

Choose Ohio First

FY24 RFP
PROPOSAL SUMMARIES

Ashland University --Executive Summary

Ashland University is requesting \$840,000 in *Choose Ohio First* (COF) program funding to provide \$3,000 annual scholarships to 20 scholars in four STEM programs housed in the Dauch College of Business and Economics (COBE). Ashland University has had a successful *Choose Ohio First* scholarship program in place since 2013, in which we have enrolled students majoring in Biology, Chemistry, Computer Science, Mathematics, Physician Assistant, Nursing, and Dietetics.

Rationale for Recruitment

As a medium-sized institution in north central Ohio, Ashland University hosts the only *Choose Ohio First* funded program serving our immediate region. Most of our undergraduate students come from high schools in Ashland and surrounding counties, making us well-situated to provide this important state scholarship support to our region. Ashland University enrolls students from diverse backgrounds, with 35% of our students being first-generation college students and 30% being Pell recipients. The high proportion of first-generation college students and Pell-eligible students in our current *Choose Ohio First* program illustrates the support needs of our region. Now, we have the capacity to include our new Industrial Systems and Engineering program, as well as our Management Information Systems (MIS), Business Analytics, and Supply Chain Management (SCM) majors as part of our *Choose Ohio First* scholarship program, and this proposal details our request for support from the Ohio Department of Higher Education.

Program Overviews

The Industrial Systems and Engineering program, Management Information Systems, Business Analytics, and Supply Chain Management programs are part of the Dauch College of Business and Economics (COBE). COBE's mission is to "educate students in a comprehensive, innovative, and engaging learning environment, through a competency-based curriculum led by teacher-scholars. Industrial engineering is the application of math and science technologies to benefit people and improve society. Industrial engineering offers students a base of traditional engineering courses that emphasize areas such as simulation modeling, engineering database systems, quality assurance, logistics and supply chain management, operations research, and facilities planning. Management Information Systems (MIS) combines the fields of computers and information technology with business to prepare students for careers in systems analysis, systems design, or MIS. Our program focuses on managing technology and change. The Business Analytics program equips students with data analytics and business intelligence (BI) skills, a broad category of analytical techniques, technologies and applications, and applies them to analyze, understand, and interpret data. Supply Chain Management (SCM) prepares students to become leaders in supply management, the emerging paradigm for world-class corporations. It is a total systems approach taken by companies, suppliers, and partners to deliver manufactured products and services to the end customer. Information technology is used to coordinate all elements of the supply chain from sourcing parts to coordination of retailers to achieve a level of integration that results in a competitive advantage not available in traditional logistics systems.

Regional Economic Strength

Integrating the Industrial Systems and Engineering, Management Information Systems, Business Analytics, and Supply Chain Management programs with the strengths of the regional economy involves aligning the program's curriculum, initiatives, and partnerships with the industries and economic sectors that are prominent in the local area. This approach ensures that graduates possess skills that are directly applicable to the job market and helps foster collaboration between academia and industry. This integration will be achieved through industry-relevant curriculum, industry advisory boards, internships and co-ops, collaborative projects, local case studies, industry workshops and seminars, job placement support, collaborative research, entrepreneurship support, and customized training. By closely aligning the Industrial Systems and Engineering, Management Information Systems, Business Analytics, and Supply Chain Management programs with the strengths of the regional economy, students are more likely to graduate with skills that are in high demand, making them attractive candidates for local employers. This integration also positions the program as a valuable partner in driving economic growth and innovation within the community.

Supporting Student Achievement

The strategic plan of Ashland University, *Rich History, Bold Future – Ashland 2025*, identifies transformational experiences as a key pillar. Transformational experiences emphasize Ashland's dedication to students and student learning, our "Accent on the Individual." This includes a commitment to academically integrated high-impact practices, which emphasize clear and specific initiatives related to the provision of experiential learning opportunities. Working together across units, we create a holistic educational experience for students who are inspired to work, serve, and lead with integrity. Ashland University's STEM programs in Business connect to AU's Strategic Plan in the following ways:

- **Transformational Experiences – Life Calling:** According to the Bureau of Labor Statistics, employment in STEM occupations is up 79% over the last 30 years and is expected 11% growth over the next decade. Our STEM programs help students develop necessary career skills in the increasingly technical world.
- **Academically Integrated High-Impact Practices:** All Business programs require the completion of internship. Moreover, all business classes focus on experiential learning and applications of concepts to real business problems.
- **Empowered Community:** Our STEM programs will help us build a more diverse and inclusive campus.

Institutional Support

Ashland University will provide a 1:1 match for the funding we receive from the Ohio Department of Higher Education under the *Choose Ohio First* program. This *Choose Ohio First* Program has the support

of Dr. Dan Fox, Dean of the Dauch College of Business and Economics (COBE); Randy Spade, Executive Director of Admissions; Zachary McGrain, Executive Director of the Career Center for Life Calling; Carrie Hartsel, Internship and Experiential Learning Coordinator for COBE; and Dr. Alexander Jordan, Executive Director of the Financial Aid Office.

Baldwin Wallace University

FY 2024 Choose Ohio First Proposal

Addressing Healthcare Disparities in Rural Communities: The Baldwin Wallace University Choose Ohio First STEM Healthcare Scholars Program

Executive Summary

Baldwin Wallace University (BW) has strong STEM (Science, Technology, Engineering, and Mathematics) programs with a history of excellent performance with Choose Ohio First (COF). More than **433** undergraduate STEM students (have been selected to the BW COF STEM Scholars program since its inception in 2008, the first year that COF funds were made available. The 2022 proposal has provided scholarship support to graduate students enrolled in the one-year MAEd programs in Science Teaching and Mathematics Teaching. Students are part of the **BW Choose Ohio First STEM Teaching Scholars**. The second cohort currently enrolled is fully subscribed. At the close of the 2023-24 academic year, 15 new teachers will be in STEM classrooms as licensed teachers, supported by Choose Ohio First.

Of note and described in the proposal is BW's success at recruiting (see **Section 2: Recruitment**), educating, and graduating students from disadvantaged backgrounds. Consider the following:

Of the **433** students selected to the BW COF STEM Scholars Program (through fall 2023; excludes MAEd students funded under COF grant 22-02):

- **44.1%** were socially disadvantaged individuals (including first-generation college students)
- **42.7 %** were first-generation college students
- **36.5 %** were economically disadvantaged individuals (Pell-eligible)
- **27.5 %** were from both a socially and economically disadvantaged individuals (Pell-eligible)
- **17.5 %** were transfer students from accredited two-year institutions
- **53.8 %** women and **46.2%** men
- **9.9 %** were adult students

To date, of first-time, full-time (FTFT) students entering BW, **218** students have graduated from BW as STEM scholars, **yielding a completion rate of 70.3%**.

The BW STEM Scholars program is on a positive trajectory. At Baldwin Wallace University, Choose Ohio First funding supports STEM students to meet Ohio economic and educational needs. Above we described the one-year MAEd programs in Science Teaching and Math Teaching to address the shortage of qualified STEM teachers. The BW FY 2023 proposal "**Academic Programs and Graduates that support Ohio Regional and State Economic Development in Manufacturing: Novel Approaches to Work Based Learning and Student Support**" focused on meeting the needs of the regional and state-wide manufacturing sector. In the present project, "**Addressing Healthcare Disparities in Rural Communities: The Baldwin Wallace University Choose Ohio First STEM Healthcare Scholars Program**" we leverage the strengths of BW STEM programs in the **School of Science and Engineering** and the **College of Education and Health Sciences** to recruit, educate, and graduate students to meet regional and state-wide workforce needs in the healthcare sector. Special attention will be paid to **rural healthcare disparities**.

Given the clear success in student retention and completion related to the **BW COF STEM Scholars program** and model (**Section 3: Student Support**), we will continue to recruit, educate, support, and

graduate undergraduate students in a manner consistent with the University mission and Strategic Plan: [Strategic Pathways](#). Combined with our experience to date with the graduate-only BW Choose Ohio First STEM Teaching Scholars program, we propose here to create a third cohort program, the **Baldwin Wallace University STEM Healthcare Scholars Program**, with **mixed cohorts** of graduate and undergraduate students. A mixed cohort model offers many potential synergies, including informal mentoring and coaching, enhanced retention of undergraduate STEM students, even possible “follow-through” admission of STEM undergraduates into BW graduate programs.

The STEM programs selected for this project (**Section 5: Programs of Study**) are aligned to meet the talent and workforce needs of regional and state-wide businesses and industry in in-demand healthcare occupations (**Section 6: Regional and Statewide Economic Needs and Strengths**).

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 is intimately tied to regional and state needs. Consider the following strategies from the BW [Strategic Pathways](#):

- Degrees will reflect both deep discipline content and the ability to demonstrate relevance to graduate schools and the current and future needs of the workplace.
- Undergraduate faculty-student research and collaboration will be distinguishing features of a learner’s academic life.
- BW’s academic programs will align with the needs of the region to promote building vibrant relationships with its industry and community partners.
- BW will excel as an entrepreneurial hub, developing new and innovative practices that contribute to industry and community growth.
- BW will engage with the regional, national, and international community across academic and co-curricular programs to create connections and build its students’ and partners’ capabilities.
- BW will increase and expand its contract work with regional businesses and municipalities.

As mentioned above, this project will focus on the **healthcare sector** at the state and regional levels. To that end, we propose **work-based learning (Section 4: Work-Based Learning)** initiatives to provide students opportunities to better understand how their academic pursuits might be a good fit for the healthcare sector and its diverse array of sub-sectors. Nearly all of the academic programs that are included in this project have **required clinical, research, internship, or capstone components**, thus meeting the requirements for work-based learning that are a required element of the project for all scholars.

Bowling Green State University
FY 24 Choose Ohio First (COF) Grant Application

EXECUTIVE SUMMARY

BGSU is committed to the strategic mission of COF. To increase underrepresented undergraduate STEM and STEM Education majors and maximize the impact of Choose Ohio First (COF) scholarships, Bowling Green State University (BGSU) has developed a comprehensive Choose Ohio First program designed to start with recruitment, stay with the student through enrollment and retain them through graduation. BGSU has selected high quality, high impact STEM programs that align with regional and state needs as well as BGSU's strategic plan, Forward, to include in COF. This enrollment strategy has been developed and honed through each grant cycle to improve BGSU's ability to target underrepresented students, promote receipt of COF applications from these students, and leverage scholarships and programming to best serve students. The COF Student Support program, mandatory for all COF recipients, evolves each year, most recently with the addition of Life Design courses that support an effective transition to college, faculty mentorship, and a dedicated graduate assistant.

A. Rationale for the Selected Populations for Recruitment

Through several grant cycles, BGSU has developed and fine-tuned a robust recruitment strategy for Choose Ohio First. The strategy, which aligns with BGSU's strategic efforts, centers on outreach to underrepresented students, direct targeting and following up to ensure receipt of student COF applications, and the awarding of scholarships to the identified populations. Eligible students receive an email and a text notification of their eligibility, a follow up phone call, an in-person meeting if requested, and all are encouraged to attend an informational webinar. BGSU markets COF to prospective students through social media, numerous in-person recruiting events and campus visits, inclusion on applicable webpages, printed media, and other digital ads. As a result of these efforts, students who identify as female made up 93.84% BGSU's Fall 2022 COF cohort.

B. Overview of the Selected Academic Programs

BGSU has chosen high-quality academic programs that meet regional and statewide workforce needs, and are aligned with the institutional strategic plan, Forward. The six additions this year (Robotics Engineering, Electric and Computer Engineering, Mechanical and Manufacturing Engineering, Actuarial Science, Aviation, and Science Education) are in direct response to regional workforce needs. Applied STEM and health programs (Nursing, Computer Science, Software Engineering, Forensic Science, Pre-Physical Therapy, Communication Disorders, Medical Laboratory Science, Dietetics, Applied Health Science, Systems Engineering) were chosen because they support BGSU's work on Forward's "Initiative 1: Right programs that are sustainable," which is currently focusing on these areas. The remaining programs (Statistics, Chemistry/Biochemistry, Biology, Environmental Science, and STEM education) were selected because they have broad application to many STEM fields.

C. Address Regional and Statewide Economic Strengths and Needs

As reflected in the strategic plan, BGSU remains committed to creating and growing programs that meet the needs of BGSU students, the Northwest Ohio region, and the State. For example, to support the growing Ohio manufacturing sector, BGSU is including three new recently approved engineering bachelor's degrees in robotics, electric and computer engineering, and mechanical and manufacturing engineering. Each engineering program was created to fill a skill gap identified by industry and will lead to meaningful employment upon degree completion for students. The need for qualified actuaries remains strong in the region and the State, with job demand expected to increase between now and 2031. We are also including Aviation this year as the need for qualified pilots remains high and BGSU is uniquely situated to address this need with the on-campus Wood County Regional Airport and partnership with the Bowling Green Flight Center. These new programs supplement the continuing COF programs, such as Nursing, Forensic Science, and STEM Education, that continue to address economic strengths and needs.

