning Glass databases. Program areas are linked to in-demand careers and likewise, most have co-curricular/experiential learning components. Key Objectives for the LCCC COF program build on demonstrated institutional best practices and include the following: Recruitment (outreach & targeted populations, marketing), Work-based learning opportunities (Co-ops, Internships, & Research Experiences), Supportive Services for certificate/degree retention & completion, and COF Operating/Fiscal Management.

3) a synopsis of the plan to address regional and statewide economic strengths for these targeted academic programs:
The LCCC plan to address workforce needs utilizes a variety of data analysis and program-specific employer engagement (via advisory boards) to drive program/pipeline growth, and the development & implementation of career pathways comporting to regional and statewide economic strengths & needs is no exception. This work operates through leadership in Enrollment Management & Student Services/Career Services office, LCCC’s School and Community Partnership/Business Growth Services, as well as individual programs offices in Math & Science, Engineering-Business-IT (LCCC’s TRAIN co-curricular programs in Industry 4.0 technologies), and Health & Wellness Science (e.g. clinical experiences for Healthcare students). As to data, LCCC researches multiple employment data resources, including EMSI/Burning Glass reports (via Business Growth Services), and Ohio Means Jobs/Ohio Dept. of Higher Educ. in-demand jobs lists, plus internal data, surveys, reports and research from the LCCC Office of Institutional Effectiveness & Planning (IEP), which also conducts frequent program review. Under the guidance of LCCC leadership, IEP concentrates research on the following areas: Student performance data, Size, scope, and quality of current programs; Labor market alignment; Progress towards implementing programs of study; Progress towards improving access & equity.
Executive Summary - Lourdes University

Lourdes University is a private institution of higher education. Our mission is to provide a values-centered education that enriches lives and advances academic excellence through the integration of arts and sciences and professional studies. Ninety-seven percent of Lourdes University students receive some form of financial assistance. Lourdes University provides one of the lowest private university tuition rates in the United States. By design, approximately 50 percent of Lourdes University institutional aid awarded to students each year is reserved for students with demonstrated financial need.

The goal of the Lourdes University Choose Ohio First Scholarship Program will be to provide a transformational experience through a significant level of financial assistance to promising undergraduate students, focusing on those from socially disadvantaged or underrepresented backgrounds. This support will help to see these students through all four years of study while lessening the financial burden enough to allow them to focus on their studies and the college experience. In addition to benefiting direct recipients, the expansion of scholarship offerings and the prestige of having a scholarship fund both of a larger amount and supported by the Ohio Department of Higher Education and Choose Ohio First program will help build the reputation of Lourdes University and enhance credibility with current and prospective donors to further the goals of the program.

Goal #1 of the Lourdes University Strategic Plan is to increase student enrollments. Strategies related to this goal include increasing the use of technology, developing an integrated marketing plan, and increasing undergraduate retention and graduation rates. The Lourdes Choose Ohio First Scholarship Program is designed to work hand-in-glove with the institution’s strategic plan to achieve this primary plan goal - ensuring financial stability for the institution and a reliable pipeline of prepared graduates ready to fill in-demand job openings in Ohio.

The Lourdes Choose Ohio First Program will focus on several of the University’s flagship programs, as well as others that it is looking to build on or grow during the project period. This includes those that relate to occupations in most demand in Ohio, including Nursing, Education, and Biology. Lourdes has a tradition of graduating exemplary students in these areas. Choose Ohio First support will allow us to attract additional Ohio students to these programs, as well as to grow other programs at Lourdes that respond to regional and state workforce needs.

Lourdes works closely with other regional and statewide efforts to address workforce needs, including the Toledo Talent Alignment Strategy organized by the Toledo Regional Chamber of Commerce, and Bowling Green State University through its Ohio Means Internships and Coos grants. Our Career Services and Student Success offices at Lourdes will support students and employers as part of the proposed project.
Executive Summary - Marietta College

Marietta College is a small, private institution located in Southeast Ohio. The college provides a strong foundation for a lifetime of leadership, critical thinking, and problem solving. We achieve this mission by offering undergraduates a contemporary liberal arts education and graduate students an education grounded in advanced knowledge and professional practice. Our goal is to prepare students for the world of work particularly in key in-demand industries in Ohio.

Marietta College proposes a Choose Ohio First (COF) Scholarship program that will help us to educate students for in-demand jobs related to STEMM. According the Bureau for Labor Statics employment in STEMM occupations nationally is projected to grow at a rate of 8% between 2019-2026, which is more than twice the national average of non-STEMM occupations in the same time period. This trend matches employment projections for Ohio. According to the Ohio Department of Job and Family Services 2026 Ohio Job Outlook Employment Projections Ohio is expected to add 253,000 new jobs between 2016-2026 with approximately 60% those jobs being in STEMM fields.

Even with the availability of career opportunities there are not enough college graduates to fill projected employment needs with employers reporting that qualified individuals in fields related to engineering, science, data analytics, computer/IT and healthcare being some of the most difficult for employers to find qualified applicants for. (Institute, C.E., 2019) Additionally, according to the American Medical Resource Institute, the ten hardest-to-fill healthcare jobs include pulmonologist, rheumatologist, nurse practitioners, agency nurse, cardiologist, radiologist, emergency medicine physician, psychiatrist, vascular surgeon, and urologist.

Marietta College proposes a program that specifically targets degrees that train students for the above mentioned occupations and directly pipeline students into graduate programs and careers that are listed on the Ohio Top Jobs and Critical In-Demand Jobs lists. We have chosen the following degree programs for this COF opportunity: Environmental Sciences, Environmental Studies, Environmental Engineering, Computer Science, Information Systems, Petroleum Engineering, Biology, Biochemistry, Mathematics, Chemistry, Geology, Applied Physics, Physics, Health Science, Sports Medicine, Actuarial Science, Neuroscience, Psychology, Mental Health Counseling, and Physician Assistant.

The STEMM degree programs identified for our COF program are competitive in the region and are generally the most academically rigorous. Therefore, it is critical that we target and actively recruit qualified students who have the capacity to thrive in college and complete their degrees. Marietta College will specifically target high school students in Ohio who have shown an interest in STEMM majors and meet qualifying GPA and college entrance exam requirements. Additionally, we will focus our efforts on recruiting women and students who are socially disadvantaged including targeting low-income, first generation, and students with disabilities to our programs. We will work through upward bound programs and our own Welcoming Inspirational Summer Experience event that specifically targets these groups. Often there are very qualified candidates among these groups who do not have the resources to attend college, let alone a private college, making the COF opportunity an important recruitment and retention tool.

One of the biggest challenges for students in Ohio is affording the cost of college. The cost of attending Marietta College is $47,760 per year. However, the median household income for Ohio residents is approximately $54,000, it is clear that most students will have to rely on financial aid, including student loans, to be able to attend Marietta College. Even with academic scholarships ranging from $19,000 to $23,000 per year, the cost of attending Marietta College may still be too high for some students who are interested in a computing degree. The COF scholarship will give us the leverage we need to attract the most qualified students to our STEMM programs, regardless of their ability to afford a private college.
Executive Summary - Marion Technical College

Marion Technical College (MTC) will recruit students interested in health programs and who need Choose Ohio First (COF) scholarship funds to attain a degree. The recruiting focus for the COF program will emphasize but not be limited to junior and senior high school students currently enrolled in MTC’s College Credit Plus (CCP) courses and high school freshman and sophomore students who are starting to consider college options. MTC will leverage existing strong relationships with area high schools to communicate the COF opportunity to prospective students.

Marion City Schools is the largest district in MTC’s market area and will be a primary focus for recruiting students. Marion City Schools is a 100% free/reduced lunch district; 24% of Marion City students are a minority. The median income of residents in Marion City schools is $27,853 and the average income is $36,984, both substantially below the state average (ODHE District Profile report, 2019). In addition to students from Marion City Schools, MTC will promote the COF opportunity to high school students at Tri-Rivers Career Center, Delaware Area Career Center, and other high schools in the MTC service area of Marion, Wyandot, Morrow, Delaware, Crawford, Hardin, and Union counties.

MTC will offer the COF scholarships to first-time college students planning to enroll in a health program. MTC offers several health programs that qualify for the COF scholarship program, including Nursing, Physical Therapist Assistant, Occupational Therapy Assistant, Radiography, Health Informatics, Surgery Technology, Medical Assisting, and Medical Lab Technology. Health occupations are in-demand in MTC’s service area and across the state of Ohio; top industries employing health-care graduates include hospitals, physician practices, and long-term care and rehabilitation facilities.

Since October 2020, there have been 854 unique job postings for health-care positions in MTC’s market area. The median advertised salary is $75,100 and the highest demand is for registered nurses. There has been an average of 130 hires per month in October and November 2020; the largest number of hires have been by OhioHealth, Avita, and Manorcare (EMSI, December 2020).

The high number of recent job postings is likely related to COVID-19, but the long-term prospect for health-care graduates is positive, with a projected 13.8% increase in the number of jobs between 2020 and 2025 in the MTC service area (EMSI, December 2020). Racial diversity in health occupations is low compared to the national data; retirement risk is about the same as the national average.

MTC envisions this COF scholarship as an integral part of a talent pipeline, as illustrated by Figure 1:

![Figure 1: COF Talent Pipeline/Pathway](image-url)
Executive Summary - Mercy College of Ohio

Mercy College proposes to establish Choose Ohio First scholarships for students completing short term certificates as community health workers, ophthalmic assistants, polysomnographic technologists and paramedics. These are certificates that can be completed within two to three semesters with excellent hiring prospects. The four chosen programs were selected because they have consistent track records for recruiting first generation, female, minority and Pell eligible students, consistent placement of students in jobs after completion, and offer room for expansion or enrollment within the programs. Mercy will utilize the financial resources provided by the COF scholarships to provide scholarships to eligible students that will cover or nearly cover the entire tuition for their program. The decision to provide more substantial scholarships to somewhat fewer students is deliberate; many students wishing to complete a certificate program do not have the financial means to pay tuition, books and fees, even for a two or three semester program. They are typically employed already and trying to work full time while also attending school. The COF investment in their achievement will alleviate much of the burden of having to pay tuition, allowing the student to focus on their academic, social and career success instead.

Community Health Worker
Community health workers (CHW) work with clients and community groups to support general health and welfare. CHWs assist with referrals to community resources, maintain communication between clients and providers, and can perform basic functions such as taking blood pressures, vital signs, and using health screening tools.

Ophthalmic Assistant
Ophthalmic assistants aid with diagnostic and technical tasks related to eye care. Training includes didactic, laboratory and clinical components to prepare students for entry into practice and to take the Certified Ophthalmic Assistant entry-level examination.

Polysomnographic Technologist
Polysomnographic Technology is a healthcare field that perform and interpret sleep studies to diagnose and treat sleep disorders. The program prepares students for immediate employment in the field and to sit for the Registered Polysomnographic Technologist examination.

Paramedic
Paramedics are first responders who typically work for emergency response and fire departments or ambulance providers. The program prepares students for the State of Ohio Paramedic Certification, eligibility to take National Registry (NREMT) exam, apply for licensure in other states, and apply college credit earned in certificate program toward advanced degrees in related healthcare fields.

Mercy College’s Choose Ohio First program supports the strengths and needs of the region. According to the U.S. Bureau of Labor Statistics, Healthcare Support and Healthcare Practitioners and Technical occupational categories comprise 6.5% of employment in Toledo, Ohio, substantially higher than the national average of 5.9%. In the Healthcare Support occupational group, the percentage of employment in Toledo, OH is 4.3%, which is consistent with the national level (4.4%). All four of these occupations are projected to grow in the next decade; community health worker has a projected growth of 13%, ophthalmic assistant projects at 11%, polysomnographic technologist projects growth of 11%, and paramedics are projected to grow 6%. All of these programs fulfill a need for opportunities with reduced barriers to first time degree seekers, and offer quality jobs that pay a family-sustaining wage with prospects for growth.
Miami University (MU) is proposing the use of Choose Ohio First Engineering (COF-E) scholarships to attract, retain and graduate more students in the areas of Robotics, Automation, Control, and Advanced Manufacturing, which are integral to the Industry 4.0 revolution. The path forward for U.S. manufacturing and smart factories combines technologies such as additive manufacturing, collaborative robotics, process automation, and digital platforms for cost-effective, energy-efficient, and sustainable product development. This new technological infrastructure requires future engineers and the existing workforce to have the requisite knowledge of these new systems. The goal of this proposal is to recruit a diverse student body (traditional/non-traditional, underrepresented minorities and women) in engineering disciplines and help enhance their level of technical preparedness for the evolving industrial landscape.