D. Relationship to the Institutional Strategic Plan and Supports of Student Achievement

Choose Ohio First, and the programs selected, directly supports BGSU's strategic plan, and particularly the initiatives associated with Objective 1: Redefining student success. In addition to

supporting Initiative 1, as described earlier, COF also contributes to achieving the remaining three initiatives in that section: intensive focus on outcomes, which is committed to eliminating opportunity gaps; differentiating the undergraduate student experience, which ensures that students are empowered to design meaningful experiences; and broadening access, which aims to make BGSU degrees more attainable for students who may not have seen themselves in college. The goal of COF aligns with BGSU's efforts in this area.

E. Institutional Assistance Leading to Successful Implementation

BGSU is committed to the success of the Choose Ohio First students. In addition to the financial commitment of the \$1.2m match, BGSU has dedicated resources towards personnel and programming to help COF students retain and succeed. The COF Student Success Program lives in the newly launched division of Student Engagement and Success, created to support student achievement and enhance the experience of BGSU students throughout their academic career. The COF Student Success Program, which is led by a professional staff member, will have a dedicated Graduate Assistant to provide consistent and personalized support and guide the students throughout the academic year; a partnership with the Geoffrey H. Radbill Center for College and Life Design, both to help students gain the skills and tools to help them be successful in academics and in their life in the Life Design 1910 course; and two STEM faculty mentors. The Kuhlin Hub for Career Design and Connections is committed to support COF students in building a professional network and obtaining meaningful work-based learning experiences. Additionally, BGSU has a standing COF Coordinating Committee comprised of administrators from Academic Affairs, Enrollment Management, the Kuhlin Hub for Career Design and Connections and Student Engagement and Success focused on working together to coordinate, evaluate, and enhance all aspects of the COF experience.

Executive Summary

COTC is entering our third year with Achieving the Dream (ATD) which is an international non-profit organization that works to transform two-year colleges to put student success at the center. For the past two years, COTC, with the help of two ATD coaches, has been focused on three student success priorities, one of which is *to increase the enrollment of students of color, and of women, by 10% in STEM programs*. Several efforts at the college are already underway to help realize this goal and the Choose Ohio First (COF) grant opportunity would be another important tool that would enhance the momentum already in place to help reach this goal. In this way, the COF opportunity aligns closely with other college-wide initiatives already underway, and this year, our final year for this phase of intensive work with ATD, is an ideal time for COTC to launch the COF Scholars opportunity to assure continuation of this initiative.

Despite these initiatives, total enrollment in the selected programs has dropped 40% from 2014 to 2022. The COF scholarship will be a strong recruiting opportunity to increase enrollment, especially to needier students. Sixty-one percent of selective admission students were Pell Grant eligible.

COTC's admissions representatives would be available to present to various community groups about the COF program as well. Skilled admissions advisors are available on each of the college's four campuses and communicate with potential students in-person and via electronic communications. Information sessions are offered on a routine basis. COTC faculty also often assist with outreach to potential students, providing clarity on career pathways and opportunities.

The programs of study COTC is selecting for this grant are all in our allied health program.

Current programs of study include:

- LPN one-year certificate
- all pathways to an Associate's degree in nursing (in-demand jobs include LPN and RN)
- Associate's degree in Radiology Technology
- Associate's degree in Surgery Technology

New Programs of Study include:

- Associate's degree in Respiratory Therapy (HLC and ODHE approved, pending program accreditation)
- Bachelor's degree in Diagnostic Medical Sonography

The Health Sciences programs at COTC typically demonstrate strong licensure and registry pass rates. For example, the Radiography registry pass rates have been maintained at 100% for several years. The Nursing NCLEX pass rates have exceeded national thresholds for the past several years. Graduates of the programs enjoy high employment rates. All of these speak to the quality of the programs. Additional resources will reduce the stress burden for the COF scholars allowing them to continue to elevate the outcomes of the programs.

COTC's Health Sciences programs are the largest majors within the college and are intricately connected to the mission of meeting student and employer needs. The COVID pandemic created significant challenges for the programs, requiring dedication and innovation to continue the mission of the college. Although there were many challenges, the programs were

successful with retaining students toward completion and maintained strong licensure/registry pass rates. This allowed the college to continue to work to meet employer needs in the area.

All of the occupations associated with COTC's selected plans of study are on the Top Jobs list, and all are classified as in-demand. Ohio's demand for registered nurses (RNs) is expected to increase by almost 10% through 2028. To help meet these workforce demands, COTC has chosen several nursing programs along the pathway to earning an RN accreditation.

The cities with the most job postings in Ohio are all in and around Licking County, thus indicating that we are in desperate need of trained workers. Newark, the location of our main campus, is number 1 on that list, second was Johnstown, which is 11 miles from our Pataskala branch campus, and third was Pataskala itself. From 2016 to 2021, jobs in our three-county service area (Licking, Knox, Coshocton) increased by 16.5%, which outpaced the national growth rate of 0.4% by 16.9%. But as the number of jobs increased, the labor force participation rate decreased from 63.5% to 61.4% between 2016 and 2021.

Submitting this project request for Choose Ohio First fits perfectly with the mission and vision of the college and assures continuation of resources for students pursuing majors with a STEM focus. The project will focus on students in the Health Sciences majors and will supplement existing resources to aid the student in certificate or degree completion without increased cost. Funding in the Choose Ohio First program will complement efforts to remove barriers for students and aid them in achieving a degree in the shortest timeframe possible. By applying COF dollars first, many needier students may have state and federal grant resources that could be applied to other cost of attendance items such as childcare, transportation and housing, and books and educational materials. These are barriers for many of our students that can impact their retention and their time to degree completion.

The students selected for the COF scholarship will have access to all of the same resources that are provided to every COTC student. The [Student Success Center](#) provides holistic, wraparound services for students, covering all [tutoring services](#), our [testing center](#), [basic needs supports](#), and [academic success coaching](#). Students in our STEM programs receive individualized outreach and support based on their needs, risk levels, and by referral.

COTC will demonstrate its commitment to the program by matching scholarship dollars of \$612,040 to essentially double the impact of the number of scholarships to students. COTC has been fortunate to have a community that has given greatly to scholarship initiatives in the past which has built a culture and expectation of the importance of scholarship initiatives. The matching funds will come from a combination of institutional funds and donor funds. Future consideration may be given to soliciting matching dollars from targeted industries.

Choose Ohio First at Clark State College

2. Executive Summary

a. Rationale

Deans, program coordinators, faculty members, and the Marketing department are making efforts to target traditionally underrepresented populations in these degree fields. One goal in the Strategic Enrollment Management Plan is to increase enrollment of special populations. This includes initiatives such as collaborative advisory committees of community leaders; engagement with community organizations such as Springfield Promise, which serves low-income students, and My Brother's Keeper, which serves African-American male students; and becoming an Achieving the Dream school. Clark State also has internal programs designed to motivate and retain underrepresented populations, such as Men of Clark State, which offers support to African-American male students. Each of the academic programs was selected due to regional and/or statewide need as well as career prospects for graduates.

As an open enrollment institution, Clark State College accepts all academically qualified students. However, efforts are made to recruit students from underrepresented populations to build a student body that is more reflective of the communities we serve. This includes marketing and programs designed to target women in historically underrepresented STEM fields, and to encourage the enrollment and completion of racial and ethnic minority populations.

b. Overview of Selected Academic Programs

The following programs are included in this proposal. Programs are sorted by CIP code:

019999 Agriculture, Agriculture Operations, and Related Sciences, Other: AAS Precision Agriculture; AAS Precision Agriculture – Technician Option; Precision Agriculture Short-Term Technical Certificate.

110202 Computer Programming, Specific Applications: AAB Computer Software Development; AAB Computer Software Development – Web Development Option; AAB Computer Software Development – Cybersecurity Option; Computer Programming Departmental Certificate; Web Development Departmental Certificate.

110801 Web Page, Digital/Multimedia and Information Resources Design: BAS Web Design and Development – Web Design Concentration; BAS Web Design and Development – Web Development Concentration.

110901 Computer Systems Networking and Telecommunications: AAB Computer Networking; AAB Computer Networking – Technical Systems Support Option.

111003 Computer and Information Systems Security/Information Assurance: AAS Cybersecurity.

143601 Manufacturing Engineering: Program included: AAS Manufacturing Engineering Technology.

150304 Laser and Optical Technology/Technician: Laser Machining Technical Certificate; Laser Maintenance Technical Certificate; Laser Additive Short-Term Technical Certificate; Laser Welding Short-Term Technical Certificate; Laser Foundations Short-Term Technical Certificate; Laser Machining Short-Term Technical Certificate; Laser Maintenance Short-Term Technical Certificate.

150399 Electrical and Electronic Engineering Technologies/Technicians, Other: Electrical Systems Short-Term Technical Certificate.

150405 Robotics Technology/Technician: Robotics Technical Certificate.

150501 Heating, Ventilation, Air Conditioning and Refrigeration Engineering: ATS Heating, Ventilation, Air Conditioning, and Refrigeration; Heating, Ventilation, Air Conditioning, and Refrigeration Departmental Certificate.

150612 Industrial Technology/Technician: AAS Industrial Technology; Process Control Short-Term Technical Certificate; Industrial Maintenance Short-Term Technical Certificate; Additive Manufacturing Technical Certificate; Manufacturing Foundations Short-Term Technical Certificate; Ohio Manufacturing Short-Term Technical Certificate; Supervisory Control and Data Acquisition (SCADA) Departmental Certificate.

150805 Mechanical Engineering/Mechanical Technology/Technician: AAS Mechanical Engineering Technology; Mechanical Systems Short-Term Technical Certificate.

151301 Drafting and Design Technology/Technician, General: AAS Computer-Aided Design Technology; Computer-Aided Design – Architectural Short-Term Certificate; Computer-Aided Design – Architectural Technical Certificate; Computer-Aided Design – Manufacturing Technical Certificate; Computer-Aided Design – Manufacturing Short-Term Technical Certificate; Computer-Aided Design Departmental Certificate.

151501 Engineering/Industrial Management: BAS Manufacturing Technology Management – Computer-Aided

Design Concentration; BAS Manufacturing Technology Management – Industrial Technology Concentration; BAS Manufacturing Technology Management – Manufacturing Engineering Technology Concentration; BAS Manufacturing Technology Management – Mechanical Engineering Technology Concentration. 159999 Engineering Technologies and Engineering-Related Fields, Other: AAB Agricultural Business – Agricultural Engineering Technologies Option. 450702 Geographic Information Science and Cartography: AAS GIS/Geospatial Technology; Geospatial Image Analyst Departmental Certificate; Geospatial Programming Departmental Certificate; Geospatial Analyst Departmental Certificate; Geospatial Precision Agriculture Specialist Short-Term Certificate; UAS Operations and GIS Short-Term Technical Certificate. 470605 Diesel Mechanics Technology/Technician: ATS Diesel Technology; Diesel Technology Short-Term Certificate. 480508 Welding Technology/Welder: Welding Short-Term Technical Certificate. 480510 Computer Numerically Controlled (CNC) Machinist Technology/CNC Machinist: Computer Numerical Control Technical Certificate; Computer Numerical Control Short-Term Technical Certificate; Computer Numerical Control – Lathe Short-Term Technical Certificate; Computer Numerical Control – Mill Short-Term Technical Certificate. 510716 Medical Administrative/Executive Assistant and Medical Secretary: AAB Office Administration – Medical Office Administration Option; Medical Coding Short-Term Technical Certificate; Advanced Medical Coding Short-Term Technical Certificate; Health Information Technology Departmental Certificate. 510801 Medical/Clinical Assistant: ATS Multi-Skilled Healthcare; AAS Medical Assisting; Multi-Skilled Healthcare Certificate; Medical Assisting Certificate; Clinical Medical Assisting Short-Term Technical Certificate. 510806 Physical Therapy Technician/Assistant: AAS Physical Therapist Assistant. 510899 Allied Health and Medical Assisting Services, Other: AAS Health Sciences. 510904 Emergency Medical Technology/Technician (EMT Paramedic): AAS Emergency Medical Services/Paramedic; Paramedic Certification; EMT Short-Term Technical Certificate; Paramedic Certification for Registered Nurses. 510910 Diagnostic Medical Sonography/Sonographer and Ultrasound Technician: AAS Diagnostic Medical Sonography. 511004 Clinical/Medical Laboratory Technician: AAS Medical Laboratory Technology. 511501 Substance Abuse/Addiction Counseling: BAS Addiction and Integrated Treatment Studies. 513801 Registered Nursing/Registered Nurse: AAS Registered Nursing; AAS Registered Nursing – LPN to RN Transition; AAS Registered Nursing – Paramedic to RN Transition; Electrocardiography Short-Term Technical Certificate; Nurse Aide Short-Term Technical Certificate; Patient Care Technician Short-Term Technical Certificate; Phlebotomy Short-Term Technical Certificate. 513901 Licensed Practical/Vocational Nurse Training: Practical Nursing Certificate. 519999 Health Professions and Related Clinical Sciences, Other: AA Healthcare Concentration; AS Healthcare Concentration. 520203 Logistics, Materials, and Supply Chain Management: AAB Management – Logistics and Supply Chain Management Option; Supply Chain Management Departmental Certificate. 521299 Management Information Systems and Services, Other: Network Administration Short-Term Technical Certificate; Network Infrastructure Short-Term Technical Certificate; Technical Support Short-Term Technical Certificate; Cybersecurity Short-Term Technical Certificate.

c. Synopsis of Plan to Address Regional and Statewide Economic Strengths and Needs

Programs at Clark State feature an advisory board made of industry professionals. These advisory boards guide the development and improvement of curriculum, and even of new programs, to meet industry needs. New programs at Clark State are developed in response to expressed or known needs from area industries. The selected programs all reflect needs of industry in the region.

d. Connection to Strategic Plan and Student Achievement

Each of the selected programs is tied to Clark State's strategic plan, mission, and recruitment efforts. Clark State College's mission is to engage and empower diverse learners by providing high-quality educational programs and services that emphasize student and community success. The vision is that Clark State College will be the leader in education by partnering with our communities, businesses and industries while achieving the highest levels of student success within a culture that provides intellectual, personal and professional growth. While all five Goals of the Strategic Plan are important and

relevant to the selected academic programs, two in particular stand out in relation to these programs and the present proposal. Goal 1 is “Develop and strengthen quality, innovative academic programs.” The selected programs are quality STEM programs that lead to quality, in-demand jobs. Choose Ohio First funding can help draw students to these programs, which will help to strengthen them through increased enrollment and funding. Goal 5 is “Promote and support collaboration with diverse communities, businesses, and industry partners.” Each of these programs works with business and industry partners in the form of an advisory board. Clark State is committed to maintaining and improving current partnerships as well as adding new ones. The required work-based learning experience that is part of Choose Ohio First will also help strengthen relationships between businesses that serve as work-based learning sites and Clark State College. The programs themselves represent programs in in-demand fields, which means that our employer partners are seeking graduates with the skills and abilities learned through these programs.

e. Commitment by the Institution

Clark State is fully committed to the successful implementation of the Choose Ohio First program. In addition to the cover letter signed by the President, the application includes the following internal commitments:

The budget is being matched by the Clark State Foundation, in the form of scholarships. A signed letter is included from Toni Overholser, Vice President of Advancement, committing to this match.

A letter of commitment from Melody Gast, Director of Admissions and Career Services and co-program manager for the Choose Ohio First program, is included. This letter demonstrates the commitment of Career Services to the project.

A letter of commitment from Dr. Travis Binkley, Dean of Enrollment Services, is included. This demonstrates the commitment of Enrollment Management and Financial Aid to this project.

A letter of commitment from Nina Wiley, Assistant Vice President of Student Affairs, is included. This demonstrates the commitment of student support services to this project.

Executive Summary

Cleveland State University (CSU) is requesting \$1,200,000 for the five-year grant period AY 2024-25 through AY 2028-29 to support approximately 22 new undergraduate students and 2 Master's level students each year for total of ~120 new students. This award will replace funds from previous cycles of COF that are phasing out to allow us to maintain the current number of students supported. We will build upon the success of our current Choose Ohio First (COF) program. Funding from this grant will provide financial support to a diverse cadre of undergraduate and graduate students, especially underrepresented students, who are pursuing a variety of Science (including health professions), Technology, Engineering, and Mathematics (STEM) majors. Matching funds will be used to support recruitment initiatives and programming activities, including providing all of our students at least one work-based learning experience in conjunction with our partners in the northeast Ohio business and healthcare communities, and/or academic researchers.

In order to increase the total number of graduates in STEM fields, we need to attract populations of students who are traditionally underrepresented in these disciplines. Our COF program is committed to increasing the number of COF Scholars that demonstrate high financial need; are first generation students; and/or are minorities or women underrepresented in the engineering and science fields. In order to increase the number of applicants in these target populations, the CSU COF program started in 2021 to develop a targeted recruitment campaign together with the Admissions Office. This campaign is identifying and reaching out to targeted students at high schools within the seven-county region immediately surrounding CSU. In addition, we are reaching out to potential COF applicants from underrepresented groups within CSU's existing applicant pool. By providing additional scholarship funds, we plan to encourage these applicants to matriculate at CSU in STEM majors.

We will continue to fulfill existing and emerging statewide needs by supporting students in STEM degree programs offered by the College of Engineering; the College of Arts and Sciences; and the College of Health which can fill in-demand jobs in Ohio (Table 1). In particular, we will give preference to students intending to major in disciplines that overlap with the degrees that Cleveland State has committed to increase through JobsOhio.

Table 1. Selected Academic Programs for CSU's Choose Ohio First program.

College of Engineering	College of Arts and Sciences	College of Health
*Biomedical Engineering	*Biology	Communication Sciences & Disorders
*Chemical Engineering	*Chemistry	Health Sciences
Civil Engineering	Environmental Sciences	Pre-Occupational Therapy
*Computer Engineering	*Mathematics	Pre-Physical Therapy
*Computer Science	*Pharmaceutical Sciences	Nursing
*Data Science	Physics	Pre-Nursing
Electrical Engineering		
Electronics Engineering Tech.		
Environmental Engineering		
Mechanical Engineering		
Mechanical Engineering Tech.		
*Software Engineering		
Pre-Engineering		

*Majors committed for growth in JobsOhio program

Team NEO, one of six network partners for JobsOhio, reports that Northeast Ohio is an 18-county region “igniting change and driving emerging markets with world-class developments – key industries in our area include advanced manufacturing, biohealth, information technology, and polymers and materials.”¹ Ohio is ranked by U.S. News & World Report as the #11 state for opportunity² – with Northeast Ohio comprising up 40% of the state’s economy.³

While these are strengths of the Northeast Ohio region, and the Cleveland area in particular, the most recent annual report, *Aligning Opportunities*⁴ notes that the post COVID economy will require innovative solutions to address worker shortages and retention strategies. With fewer workers but increasing demand, Northeast Ohio faces emerging needs of this region’s employers to ensure the region’s talent pool is ready to take on the opportunities of tomorrow.

These efforts will require students to be prepared for the jobs that will be created. At CSU, we have been preparing students to work in key industries in Northeast Ohio. We currently work closely with internal and external partners to help current COF students obtain work-based learning experiences. The work-based learning experiences of the Choose Ohio First program in key industries will link local employers with knowledgeable and sustainable employees to allow their businesses to thrive and grow in Northeast Ohio.

Our COF initiative aligns with the overall institutional strategic plan of CSU. The mission of CSU is: “*Empowering Students. Creating Knowledge. Engaging Communities. Shaping our World.*”⁵ Under leadership headed by CSU President Dr. Laura Bloomberg, CSU continues to implement CSU 2.0, an aggressive, growth-oriented plan for emerging from the global pandemic a stronger, more focused institution. It outlines multimillion-dollar investments in research, faculty positions, and initiatives to advance student success, develop new programs and build new partnerships.⁶ CSU has also committed to significantly increasing STEM graduates for in demand majors as part of the state funded JobsOhio initiative.

The COF supports student achievement through a variety of ways, in particular through the cohort model which provides services such as mentoring, advising, tutoring and cohort meetings. COF funds complement institutional financial support over the course of a student’s time at CSU. These additional resources allow students to focus on their academics when they may otherwise have needed to interrupt or significantly slow their studies for work or tend to other financially related obligations.

The University administration has been highly supportive of our Choose Ohio First programs. They recognize the value and impact that the program has students and have been willing to provide resources necessary for program support. Matching funds surpassing the 1:1 requirement

¹ Team NEO. (n.d.). Key Industries. Retrieved from: <https://teamneo.org/why-northeast-ohio/key-industries/>

² U.S. News and World Report. (n.d.). Opportunity Rankings: Exploring if States are Granting Citizens Tools to Succeed. Retrieved from: <https://www.usnews.com/news/best-states/rankings/opportunity>

³ Team NEO. (n.d.). Opportunity Abounds: Positioned to Foster Prosperity for All. Retrieved from: <https://northeastohioregion.com/life-in-northeast-ohio/opportunity/>

⁴ Team NEO. (2021) *Aligning Opportunities: 5 Years*. Retrieved from: <https://aligningopportunities.teamneo.org/>

⁵ Cleveland State University. (n.d.). University Mission and Vision Statements. Retrieved from: <https://www.csuohio.edu/uspc/university-mission-and-vision-statements>

⁶ Cleveland State University. (n.d.). CSU 2.0. Retrieved from: <https://csu2.0.csuohio.edu/>

have been identified including substantial support for student programming (see *Letter from Nigamanth Sridhar, Provost*). A full-time dedicated Program Coordinator is a key part of the success of our program. We have continued commitment from key departments on campus that allow COF scholars to obtain streamlined support including Admissions (see *Letter from Cristina Wayton*), Financial Aid (see *Letter from Rachel Schmidt*), and Career Exploration and Development (see *Letter from Brittany Wampler*). We also continue to work with key staff on campus who help COF students locate co-op and internship opportunities through the Fenn Co-Op (see *Letter from W.C. Vance*) and the Engineering Co-Op Office (see *Letter from Erin Elosh*).

Executive Summary

Columbus State Community College is located in downtown Columbus, Ohio. The college serves more than 45,000 students each year who are pursuing certificates, associate degrees, and transfer opportunities. Approximately 35% of the student population are people of color, and 75% of students are attending part-time; many while working and supporting their families. Columbus State recognizes that many community college students face obstacles including finances and time constraints. The Choose Ohio First Program helps ease the burden of cost for students and promotes student success. This program will feature a three-year cohort structure to allow students additional time and flexibility to earn their degree.

a. Provide a rationale for the selected populations for recruitment, including recruiting underrepresented populations in the fields of science, technology, engineering, and mathematics or education majors with a STEM focus.

Columbus State has experience creating focused recruitment efforts for women and socially disadvantaged students. The College has long-running TRIO programs (educational Talent Search, Student Support Services, and Upward Bound) which have developed relationships with local K-12 schools, especially within Columbus City School District, with students in high need of academic and nonacademic support services. CSCC has also implemented Women in STEM initiatives such as the GenCyber summer camp series funded by the National Security Agency. The College also targets recruitment for veteran students, students with disabilities, and former foster youth. A major strategy for recruiting underrepresented groups is promoting student success stories of alumni who represent these groups.

b. Provide an overview of the selected academic programs.

Nursing: The Nursing Department offers a number of affordable, quality ways to help students enter into the health care field. Registered Nurse (RN) Associate Degree: CSCC's Associate of Applied Science in nursing Degree (A.D.N.) prepares graduates to provide direct care to clients with common health problems in a variety of settings. After successful completion of the five semester program, students are eligible to apply to take the NCLEX-RN exam.

- **Licensed Practical Nurse (LPN) Certificate:** The Practical Nurse Program is a part-time evening and weekend program designed to prepare graduates to provide health care to clients of various ages in a variety of health care settings. The part-time program is designed as a career path for entry-level patient care providers.
- **Nurse Aide Certificate (STNA):** This one-class certificate allows qualified students to take the State-Tested Nursing Aide exam in Ohio.

Allied Health: In addition to nursing, the COF program will serve the Multi-Skilled Health, or Allied Health, program at CSCC. Many health care facilities have reorganized and the job roles within these systems have adjusted to provide care and services

based on patient needs. As a result, many employment opportunities have been created for the individual who has documented competencies in a variety of health care skills.

Multi-Skilled Health provides flexibility for students to gain these important skills in healthcare. Many of the courses require clinical experience placement. Columbus State offers a variety of degrees and certificates in multi-skilled health.

Social Work & Human Services: This proposal broadens its reach from nursing and allied health to also include social work and human services programs.

The Addiction Studies Certificate prepares students for an entry-level credential for working in the addiction field. The Advanced Addiction Studies Certificate is a 31-credit hour certificate program for students with an associate degree in a behavioral science, or a bachelor's or a master's degree in any field for preparation to work in the field of addictions. The Advanced Mental Health Certificate is open to students with an associate degree in a related field, a bachelor's or master's degree in any field of study.