Miami University is now offering new and innovative academic programs and curricular opportunities which include: Interdisciplinary B.S. in Robotics Engineering (first in Ohio), stackable Professional, Graduate/Professional Level Certificates in Advanced Manufacturing and Materials Evaluation, and experiential opportunity in Process Automation and Control. Moreover, students from other engineering disciplines have an opportunity to take Robotics Engineering as a second major or minor.

Economic indicators for national projected growth from 2018-2023 (Burning Glass Report) have forecast a 224.7% increase in demand in Industry 4.0 (including Additive Manufacturing: 62.92%, IoT: 136.4 %, Robotics: 55.80%, and Automation: 36.87%). A job search on OhioMeansJobs for ‘Robotics,’ ‘Automation,’ ‘Manufacturing,’ with Bachelor’s degrees in engineering reveals high demand for workers at the regional and state levels. The employment projection tools also show a high percentage change in job demand (2016-2026) for Industry 4.0 related engineering occupations (Mechanical, Electrical, Chemical, and Computer). Topjobs Ohio portal also lists considerable growth in these disciplines, which are integral to Industry 4.0. However, cross-disciplinary educational programs in Robotics, Automation, and Manufacturing are nationally scarce and MU engineering is well-positioned to take the lead in student preparation in these areas.

We plan to provide an average 35 scholarships per year ($6,000 per student per year for 25 students in the B.S. programs and $1000 per student for 10 students in the certificate program) for 5 years. A comprehensive plan has been developed for student recruitment, mentoring, career counseling, and supporting work experience for the selected scholars, in consultation with university offices including Student Aid, Enrollment Management, and Career Services. Miami University has a demonstrated track record of supporting COF state funds through matching tuition waivers and university scholarship dollars. Through business partnerships and undergraduate research infrastructure, MU will facilitate work experiences such as co-op/internships opportunities, and faculty-directed research to COF-E scholars. We firmly believe this state support will serve as a catalyst in the long-term effort to increase enrollment in areas of emerging need. With reliable data-driven forecasting covering the manufacturing sector of Ohio, this proposal is ideally timed to help expand the technical skill set of the future workforce. Another feature that uniquely recommends Miami for the scholarship program is the diversity of the educational offerings: in addition to traditional students, the certificate program is well suited for returning students providing targeted, industry-relevant content in effective formats.

ECONOMIC INDICATORS FOR NATIONAL PROJECTED GROWTH FROM 2018-2023 (BURNING GLASS REPORT) HAVE FORECAST A 224.7% INCREASE IN DEMAND IN INDUSTRY 4.0 (INCLUDING ADDITIVE MANUFACTURING: 62.92%, IOT: 136.4 %, ROBOTICS: 55.80%, AND AUTOMATION: 36.87%). A JOB SEARCH ON OHIOMEANSJOBS FOR ‘ROBOTICS,’ ‘AUTOMATION,’ ‘MANUFACTURING,’ WITH BACHELOR’S DEGREES IN ENGINEERING REVEALS HIGH DEMAND FOR WORKERS AT THE REGIONAL AND STATE LEVELS. THE EMPLOYMENT PROJECTION TOOLS ALSO SHOW A HIGH PERCENTAGE CHANGE IN JOB DEMAND (2016-2026) FOR INDUSTRY 4.0 RELATED ENGINEERING OCCUPATIONS (MECHANICAL, ELECTRICAL, CHEMICAL, AND COMPUTER). TOPJOBS OHIO PORTAL ALSO LISTS CONSIDERABLE GROWTH IN THESE DISCIPLINES, WHICH ARE INTEGRAL TO INDUSTRY 4.0. HOWEVER, CROSS-DISCIPLINARY EDUCATIONAL PROGRAMS IN ROBOTICS, AUTOMATION, AND MANUFACTURING ARE NATIONALLY SCARCE AND MU ENGINEERING IS WELL-POSITIONED TO TAKE THE LEAD IN STUDENT PREPARATION IN THESE AREAS.

WE PLAN TO PROVIDE AN AVERAGE 35 SCHOLARSHIPS PER YEAR ($6,000 PER STUDENT PER YEAR FOR 25 STUDENTS IN THE B.S. PROGRAMS AND $1000 PER STUDENT FOR 10 STUDENTS IN THE CERTIFICATE PROGRAM) FOR 5 YEARS. A COMPREHENSIVE PLAN HAS BEEN DEVELOPED FOR STUDENT RECRUITMENT, MENTORING, CAREER COUNSELING, AND SUPPORTING WORK EXPERIENCE FOR THE SELECTED SCHOLARS, IN CONSULTATION WITH UNIVERSITY OFFICES INCLUDING STUDENT AID, ENROLLMENT MANAGEMENT, AND CAREER SERVICES. MIAMI UNIVERSITY HAS A DEMONSTRATED TRACK RECORD OF SUPPORTING COF STATE FUNDS THROUGH MATCHING TUITION WAIVERS AND UNIVERSITY SCHOLARSHIP DOLLARS. THROUGH BUSINESS PARTNERSHIPS AND UNDERGRADUATE RESEARCH INFRASTRUCTURE, MU WILL FACILITATE WORK EXPERIENCES SUCH AS CO-OP/INTERNSHIPS OPPORTUNITIES, AND FACULTY-DIRECTED RESEARCH TO COF-E SCHOLARS. WE FIRMLY BELIEVE THIS STATE SUPPORT WILL SERVE AS A CATALYST IN THE LONG-TERM EFFORT TO INCREASE ENROLLMENT IN AREAS OF EMERGING NEED. WITH RELIABLE DATA-DRIVEN FORECASTING COVERING THE MANUFACTURING SECTOR OF OHIO, THIS PROPOSAL IS IDEALLY TIMED TO HELP EXPAND THE TECHNICAL SKILL SET OF THE FUTURE WORKFORCE. ANOTHER FEATURE THAT UNIQUELY RECOMMENDS MIAMI FOR THE SCHOLARSHIP PROGRAM IS THE DIVERSITY OF THE EDUCATIONAL OFFERINGS: IN ADDITION TO TRADITIONAL STUDENTS, THE CERTIFICATE PROGRAM IS WELL SUITED FOR RETURNING STUDENTS PROVIDING TARGETED, INDUSTRY-RELEVANT CONTENT IN EFFECTIVE FORMATS.
Executive Summary - Mount St. Joseph University

Mount St. Joseph University (the Mount) has implemented a highly successful Choose Ohio First (COF) Program in Computer Science during the 2020 fiscal year. In particular, the Mount’s program was highly successful in attracting individuals who are traditionally underrepresented in STEMM fields: 80 percent of our inaugural cohort is female and 40 percent are first generation students. The present proposal seeks to build upon the success of the COF Computer Science program at the Mount by expanding it to include a number of additional STEMM fields. This expansion is well aligned with the mission and strategic priorities of the University, and has the full support of University leadership, faculty, and administration.

Our proposal seeks to continue to leverage COF funding to attract prospective students who are traditionally underrepresented in STEMM fields, such as women, first generation students, Latinx students, and rural students. The student recruitment process will capitalize on the successes and the lessons learned from the recruitment for our existing COF program in Computer Science.

All of the programs covered by this proposal will create opportunities for students to engage in projects that merge research with real industry needs. In order to ensure close alignment between the classroom instruction and the real world, students will have numerous opportunities to work on industry projects through dedicated centers of excellence starting with their first semester. Through the Mount’s COF program, students will receive a strong research-centered STEMM education and interdisciplinary approach aimed at equipping students with the critical thinking framework that will make them particularly attractive to future employers in the area. This proposal includes letters of support from our industry partners.
EXECUTIVE SUMMARY - Muskingum University

Muskingum University’s Choose Ohio First (COF) initiative, Muskingum Works for Ohio First, has been designed as part of the institution’s Impact 2025 Strategic Action Plan to leverage the university’s capabilities for serving the educational and career development needs of our COF scholars with great effectiveness.

**Populations for COF Recruitment:** The university serves a region in east central and southeastern Ohio composed largely of Appalachian counties where much of the population is socioeconomically disadvantaged. A significant gap exists between the projected workforce need for the southeastern Ohio region and the educational attainment of the population in this area, where on average only 12.7% of adults hold a bachelor’s degree, with only 4.5% being in a STEMM discipline. Over 51% of full-time undergraduate students currently enrolled at Muskingum University are from Appalachia, while 40% of undergraduate students are eligible for the Pell Grant (2018-2020), and 38% are first-generation college students.

**Academic Programs for COF Initiative:** As the only comprehensive four-year institution within a 35-mile radius of New Concord and Zanesville, Muskingum University offers 18 COF-eligible STEMM majors including biology, chemistry, computer science, conservation science, environmental science, general engineering, geology, mathematics, molecular biology, neuroscience, nursing, and physics, as well as majors in the areas of health science, healthcare management, information systems, medical laboratory studies, and nursing. These majors are drawn from the CIP codes aligned with regional workforce needs. Choose Ohio First funds will also support candidates for STEMM teacher licensure, a teaching area in critical demand in local school districts and across the state. To best meet the educational and workforce needs of our region, the university will build on the successful program model of our current Choose Ohio First program (2008 – present) that spans the STEMM academic disciplines for both our traditional students as well as our non-traditional students enrolled through our Muskingum Adult Program (MAP). The programs were selected in part for their relevance to STEMM, the alignment with the institutional plan, and the resources and personnel available to implement a high-quality program.

**Plan to Address Regional and Statewide Economic Strengths and Needs:** The innovative student supports described in this proposal are designed to meet the diverse needs of all undergraduate students at Muskingum University to help them overcome the challenges they face. University leadership and STEMM faculty continue to leverage and expand relationships with regional business and industry leaders to strengthen partnerships supporting the workforce initiatives proposed. Letters of commitment and support from institutional leaders and business partners document several of these ongoing partnerships while highlighting the institutional and regional support for this COF initiative at Muskingum. Choose Ohio First scholarship funding will provide support for an anticipated 100 undergraduate students to work on applied projects, explore careers through field placements, and experience the transformative power of on-site learning through internships.
Executive Summary – North Central State College

Rationale for selected populations

NCSC will continue to target students transitioning from high school, with a special focus on career-technical students who comprise a large contingent of COF awardees under the 16-36 grant. In addition, CTE/CCP graduates of the full-time CollegeNOW engineering technology program will continue to be targeted with the lure of a bachelor’s in mechanical engineering technology for less than $10,000. Finally, given the pandemic many high school graduates have chosen to take gap years, and thus would not qualify for NCSC’s Tuition Freedom Scholarship. The college will use COF to help draw these recent graduates to college.

NCSC will also target aspiring adult learners with COF, especially given the large number of dislocated workers with the pandemic. COF is an ideal strategy in that it allows busy adults to attend part-time, earn a certificate and stretch their purchasing power due to the fact that it is a first-dollar scholarship. NCSC will align COF with strategies being implemented as part of Finish for Your Future.

Finally, NCSC will target both traditional and adult populations that are underserved. A key partner in this effort will be the Mansfield City School District, which serves a large number of low income and minority students.

Rationale of selected academic programs

Targeted programs include Networking and Cybersecurity (degree and certificate); Graphic Design (degree); Integrated Engineering (degree); Bioscience (degree); Mechanical Engineering Technology (bachelor’s degree); Licensed Practical Nursing (certificate); Registered Nursing (degree) and Respiratory Care (degree). Data from the Program of Study section show that compared to the college as a whole, these targeted programs have higher retention, graduation and often earnings following graduation. A wage-matching study of graduates from 2016-17 to 2018-19 showed the COF-eligible group had an average quarterly wage of $9,600 six months after graduation, compared to a college-wide average of $7,900.

Further, these programs offer unique contextual benefits such as a Bioscience program linked to a National Science Foundation Grant, a Graphic Design program offering a STEAM pathway for students with an artistic bent, and Ohio’s only community college applied bachelor’s degree in Mechanical Engineering Technology.

Plan to address regional needs

According to an EMSI study of nine regional counties, there are 950 annual openings for occupations mapped to the targeted programs. Even with the pandemic, a review of job postings shows demand for these occupations remain high. Numerous employer partners who hire both interns and graduates have voiced support for this COF effort.

The COF program will provide a rich co-curricular experience to supplement classroom learning. This will include targeted engagement activities, honors opportunities and student-related clubs. But most important, NCSC will scale efforts with its Internship Office to provide even more placements for students – including unique opportunities for health science majors to supplement their clinical work.
EXECUTIVE SUMMARY - Northwest State Community College

1. **Rationale for the selected populations for recruitment.**

The target population for Northwest State Community College’s (NSCC) Choose Ohio First (COF) initiative will include women, youth aging out of foster care, and long-term unemployed individuals, focusing on people of color from rural northwest Ohio counties. Due to COVID mandated closures, many current unemployed individuals were previously employed in the restaurant/hospitality industry or self-employed. These individuals are challenged by lower levels of education and employment.

Between October 25th-31st, 21,263 initial jobless claims were filed with the Ohio Department of Job and Family Services. That is an increase of 3,732 claims, or 17.6%, over the previous week. Since mid-March when the state closed down due to COVID, a total of 1,807,545 unemployment claims were filed in Ohio - more than the number of claims filed during the previous four years combined. In the last 33 weeks, ODJFS says it has distributed more than $7.1 billion in unemployment compensation payments to more than 833,000 Ohioans.\(^1\) In addition, within rural Ohio, 12.2% of residents have not completed high school and 43% ended their education with only a high school diploma (versus 9.3% and 30.8%, respectively, of their urban peers); 16.9% of rural Ohioans have finished college (versus 30.6% of their urban peers).\(^2\)

According to the 2020 Kids Count Data, State Trends in Child Well-Being published by the Annie E. Casey Foundation. Ohio ranks 31\(^{st}\) in overall child well-being. According to the 2020 report, 36 percent of children live in single parent households and 28 percent of children live in households where their parents do not have secure employment. In addition, by age 21, just 43 percent of former foster youths in Ohio had a high school diploma or equivalent, according to data released by the foundation. That compares with 76 percent of the overall U.S. foster-care population and about 92 percent of Ohio’s general population. In Ohio, foster youths were far less likely to have received transition services such as employment programs or vocational training. Nationally, 23 percent of foster youth received job training; the figure was 6 percent for Ohio.

2. **An overview and rationale of the selected academic programs.**

NSCC has introduced a COF Advanced Manufacturing/STEMM proposal which allows eligible target populations earn Industry-Recognized Credentials (IRC)/certificates and/or degrees that data confirms are of high employment value to the State of Ohio and the businesses it serves. The initiative provides the technical training COF students need to gain employment in the labor shed.

The proposal will allow special populations enroll and attend NSCC who may otherwise not have the opportunity to, and increasing a diverse, highly skilled workforce pipeline that spurs growth and prosperity and provides students with opportunities for upward mobility. The Advanced Manufacturing (AM)/STEMM academic programs proposed will certify the student’s qualifications and competencies and will be “stackable,” accumulating over time to build the COF student’s qualifications to continue down the AM/STEMM career pathway or articulate to a degree through transfer of prior learning credit. The work-based learning embedded within the initiative will also assist with extending the students traditional education into the workplace through on-the-job training, employer mentoring, and other student supports in a continuum of lifelong learning and skill development.

---

1 Ohio Department of Job & Family Services, Bureau of Labor Management
3. **A synopsis of the plan to address regional and statewide economic strengths and needs for the targeted academic programs.**

The proposed program outcomes are based on the intent to fulfill growing workforce demands in the AM/STEMM sector, but also the dedication to build NSCC’s capacity to provide quality vocationally relevant education and training through an innovative COF workforce development initiative.

NSCC’ COF initiative incorporates the Governor’s Office Of Workforce Transformation (OWT)’S strategic vision for the State’s workforce development system which is “an Ohio where business, training, and education are aligned to meet the needs of employers, individuals, and their communities.”

To support its strategic workforce vision, Ohio has identified the following four goals for preparing an educated and skilled workforce, including youth and individuals with barriers to employment and other populations along with meeting the skilled workforce needs of employers.

Goal 1: Coordinate efforts across entities (public, private, local, and State) to reduce unnecessary duplication and maximize resources.
Goal 2: Leverage technology and data to create efficiencies and improve services and outcomes.
Goal 3: Deploy locally driven programs that produce results.
Goal 4: Invest in and promote education and training for jobs that
   1. empower people with 21st Century skills and strengthen Ohio’s strategic economic advantage, and
   2. ensure that our State has a workforce to support the health and well-being of Ohioans, their families, and communities.

NSCC’ COF AM/STEMM initiative includes strategies to meet the four Ohio goals listed above.
EXECUTIVE SUMMARY - Notre Dame College

Notre Dame College (NDC) shares our gratitude with the Ohio Department of Higher Education for your sustained support of our Choose Ohio First (COF) program since 2011. We are pleased to share this proposal with you for review. We hope to convey the successes made possible by COF support and our plans to improve our programs so that we can help fill our regional and statewide pipelines with talented professionals.

COF scholarships help make college affordable and accessible to first-generation and low-income students while attracting women and under-represented groups into STEMM fields. NDC’s COF program, as proposed this year, would award scholarships to qualified students majoring in biology, chemistry, math, and math education who have an interest in STEMM careers and a commitment to participating in our COF STEMM learning community. The program offers personalized advising and mentoring, STEMM-specific programming, career guidance and networking opportunities, and internship and/or undergraduate research experiences for scholars. The low student to faculty ratio encourages the development of relationships with faculty through personalized advising and mentoring which can help support the scholars while in school and beyond.

Building upon the program’s success, NDC aims to grow our current COF STEMM program with enhanced academic and career support programming and services that work to increase persistence, completion, and career readiness. Over the past three years, our COF STEMM retention has increased significantly through attentive 1:1 faculty advising, mentoring, and curricular and co-curricular programs. Through participation in the COF STEMM program over the past nine years and the implementation of strategic STEMM recruitment and academic support services, the number of science majors and graduates has increased. NDC will continue to attract not only first-time, full-time students but also transfer students from our three community college partners with whom we have articulation agreements in place: Cuyahoga Community College, Lakeland Community College, and Lorain County Community College.

The goal of the COF STEMM @NDC program will be to increase the number of students from Ohio entering STEMM careers within the state. We aim to achieve this goal by:

a) Providing scholarships to qualified science majors (biology, chemistry, math, and math education) entering NDC either as high-school graduates/first-year students or transfer students from local community colleges;
b) Delivering academic and career support programming to increase persistence and completion among STEMM scholars and majors;
c) Improving graduate and/or career readiness among STEMM scholars and majors;
d) Partner with industry to educate students with career-ready knowledge and skills that enable them to step into a STEMM career following graduation; and,
e) Foster relationships with area graduate programs so STEMM students are competitive candidates.

Each year Notre Dame College (NDC) fulfills its transformational spirit and mission: *NDC educates in the liberal arts for personal, professional, and global responsibility*. With its founding almost 100 years ago, The Sisters of Notre Dame provided an education to women, at a time when it was not the societal norm. In recognition of NDC’s commitment to enrolling, educating, and graduating Pell-eligible students, NDC is a designated by the US Department of Education as a Strengthening Institutions Program (SIP)-funded college. Annually, NDC commits $20M of institutional aid to students make education accessible and affordable. A NDC education changes not only a student, but his or her family and community, when a student earns a college degree.
The Choose Ohio First program at Ohio Dominican University seeks to boost both the economic mobility of underrepresented students in STEMM, as well as the economy at large in State of Ohio by providing substantial tuition scholarships, work-based learning experiences, and ample academic and career support to Ohioans seeking STEMM degrees. ODU is particularly well suited to accomplish these goals due to its strong relationships with local STEMM businesses – particularly in the health sector – and its rich history of serving students who are economically disadvantaged and/or are members of an underrepresented group. Currently, approximately one-third of ODU STEMM students fit into each of those two categories. It is part of the university’s strategic plan and institutional mission to continue to recruit students of underrepresented groups and provide an environment where they can thrive as students and begin successful and productive careers.

STEMM programs at ODU are some of the most popular and fastest growing – particularly with students interested in professions in the health sector. Since this is currently an area of high demand in the job market, there is a need to further support students interested in STEMM. For this reason, the Choose Ohio First program will support students in academic programs related to biomedical, public health, and data analytics fields: biology, biopsychology, chemistry, environmental science, exercise science, and mathematics. A key factor that can separate one recent graduate from another in these fields is an element of experience outside the classroom. Thus, the work-based learning experiences that are part of the Choose Ohio First program will help accelerate the early careers of ODU graduates by allowing them to perfectly fit the demands of the local and statewide economy.

As a small, liberal arts institution, ODU is already prepared to provide support to students in the Choose Ohio First program on an individual basis. Faculty already spend a significant portion of their time providing one-on-one academic assistance and career advice to students. The Academic Resource Center on campus is able to provide academic support with a team of both undergraduate tutors and full-time professional specialists. The Career Development Center on campus has a strong track record of helping students develop strong resumés, polish their professional "soft skills", and find career opportunities that are well suited to their goals and ambitions. The leadership team of the Choose Ohio First program will be comprised of two representatives from the STEMM faculty at ODU, Daniel Little, (Ph.D.) and Amanda Arnold, (Ph.D.), the directors of the Academic Resource Center and Career Development Center, Amy Spencer, (M.A.) and Jessica Hall, (M.A., M.L.H.R.), respectively, and the Director of Undergraduate Admissions, Alecia Dennis, (M.B.A.). With this team of dedicated and experienced individuals, the Choose Ohio First program at Ohio Dominican University will be able to make a positive impact both in the lives of students and the economic and social prosperity of the State of Ohio.
Executive Summary: Ohio Northern University

Ohio Northern University (ONU) has served the state of Ohio by providing quality undergraduate education that has integrated practice with theory for 150 years. The Choose Ohio First (COF) scholarship will allow ONU in this, its sesquicentennial year, to expand recruitment of students into high-demand STEMM professions. The purpose of this present proposal is to increase the enrollment of students in STEMM-related fields that prepare professionals for in-demand health care and infrastructure occupations in Ohio.

Specifically, the proposal aims to increase enrollment at Ohio Northern University in Biochemistry (26.0202), Biomedical Sciences (26.0102), Civil Engineering (14.0801), Environmental and Field Biology (26.0709), Exercise Physiology & Strength & Conditioning (31.0505), Medical Laboratory Science degree and completion certificate (51.1005), Medical Physics (51.2205), Molecular Biology (26.0204), Nursing (51.3801), Pharmacy (51.2001), Public Health (51.2201), and the pre-professional preparatory fields for medicine, occupational and physical therapy, and physician assistant occupations. All of these programs are included in the list of eligible academic programs for this RFP. The goal is to enroll 40 students per year into the COF STEMM-related program at ONU with a $3,000 scholarship per student. ONU will match each COF scholarship 1:1 with University-funded scholarship monies, and many students will receive significantly more from ONU than from COF.

Projections from the Ohio Job Outlook 2016-2026 note that “The health care and social assistance services industries are expected to add the most jobs, and a large portion of job growth will come from health care occupations.” The oldest population group (65 and older) is expected to grow 25 percent in Ohio, spiking additional health care needs for seniors who have higher rates of illness and disease and greater needs for care overall. The fastest-growing industry group is projected to be home health care services (50.7 percent). Other fastest-growing areas in that sector include: community care facilities for the elderly (31.2 percent); specialty hospitals (28.1 percent); and offices of other health practitioners (25.6 percent). In fact, five of the top six industry groups expected to create the most jobs are in the health care and social assistance sector. According to the report, Ohio employment outlook includes a demand for 135,631 new jobs overall in Health Care and Social Assistance by 2026, which is 109,838 more job openings than the next nearest employment field.

The opportunity presented by scholarships through Choose Ohio First will allow Ohio Northern University to continue to provide meaningful education and work-based experiences for Ohio students, creating a qualified and job-ready workforce for meeting our state’s challenges. As outlined in the Ohio Department of Education’s Ohio Physician and Allied Health Care Workforce Preparation Task Force Report from March 2020, workforce needs are “no more daunting than in the field of health care.” Three factors are instrumental to ONU’s decision to focus on health care and infrastructure related programming: 1) COVID-19’s current and future impact on health care workers and infrastructure, 2) an aging Ohio population straining health care human and structural resources, and 3) a health worker shortage predating the pandemic, especially in rural areas. Since graduates who participate in these kinds of hands-on experiences will settle, on average, within 25 miles of their college work experience, ONU students will serve Ohio’s rural population of 2,347,371 residents well upon degree completion.