The Associate of Applied Science in Social Work & Human Services provides students the opportunity to apply for certification and/or credentialing through two state boards (The Ohio Counselor, Social Worker and Marriage and Family Therapist Board and The Ohio Chemical Dependency Professional Board). Based on the coursework and practicum experiences, students are work-ready as soon as they graduate. Graduates often find jobs as case managers, case aides, chemical dependency counselor assistants and social work assistants.

The Human Services Assistant Certificate is a 16.5 credit-hour program for students who have an intellectual or development disability and an interest in developing skills needed to assist others. Students will learn about various disabilities, needed supports, interventions and tools to be successful worker. Students participate in two clinical practicum experiences in a variety of human services agencies.

c. Provide a synopsis of the plan to address regional and statewide economic strengths and needs for these targeted academic programs.

CSCC 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 with Regionomics, a consultant providing data and analysis on the regional economy and trends.

CSCC is dedicated to serving as a workforce and education partner in the region. This includes educating students to not only meet the workforce demand but also stay in the state and region. Nearly 90% of CSCC alumni live and work in the central Ohio region.

d. Describe how the COF initiative is part of the institutional strategic plan, supports student achievement.

Columbus State's strategic plan is framed around three main pillars: student success, workforce development, and civic engagement. More specifically, the Choose Ohio First program's purpose and the institution's strategic foci align in the following examples:

- Student Success: Provide an enriching first year experience that lays the academic and cultural foundation to flourish; direct advising to build meaningful relationships and connect students to academic programs and career pathways; and establish student learning communities so students can share common experiences and provide support to one another
- Workforce Development: Partner with employers and the economic development community to maintain a rigorous connection to the talent development in the region; enhance curricula through collaboration with industry leaders; engage business leaders in the development of aligned curricula and delivery of work-based experiences so that students may graduate with economically viable career credentials
- Civic Engagement: Provide an inclusive, open, and supportive environment to identify student needs and connect holistic and relevant resources that will address both academic and non-academic barriers

Columbus State has identified nursing, allied health, and health and human services as in-demand career fields for the state of Ohio and the central Ohio region. These programs have been strategically selected to address regional and statewide economic needs. The College will increase the success of the Choose Ohio First program at Columbus State by providing more opportunities for students in biological and physical sciences and engineering technology.

e. Describe commitments by the institutional that will lead to successful implementation of the COF program.

The institution will leverage specialty departments to support the implementation of the COF program. While many areas across campus contribute to the success of the program and scholars, the four core partners are as follows:

- Admissions
- Career Services
- Marketing & Communications
- Employer Engagement and Experiential Learning

EXECUTIVE SUMMARY

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 grant acquisitions. While scholarships for STEM majors have grown, they have not increased sufficiently to ensure that our STEM programs are fully enrolled to the level the College can now accommodate. The scholarship funding provided by the Choose Ohio First grant would break down the remaining economic barrier for STEM 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 STEM students from populations often less represented in the STEM fields – minority students, students of low economic status, women, and first-generation College students. As we have done with the COF Computer Science and STEM grants, we will work with area school districts to target these individual students. This grant will fund Ohio students in the following majors: computer science/cybersecurity/cyber forensics.

As part of our strategic plan, the Institution feels that it is critical to grow our sciences in these areas and meet workforce needs in Ohio. Anecdotally, local employers note the need for computer scientists and cybersecurity professionals.

Defiance College's mission statement shows its commitment to moving students beyond the boundaries of a classroom by applying their academic knowledge and skills in real-world contexts to develop leaders who will positively impact communities in Ohio and beyond. The College has been developing clear strategies to support student success, especially within STEM majors, and its reach is currently limited by the lack of scholarship funding for students with exceptional potential who lack sufficient resources to enroll and persist at the Institution.

Executive Summary

a. Rationale for recruitment, including recruiting underrepresented populations in the fields of science, technology, engineering, and mathematics or education majors with a STEM focus.

Heidelberg College on its 125-acre campus was founded in 1850; In 2009, Heidelberg College became Heidelberg University (HU) to better reflect academic offerings. HU is accredited by the Higher Learning Commission and offers students a strong pre-professional education with a liberal arts foundation. Experiential learning, career readiness, professional growth and leadership are emphasized. HU's mission is *to promote and nurture intellectual, personal, and professional development, leading to a life of purpose with distinction*. HU is ranked #53 in Regional Universities Midwest (U.S. News & World Report).

Internships and work experience are the norm at HU; students are encouraged to incorporate work experiences into STEM education. The National Center for Water Quality Research lab offers Heidelberg students unique internship and research opportunities in biology, chemistry, and water resources. HU offers 1:2:1 and RN: BSN pathways for Registered Nursing to optimize students' efforts in advancing as well as career placement with regional healthcare partners. The Health Sciences program is ranked #3 of 50 (Learn.org) and requires local internships or regional training such as Nationwide Children's Hospital, Cleveland Clinic, or Akron's Children's Hospital. Education majors have a wealth of student teaching opportunities in rural and metropolitan areas; they train with on-campus STEM and STEAM camp offerings. Psychology majors choose between an internship, research project, or study abroad experience that fits with individual career goals; one unique opportunity is Heidelberg women are conducting research at the Ohio Reformatory for Women. HU Computer Science majors train with advanced tools and find employment with leaders such as Google, IBM, and Microsoft. In the past three years, HU students had a 100% job placement rate into relevant computing careers within six months of graduation.

HU's Choose Ohio First (COF) program will be marketed as a component of our STEM programming. The current strategic enrollment management plan emphasizes the focus on filling these programs and for the increase in enrollment of underrepresented student groups including black or African American, Hispanic, or Latino and female students. COF will be included in the planned materials to be sent in the fall of the students' senior year. HU desires to increase applicants in Ohio regions where HU has underperformed in competing for highly prepared students of the targeted demographics. Efforts will be made to attend college fairs and recruitment events throughout Ohio, promoting COF at all.

Once the students apply, they will be invited to compete for the COF through a special invitation like the existing Scholars Day program. Scholars Day invitees are contacted through email, phone and direct mail and are invited to attend a special day on campus to compete for additional academic scholarships. Identified students will be asked to submit an essay which will be graded by a group of faculty in the designated STEM areas as well as by staff. These types of events are held 4-5 times annually.

HU is part of the consortium of colleges and universities in the Ohio region. The consortium hosts the Education Expo annually, with location rotated between participating universities; HU will host in 2025. The Expo brings employers from around the country to attend. The goal is to network HU students to employers. Students schedule interviews ahead of time with employers they are potentially interested in. Many students are hired on-the-spot during the Expo interview sessions.

Athletics are huge at HU, and over 60% of students are participating as recruited athletes. As part of this recruiting of athletes, coaching staff attend hundreds of events all over the U.S. As interested potential student athletes interact with HU staff, they not only learn about the athletics programs and academic programs, but also learn about potential financial aid available to them. Note – student athletes are not paid to participate in athletics at HU, rather they must file their own financial aid or earn scholarships.

With special emphasis on diversity and equity in recruiting of students, HU admissions team has designated recruiters to focus specifically on underrepresented areas of Ohio. HU also has admission counselors participate in specific diversity-focused college fairs. The Director of Diversity, Equity, and Belonging is also available for direct meetings with potential students.

b. Provide an overview of the selected academic programs.

CIP	CIP Code Title	HU's Academic Program	In-Demand Occupation
030104	<i>Environmental Science</i>	Environmental Science	Forestry, Wildlife, & Natural Resources
110701	<i>Computer Science</i>	Computer Science	Computer Science
131311	<i>Mathematics Teacher Education</i>	Science and Math Education	Math Teacher Education
131316	<i>Science Teacher Education/General Science Teacher Education</i>	Science and Math Education	Science Teacher Education/ General Science Teacher Education
131322	<i>Biology Teacher Education</i>	Science and Math Education	Biology Teacher Education
131323	<i>Chemistry Teacher Education</i>	Science and Math Education	Chemistry Teacher Education
260101	<i>Biology/Biological Sciences, General</i>	Biological and Medical Sciences	Biology/Biological Sciences, General
260202	<i>Biochemistry</i>	Biological and Medical Sciences	Biochemistry
400501	<i>Chemistry, General</i>	Chemistry	Chemistry, General
510000	<i>Health Services/Allied Health/Health Sciences, General</i>	Other Health	Health Services/Allied Health/Health Sciences, General
513801	<i>Registered Nursing/Registered Nurse</i>	Registered Nursing/ Registered Nurse	Registered Nursing/Registered Nurse
307101	<i>Data Analytics, General</i>	Data Analytics, General	Data Analytics, General
420101	<i>Psychology, General</i>	Psychology, General	Psychology, General
400605	<i>Hydrology and Water Resources Science</i>	Watershed Science Specialization	Hydrology and Water Research

The focus on expanding enrollment in the selected majors and corresponding CIP codes are an integral part of the program prioritization process the university recently completed. That process will serve as a foundational element to the strategic planning process currently underway.

First year retention in these programs exceeds 70% for all students entering the major (IPEDS 2021 data); however, graduation rates in four-years differ dependent on economic position. Pell grant recipients graduate at 50% rate, No Pell Grant/ Yes to Stafford Federal Loan graduate at 58% rate, while No Pell/No Federal Stafford Loan Students graduate at 74% success rates. This example demonstrates that financial burdens can decrease successful graduation with a bachelor's degree. The available data from HU internal data analysis has shown that when the affordability gap is narrowed for these students, the first-year retention rate climbs to above that of the well-funded peers.

Historical graduation rates at HU have been just under 50%, these STEM majors included, however the increased retention in recent years has resulted in expected graduation rates above 50%. With the funding offered by the COF program, plus ongoing efforts to continue increasing retention, the university SCAP goal of reaching 65% should be reached by 2025.

HU's fall-to-fall first-year student retention rate is 72.4% (5-year average), compared to a 77.1% return rate across all students who started college in four-year private non-profit institutions (National Student Clearinghouse) in 2014. The 5-year average of four-year (47.2%) and six-year graduation rates (52.6%) waiver compared to national averages of 53% and 55% (National Student Clearinghouse).

Placement and outcomes in our current STEM programs vary based on discipline. Our placement rate in Health Sciences and Athletic Training is above 70%. In the Natural Sciences our placement rate varies depending on subject area, but all programs have a placement rate above 50%. Investment from the COF grant will provide our STEM areas with additional resources to engage students in career planning.

c. Plan to address regional/statewide economic strengths & needs for targeted academic program.

Ohio is in a critical mental health professional shortage. “2,385,144 people in Ohio live in a community that does not have enough mental health professionals.” (NAMI Ohio Fact Sheet, 2021) Seventy five of the eighty-eight counties in Ohio are designated Mental Health Professional Shortage Areas (ODMHAS).

There is also a known shortage of Registered Nurses and RN faculty that is contributing to the overall national shortage of nurses. This is greatly impacting local health facilities, causing them to have to close units if no licensed staff are available, or must hire PCN traveling RNs which cost a much higher rate of pay than a hired employee, thus putting that facility at risk of balancing budgets or closing doors.

Eighty six percent of school districts nationwide answered that they are finding it difficult to hire new employees due to a nationwide shortage of teachers. (Educators for Excellence website, 2023).

Natural Resource/ Water Quality trained persons are also critically needed to maintain the health of the Great Lakes – the world’s largest supply of freshwater. This is essential in that over 11 million citizens depend on the Great Lakes and its river tributaries for its drinking water. To add to challenge, nonpoint (especially releases of Phosphorus that are found in many household and agricultural fertilizer products that lead to Microcystis Algal Blooms – Toxic to humans) as well as point source pollutants control (i.e., combined sewer overflows, factory NPDES permitted water release sites, etc.) are impacting the lakes.

d. COF initiative is part of the institutional strategic plan, supports student achievement.

In October 2020, HU President Robert Huntington announced the Strategic Growth Action Plan (SGAP) Committee; the Board approved the SGAP in December 2021. The SGAP, rolled out in early 2022, established a 5-year plan to strengthen HU’s core student mission, to achieve financial sustainability, and to begin a planning process to navigate the current challenges. The COF initiative aligns with Heidelberg’s SGAP and has the full support of the university’s Senior Leadership and Board of Trustees.

One of the goals in the SAGP is to “**Amplify Experiential Learning Opportunities**”. With the “Purpose to complement student academic portfolios and the impact to make HU students and graduates more attractive in the employment marketplace.” COF scholars will be linked with local and regional businesses and given opportunities to network; this will make their job search after degree completion easier, and HU hopes to achieve a “90% career placement by FY2025” rate (SAGP). Every junior or third year student is invited to network with local and regional employers in their desired field.