Ohio Northern University has a rich tradition of working with COF to bring students to campus, helping them successfully move through the college experience to graduation, and on to the workplace. Previous COF grants at ONU have been for Engineering Education, STEM Education and the Health Sciences majors, and Computer Science and Computer Engineering. Ohio Northern works well with the State of Ohio to benefit high school students, the University’s students, and ultimately the general population. This is a unique opportunity to expand that effort and increase the number of students in STEMM fields who will also be prepared to serve this great state.

The goals of the present proposal are well aligned with the contemporary needs of the state of Ohio. ONU will strategically use COF scholarships to support recruitment and retention of students in health care and infrastructure fields. Special attention in the recruitment process will be given to disadvantaged populations, and, in the case of Civil Engineering, particularly to women. ONU’s typically high retention and completion rates are built into this model. Prior COF STEM-Education and COF Health Professions scholarships have demonstrated success in enrollment in the University’s programs. In sum, adding 40 students through a $3,000 matched COF scholarship per year to the Ohio workforce pipeline is a tangible way for Ohio Northern to celebrate its 150th anniversary in 2021.
2. EXECUTIVE SUMMARY - Ohio State University

Ohio is making substantial advances in converting from a rustbelt low technology, manufacturing economy to an advanced manufacturing, innovative science, and advanced health science economy. The INSW at Ohio State intends to expand the number of graduates in the following majors through the use of Choose Ohio First Scholarships: Data Analytics, Mathematics, Statistics, Engineering Technology, Biology, Chemistry, Molecular Biology, Nursing, and Pharmacy. Racial and ethnic minorities and first-generation college students will be particularly targeted for recruitment in these majors. This will be done to expand the pool of B.S. graduates available to contribute to workforce needs in advanced science and technology, manufacturing, and health care sciences. This is a strategic decision based on data on the current and near-term needs in Ohio and the central region Ohio in the STEMM workforce.

Three of the targeted programs are relatively new at Ohio State: Engineering Technology, Data Analytics, and Statistics. The B.S. Engineering Technology degree (BSET) was developed through a three-year collaborative discussion between OSU faculty and staff and manufacturing industries that are located near the regional campuses throughout the state. Now in its first year with enrollment of 55 student, it is the first engineering degree available for completion at our regional campuses in Mansfield, Marion, and Lima. This collaborative effort was initiated to strongly enhance the workforce supply of those regions with this particular skillset. Similarly, the data analytics and statistics majors were started in 2014 and 2018, respectively through recognition of developing economic sectors and deep discussions with local and national corporations. Both majors are already well established and have substantial growth profiles. Traditional STEM disciplines chemistry and mathematics have experienced increased enrollment at OSU to 900 and 1000 students, respectively. Students in these majors contribute strongly to Ohio’s new startup areas as well as scientific advances supporting innovation in classical industries in Ohio such as transportation, consumer products, financial and insurance services, and light manufacturing. This is attested through support letters garnered from Honda, Nationwide, Eastman Chemical, and the Ohio Manufacturer’s Association, as well as through the statewide and local workforce needs documented in the proposal. Furthermore, approximately 50% of the chemistry and biochemistry majors matriculate to health professional schools (Medicine and Dentistry which are other documented high needs areas in central Ohio and in the state. Finally, the biology major, pharmaceutical sciences, and nursing majors continue to experience high demand from students. These graduates meet the growing needs in Ohio for Health professionals as attested to by support letters from Kroger and Total Health Wellness.

The colleges and departments that will be involved in supporting these Choose Ohio First Scholarship students are ranked highly nationally and internationally and are highly regarded for their strengths in academic instruction. Therefore, through this INSW effort, Ohio State will be able contribute strongly to strengthening the STEMM economy in central Ohio and throughout the state in fulfillment of its public, land grant, and research mission.
Executive Summary - Ohio University

Ohio University’s Choose Ohio First 2021-2026 proposed program exemplifies the intersection of our commitment to access and inclusion, student success, and preparing students to meet emerging workforce needs in the state of Ohio. An anticipated 29 students per cohort and 145 students in total will benefit from both existing and enhanced levels of student support to reach degree completion as well as nearly $1.6M in scholarship support, combined with another $1.6M from Ohio University’s match. Biological Sciences’ Pre-professional (pre-health) majors and nine diverse majors from the Russ College of Engineering and Technology (RCENT) will recruit, support, and celebrate the completion of STEM students with a particular focus on underrepresented students. In addition to the benefit to participating students, Ohio University’s Choose Ohio First program will promote faculty and industry partners to collaborate to address high-demand workforce needs in advanced manufacturing and healthcare.

This work aligns with and is supported by the University’s strategic plan, Fearlessly First, announced just last year, meaning that even before the application is turned in, this Choose Ohio First Scholarship proposal is being watched and supported by senior leadership. For example, the University’s core outreach, recruitment and marketing leadership team has been tasked with supporting the effort through social media, direct contact, and themed admission events to help recruit students. In particular, the needs of tomorrow depend on a diverse workforce, so we will give special consideration to the recruitment and support of minoritized populations who want to make a difference by bringing their Ohio University education and real-world challenges together in guided programs and work-based learning.

The rationale for contributing to a high-quality healthcare workforce skilled in the very cutting edge of research science could not be clearer during a global pandemic. As we prepare this application, Ohio is facing a shortage of workers and hospital beds, with Governor DeWine going so far as to place Ohio itself on a list of states considered dangerous to travel to. Advanced manufacturing too is critically important to this moment when supply chain disruptions inhibited efforts to mobilize needed health resources, but also because Ohio has the nation’s third largest manufacturing workforce. Maintaining that strength in manufacturing requires constant innovation and talent development. Ohio University’s industrial partners and faculty are already collaborating, so COF Scholars will be able to see through their work-based learning, how vital their studies are to contributing to their post-graduation success.

Professional advisors, internship and career specialists, and student academic support specialists are embedded within the Russ College and the Department of Biology to ensure that each COF Scholar has a robust support network to help them succeed academically at Ohio University and beyond. Ohio University’s advisors use an “appreciative advising” framework that begins with understanding a student’s dreams for who and how they want to be and then backwards-mapping the steps that will get the student to their dream. Pathways, degree plans, and checklists can only go so far and they can’t factor in a student’s dreams. Ohio University advisors are a vital part of the success of Choose Ohio First Scholars achieving their dreams, and the appreciative advising model is especially important to first-generation students, and other students who may have a better understanding of their dreams than of their degree audits. The Career and Leadership Development Center will be also be supporting the COF Scholars actively in programming and
resources at an institutional level as well, including through Ohio University’s Handshake portal that connects students to thousands of jobs and internship opportunities.

This proposal brings together enrollment management (including recruitment, outreach, and marketing), student support (including career and internship services, and retention, persistence, and academic success support), and the academic programs and world-class faculty—to support the success of COF student scholars, the region, and Ohio’s communities. The resources and support needed to complete the work are backed by senior leadership who understand how well-aligned COF is to our needs and our mission.
Executive Summary - Ohio Wesleyan University

Rationale for the selected populations for recruitment
Ohio Wesleyan University is pleased to have the opportunity to inform prospective students, parents and high school counselors about the Choose Ohio First scholarship program in support of STEMM majors. If our proposal is approved, funding will help OWU to recruit and retain Ohio residents and lessen financial barriers to their obtainment of a degree in STEMM fields.

OWU’s Office of Admission is particularly attentive to the recruitment of students from diverse backgrounds and our Diversity Recruitment plan both outlines our efforts and provides guidance to staff to ensure that OWU is inclusive in its efforts to recruit, admit and enroll Ohio students interested in STEMM majors who are from marginalized and historically underrepresented backgrounds.

We derived the number of students per cohort by linking eligible CIP codes to PowerCAMPUS, our registration and academic management system, to determine the number of current students enrolled in eligible majors. The Oct. 2020 research pulled all current students who have declared an eligible major and a permanent resident address in Ohio. The initial research resulted in small numbers for freshmen and sophomores because OWU students do not declare a major until the end of their sophomore year but enrollment among juniors and seniors resulted in approximately 50 students per class.

Per the recommendation of the program, we are limiting our proposed cohort to 10 students, a reasonable number to help ensure the quality of additional support and mentorship OWU will provide these scholarship recipients. In addition, 10 students will align with OWU’s 1:1 matching fund requirement. OWU will use COF funds to enhance the aid packages of these students to help make a bachelor’s degree from OWU more affordable as the university is unable to meet 100 percent of demonstrated-financial need.

Overview and rationale of the selected academic programs
Ohio Wesleyan University extends the advantages of a liberal education to all students to prepare them for work, life, global citizenship and democracy. The core expertise of liberal arts graduates — critical analysis, deep and coherent reading, and communication across differences — are transferable skills that are not discipline- or major-specific, enabling employers to solve big or wicked problems in fast-growing STEMM occupations. A liberal arts education prepares STEMM students to be the next generation of the workforce in a manner that allows them to keep pace with a changing economy and drive economic development in their towns, regions and states. More specifically, the STEMM curriculum in 13 academic departments supports 29 specific majors.

Plan to address regional and statewide economic strengths and needs for these targeted academic programs
A bachelor’s degree is a credential that means so much to employees and employers in the 21st century. According to the Kresge Foundation, which works to expand opportunities in America’s cities through philanthropic investments in education, among other priorities, research has shown that someone who holds a bachelor degree earns, on average, $1 million more in lifetime earnings, votes more, lives longer and is more engaged in community. Ohio Wesleyan’s liberal arts curriculum and excellent STEMM programs attract and educate students who are qualified and well prepared to move directly into central Ohio’s diverse workforce to support core industries, technology hubs, advanced computing services, biomedical and health services, aerospace, logistics, manufacturing and agriculture, among other employment opportunities and needs. As much as skill requirements may differ across these fields, the core expertise that OWU graduates gain are transferable, and the demand for our STEMM graduates helps to strengthen Ohio’s economic competitiveness and fosters growth, innovation and talent. Ohio’s economic strength depends upon education systems that help everyone succeed and OWU educates and prepares graduates to succeed at in-demand careers that require a postsecondary education. Between 2016 and 2020, 27 percent of our graduates have pursued STEMM majors and we look forward to supporting Choose Ohio First scholars to obtain their degrees in STEMM majors.
Executive Summary - OTTERBEIN UNIVERSITY

Otterbein University—a nationally recognized, private, co-educational university in Westerville, Ohio—requests a Choose Ohio First (COF) grant to advance the Ohio Department of Education’s goal of increasing the number of Ohio residents completing postsecondary studies in the fields of science, technology, engineering, mathematics, and medicine (STEMM) and STEMM education.

Otterbein’s proposed “Cardinal STEMM Scholars: Building Ohio’s STEMM Pipeline” program will increase the enrollment, retention, and timely completion of students in Otterbein’s chemistry, environmental science, physics, and engineering programs through scholarships and a comprehensive, cohort-based support system. Specifically, selected programs of study include chemistry, environmental science, engineering (systems engineering), and physics (physics and engineering physics). Each of these programs prepares graduates for occupations in fields in demand in Ohio. These programs were selected because of their alignment with eligible Ohio Department of Education STEMM CIP codes. Among the 102 students currently enrolled in these majors (Fall 2020), 81% are Ohio residents, 39% are female, 20% are underrepresented minorities, 75% have unmet financial needs, and 27% are low-income.

“Cardinal STEMM Scholars” is modeled after Otterbein’s “Cardinal Science Scholars” (CSS2) program, a National Science Foundation-funded program for low-income, academically talented students in biochemistry/molecular biology, chemistry, physics, engineering, math, or computer science majors. The CSS2 program included scholarships and student support services. The graduation rate of CSS was double the university rate for STEMM majors; students participated in research or internships at twice the rate of students not involved in the program.