Knowing Heidelberg has always attracted a larger number of first-generation and lower-income students than comparable Ohio schools, the focus since 2010 has been on **Total Student Success**. To that end, the Academic Comprehensive Campaign for Excellence (ACCE), launched the Owen Center for Teaching & Learning, raised near \$9 million in new scholarships and over \$3 million for student internships/ conferences/service trips, and implemented programs to improve learning outcomes and retention.

e. Commitments by the institutional that will lead to successful implementation of COF.

HU is committed to the COF proposal. HU has submitted five letters of internal commitment. These include letters from the Chief Strategic & Finance Officer (representing the President and all Business and Legal Affairs), Vice President of Marketing and Enrollment, Vice President of Academic Affairs and Provost, Career Services and HYPE Career Ready® Program, and the Director of Academic Placement working out of the Owen Center for Learning & Teaching. Each letter has the team of persons who will work with the lead staff to assist with program recruitment or implementation in some way. HU has had previous COF funding and is able to use it effectively to assist students’ cohorts. HU asks for new funding to continue to make our STEM programs grow and expand its enrollment numbers, which ultimately will lead to expansion of numbers of in-demand career professionals needed in Midwest jobs.

Choose Ohio First – Hocking College Workforce II COF Application

Executive Summary

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 Southeastern Ohio, Hocking College works with businesses and state and local agencies to deploy targeted training programs for meaningful, gainful employment within identified in-demand occupations. It is through these partnerships that we strive to set apart our students with industry-current engagement and increased opportunities for underserved populations—including women, veterans, individuals impacted by substance abuse, and the 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.

For this Choose Ohio First grant agreement, entitled *Workforce II*, Hocking College seeks to recruit up to six (6) students per year to our Workforce-housed programs: *Water & Wastewater Management* and *Heavy Equipment Management*. The College is seeking a total of \$180,000 to be disbursed across the 5-year cohort.

The Choose Ohio First Scholars Program at Hocking College continues to provide education to those most in need. The goals and objectives of the COF program align with Hocking College's strategic focus of increasing equitable access to education for all. A cornerstone of the Hocking College 2022 Strategic Plan, *A Place for Everyone*, equitable access to education is a priority for the college as social and economic mobility continues to be a challenge for historically underserved individuals. Through Choose Ohio First, Hocking College is poised to increase enrollment in an additional two in-demand workforce fields as identified by Jobs Ohio, impact 30 students directly, and meet our local business and employer needs through access to an expertly trained labor force.

EXECUTIVE SUMMARY

This Choose Ohio First (COF) grant proposal aims to recruit, support, and guide underrepresented populations including low-income, first-generation, and minority students into STEMM fields, specifically nursing and pre-health professions majors. This grant aligns with John Carroll University's (JCU) mission of inclusion, social justice, and developing leaders who will be men and women for others. Targeted outreach will engage high schools with significant underrepresented populations to attract diverse STEMM talent. A cohort model, peer mentoring, research experiences, professional mentorship, service-related experiences, and programming through the Center for Diversity and Inclusion will provide critical support and information for underrepresented scholars.

The targeted programs of study include pre-health professions/pre-medicine majors such as biology, chemistry, interdisciplinary physics, neuroscience, exercise science, and nursing. These programs align with high-demand STEMM fields locally and regionally based on workforce data and the need for greater diversity in healthcare environments. STEMM-related careers account for 18.2% of the greater Cleveland workforce (Bureau of Labor Statistics 2022b), with healthcare accounting for a greater workforce percentage, compared to national averages (Bureau of Labor Statistics 2022b). JCU's programs offer rigorous curricula focused on developing the critical thinking, problem-solving, communication, and real-world skills needed in today's healthcare providers.

The selected programs aim to address critical local and statewide workforce gaps in healthcare fields. We will leverage our current academic portfolio, utilize multiple resources across campus, and connect students with our extensive alumni network, mentors, and regional healthcare employers to provide experiential learning opportunities that will prepare scholars for high-demand healthcare careers. JCU's newly established innovative Bachelor of Science in Nursing program is founded on principles of excellence, leadership, and compassion and provides students with a forward-thinking, transformational learning experience using cutting-edge technology. Similarly, the rigorous pre-health professions programs will prepare students to succeed in any medical graduate program, including but not limited to medical school, dental school, and physician assistant programs. A JCU pre-health professions education instills resilience, adaptability, empathy, cultural competency, and practical skills that are critical to delivering quality healthcare to people from diverse communities.

The COF initiative aligns with the university's goals to increase access, career readiness, and support for underrepresented students. The goal of this new COF grant is to recruit 14 students, seven nursing and seven pre-health professions students, with the intent to increase the number of underrepresented minorities, first-generation college students, males in nursing, and low-income students at JCU who are destined to work in the healthcare industry. The expanded programs will lead to greater student achievement including higher retention, timely graduation, and strong employment outcomes.

The university has developed a detailed plan for COF program continuation, committing faculty, staff, facilities, student support services, and leadership engagement. Ongoing assessment will track student progress and completion rates. The program builds on current successful efforts to recruit and retain underrepresented STEMM students. JCU's previous COF and National Science Foundation grants provided a solid foundation; we can build on the momentum established by the previous grants and with institutional investment, the **COF program aims to significantly improve access and success rates of underrepresented students interested in healthcare careers.**

EXECUTIVE SUMMARY

Kent State University is a leading regional university for Ohio, with eight campuses spanning Northeast Ohio, offering certificates and associate degrees, bachelor's, and graduate degrees. Kent State produces the most graduates of any of the universities in Northeast Ohio and is a major economic engine for the region. Nearly 94% of all students attending Kent State are from Ohio and Kent State is strongly committed to graduating career-ready students in high-demand STEM fields such as healthcare and engineering, further enhancing the economic health of our State. Notably, 63.8% of Kent State's alumni stay in Ohio to work, comprising 3.1% of the State's workforce. The current Choose Ohio First proposal exemplifies Kent State's commitment to workforce development for our State.

Kent State's seven Regional Campuses (Ashtabula, East Liverpool, Geauga (includes Twinsburg academic center), Salem, Stark, Trumbull, and Tuscarawas) are an integral part of fulfilling the overall mission and vision of Kent State. The Regional Campuses provide access to public higher education at a lower cost, while offering the same quality and prestige as the main Kent Campus. Most notably, the Regional Campuses offer learning opportunities locally, in rural areas where our students live, thus providing local learning opportunities and student support close to the student's home.

Kent State has been fortunate to receive generous support from Choose Ohio First in previous years. Kent State's Choose Ohio First program currently supports students in a variety of 4-year degree-granting majors in Biological Sciences, Mathematics, Environmental Sciences, Neuroscience, Computer Science, Chemistry, Physics, Aeronautics, and Engineering. During the past years we have successfully developed and implemented a university-wide approach to recruitment for Choose Ohio First that has resulted in increased access and diversity, a successful approach to Student Support resulting in high levels of retention and persistence in the Choose Ohio First cohorts, and a process for connecting students to work-based learning experiences. However, a major gap and missed opportunity in Kent State's Choose Ohio First programs is a lack of representation of undergraduate programs at the Regional Campuses.

Therefore, the current proposal aims to provide access to higher education to students in programs at the Regional Campuses, in the College of Applied and Technical Studies, to be educated towards jobs of high and growing need in Ohio. Specifically, nine Associate of Applied Science or Business Degree programs in Healthcare, Information Technology, and Engineering Technology were selected for this Choose Ohio First proposal as these directly address job sectors of high need and demand in the State of Ohio and are of the highest academic quality. Moreover, these 2-year degree programs were deliberately selected for optimal short-term impact on student career growth and success and on providing career-ready students to fill job needs in Ohio. Hence, providing scholarship support in these programs will have the greatest impact on student's access to a higher education and career, as well as greatest economic impact on the region. Finally, these programs are well-aligned with the Kent State's strategic priorities and have outstanding leadership from Choose Ohio First Academic Program Leaders and a Leadership Team, dedicated to supporting Choose Ohio First student success.

The number one priority at Kent State is our "Students First" approach which is woven throughout the fabric of our institution. We strive to provide a diverse learning environment where all students thrive, belong, graduate, and become engaged alumni and lifelong learners committed to a life of impact. We have implemented numerous initiatives to support student achievement, which are aligned perfectly with the objectives of the Choose Ohio First program. Moreover, the university strives to provide optimal assistance to students, faculty, and staff for the successful implementation of our "Students First" initiatives. We have implemented student support programs to improve retention and graduation rates, adopted a student engagement strategy to enhance learning through

increased participation in high-impact experiences towards workforce development, and aligned the educational experience to focus on purposeful learning outcomes.

The 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. The focus of the current Choose Ohio First proposal on degrees of interest and impact to students in our rural areas aligns well to this mission. We have implemented enrollment strategies with emphasis on removing barriers, both financial and structural, to make access to higher education more equitable. Our vision is to be an inclusive community whose collective commitment to learning sparks transformative thinking, meaningful voice, and sustainable outcomes to better our world.

Each of the selected programs have outstanding leadership from Choose Ohio First Academic Program Leaders, dedicated to support Choose Ohio First students. Moreover, we have developed and implemented university-wide support for the Choose Ohio First students to facilitate retention and on-time completion. Students will be supported by teams of designated and dedicated advisors in campus offices, Academic Program Leaders, and faculty in their programs. 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 have implemented 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. Finally, events are organized to engage the students as a community and further strengthen their professional skills and preparedness for employment.

In conclusion, Kent State is well-positioned to build on the success of our current Choose Ohio First programs with an emphasis on associate degree programs at the Regional Campuses. Our selected programs are nationally recognized and accredited and provide graduates in high-demand fields in Ohio. This is coupled with our award-winning student success and support services and deep commitment to student access and belonging. We are excited for the prospect ~~to expand of~~ expanding into these education and workforce development areas to continue to support the invaluable investment provided by the Choose Ohio First program.

Executive Summary

Since 1856 Lake Erie College's (LEC) strong liberal arts tradition has fostered a scholarly community that prepares students for professional success, responsible citizenship, and purpose-driven lives. That tradition informs our mission, *to provide an excellent, inclusive, and highly personalized education grounded in the liberal arts tradition. Guided by hope and care, our students are empowered to lead lives of personal significance and professional success as global citizens.* We envision their academic career, and future lives, enriched by self-discovery, strong personal attributes, creative problem-solving, and a thoughtful consideration that balances personal and professional goals in relationship to other's needs. We prepare graduates to cultivate character and a future career throughout their time at LEC.

Graduates who are prepared to enter the Northeast Ohio workforce will find an abundance of opportunity over the next decade. The City of Cleveland is home to companies that rely on a skilled STEM workforce. The economy of Greater Cleveland is diverse, with robust healthcare, bio-science, smart manufacturing, and technology sectors. Reports and forecasts from Ohio Means Jobs | Team NEO and Ohio Department of Job and Family Services project growing demand in healthcare settings which employs 17.1% of our local workforce. Ohio Means Jobs | ODJFS (2020-2030) reports for the Cleveland-Elyria MSA indicate that medical and health services managers (+25.7%), forensic science technicians (15.0%), nurse practitioners (45.0%), physical therapy assistants (20.5%), physician assistants (29.4%), and postsecondary instructors in biology (10.9%), healthcare specialties (17.4%), nursing (19.6%), and veterinarians (14.2%) are expected to see the greatest demand for their expertise through 2030.¹ Smaller yet steady gains are anticipated for middle school (4.0%) and high school educators (4.6%), K-12 education administrators (4.7%), natural science administrators (3.0%), conservation scientists (4.2%), environmental scientists (8.2%), chemists (6.1%), registered nurses (5.7%), clinical laboratory technicians (6.2%), HVACR technicians (3.9%), and welders (7.1%).

Considering our Northeast region graduates ~40,000 STEM students annually, and our current STEM workforce is 97,000 jobs-strong with forecasted growth in 4 key sectors that are the focus of the Greater Cleveland Partnership and the Alliance for Working Together in Lake County, programs like Choose Ohio First will play a key role in helping students see the pathway to an affordable education and one that helps them stay enrolled while they augment their classroom learning with internships and other experiences that equip them with career-ready skills.

LEC is prepared to help students meet our regional employment needs. With the appointment of President Jennifer N. Schuller on July 1, 2023, LEC's new leader announced investment in STEM education as one of her first priorities. That commitment includes investment in our academic programs with new laboratory equipment that undergraduate students will use to undertake advanced graduate-level research and prepare themselves for future education and the workforce. This commitment and corresponding investment are rooted in the College's institutional strategic plan (2018-2022) that calls for *"build[ing] and enhance[ing] academic programs that strengthen our reputation, attract new students, and support the needs of the region"*. We align our academic programs intentionally with the needs of employers. Further, the plan *"place[s] a focus on building and expanding intentional co-curricular activities to support student academic success" while "ensur[ing] that our students have sufficient access to academic support services, such as advising, tutoring, and career development."* With the College's forthcoming 2023-2027 strategic plan, STEM will be a top priority to prepare students for in-demand jobs in our region.