Based on the financial needs of Ohio-based students in these majors, Otterbein plans to provide scholarships on a sliding scale to 70 unduplicated STEMM undergraduate students, including students of diverse backgrounds, in five cohorts of 10–15 students over the five-year grant period. Aligned with Otterbein’s strategic plans, the University will guarantee that all selected students will receive at least $8,000 and up to $15,500 annually in scholarship support made possible by dedicated matching funds. COF scholarship amounts will be based on individual student needs and will supplement—not supplant—existing resources. Otterbein has a detailed recruitment plan to recruit, enroll, retain, and graduate students in these majors who are residents of Ohio and have unmet financial needs. Recruitment plans will leverage Otterbein’s longstanding partnership with Columbus State Community College.

These scholarships will ameliorate financial barriers for students with unmet financial needs while also fostering a supportive environment for STEMM majors in Ohio’s high-demand industries. COF scholars will form cohorts with annual orientations and monthly mentoring sessions. Students will receive individualized support from faculty and peer mentors in their majors. This support, in addition to the numerous clubs, organizations, academic services, and wellness support at Otterbein, will ensure that the University can attract, retain, and graduate the future STEMM leaders of Ohio.

Otterbein has exceptional capacity to strengthen the talent pipeline in STEMM fields by ensuring that graduates of these programs secure employment in Ohio in their fields of study upon graduation. At least 75% of the 70 COF scholars will be placed in internship positions or participate in research experiences, fostering their capacity to deepen Ohio’s economic strength as future STEMM professionals.
Executive Summary - Owens Community College

Owens Community College (OCC) supports the educational needs of Northwest Ohio students by offering associate's degrees, certificates, and non-credit courses in over 100 academic program areas such as arts and sciences, business, health, public service, skilled trades as well as the industrial and engineering technologies.

The Owens Community College mission is to foster student and community success by providing high quality and affordable education that leads to rewarding careers, personal growth and regional economic strength.

The OCC COF team was formed with the purpose of providing a holistic approach towards student success. Members include representatives from Financial Aid, School of STEM, Career and Transfer Services, Workforce and Community Services, Marketing, Admissions & Recruiting, Internship Management, Advising and the OCC Findlay-area campus. Team members will work collaboratively to ensure that OCC meets all COF initiatives while providing superior service to scholarship recipients. Services include, but are limited to:

- Recruitment and marketing for School of STEM selected programs
- Targeted recruitment and marketing to underserved and underrepresented populations
- Individual financial aid advising and scholarship management
- Individual program advising
- Placement in a work-based learning experience
- Outreach to current and new business partners in the Toledo and Findlay-areas that offer tuition assistance and work-based learning experiences
- Customized career development activities and transfer services

The OCC COF team, in partnership with the College’s Institutional Research Department, selected certificate and degree programs in STEM fields that exhibit high enrollment, retention, employment and transfer rates.

<table>
<thead>
<tr>
<th>Scholarship Eligibility Criteria</th>
<th>College Total</th>
<th>COF-Selected Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Degree/Certificate-Seeking Ohio Residents</td>
<td>4,692</td>
<td>687</td>
</tr>
<tr>
<td>Full-Time Degree/Certificate-Seeking Ohio Residents</td>
<td>1,744</td>
<td>233</td>
</tr>
<tr>
<td>Part-Time Degree/Certificate-Seeking Ohio Residents</td>
<td>2,948</td>
<td>454</td>
</tr>
<tr>
<td>First-Time Degree/Certificate-Seeking Ohio Residents</td>
<td>936</td>
<td>143</td>
</tr>
<tr>
<td>External Transfer-In Degree/Certificate-Seeking Ohio Residents</td>
<td>314</td>
<td>41</td>
</tr>
<tr>
<td>Internal Degree/Certificate-Seeking Ohio Residents who Transferred into STEMM program</td>
<td>NA</td>
<td>201</td>
</tr>
</tbody>
</table>
Executive Summary - Rhodes State College

While the COF grant opportunity will be widely marketed to all potential high-achieving students, COF seeks to especially support high-achieving students with specific racial, gender, and socioeconomic characteristics. High school enrollment data was used to identify area high schools for an additional recruitment focus. The selected schools have STEMM focused programs and demographic data that met the COF criteria. Marketing will also be focused on adult populations in our service area who meet the criteria. The COF grant will assist students in achieving a quality education to meet employment needs in high demand STEMM careers.

RSC is proposing to greatly expand the list of COF-eligible STEMM CIP codes from the last COF grant offering. Efforts for this round of funding are focused on providing a pathway to a high wage, high demand STEMM career in one of the three main businesses and industries in the service area: manufacturing, agriculture, and health care. The College leadership continues to work with service area business and industry partners to meet their regional workforce needs through offering current and new academic and certificate programs.

The College has selected the following STEMM programs and certificates to be COF-eligible: Advanced EMT Certificate; Advanced Manufacturing Technology; Agricultural Technology; Associate of Science Pre-Health Concentration; Concrete Technology; Dental Hygiene; Digital Media Technology; Electronic Engineering Technology; Emergency Medical Services; General Prep - Dental Hygiene; General Prep - LPN to ADN Transition Program; General Prep – Nursing; General Prep - Physical Therapist Assistant; General Prep - Practical Nursing Certificate; General Prep - Radiographic Imaging; General Prep -Occupational Therapy Assistant; General Prep -Respiratory Care; Health Care Technology; Manufacturing Engineering Technology; Mechanical Engineering Technology; Medical Assisting; Medical Billing & Coding Certificate; Network Security; Nurse Assistant Certificate; Nursing; Occupational Therapy Assistant; One-Year Maintenance Certificate; Paramedic Certificate; Phlebotomy Certificate; Physical Therapist Assistant; Practical Nursing Certificate; Radiographic Imaging; Respiratory Care; Surgical Technology; and Web Programming / Computer Programming.

To ensure that these chosen COF-targeted academic and certificate programs support regional and statewide economic strengths and needs, the College examined two different sets of data provided by the Ohio Department of Job and Family Services and the Ohio Development Services Agency. For each program, the College identified the closest corresponding occupation in the State of Ohio’s Occupational Projection report and chose only those with a positive growth projection. In addition to occupational growth, the labor market statistics provided information regarding the situation surrounding current workers in every chosen occupation. The College is committed to work closely with area businesses and industries to match students with high quality work-based learning job opportunities as well as job openings upon graduation. In addition, career advancement information related to STEMM areas of study as well as assistance in honing job search skills will be offered to the Scholars by the College.
Executive Summary - Shawnee State University

Shawnee State University is committed to meeting the workforce needs of Ohio, offering a growing number of regionally and nationally recognized programs that lead to in-demand careers in health care and specialized technology fields that support the medical community. In rural southern Ohio, Shawnee State University’s primary service region, health care is the largest employment sector.

The medical community relies on Shawnee State University for graduates in the fields of nursing, respiratory therapy, medical laboratory, and other healthcare professions. The demand for these professionals, particularly nurses, was tremendous before the pandemic, and has become even more desperate as our community struggles to meet the needs of an at-risk population. A recent report from the Robert Wood Johnson Foundation ranked Scioto County, where Shawnee State is located, 88th out of 88 counties for health outcomes in the state of Ohio. The health care needs of this region will continue beyond the pandemic, with growing mental health, addiction, eldercare, and wellness concerns.

The medical community also relies on graduates from specialized applied technology fields that contribute to innovation and growing areas of health care, including advanced manufacturing, computer science, cybersecurity, health informatics, and even game design. This intersection of health care and technology became evident during the pandemic as students in Shawnee State’s plastics engineering technology labs designed and manufactured thousands of personal protective equipment (PPE) used by health care workers on the frontlines.

Applications for 3-D animation and game programming are being used in medical education. A state-of-the-art nursing simulation lab is used and supported by both Shawnee State and Southern Ohio Medical Center to develop and maintain clinical skills of nursing students and nurses in the field.

Growing trends in telehealth, management of electronic health information, and security of protected medical records has created increased opportunities for students in the region and increased need for graduates with these specialized skills. Shawnee State recently received approval for a Bachelor of Science degree in information security (cyber security) with applications for health care.

Graduates from Shawnee State’s health sciences and technology programs are in demand locally and statewide. An estimated 86% of graduates from these programs stay in Ohio after graduation, with many remaining in the southern Ohio region. In recent years, 100% of SSU health profession graduates had job offers before they graduated.

Our partner hospitals, long-term care facilities, rehabilitation clinics, and home health care providers have all communicated significant demand for nurses and allied health professionals at all levels of care. If granted, Shawnee State University will create an SSU Choose Ohio First Scholarship Committee with its clinical and medical workforce partners to ensure that we (1) recruit students into the highest need applied health care programs and health-related technology fields in our region, (2) select outstanding award recipients from underrepresented Ohio populations who have significant financial need; and (3) open pipelines for job placement to keep our state’s best and brightest in Ohio building rural health care careers.
Executive Summary - Sinclair College

Three strategic priorities – alignment, growth and equity – guide all policies and practices at Sinclair Community College. As a political subdivision of the state of Ohio, responsible to local, regional and statewide stakeholders, Sinclair serves citizens, communities and businesses with educational programs and services aligned to the economy and social needs of the region. Alignment means focusing on increasing both student enrollment and student success and connecting with more businesses and community organizations. Intrinsic to that alignment and growth is the commitment that Sinclair’s student body, faculty, and staff reflect the holistic diversity of the region and that every effort is made to eliminate achievement gaps between groups.

1. Rationale for Selected Populations for Recruitment

To strengthen the regional and statewide economy, Sinclair will seek to recruit talented first-time degree-seeking or certificate-seeking students from high schools around the Dayton region to the Choose Ohio First scholarship program, with an emphasis on reaching students disadvantaged due to race or socioeconomic status. In addition, Sinclair will promote the selected Choose Ohio First certificates and degrees to existing students as well as incumbent workers to encourage them to pursue careers in the selected in-demand jobs.

2. Overview and Rationale for the Selected Academic Programs

There is a high demand by employers for graduates with certificates and degrees in Engineering Technology, Industrial and Manufacturing Technology, Mechanic and Repair Technology, Aviation, Dentistry, Nursing and Allied Health occupations. To meet this demand and assist Ohio employers in finding the STEMM talent they need to stay competitive and grow, Sinclair Community College will promote a Choose Ohio First (COF) scholarship program for talented students pursuing credentials in these areas.

3. Synopsis of the Plan to Address Regional and Statewide Economic Strengths and Need

All COF programs to be offered were chosen because their graduates are in high demand by employers in the Dayton region. When COF scholars complete their programs, both the graduates and the employers benefit due to the close alignment between student and company needs. The highly-skilled graduates will be the solution to employers’ workforce skill gaps. Graduates will benefit from entering middle skill jobs with a career pathway leading to increasing salaries and wages that support their families and allow them to support the communities where they reside.
Executive Summary - Stark State College

Stark State College (SSC) proposes the following program in response to the Ohio Department of Higher Education’s 2020 Choose Ohio First (COF) STEMM initiative. Through this program, SSC will make strategic investments to support expanded opportunities for students in Science, Technology, Engineering, Mathematics, and Medical (STEMM) fields; connect students to work-based learning experiences and careers in STEMM fields; and deepen Ohio’s economic strength by increasing the available talent pipeline for STEMM-related industries.

SSC’s proposal aligns directly with the COF initiative in its selected populations for recruitment, selected academic programs, and in its plan to address regional and statewide economic strengths and needs for these targeted academic programs:

Selected populations for recruitment
Stark State intends to use this COF scholarship opportunity to recruit a large and diverse cohort of STEMM scholars. Recruitment efforts will focus on engaging academically talented students who completed rigorous programs while in high school. This would include students who have completed College Credit Plus coursework, as well as those whose studies included STEMM-specific curriculum. Women and socially disadvantaged populations will be encouraged to apply for COF STEMM programs, as these populations are typically underrepresented in STEMM fields.

Overview and rationale of selected academic programs
For this proposal, Stark State has identified 27 total programs corresponding to 21 different CIP codes. One CIP corresponds to a program within the College’s Business and Information Technology Division; Two CIPs correspond to two programs within the Engineering Technologies Division; Three CIPs correspond to three programs within the Arts and Sciences Division; and 15 CIPs correspond to 21 programs within the Health and Public Services Division.

The programs/CIPs included in this proposal reflect a combination of both high- and lower-enrolled programs that lead to in-demand STEMM jobs and also meet all other Ohio Department of Higher Education (ODHE) COF program guidelines. This two-fold approach will allow the College to attract students into majors that will lead to meaningful employment, but that currently lack enrollment for various reasons, and to maintain strong enrollment in other programs that also lead to in-demand STEMM careers or transfer, upon completion.

Summary of plan to address statewide economic strengths and educational needs
This proposal is data-informed and strongly integrated with the strengths of Ohio’s economy. Healthcare, advanced manufacturing, and information technology (IT) are recognized as the top industries in the state, and they are also the industries with some of the greatest current workforce needs. Stark State stands ready to train students in the skills employers are seeking in qualified STEMM job candidates. The College will use COF scholarships to increase the number of talented individuals completing in-demand certificates and degrees that lead to stable STEMM careers. Increasing retention and completion of STEMM scholars will create a pipeline of trained workers able to help bridge the existing workforce skills gap.

Stark State designed this proposal to allow populations that are traditionally underserved in STEMM fields to receive the support needed to cost-effectively develop the skills required to fill critical STEMM-industry workforce needs across Northeast Ohio.
Executive Summary

Terra State’s Choose Ohio First grant is dedicated to the goal of filling current workforce demand in the healthcare field. Target populations to be recruited are those living in rural neighborhoods, those classified as low-income, those living in opportunity zones, and women. Three different rationales support the recruitment of these populations. Perspective students who live in opportunity zones and/or are classified as low income have proven financial barriers which may prevent them from pursuing their educational goals. Rural students often lack reasonable access to a college, particularly if housing is an issue. Finally, women are under-represented in STEMM fields and are often an under-served population in itself. All of these populations encompass those who have the largest barriers to higher education and it is with this in mind that we target those who need these scholarships most.

Recently, the onset of Covid-19 has brought to light increased demand of the healthcare fields. There are simply not enough medical professionals to meet the need. The following programs have been chosen for this proposal: registered nurse, LPN to RN, medical scribe, medical assistant, phlebotomy, physical therapy assistant, medical billing and coding, medical coding, HIT, health care administration, phlebotomy technician and health information management.

The above programs were chosen based on the in-demand occupations report from Ohio Means Jobs. Because demand for these occupations is so high, this proposal will serve two purposes. It will fill needs within the community which, in turn, will further promote college and business collaboration. It will also allow students to enter into in-demand work experiences which not only will meet area needs but likely allow students to obtain immediate employment upon graduation.
Executive Summary - Tiffin University

**Executive Summary: Rationale for Selected Populations for Recruitment.** Tiffin University (the "University" or "TU"), proposes a Choose Ohio First (COF) scholarship program which seeks to develop a pipeline of talented students in Science, Technology, Engineering, Mathematics, and Medical (STEMM) fields to strengthen Ohio's competitiveness in the STEMM disciplines and STEMM education, and ensure a well-qualified workforce for STEMM-related industries. The proposed scholarship program will recruit and enroll five cohorts of 36 diverse undergraduate students majoring in computer science, science and math education, chemistry, health care administration/management, athletic training, substance abuse/addiction counseling, registered nursing, and logistics/supply-chain management. As of fall 2020, Tiffin University has 281 students enrolled in the proposed subject fields.

Choose Ohio First scholars will be selected based on their degree, major, and other qualifying factors. Students will not need to use an application to apply for the COF grant but rather they will be automatically awarded should they meet COF scholarship criteria. Through this approach, high-achieving and high-need students will receive a higher amount of scholarship, thereby ensuring academically talented, socially disadvantaged students, such as those from lower-income households, will receive an amount that meets their need and encourages them to pursue careers in STEMM. In fall 2020, forty-six percent of TU students are considered low income as defined by Pell eligibility. 27% are first-generation college students, and 97% receive some kind of aid. By providing COF scholarships to undergraduate STEMM majors, TU will be able to remove financial barriers, reduce student debt, and increase student success.

Prospective COF scholars will be recruited from the state of Ohio with additional consideration for students who are socially disadvantaged. Despite current recruitment and enrollment efforts, there is an institutional need to strengthen the recruitment of underrepresented and socially disadvantaged students. The University has made the recruitment of underrepresented individuals a priority as demonstrated by TU's Strategic Plan (Priority 4). As a result of the proposed COF scholarship program, TU anticipates increasing recruitment and graduating five diverse cohorts of 36 talented STEMM scholars who are prepared to work in Ohio's 21st-century workforce.

**Overview and Rationale of Selected Academic Programs.** Recruiting students into the selected academic programs not only addresses TU's strategic priorities, but also addresses the University's mission by preparing students for the 21st-century workforce. Further, the selected programs address a demonstrated demand for jobs in Ohio for computer science, science and math education, chemistry, health care administration/management, athletic training, substance abuse/addiction counseling, registered nursing, and logistics/supply-chain management. By 2026, the in-demand STEMM fields targeted by this project are expected to see the following growth in Ohio: computer science 37%; chemistry 5%; science and math education 6%; health administration and management 16%; exercise science 17%; substance abuse and addiction counseling 16%; applied health science nursing 14%; and supply-chain management 6%. Most of these occupations do not require master's degrees, therefore students will be prepared to enter the workforce soon after degree completion.

**Plan to Address Regional and Statewide Economic Strengths and Needs for Targeted Academic Programs.** Today, 330,000 more jobs exist in Ohio than in 2008, but there are 190,000 fewer Ohioans in the workforce (Source: OhioMeansJob). To support Ohio's economy in continuing to grow, this project will cultivate a workforce that aligns workers' skills with the jobs of the future, particularly in Tiffin and Seneca County (where Tiffin is located). An issue for Seneca County's economy is workforce development; employers cannot find the workers they need to fill current and future job openings. This project will significantly benefit small and emerging businesses in Tiffin, Seneca County (where Tiffin is located), and the surrounding counties of Erie, Hancock, Huron, Ottawa, Sandusky, and Wyandot through the training and graduating of a talented, STEMM-based, job-ready pool of workers.
Executive Summary - University of Akron

I. Overview and Rationale

The University of Akron (UA) is a comprehensive metropolitan institution of higher learning dedicated to student success through support and engagement. Training undergraduate students in STEMM areas that directly affect the economic competitiveness of Ohio is one of our strengths.

a. Population

The students that we will target in our recruitment efforts for this program are:
- Students who would normally go out of state for a STEMM degree
- Students interested in STEMM but who choose a different major
- Non-traditional students seeking to enhance or change their career
- Former military personnel
- Students underrepresented in STEMM fields
- Other populations underserved by limited access to higher education
- Student who would not normally undertake STEMM degrees

b. Academic Programs

The past decade has brought about an increase of technological uses in the education, business, and social sectors. Advancements within the medical and science fields, as well as the use of social media have created opportunity for science and technology to become more compatible with business and consumers, especially since the onset of the COVID-19 pandemic. The following areas of study will be the focus for this program. The selected majors will increase the number of skilled employees for Ohio’s workforce.

II. Regional and Statewide Economics

a. Strengths

STEMM occupations are a national priority in the United States and policymakers believe retaining more students in STEMM fields is an efficient way to quickly produce STEMM professionals.

b. Needs (academic programs)

According to Ohio Means Jobs (OMJ), there are over 15 STEMM fields of study for which the total annual job openings exceed 22,000. These occupations requiring baccalaureate degrees need qualified employees. With the overwhelming predicted demand, The University of Akron will support the region by providing additional graduates through Choose Ohio First. These numbers will be negatively impacted over the next 3 years by COVID-19 but are expected to rebound for Northeast Ohio by 2025.
The goal of this project is to increase, retain, and graduate underrepresented, ethnic economically disadvantaged, and first-generation STEMM students at the University of Cincinnati (UC) through a designated Choose Ohio First (COF) Scholars Program. This will be accomplished by creating an optimal learning environment for our COF Scholars, so that they are well-prepared for the rigors of employment in an ever-changing, technical, global market. To achieve this goal, the objectives of this project are to: 1. Increase the number of underrepresented students in STEMM majors. 2. Increase the retention of those students through graduation. 3. Work aggressively toward parity with these groups’ representation in the state of Ohio. 4. Place graduates into employment in STEMM fields or in graduate or professional school. To achieve these objectives, we will provide a supportive STEMM experience in a multi-year COF Scholars Program (CSP) with scholarships to 41 new COF Awardees per annual cohort (18 from College of Engineering and Applied Science (CEAS), 11 from College of Arts & Sciences (A&S), 7 from College of Allied Health Sciences (CAHS), 3 from College of Nursing (CoN) and 2 from UC-Blue Ash). Students from CEAS, A&S and CAHS from each of the 2021 and 2022 entering classes will receive average COF Scholarship awards of $2,500/semester for 8 semesters for a total of $20,000 per student. Students from Nursing from each of the 2021 and 2022 entering classes will receive average COF Scholarship awards of $1,250/semester for 8 semesters for a total of 10,000 per student. The students will complete their degree in 4 years. Students from Blue Ash from each of the 2021 and 2022 entering classes will receive average COF Scholarship awards of $2,500/semester for 4 semesters for a total of $10,000 per student. UC’s COF Scholars will participate in a summer bridge program (in its 34th year), along with selective first year learning communities emphasizing a community of peer support and one-on-one faculty and staff mentors; these programs will provide an exceptionally supportive, yet rigorous, academic experience for our scholars. Undergraduate (UG) engineering programs in the College of Engineering and Applied Science (CEAS) span five academic years (AYs) to allow for five semesters (including a summer) of required co-op, whereas UG programs in College of Arts & Sciences (A&S), College of Allied Health Sciences (CAHS) and College of Nursing span four AYs with summer internships opportunities. Programs at the Blue-Ash campus span two AYs. Students are then supported as they transition to the main campus. Our goal is to have 100% of our Blue Ash students complete their 2-year program and transition into a program on Clifton campus. In view of this, the quantifiable outcomes against which we will measure our success are: 1. We will graduate 80% of the students from the targeted programs and populations. 2. The targeted incremental retention rates in CEAS for the COF Scholars’ are: (i) 76% from first year to sophomore; (ii) 86% from sophomore to pre-junior; (iii) 93% from pre-junior to junior and (iv) 100% from junior to senior. For A&S and CAHS the incremental retention rates are: (i) 72% from first-year to sophomore; (ii) 85% from sophomore to junior; and (iii) 100% from junior to senior. In Nursing the incremental retention rates are (i) 93% from first-year to sophomore; (ii) 85% from sophomore to junior; and (iii) 89% from junior to senior. 100% of students who graduate will be in STEMM jobs and/or graduate school.
Executive Summary - University of Dayton

The University of Dayton (UD) is a top-tier Catholic research university committed to building a diverse, inclusive learning environment. We recruit, educate and graduate students with practical, hands-on learning experiences and prepare our students for lives of learning, leadership, and service that will benefit the Ohio economy and its communities. Our recruitment and admission strategy will help students interested in pursuing a STEMM major understand the value of a UD education and describe the benefits of the Choose Ohio First (COF) Scholarship program. Our recruitment strategy aims to expand opportunities for historically underrepresented students to have access to a UD degree with support from the COF Scholarship.

To select our 22 eligible programs of study, we identified initiatives that expand access to a University of Dayton degree. Three key institutional initiatives expand access to UD and include the UD Sinclair Academy, Women in Science and Engineering Integrated Learning-Living Community (WISE ILLC) and the STEM Summer Bridge Program. Each of these selected institutional initiatives directly impacts women and/or historically under-represented individuals. The UD Sinclair Academy is a partnership between the University of Dayton and Sinclair Community College designed to ease the pathway to a four-year degree. Students are members of both campus communities from day one, and they have access to UD advising, research opportunities, facilities and amenities while taking classes at Sinclair. The Women in Science and Engineering Integrated Learning-Living Community (WISE ILLC) is a community of learners that creates a strong support system to foster success and academic curiosity. The Minority STEM Summer Bridge Program allows entering STEMM majors the opportunity to acclimate to campus and preview specific coursework prior to their first semester at the University of Dayton.

Students participating in these initiatives will be given preference when awarding the COF Scholarship. Further, we intend to select students who have significant financial need as determined by the FAFSA. The additional source of funding for students strengthens our efforts to expand access to UD. The University of Dayton provides over $200 million per year in scholarship and grant assistance to our students and we are committed to match the COF funding dollar for dollar; in most cases UD will exceed a dollar for dollar match.