That careful preparation and future-focused approach is woven into our STEM majors. The School of Natural Sciences and Mathematics (SNSM) offers undergraduate majors in biology, chemistry, mathematics, and environmental science and pre-professional tracks in medicine, dental and pharmacy. Physician assistants enroll in our exceptionally competitive master's degree program. Within each of

¹ OhioMeansJobs.com. <https://workforcedatatools.chrr.ohio-state.edu/employmentprojections/>

these disciplines and degree programs, students experience small class sizes that promote rich, interactive learning and lab-based experiences that deepen their understanding of the content. All courses are taught by faculty with a Ph.D. or M.S. degree and industry experience rather than graduate or teaching assistants. These faculty are available to any student who needs additional support.

Lake Erie College's ethos of personalized service and attention informs how we work each day, with each student. Dr. Johnathan Tedesco, dean of the School of Natural Sciences and Mathematics and associate professor of chemistry, serves as the primary point of contact for students, and supportive staff in admission, marketing, financial aid, academic services, and career development. Together, these faculty and staff leaders form an advisory work group that will convene regularly throughout the duration of the five-year grant period to assess, inform, and improve our student's academic and co-curricular experiences as well as our program outcomes.

For our Choose Ohio First cohorts, with significant representation from Northeast Ohio students, support may begin ahead of a first year student's classes with a summer bridge program. Any student who needs transitional support from high school to collegiate level mathematics and writing may enroll. As a student continues his/her education, the Academic Learning Center (ALC) provides complementary services designed to enable students to fulfill their academic potential and to support their academic success. The ALC includes three primary areas of support: the Writing Center, the Mathematics Lab, and Tutorial Services. These services are available throughout the duration of a student's academic career at LEC, including students who begin their LEC careers as high school students earning college credit through Ohio's College Credit Plus program.

Our focus on these important student support services recognizes that many Lake Erie College students come with a range of academic abilities and needs, and many enroll with exceptional financial needs. In academic year (AY) 24, the College will award \$2MM more in institutional aid than it did the previous year, bringing that total to \$17,410,928. Ninety-nine incoming students, or 56.25% of the incoming class qualified for Pell, including eight incoming COF Scholars. Among Pell COF awardees, seven (87.5%) received the Ohio College Opportunity Grant (OCOG). Among LEC's Pell students overall, 39.39% qualified for Pell and OCOG. Institutional aid fills the gap between a student's expected family contribution and need-based aid provided by Pell and OCOG. Programs like Choose Ohio First help close the gap. Eight incoming Scholars will attend this year with \$0 out of pocket.

In AY24, 26% of undergraduate students self-identify as underrepresented minorities. Women comprise 41% of the undergraduate population with greater representation in STEMM majors compared to their male peers (15% vs. 11.8%). Among STEMM majors, more underrepresented women than men are enrolled in these degree programs (35% vs. 31%).

With large populations of high-need and underrepresented students enrolled, and in consideration of the exceptional experience Lake Erie College offers to prepare students for STEMM careers, the College's leadership respectfully requests an award of \$1.2MM.

One of our Scholars shared with us their aspirations, which we would like to share with you: *"I would just like to thank you for this opportunity, and I want you to know that if given this scholarship, I will not be one to take advantage of it. Education is very important to me and being able to afford it is stressful, but with continuous hard work, I know that it will all be worth it. I am a hard worker, passionate, and dedicated to learning more and expanding my abilities".*

Another COF Scholar said, *"This scholarship comes highly commended from the staff and students I have befriended at Lake Erie College, and I'm honored to be considered a good candidate! With the help of scholarships, I hope to reach my full academic potential by focusing more on my studies and less on finances. It's a challenge to become a veterinarian, and rightfully so, but it's one I know I can achieve."*

On behalf of our COF Scholars, thank you for your consideration and the impact we can achieve together.

2. Executive Summary

Lakeland Community College (Lakeland) is committed to increasing the number of Ohio residents successfully completing an Information Technology & Computer Science (ITCS) degree or certificate. As a part of this commitment, Lakeland is requesting \$320,000 in Choose Ohio First Scholarships (COFS) grant funds to prepare 50 students for this high growth job sector. COF Scholarships will be awarded to qualified students over a five-year period from AY 24-25 to AY 28-29.

The goal of this program is to increase the number of underrepresented students completing degrees and certificates in the high-demand ITCS employment sector. Women and minority groups have historically been underrepresented in the information technology and computer science employment sector. A diverse workforce provides the potential for innovation by leveraging different backgrounds, experiences, and points of view. Innovation and creativity, along with technical skills relying on expertise in science, technology, engineering, and mathematics (STEM), contribute to a robust STEM enterprise. Additionally, STEM workers have higher median earnings and lower rates of unemployment compared with non-STEM workers¹. These combined factors contribute to thriving economies and prosperous communities.

Lakeland's mission is to provide quality learning opportunities to meet the economic and social needs of the community. Providing underrepresented students with a COF scholarship is deeply connected to Lakeland's mission and strategic plan aimed at student success. Lakeland's Student Navigator Cohort model will improve student retention and completion rates in these degree programs and - *combined with COF scholarships* - will further increase student success. Quality education is a key optimizer to an individual's financial prosperity, while fulfilling their personal and career goals. It is also a cornerstone of our communities' economic growth and prosperity.

Lakeland was first awarded a Cybersecurity Choose Ohio grant in December 2019 and due to its success, we expanded this grant to include all IT&CS degree and certificate programs. All academic program areas are linked to in-demand occupations in our region and across the state. Lakeland's program has five objectives: 1. Implement a recruitment plan that results in annual enrollment of at least 50 new students in the COF ITCS Scholar Program. Lakeland already aggressively recruits students into its ITCS program and will emphasize recruitment of underrepresented groups into this STEM sector, including women and people of color; 2. Provide comprehensive academic support services to COF scholars to optimize completion of an ITCS degree or certificate. Support services are designed to maximize student success and completion and include tutoring and mentoring; 3. Provide work-based learning experiences to all Choose Ohio First ITCS student scholars. Lakeland faculty and staff work closely with regional employers to address workforce shortages and to insure students possess the skills employers need; 4. Meet all ODHE required reports and information in a timely manner; and 5. Provide a minimum 1:1 institutional match for COFS funding.

Lakeland has a comprehensive recruitment plan to engage and enroll underrepresented students as Choose Ohio First ITCS scholars. Lakeland's Recruitment Office and ITCS faculty will provide information sessions and open houses, faculty and staff presentations, and follow-up emails to advise potential students of next steps including links to Admissions and Counseling. Enrollment rates for Lakeland ITCS students pursuing degrees or certificates are strong, including for underrepresented groups. This suggests our recruitment and enrollment efforts are working. From AY 2018 to 2022, enrollment in these programs was 1,402, gradually increasing each year. Similarly, enrollment of women and minority students increased during this timeframe from 20% to 30%.²

Lakeland's recruiting efforts will target Lake, Ashtabula, Geauga, and Eastern Cuyahoga counties with higher populations of underrepresented groups. All recruiting efforts will be coordinated across campus and include faculty and staff involved in the ITCS COFS program. Dawn Plante, Chief

¹ <https://nces.nsf.gov/pubs/nsf23315/report>

² Lakeland Technology & Computer Science, Enrollment and Retention Data, April 27, 2022 (Excerpt included in Attachments section).

Communications Officer and Vice President for Community and College Relations, oversees Lakeland's Marketing and Communications Department, which includes the Recruitment Office. Recruitment activities include campus tours and information sessions, and Campus Visit Days for high schools. Other activities are planned at area libraries, Ohio Means Jobs offices, Veterans Organizations, Chambers of Commerce, the Alliance for Working Together, College NOW Greater Cleveland, LEAF, Career Technical Education locations, and area high schools. Additionally, Lakeland will provide information about the Choose Ohio First Scholarship program via social media. Lakeland's website has a dedicated email link, electronic signage, Facebook, Instagram, and LinkedIn. Lakeland's marketing department developed an ITCS website that includes links to ITCS Pathways, and a video of faculty and area employers providing an overview of the demand, opportunities and programs available at Lakeland. Lakeland ITCS faculty and administrators coordinate internal student recruitment via offices including Admissions, Recruitment, Counseling, Men's Center, Women's Center, Honors Program, Veterans Support, and Hispanic Center.

Lakeland will leverage two new initiatives in its ITCS department to enhance recruitment to the ITCS Choose Ohio First Scholarship program. This includes a Department of Labor Strengthening Community Colleges (SCC3) grant funded program *Equity in Tech*. This initiative is being led by Lorain County Community College and includes a consortium of Northeast Ohio community colleges. It is an effort to build our capacity to address equity gaps and meet the skill development needs of employers and workers more effectively. *Equity in Tech* aims to help people in marginalized and underrepresented populations overcome barriers to career and technical education programs they need to connect with quality jobs. Lakeland will target the high-demand ITCS employment sector. Lakeland recently hired Beth Cueni as the program coordinator for our SCC3 *Equity in Tech* Program. Ms. Cueni will work in partnership with Lakeland's ITCS faculty and its recruitment and student support administrators to recruit, enroll, and support underrepresented COFS student cohorts to insure successful degree or certificate completion.

Lakeland will also leverage another initiative, "*ITCS College Ready Now*," to enhance our recruitment efforts and increase enrollment into our COFS ITCS program. This program focuses on high school and Career Technical Education (CTE) students and provides them with critical ITCS foundational skills and industry credentials prior to enrolling in college. *The ITCS College Ready Now* program has been successful in increasing enrollment of CCP students into Lakeland's ITCS programs upon their high school graduation. Additionally, students currently enrolled in Career Technical Education programs receive articulated credit for several IT&CS programs, as well as other STEM courses at Lakeland. Through focused outreach and yearly informational events, CTE students can use these articulated credits to begin their educational pathway at Lakeland and either begin their IT&CS career and/or then move on to a 4-year college or university to complete their Bachelor's degree. Choose Ohio First ITCS scholarships will provide clear incentive for students to enroll in these high demand programs.

This proposal is fully integrated with the employment and education needs of both Northeast Ohio and throughout the state. ODJFS identifies ITCS occupations as in high demand regionally and across Ohio. Employers continue to voice a strong need for ITCS workers however, the supply of qualified workers remains limited. These In-Demand occupations align with all degree and certificate programs included in this application. Demand for support personnel and application developers is high in part due to the increase in technology use for people who are now working from home. According to Robert Half Technology, Data Analysts, Network Security, Network Administrators, Helpdesk and Desktop Support Professionals, and Web and Mobile App Developers continue to be in the top 10 most in demand IT professions.³ Jobs in ITCS are projected to grow 15% from 2021 to 2031, much faster than the average for all occupations; this increase is expected to result in about 682,800 new jobs over the decade. In addition to new jobs from growth, opportunities arise from the need to replace workers who leave their occupations permanently. About 418,500 openings each year, on average, are projected to come from growth and replacement needs.⁴ The median annual wage for this group was \$97,430 in May 2021, which

³ <https://www.roberthalf.com/salary-guide/technology>

⁴ <https://www.bls.gov/ooh/computer-and-information-technology/home.htm#:~:text=These%20workers%20create%20or%20support%20computer%20applications%2C%20systems%2C,in%20about%20682%2C800%20new%20jobs%20over%20the%20decade.>

was higher than the median annual wage for all occupations of \$45,760. This need is reflected in Ohio and in our region and is expected to increase exponentially.

The COFS program will help Lakeland achieve each of its strategic goals. Student retention and completion rates are increased when we remove barriers such as the cost of tuition. Lakeland will use this COF scholarship as a recruitment tool and graduate more ITCS workers critical to our regional and state economy. All scholars will be a part of a cohort model. A navigator will help students improve their academic performance using cohort-based support initiatives such as academic skills coaching, tutoring, study tables, and liaison efforts that connect students to campus resources. All scholars will participate in a work experience and gain a solid understanding of the skills needed to be successful in their employment.

The completion of the Guaranteed Transfer Pathway programs will facilitate transfer to 4-year degree programs at almost any public 4-year institution in the state. Many of these institutions receive COFS funding further easing retention and completion rates of students pursuing a bachelor's degree or beyond. Students in Lakeland's ITCS programs can take advantage of completion pathways and/or agreements between Lakeland and several universities including Franklin University, Kent State University, and the University of Cincinnati to complete their 4-year degree, online if desired. Additionally, Lakeland ITCS students can also complete a 4-year degree in IT from Kent State University on the Lakeland campus.