Implementation will be accomplished collaboratively with faculty and staff leadership from the College of Arts and Sciences and the School of Engineering, as well as leadership from the Office of Recruitment and Admission, Financial Aid, Career Services, the Cooperative Education Office and the Integrative Science and Engineering Center. The University of Dayton creates intentional connections with employers and students to expand opportunities for internships, undergraduate research and employment in these in-demand occupations. STEMM industrial and organizational partners frequently visit campus to engage with students regarding employment opportunities. Further, UD frequently consults with Ohio partner organizations regarding curriculum development and talent and recruiting needs. Many of these organizational partners serve on advisory councils supporting the College of Arts and Sciences, the School of Engineering, and the Office of Career Services.

Exclusive programming for COF Scholars will be developed with two purposes: 1) to assist students in finding internship, coop or full time work, and 2) to assist students in succeeding in professional positions. Student learning is integrated, occurring inside and outside of the classroom to fulfill our mission to educate the whole person. Our strong completion rates and employment outcomes in the identified programs of study reflect the success of our approach and our ability to meet the workforce needs in identified STEMM fields in Ohio.

In determining our eligible programs of study, we identified those that had at least one in-demand occupation based on data from Ohio Means Jobs. Graduates of the identified programs go on to make contributions to our regional and statewide STEMM affiliated industries such as advanced manufacturing, aerospace, automotive, bioscience and medical, construction, energy, healthcare as well as new and innovative technology development. With this proposed funding, we will integrate the strengths of our strategic institutional initiatives that expand access to a UD degree and provide opportunities for students to explore career opportunities in Ohio. The University actively supports these initiatives to ensure students succeed and graduate ready to contribute effectively to their employers and their communities.
Executive Summary - University of Findlay

As Site Selection magazine’s #1 micropolitan community in the nation, a title held for six consecutive years, Findlay-Hancock County is booming due to its foreign trade zone, 500-acre CSX intermodal terminal located 10 miles north of Findlay, nine distribution centers, 100 manufacturing facilities, and 35 public schools. Local workforce needs reflect Ohio Means Jobs (OMJ) data for licensure-, bachelor’s, and graduate-level positions in these industries. OMJ cites a need for 331 environmental scientists and 241 computer programmers. The healthcare industry is similarly projected to have a high growth rate: currently, there are 158 openings for dentists, 294 unfilled physician assistant jobs, and over 8,000 unfilled nursing positions. Pharmacists, because they are and will be on the front-lines of delivering vaccines, will continue to be in demand (56 openings in the Northwest and 628 statewide).

The state is also experiencing shortages with science and math education. Both science and math are designated teacher shortage disciplines in Ohio based on the U.S. Department of Education Office of Postsecondary Education’s annual report. In fact, the report shows that shortages of science and math teachers have persisted each year since 1997, a gap that is likely to have far-reaching downstream impacts on the ability for the area’s workforce to meet industry needs.

The University of Findlay (UF) is poised to meet these needs because it stands as the largest private four-year institution in Northwest Ohio purposely partnering with government, economic development, non-profit, and regional industry sectors to implement a workforce development initiative that will reduce the region’s workforce gap via a relevant talent pipeline. UF wants its students to both graduate with a degree and readily attain employment in their desired career and for regional employers to gain access to top talent.

Through its COF initiative, UF aims to recruit, train, and graduate students in programs that significantly align with the workforce needs in Northwest Ohio. The targeted programmatic areas are (1) health professions, a term that refers to eight specialties; 2) pharmacy; 3) STEM education; 4) computer science; 5) biology; and 6) environment, health, safety, and sustainability. UF’s COF program will strategically recruit high school students, transfer students, and graduate students from the region. Recruitment strategies will include in-person and virtual campus visits, various web-based materials, and community interactions that strengthen a cradle-to-career growth strategy.

Selected scholars will receive a maximum of $8,000 per academic year in Choose Ohio First (COF) scholarship aid until graduation, provided that they meet certain expectations related to continued academic and co-curricular success. UF’s COF scholars will also be awarded institutional merit aid packaging (approximately $15,000 for undergraduate students, $16,000-19,000 for transfer students, and $1,500-8,000 for graduate students). Awarded COF scholars will receive unique institutional support and resources to foster their academic and professional development as well as encourage degree completion. Scholars will have access to industry and faculty mentors, regular contact with academic advisors, and retention tracking and support. Scholars will also receive numerous opportunities to develop strong soft skills via networking with regional industry and business representatives, off-campus service learning experiences, and research and scholarship presentations.

During this five-year COF grant period, UF’s program will:

1. Recruit and select 60 qualified scholars to enroll in one of the designated COF programs so a greater number of trained professionals are available to fill workforce gaps in Ohio.
2. Provide scholars with financial, academic, and co-curricular support that will enable 100% to persist to degree completion with minimal financial burden.
3. Provide networking and experiential learning opportunities to prepare them with the academic and soft skills required to become productive professionals who excel in their chosen career, further enriching the region and state.
Executive Summary - University of Mount Union

The University of Mount Union (UMU) is excited by the opportunity to submit its first Choose Ohio First proposal to increase access for underrepresented students from the State to pursue STEMM majors and careers. Specifically, we seek $350,000 in scholarship support for students from two regional pools that do not typically believe they can access a small, teaching centered private university, or any university at all. Our primary focus will be to recruit students from Akron Public Schools’ North High School. As of March 2020, UMU is the Sister University to North, which is distinguished as the most diverse high school in the State of Ohio. We are already committed to provide North faculty with curricular liaisons to develop course content aligned to their career academies in health, computer science and business, as well as preparation of students for the ACT, student success programs such as camps, and financial aid workshops for students and families. Our prioritization of North High School stems from a mutual desire to increase college attainment in this population; roughly 34% of North graduates in the classes 2017-2019 matriculated to either a 2yr (20%) or 4yr (14%) institution of higher ed. For the class of 2020, those numbers plummeted to 15% overall, with only 2% matriculating to a 4-year college or university. Any scholarship funds not awarded to Akron North graduates will be utilized for Alliance area students with demonstrated sociodemographic disadvantage, as these students are not typically represented in UMU’s long standing Investment Alliance scholarship program.

We propose to allow our UMU COF Scholars to choose from any of our undergraduate majors that align with approved STEMM CIP codes. We do not want to limit Scholar choice, and we believe that the small size of our annual cohorts and the program design can adequately support this strategy. Scholars thus have access to our natural sciences, math, engineering, computer science and nursing programs, and will be afforded multiple opportunities to gain work-like experiences through internships, undergraduate research, and discipline specific student organizations.

Additionally, all Mount Union STEMM undergraduate programs included in this COF proposal address both regional and statewide economic needs. Our examination of Ohio’s 2026 Job Outlook indicates substantive employment growth in the NE Ohio labor markets in Engineering and related fields (8%), Health services (23%), and Computer Systems and Design services (17%). According to TeamNEO, roughly 40% of the State’s economy stems from NE Ohio. Key NE Ohio industries specifically supported by Mount Union STEMM graduates include clusters in smart and additive manufacturing, aerospace and automotive, bio-health (delivery and tech transfer), advanced materials (polymers, steel), and information technology. This proposal, with its focus on increasing access to STEMM baccalaureate education for highly diverse, underrepresented students from the region, will advance NE Ohio’s ambition to capitalize on its “strong history of innovation.” Finally, for Ohio to strengthen its economy, it must increase degree attainment, and specifically expand its tech workforce; achieving this aim requires us to increase recruitment and retention of our underrepresented populations such as those targeted in this COF proposal.
Executive Summary - University of Rio Grande

The University of Rio Grande (URG) and Rio Grande Community College (RGCC) exists as a unique private/public institution of higher education, dedicated to providing high-quality educational opportunities both on URG’s main campus, and through its off-site locations (Jackson Center, Meigs Center, and McArthur Center). As part of URG/RGCC’s vision, the institution also seeks to educate and train students for employment in growing job fields, and has established numerous affiliations and partnerships with businesses, industries, agencies and non-governmental organizations in the region and across the state. To this end, the URG COF STEMM Scholarship program aligns with the goals of the institution, enabling URG/RGCC to recruit and retain student in the STEMM fields, and create start-to-finish career arcs that keep trained talent in Ohio (and the region).

URG/RGCC services the Appalachian counties of Ohio, including RGCC’s service district (Gallia, Jackson, Vinton, and Meigs, as well as Lawrence, Scioto, Pike, Ross, Hocking and Athens counties. Roughly 90% of URG/RGCC’s students are from Ohio, and over 60% are from within RGCC’s service district. Classified within Appalachia, this region has historically lagged behind state and national averages across many important social and economic measures. Moreover, the region has also experienced a net loss in population, including working-age citizens. The URG COF STEMM Scholarship program leverages against these patterns, by helping to attract local and regional students to STEMM-based academic programs, and increasing their chances of completing a degree or certificate, and finding employment in STEMM fields. Over the past three academic years, females have made up 73% of the students receiving scholarships through the URG COF STEMM Scholarship program, and 93% of recipients are either 1st generation students and/or are considered low-income.

As URG’s previous COF STEMM grant (16.51) sunsets, the current proposal extends the scholarship program to an additional sixteen STEMM-based degrees or certificates across URG’s Biology, Environmental Science, Mathematics, Industrial Technology and Computer Science programs, while retaining programs originally participating (Wildlife Conservation, Chemistry & Biochemistry, Diagnostic Medical Sonography, and Nursing). These programs were selected because they closely match areas of economic expansion in the region. Industries related to Nursing, Allied Health, Scientific Research, Technical Consulting, and Automated Manufacturing are all expecting double-digit growth in the region over the next decade. The selected academic programs also offer extensive hand-on training and research opportunities, and maintain robust internship, work- and clinical-training affiliations. Finally, nearly all of these programs offer “stackable” 2 + 2 Associate’s and Bachelor’s degrees (as well as certificates), which allows students to pursue certificate and AS degrees at community college rates, while completing the first two years of a BS degree, substantially reducing the cost-to-completion for students.

Thus, the Choose Ohio First STEMM program is an integral part of URG/RGCC’s strategy for advancing the institution and effectively serving regional industry and workforce needs by producing well-prepared STEMM graduates.
Executive Summary - University of Toledo

The goal of the Choose Ohio for Data, Environment, Energy, Entrepreneurialism and Sustainability (COD3ES) scholarship program is to increase the number of graduates equipped with the entrepreneurial training needed to translate innovative ideas in the solar, water quality, and sustainable technology sectors into economic growth for the State of Ohio. We have selected the overarching theme of this year's proposal submission to be "Solar Energy, Water Quality, and Sustainable Technologies," which is also one of our institutional Areas of Research Excellence. Choose Ohio First Scholarships will be used to recruit and support students who will receive a rigorous technical education, supplemented by a cogent program in entrepreneurship, and apply their new knowledge immediately through co-op experiences or internships at companies in high-tech industries that are important to protecting the environment and the State's future. The academic programs at UToldeo selected for this scholarship program are in the College of Engineering, the College of Natural Sciences and Mathematics, and the College of Arts and Letters. UToldeo selected these colleges and programs for their relevant curriculum and work experience opportunities in the solar energy, water quality, and sustainable technologies fields. We will recruit directly from high school and transfer students who have an interest in these programs and fields, and work closely with the UToldeo Admissions Team using proven recruitment strategies from previously successful COF scholarship programs.

The COD3ES team is led by the UToldeo College of Engineering, The College of Natural Sciences and Mathematics, and the College of Arts and Letters. Internal partners include the College of Business and Innovation, the Office of Military and Veterans Affairs, and the LaunchPad Incubation Center. External partners include Toledo Public Schools and several key corporate partners that provide co-op and full-time employment to our students and graduates.

The COD3ES scholarship program will encompass diverse fields across the breadth of professions that are important to Ohio’s economy. Scholarship recipients will receive both educational and experiential elements throughout their degree programs, including participation in first-year design and commercialization experiences along with mentoring and encouragement to develop, to pitch, and to commercialize their innovations related to sustainable technologies. Scholarship recipients will develop a plan of study that includes a rigorous curriculum combined with training in entrepreneurship. Scholarship recipients will also participate in an integrated mandatory co-op program, an internship, or a research lab experience. The College of Engineering has a growing network of over 1,500 employers in the State of Ohio, and the UToldeo Career Services actively finds and posts new internship positions for all UToldeo students regularly. Scholarship recipients will culminate their studies with a capstone design project for a novel idea with potential for commercialization in the sustainable technology field.

If funded, we will be able to expand on previous COF funding and continue making positive contributions to the economic growth of Ohio by providing Ohio employers with professionals prepared to drive innovation and commercialization during coming decades in addition to protecting the environment.
Executive Summary - Ursuline College

STUDENT SUPPORT: Ursuline College requests a Choose Ohio First grant of $1,600,000 over five years to increase enrollment and retention of women and students of color in STEMM degree programs, supporting a diverse pipeline of students entering these in-demand careers. Focus will be on first-time full-time undergraduate students in Nursing, Art Therapy, Biology, Biochemistry and Chemistry recruited from the Northeast Ohio community.

Founded in 1871, Ursuline College is the only women’s focused college in Ohio and provides holistic education that transforms students for service, leadership and professional excellence. The college enrolls 1,075 students annually, of whom 677 are degree seeking undergraduates. The undergraduate student body is 90% female and Ursuline has expanded our focus on women’s leadership through a new Women’s Center and Institute for Women, Wellness & Work. The college is also committed to attracting and supporting a diverse student body with 33% of undergraduates who are students of color. Approximately 75% of undergraduates receive Federal Financial Aid and 35% are eligible for Federal Pell Grants.

In July 2020, Forbes magazine published, “Which Colleges Are Fulfilling the Promise Of Intergenerational Mobility?” ranking Ursuline College #1 in the nation for moving low-income students into higher income groups. The article was based on an independent research paper funded by American Enterprise Institute and is a strong endorsement of Ursuline College’s historical commitment of making a private education affordable and providing students the one-on-one support to succeed.

The Choose Ohio First program at Ursuline College will provide academic and wrap-around support to selected students enrolled in Nursing, Art Therapy, Biology, Biochemistry and Chemistry. Ursuline’s undergraduate nursing program accounts for approximately 50% of enrollment and is the #2 ranked program in Ohio, with 100% employment post-licensure. The Art Therapy program is helping meet a growing demand for mental health providers and is the only program in Ohio that offers a bridge to a Master’s in Counseling and Art Therapy, which is required to practice as an Art Therapist. Ursuline’s Biology, Biochemistry and Chemistry programs have 100% enrollment of female students and offer one-on-one mentorship and research opportunities with female faculty.

Enrollment of COF scholars will build on Ursuline College’s current outreach efforts and streamlined application process. The Choose Ohio First program will be incorporated into print and digital marketing materials and will help increase enrollment through additional scholarship funding and work-based learning opportunities to prepare students for the workforce and/or graduate school. In addition, Ursuline College will develop targeted community partnerships to encourage high school students to explore STEMM careers.

The Choose Ohio First program will build on the best practices that Ursuline College has learned over the last few years in recruiting students who may need extra support and providing them a private college experience that helps them succeed. COF scholars will be supported through a cohort-model and receive advising and wrap-around resources that will ensure their success. Scholarships will range from $1,500 to $8,200 per student, per academic year, and will be awarded based on financial need. All students will have completed at least one internship and/or research opportunity by the end of their fourth year.

Choose Ohio First @ Ursuline College
Year 1 – Strategies for Academic Success & Resilience
Year 2 – Socialization to Profession
Year 3 – Research & Work-Based Experience
Year 4 – Leadership Development & Transition to Practice
Executive Summary - Wright State University

Wright State Choose Ohio First Scholars Program

Wright State University supports the Ohio Department of Higher Education’s (ODHE) goal of expanding opportunities for students in Science, Technology, Engineering, Mathematics, and Medical (STEMM) fields and recognizes the importance of higher education revitalizing the regional and state economies.

The largest single-site employer in the state is Wright Patterson Air Force Base, situated adjacent to Wright State, which is home to the Air Force Research Laboratory (AFRL). Accompanying this economic engine are the offices of a variety of private engineering and science firms that support the research and development sponsored by AFRL. The second largest employer in the Dayton region is the health industry.

Wright State’s proposed Choose Ohio First Scholars program will support the economic growth of Dayton, the Miami Valley, and Southwest Ohio regions by enhancing the production of graduates in the critical Science, Technology, Engineering, Mathematics, and Medicine (STEMM) areas needed by these industries.

Wright State has participated in the Choose Ohio First Scholarship program since its inception through scholarship programs and has developed a number of support services for Choose Ohio First Scholars including academic support and career-related services. Wright State was the lead on the Growing the STEMM Pipeline in the Dayton Region and STEM Degrees for Careers for Ohioans with Disabilities, including Veterans. In the current academic year, the Choose Ohio First program is supporting over 450 students majoring in STEMM programs.

The proposed Wright State Choose Ohio First (COF) Scholars program will support students in the engineering, science, information science, and health disciplines that have been identified by Ohio Means Jobs as in-demand occupations or by JobsOhio as key industries for the State of Ohio. These occupations include engineering disciplines, biology, chemistry, mathematics & statistics, neuroscience, physics, information systems, medical lab science, public health, supply chain management, and nursing.

The proposed program consists of three complementary components that combine to attract and enroll students, provide work-based experience that facilitates career selection, and support students’ academic progress. The COF Scholars program will be comprised of students recruited from direct-from-highschool, as well as transfer populations. Financial support will be provided to attract a variety of students and also to help ensure a focus on academic progress and degree attainment once they are enrolled. Additionally, the COF Scholars Program will introduce students to career opportunities across a spectrum of STEMM areas. Finally, COF Scholars will have a dedicated advisor to facilitate career development and academic support in the Student Success Center.

PROJECT RATIONALE
Executive Summary - Xavier University

Xavier University would like to offer a yearly cohort of 20 talented students a $5,500 per year Choose Ohio First scholarship, matched by Xavier, to attend Xavier in one of our high quality STEMM programs that provide our regional and state employers the strong talent they need to succeed.

Selected Populations for Recruitment
We seek to make a Xavier education available for Ohio students who apply, are highly qualified, are admitted, but cannot enroll due to financial need. Within this group of students, we particularly seek those who enhance our programs by increasing the diversity of our campus. Increasing diversity helps us better prepare our students for the diverse and complex world they will face by allowing more meaningful discussions that address issues such as institutionalized racism, while also allowing students to discover the power of diversity to create better solutions as they work together.

Xavier’s mission is to educate each student intellectually, morally, and spiritually. We create learning opportunities through rigorous academic and professional programs integrated with co-curricular engagement. In an inclusive environment of open and free inquiry, we prepare students for a world that is increasingly diverse, complex and interdependent. Driven by our commitment to educating the whole person, promoting the common good, and serving others, the Xavier community challenges and supports all our members as we cultivate lives of reflection, compassion and informed action. This education has particular value for students in healthcare, natural science, technology and analytics, and STEMM education, where issues of ethics and values are confronted with regularity and increasing urgency.

Overview of the selected academic programs
The Choose Ohio First academic programs represent areas with strong outcomes for majors clustered roughly as health (Nursing, Health Services Administration, Biomedical Sciences, Pre-Pharmacy, Pre-MSN), technology and analytics (Data Science, Business Analytics, Information Systems, Computer Science, Mathematics, Life Sciences for Business), natural sciences (Biology, Environmental Science, Applied Physics, Biophysics, Engineering Physics, Physics, Applied Chemistry, Chemistry, Chemical Science), and STEMM education (Teaching Life Sciences, Teaching Physical Sciences, Teaching Life Sciences and Chemistry, Teaching Life Sciences and Physics).

This set of programs provides Choose Ohio First scholars a broad range of undergraduate majors. It is intentionally broad to facilitate career discernment which is an essential part of a Xavier education.

Addressing regional and statewide economic strengths and needs
The programs we have chosen all connect to the strengths and needs of our regional economy. Our region has a demonstrated need for expertise in health care, technology, and analytics. Students from our selected programs most often end up pursuing careers in these areas. For example, Cincinnati Children’s Hospital Medical Center and Cincinnati Children’s Research Foundation have over 1.4 million square feet dedicated to research space and have a strong need for students with majors such as biology, biomedical sciences, chemistry, and nursing. GE Aviation needs employees with backgrounds in computer science, information systems. Ocean, a high tech accelerator recognizes needs for students across technology, analytics, and basic science. The Cincinnati Public School System is recognized by the US Department of Education as a district needing high quality STEMM teachers.

Xavier has a strong tradition of and commitment to producing leaders in these in-demand fields for our regional and state economy. Over 70% of our STEMM graduates stay in our region or state. We currently enroll about 50% of STEMM students from out of state. As part of our commitment to our state and region, we are prioritizing recruitment of Ohio residents to join our programs and become successful leaders in our state and regional economy.
Executive Summary - Youngstown State University

0. Overview  The YSU-COFSP 2020 proposal, **Student Success in STEMM Careers (SSSC)**, builds on the outstanding success and best practices of previous YSU-COFSP programs (08-09,16-66,16-77), yet incorporates new focus areas and program components. SSSC requests **$1,416,000** over five program years to fund 14 COF cohort years: 30 students per new cohort, $4,000 per student, assuming 13% freshman-sophomore attrition—parameters consistent with 13 year YSU-COF program history. Total institutional match over five years is **$3,823,530**. Many majors in the College of STEM (CSTEM) are supported, plus six special focus areas listed below. High poverty school districts are targeted, and there is increased emphasis on work-based learning and, ultimately, filling high demand STEMM jobs with a trained STEMM Ohio workforce: SSSC mines relationships built with business partners through co-ops, internships, and precepting, developed in part by OMIC and federal DOL grants.

I. SSSC Targeted Recruitment Populations

(1) General Emphasis & Rationales
(a) General target population is STEMM-talented Ohio high school students, especially those in the Youngstown-Warren MSA and YSU central mission area.
(b) The rationale for this general population is that it anchors the YSU central mission area, the Youngstown-Warren MSA has one of the lowest post-secondary education rates in the state and country, this general population has borne the brunt of recent recessions, especially the current pandemic fueled recession, yet this area has unfulfilled economic potential and promise.

(2) Specific Emphases & Rationales
(a) Specific target populations are STEMM-talented students in those school districts in the Youngstown-Warren MSA classified by ODE typology as rural high poverty or urban high poverty, including public and diocesan. Important recruitment and development tools: the YSU-COF Summer Algebra II to PreCalculus Bridge program, an immersive, month long, all day long program developed by YSU and key high school partners, with 13 years of great success, heralded by ODHE as a “STEM Demonstration Program” exemplifying best practices; coordination with current ADMETE and Believe in Ohio recruitment efforts.
(b) The rationale for these specific school districts is that they enable SSSC to target STEMM-underrepresented populations: rural, urban, financially-disadvantaged, first-generation groups, URMs, and females. Such students’ STEMM potential represent an underutilized talent source for a STEMM-educated workforce, and targeting these students reflects the spirit of the original 2007 COF legislation.

II. SSSC Targeted Academic Programs

(1) Broad Academic Emphasis & Rationales
(a) The broad academic scope includes many majors housed in CSTEM (see cipcodes in attachments).
(b) CSTEM was founded in 2007, and YSU-COF grants have played a significant role in its establishment; YSU-COF programs have been extremely successful by many metrics—four-year graduation rates (86%–92%), student satisfaction, and student placement in high-demand STEMM careers. This 13 year history makes broadly supporting CSTEM an institutional priority, as does CSTEM’s anchoring of the special focus areas listed below.

(2) Specific Academic Emphases & Rationales
(a) Six academic areas receive special focus: (1) advanced, additive, and digital manufacturing; (2) computer engineering and technology; (3) STEMM integrated education; (4) YSU-BaccMed Consortium (premier integrated premed/med primary care program); (5) undergraduate nursing (BSN, pathways to primary care nurse practitioner); and (6) actuarial science and financial mathematics.
(b) Rationales for these focus areas reflect university priorities in CSTEM and BCHHS, some long-term, some emerging, as well as program quality and regional/state imperatives.

III. SSSC Connections Between Regional/State Strengths and Targeted Academic Programs

(1) Broad Academic Emphasis. All STEMM programs tagged by SSSC cipcodes are strongly linked to the NE Ohio region and work-based learning: even in recession, many regional STEMM positions go unfilled as indicated by feedback from employers and students.

(2) Specific Academic Emphases. These are consistent with regional priorities: GM-LG Ultium battery plant near GM Lordstown facilities; Lordstown Motors; America Makes; shortage of primary care health providers; need for STEMM educators; Air Force ADMETE initiative; insurance actuarial needs.