Lakeland's COFS program is 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. Laura Barnard, JD, Executive Vice President and Provost will oversee all aspects of this grant program. Leadership of the COFS program will include Dr. Ryan Hamilton, Dean for ITCS & Engineering Technology, Sue Baker, ITCS Professor and Department Chair, Melissa Amspaugh, Senior Director for Enrollment Operations, Jennifer Collis, Associate Provost for Strategic Educational Programs, Career Pathways, and Retention Initiatives, and Rhonda Butler, Director of Career Services.

ODHE CHOOSE OHIO FIRST FY24*August 2023***EXECUTIVE SUMMARY****A) Rationale for the selected populations for recruitment:**

LCCC is a dynamic, student-centered college intentionally designed to support individuals with balancing multiple roles on their path to college completion. Nearly **90%** of LCCC students work while attending college, with the majority working at least half-time. The average age of LCCC's students is **24**, and many bring life experiences that include caring for dependents, serving in the military, or completing some prior college. Over **80%** of LCCC students receive financial assistance through grants and scholarships, and LCCC has been nationally recognized for holistic, fully integrated services and commitment to student success.

As part of LCCC's *Vision 2025* strategic plan, LCCC has committed to increasing equitable access to the academic and career pathways that align to high opportunity STEM-related industries in Northeast Ohio. To enable student success, LCCC seeks to provide financial and holistic support that boosts access, persistence and completion while increasing STEM students' social capital and career network through experiential learning, transfer planning, and engagement in high impact practices. 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 for whom access to higher education may require intentional financial and support resources. As part of this commitment to equity in access, LCCC adopts best practices to remove structural barriers in key areas of student progress to completion. These target populations reflect LCCC's enrollment management plan, 2022-2024 Completion Plan, and strategic and equity-minded coordination of outreach, enrollment management, and ongoing student support provided by the offices of Academic Affairs (including Division Deans and faculty from STEM programs), Business Growth Services, Career Services, Enrollment Management & Student Services, and School & Community Partnerships. Financial resources including ODHE's Choose Ohio First (COF) STEM scholarships continue to be key to this equity-minded, access-focused work. As part of this commitment to equity in access, LCCC adopts best practices to remove structural barriers in key areas of student progress to completion. In addition, and similarly aligned, is the *Vision 2025* goal of graduating 10,000 students by 2025. As of Spring 2023, LCCC was 91% of the way to that goal.

B) An overview and rationale of the selected academic programs:

For the newest (competitive) COF program opportunity, LCCC is targeting 10 STEM CIP-defined program areas that are stackable towards BAS programs in **Microelectronic Manufacturing Systems (MEMS)** and **Smart Industrial Automated Systems Engineering Technology**, which are key pathways that lead to in-demand careers with family-sustaining wage jobs within Northeast Ohio (see Attachment G re SOC codes & in-demand jobs). The proposed eligible programs include LCCC's newly approved Semiconductor Maintenance Technician Certificate, designed with input from Intel, Ohio Association of Community Colleges (OACC), and the Ohio Department of Higher Education (ODHE) to prepare Ohio students to work at Intel and semiconductor supporting industries. In addition to supporting these Industry 4.0, LCCC will use the COF Scholarship Program to ensure that more Computer Science &

Information Technology students are enrolled into, and successfully move through the **Software Development** and **Cybersecurity** programs towards a planned **Trusted & Assured Microelectronics Systems (TAMS) BAS degree**, now being prepared for submission.

LCCC is seeking to enroll 12 new students into each year of the Choose Ohio First cohort (for certs and associates) and three (3) new students annually for Applied Science (BAS) degrees. LCCC has determined and validated their relationship to building critical workforce pipelines via EMSI, LightCast (formerly Burning Glass) and in collaboration with employer partnerships, advisory boards, and regional workforce development partners such as Team NEO. Program areas selected for inclusion include co-curricular and experiential learning components in alignment with COF requirements. Key Objectives for the LCCC COF program build on demonstrated institutional best practices and include the following components: Recruitment & Marketing (outreach & targeted populations), Work-Based Learning opportunities (co-ops, internships, & research experiences), Supportive Services for certificate/degree retention & completion, high-impact practices (HIPs) (within curriculum and co-curriculars), and COF Operating/Fiscal Management.

C) A synopsis of the plan to address regional and statewide economic strengths for these targeted academic programs:

Northeast Ohio's economy is comprised of three core sectors: manufacturing, information technology, and healthcare, each of which heavily supported by STEM talent. LCCC leadership is actively engaged with regional and local workforce development organizations where higher education and industry integrate to build a sustainable STEM pipeline for the future.

Partnerships include Team NEO, Greater Cleveland Partnership Regional IT Engagement (RITE), Lorain County Manufacturing Sector Partnership, MAGNET--Northeast Ohio's Manufacturing Sector Partnership, Workforce Connect Sector Partnerships and more. LCCC plans to address STEM-related workforce needs utilizing a variety of data analysis, economic-development, and program-specific employer engagement & staff acumen regarding career pathways/options (via advisory boards and the *Career by Design* program initiative) to drive program and pipeline growth and to develop & implement career pathways aligning with regional and statewide economic strengths & needs. This work operates through leadership in academic infrastructure supporting curriculum development and pedagogies, Business Growth Services (BGS) direct work with industry to understand talent needs and develop innovative programs, as well as individual academic programs offerings in Engineering, Business and IT.

D) How the COF initiative is part of the institutional strategic plan, supports student achievement.

LCCC's current strategic plan, *Vision 2025: 10,000 Degrees of Impact*, sets forth a bold vision of impact across the college's region and local communities. LCCC's strategic plan highlights five areas of focus (student-focused, success-focused, future-focused, work-focused, and community focused) to increase the earning potential, economic mobility, and financial security of individuals, families, and communities. The strategic plan's components are designed to create a vibrant community for all, where students achieve success and industry talent needs are met. Equity is at the heart of LCCC's vision and strategic plan, and LCCC's culture of care and innovative practices to support student success are designed with support of historically underrepresented students and communities in mind. LCCC is committed to increasing the attainment level of all students, but particularly first-generation, low-income, racial minority, and adult students through the following key efforts, all of which strengthen the COF student experience:

- Building clear career pathways to certificates and degrees to reduce course overlap and time to degree completion, including for College Credit Plus (CCP) students who begin their studies in high school.
- Creating student experience courses that provide early connections to career-focused work-based learning, experiential learning, and research opportunities.
- Structured academic advising that allows students to meet academic milestones as they advance through their educational program.
- Increased data analysis, tracking and sharing of academic and co-curricular student success.
- Integrating inclusive teaching pedagogies and high-impact practices throughout courses in STEM programs
- Utilizing “Career by Design,” based on the Loss Momentum Framework, to identify key points along the students’ pathway (non-academic and academic) that create barriers and prevent transfer completion

E) Institutional assistance it will receive that will lead to a successful implementation.

LCCC utilizes assessment, research, and continuous improvement among its best practices in operating and advancing the Choose Ohio First program. Specific focus is on placing students together in STEM learning communities to foster a sense of belonging through LCCC CONNECT. Additionally, COF students are supported by Career Services and TRAIN OH Earn & Learn as they are connected to work-based learning experiences like internships, clinicals, undergraduate research and more. LCCC will support scholars’ attendance and participation at conferences, the COF Scholar Showcase and transfer events. Successful students, upon graduation, will transition into graduate school, the military, or the workforce.

COF at LCCC is led by the Dean of Accreditation & Assessment, the Director of Financial Aid, Director of School & Community Partnerships, Manager of Career Services, and Manager of K12 CTE Pathways & Programs. This ensures timely management, communication, employer engagement, fiscal oversight, and full reporting, per ODHE and State of Ohio guidelines.

To support scholars from recruitment through graduation and employment, LCCC utilizes a cross-functional, across-unit team to oversee, plan, and coordinate recruitment, programming, scholar support and persistence, academic program tracking, connection to program faculty, and program evaluation. The LCCC COF Team includes members from academic affairs (including each division supporting STEM programs), academic advising, accreditation & assessment, career services, enrollment services, financial aid, institutional research, and school and community partnerships.

This COF FY24 proposal incorporates strategic institutional completion planning that place significant emphasis on leveraging existing and emerging recruitment pipelines, strategic enrollment management principles, inclusive teaching practices and curricular design, high impact practices (HIPs), evidence-based practices for transforming STEM higher education, and co-curricular educational components to enhance the overall student experience.

Executive Summary for Malone University's Choose Ohio First Grant Proposal

The mission of Malone University is to provide students with an education based on biblical faith in order to develop men and women in intellectual maturity, wisdom, and Christian faith who are committed to serving the church, community, and world. Our Choose Ohio First (COF) **proposal seamlessly aligns with our institutional mission** as it outlines our intention to actively recruit and educate students, in the STEM fields of study outlined by our selected CIP codes, who will engage in work-based learning during their academic experience, thereby using their Malone educational experience to positively impact and serve workforce needs in Ohio. This funding opportunity also does not displace existing resources already allocated to fulfilling our institutional mission but rather provides needed financial support for students particularly the underrepresented student population that we are targeting. **Malone's 1:1 match commitment** with the COF funds will make STEM education more cost-effective as students will receive both the COF funds and matching institutional merit awards. This will provide more access and opportunity for underrepresented students in STEM fields and strengthen Ohio's economic capacity.

The Choose Ohio First scholarship funds will bolster our capacity to **recruit STEM students** to the Malone University campus and support Ohio's workforce needs more rapidly. Malone will continue to **proactively seek underrepresented students for STEM programming** at Malone by partnering with local high schools and their students (see details in the proposal) and working closely with area and regional high school guidance counselors and partnership high schools to intentionally recruit from schools with diverse student populations.

Malone's Center for Student Success (CSS) is designed to provide support systems to assist with retention and on-time completion. We have a *proactive, preventive, systematic approach* to engaging with and assisting every student throughout their Malone experience to achieve their goals. The CSS staff is fully committed to the **COF initiative and to working toward a 100% success rate** for our COF scholars. Our Academic Advisor will help create cohort synergy by meeting with cohort groups several times per year to connect and build relationships. She will maintain and monitor the progress of our COF scholars including GPAs to ensure that any student falling below a 3.0 will be scheduled for tutoring opportunities. Moreover, the advisor will include on the data spreadsheet the documentation of the site placements for clinicals/student teaching/internships and will connect with the faculty leaders who are advising these students to ensure their overall support and success.

Malone University is committed to ensuring that 100% of our COF students have authentic work-based learning experiences as a part of their pathway to graduation to impact Ohio's workforce needs. **All students entering our Malone COF STEM programs are required to complete work-based learning experiences** (internship, research lab experience, clinicals, education field experiences, student teaching, or other work-based learning activities) as a part of their course requirements in their specific fields of study. Connections, networks, and partnerships with business and support agencies for work-based learning are provided predominantly through the specific programs, departments, and chairs/directors of the departments. Each department/program has a work-based learning supervisor who coordinates work-based experiences, tracks student progress, and documents completion at both the program and institution levels.

Malone University is committed to partnering with every **COF student to ensure a successful transition to the Ohio workforce**. Many of our students will already have job offers after their internship, clinical experiences and student teaching as these experiences give both the employer and the student the opportunity to evaluate the skills and workplace match. Malone staff and faculty have built strong relationships in the business community that give our Malone COF STEM students access to workforce needs more readily. Students are introduced to available career opportunities during our fall Calling and Career fair, a job board specifically for Malone students/alumni, and resume support through the Center for Student Success. The Center for Student Success and faculty advisors will mentor, coach and advise COF students and post-graduates through the employment-ready to job placement process. Additionally, career advising is embedded in the curriculum through internships and mentoring with faculty advisors. Our goal is 100% placement in STEM jobs to impact our workforce needs.

Malone University representatives are **actively engaged with our business and education leaders** to ensure we align our coursework with skills needed for the workforce and evolve our course options and programs to ensure we meet the in-demand job needs in our community. We do that by hosting business advisory committees on our campus, by actively serving on regional committees like the Canton Regional Chamber of Commerce Education Committee and Strengthening Stark Task Force as well as by attending statewide forums to keep current regarding in-demand workforce needs and future forecasting. Reviewing current and future trends data occurs at every level of engagement with the business community and one of the tools we use is a robust jobs tool, **Stark Jobs Platform**, which provides academic advisers, job seekers, students, parents, educators and others with information about the *current and future job market*. Data for the platform is sourced from the state workforce agency, OhioMeansJobs, and the U.S. Department of Labor. One of our local partners **and largest Stark County employer, Aultman Health Foundation, has over 500 STEM positions open currently**. The COF funds will help us fill those positions.

COF funding will be a game-changer for our recruited underrepresented students who will now have access to an affordable, high quality STEM education and help fill these in-demand positions. The COF funds will equip more Malone STEM students to meet local workforce needs and improve Ohio's economic outcomes.

Executive Summary

Mercy College proposes to establish Choose Ohio First scholarships for students completing an Associate of Applied Science degree in Radiologic Technology. This degree can be completed within five semesters with excellent hiring prospects. The program was selected because it has a consistent track record for recruiting first generation, female, minority, and Pell eligible students, consistent placement of students in jobs after completion, and offers room for expansion or enrollment within the program. Mercy will utilize the financial resources provided by the Choose Ohio First program to award scholarships to eligible students as substantial resources towards tuition for their program. Many students wishing to complete this associate degree program do not have the financial means to pay for tuition, books, and fees. They are typically employed already and trying to work full-time while also attending school. The Choose Ohio First investment in their achievement will alleviate the substantial burden of having to pay tuition, allowing the student to focus on their academic, social, and career success instead.

Radiologic Technology

Radiologic technologists perform diagnostic radiographic procedures, evaluate radiographic images for appropriate quality, and apply proper radiation protection to patients, self, and others, all whilst providing appropriate patient care in changing situations. The Radiologic Technology Associate of Applied Science Degree Program at Mercy College prepares students to demonstrate clinical competence in performing diagnostic radiographic procedures in a compassionate, professional manner. Using a variety of learning resources, students will acquire the knowledge base in the field of imaging, preparing them to work directly with patients and assist in the diagnosis and treatment of injury and disease.

Mercy College's Choose Ohio First program supports the economic strengths and needs of the region. According to the U.S. Bureau of Labor Statistics, the Radiologic Technologists and Technicians occupation (SOC 292034) comprises 2.495 employment per 1,000 jobs in Toledo, Ohio, higher than the statewide figure of 1.885 employment per 1,000 jobs. Similarly, the Ohio Northwest Region Top Jobs List for February 2022 designates Radiologic Technologists and Technicians as an in-demand occupation, with 884 employed in 2018 and 41 annual openings in the Northwest Region, this occupation accounted for 10.89% share of the statewide total employment in the field. The Ohio Occupational Employment Projections Report shows the Radiologic Technologists and Technicians occupation is projected to grow from 2022-2024 and a current search for Radiology Technologist job postings in Toledo on Indeed.com revealed 113 openings within a 35-mile radius.

Providing eligible students entering Mercy College's Radiologic Technology program with Choose Ohio First scholarships will reduce barriers for these first-time degree seekers. The Choose Ohio First scholarships will enable more students to achieve success by increasing access to opportunities that lead to in-demand, quality jobs and offer prospects for growth. The Choose Ohio First initiative is directly aligned with Mercy College's 2023-2024 Strategic Plan as it supports the pillars of *Excellence* – strengthening quality programs, *Impact* – serving as a catalyst for enrollment and bolstering retention, helping to *Build* the Mercy College Experience through a growing community of Choose Ohio First scholars, and supporting the mission to encourage and *Embrace* students from diverse backgrounds. Mercy College is committed to providing the necessary institutional resources and a wide array of student supports to ensure successful implementation of the Choose Ohio First program.

Choose Ohio First Submission

Miami University, Oxford, OH

PI: Dr. Jessica Sparks

Co-PIs: Dr. James Walden, Dr. Kumar Singh, Dr. Jennifer Blue, Dr. Jeffrey Wanko

EXECUTIVE SUMMARY

Through the Ohio Department of Higher Education's Choose Ohio First program, Miami University seeks to create and launch the Choose Ohio First – Pathways to Careers in Digital and Quantitative Skills (COF-Pathways) program at its main campus in Oxford, OH.

Overview of Selected Academic Programs and Student Support

The grant proposal requests \$1,000,000 in funding over five years to provide scholarships to students pursuing undergraduate or graduate degrees in targeted STEM disciplines at Miami University. Degree programs to be supported include computer science, cybersecurity, smart manufacturing engineering, robotics engineering, data science, data analytics, integrated mathematics education, and other closely related disciplines aimed at building Ohio's digital and quantitative workforce. These career paths are well aligned with striking national and regional employment trends that are largely driven by the increasing digitization of the economy and of society as a whole.

Student support mechanisms utilized within Miami's new COF Scholars Student Success Program are known to enhance educational and career opportunities for participating students. Recruitment strategies include approaches tailored to attract and retain students from under-represented populations in the selected STEM disciplines. The COF-Pathways scholars will be supported by a mentoring committee, consisting of faculty from across participating departments, while taking advantage of existing on-campus support systems to support their retention, graduation and professional development. Experiential learning is a core element of the experience, and the mentoring committee will work with career services and various Miami industry relations professionals to support students in securing work-based experiences (a requirement of the Choose Ohio First Program), such as co-ops, internships, and student teaching experiences, with employers in the scholars' identified fields of interest.

Plan to Address Regional and Statewide Economic Strengths and Needs for Targeted Academic Programs

A recent U.S. Bureau of Labor Statistics report shows that much of the increased demand for STEM professions is driven by growth in the digital economy, including an expected surge in the number of connected devices and an expected rise in the risk from data breaches. Reliance on connected devices is rapidly being integrated within the manufacturing domain with the rise of smart factories and robotic/automated processes. Similarly, increased use of digital technologies creates vast amounts of data, driving increased demand for professionals in data science/mathematics who can analyze and interpret large data sets to inform decision making.

The same trends are mirrored in the state of Ohio, as evidenced by rapid occupational growth rate projections for computer and mathematical occupations such as information security analysts, statisticians, and actuaries. These high demand occupational groups are reflected in the CIP codes chosen for this proposal, representing careers in digital and quantitative skills ranging from computer science and cybersecurity to smart manufacturing engineering and robotics engineering to data science and analytics.

In addition to these STEM fields, we are also committed to supporting related areas in STEM Education. Different from recent Choose Ohio First grants from Miami University, we are partnering with our colleagues in education fields who are preparing future mathematics teachers. According to Ohio's Teacher Workforce Report, an alarming number of middle school and high school mathematics courses in Ohio's schools are being staffed by teachers who do not have the proper certification due to a shortage of qualified teachers in Ohio—particularly in urban schools.

To address these needs, Miami's COF-Pathways program seeks to increase the number of skilled graduates in relevant high-demand STEM fields, at the undergraduate and graduate level, to support the continued growth of Ohio's economy.

Rationale for Selected Populations for Recruitment

The second aim of the proposed COF-Pathways Scholars program at Miami is to increase recruitment and retention of students from under-represented populations in the selected STEM disciplines. There is ongoing recognition locally and nationally of the importance of diversity in STEM disciplines. At the same time that the STEM workforce is experiencing critical demand for new talent in occupations such as cybersecurity, engineering, and data analytics, these occupations are struggling to attract and retain under-represented populations, including Black, Latinx, and Native American students across professions and women in engineering and computing. Ohio's workforce not only requires greater STEM talent in terms of sheer numbers, it also benefits when diverse viewpoints and perspectives inform industry. The COF-Pathways program will provide critical scholarship support to enhance educational opportunities for students from under-represented populations in STEM disciplines. The cohort-based model leverages existing institutional best practices and support systems, and combines them in ways that better serve all students. The COF-Pathways emphasis on work-based experiences also adds a layer of intentionality, connecting students with viable career pathways, professional networks, and guidance early in their careers.

How the COF Initiative is Part of the Institutional Strategic Plan and Supports Student Achievement

The COF-Pathways Scholars program taps into the University's mission and strengths in undergraduate teaching, graduate education, personalized student attention, and immersion of students in co-curricular discovery alongside faculty. While these emphases support the success of all students, the proposed project recognizes that much of what is already in place

on campus can be presented and combined in new ways to optimize the support and success of under-represented students.

As Miami strives toward preparing job-ready graduates for tomorrow's careers, the COF-Pathways program targets in-demand academic programs that are aligned with University strategic priorities and workforce needs and supported through partnerships with Ohio-based partners.

Miami's 4-year graduation rate is in the top 15 of all U.S. public universities, and 98% of our graduates were employed or enrolled full-time in graduate school within 6 months. Available data on 6-year graduation rates and first to second year retention suggest that across all majors at the University, students from under-represented groups are persisting and graduating at elevated rates compared with public university peers. Support systems for students from under-represented groups exist, and the COF-Pathways program seeks to leverage enhanced mentoring, career support, and work-based learning to harness these systems toward graduating under-represented students in selected STEM fields and placing them in in-demand STEM careers.

Institutional Assistance Leading to Successful Implementation

Aside from the creation of a dedicated COF-Pathways faculty mentoring committee, which draws from existing faculty already committed to inclusive educational practices, no new support systems will be created or additional resources required.

All needed elements draw from existing initiatives within the engaged academic divisions (the College of Engineering and Computing, the College of Arts and Science, and the College of Education, Health, and Society), the Graduate School, the Division of Enrollment Management and Student Success (EMSS), and the Center for Career Exploration and Success (CCES), comprising a truly campus-wide commitment.

Leadership from these campus partners have endorsed and committed resources to the plan, which aligns with broader University goals regarding recruitment, retention, graduation, and creating a more welcoming and inclusive environment for all students.

Executive Summary

Recruitment Rationale

Since its establishment in 2020, the Mount's COF program has employed a collaborative and targeted recruitment strategy that has yielded remarkable success. Over the years, the program has effectively recruited four cohorts of COF cITe Scholars in Computer Science: Social Computing. This achievement reflects a strategy deeply rooted in institutional support and alignment with the university's overarching goals of enhancing STEM enrollment and promoting inclusivity, exemplified by its notable accomplishment of achieving a 55% female enrollment—an outstanding feat considering the prevailing gender disparity in the field of computer science.

Our recruitment strategy relies heavily on personalized interactions—such as meetings with faculty. Our multifaceted recruitment strategy is made possible by cohesive efforts of the COF recruitment and enrollment team, which consists of the Office of Admissions, the COF program coordinator, faculty, and support staff. When students visit, we are able to show that our program encompasses dynamic elements, including the demonstration of technology's practicality through work-based learning and interdisciplinary projects. Collaborations with cITe Technologies play a pivotal role, providing COF Scholars with hands-on experiences that bridge the gap between academia and industry, resulting in the creation of impactful projects like Moz Light, Cicada Safari, and MomsThrive.

The program's attractiveness is further amplified by the provision of research opportunities, appealing to students interested in graduate studies. Leveraging social media and employing personalized outreach through text and email facilitate direct and effective communication with potential students. Additionally, synchronization with on-campus recruitment endeavors, prominently showcased by the Innovation Hub, contributes to fostering community engagement during campus visits.

Notably, the program's commitment extends beyond its campus boundaries through partnerships with two-year institutions, which significantly enhance its influence, especially within underrepresented communities. This dedication to fostering wider educational access and inclusivity serves as a testament to the program's holistic impact and purpose.

Program Overview

Through collaboration with the broader university, students, and areas businesses as a well as a commitment to continuous assessment and improvement, program excellence is assured, while a focus on research and graduate preparation further elevates student capabilities. The continuous enhancement of the program is driven by targeted initiatives and hands-on learning experiences that bridge academia and industry.

Addressing regional economic needs, the COF program serves as a pivotal link between the demand for IT professionals and the pursuit of interdisciplinary innovation. Equipping graduates with a diverse skill set and readiness for various career paths, the program acts as a conduit to employment or advanced studies. By seamlessly integrating work and project-based learning, research opportunities, and tailored advising, the COF program ensures that graduates are well-prepared for their post-graduation journey.

In accordance with the university's mission, the COF program establishes personalized connections with historically underrepresented students, thereby contributing to both enrollment growth and diversity. The program is still young—now entering its fourth year as an established program—but early accomplishments, such as a 93.33% retention rate, timely (early) graduations and favorable job placements, underscore the program's effectiveness.

Alignment with Regional and Statewide Economic Needs and Strengths

The COF cITe Scholars program at Mount St. Joseph University strategically aligns with regional and statewide economic needs. By capitalizing on the regional economy's strengths while addressing broader STEM educational needs, the program acts as a catalyst for economic growth and innovation. In a world where skilled individuals adept at harnessing technological tools are in high demand, the program responds to the shortage of IT professionals at global, national, and state levels. Ohio, mirroring this challenge, seeks to cultivate a more substantial pool of versatile IT professionals who can contribute across STEM domains.

The COF cITe Scholars program cultivates STEM-proficient professionals capable of driving local, regional, and statewide progress. Graduates understand user-centric technology design and development for fields like biology, business, communications, mathematics, and education. This equips them to create innovative technological solutions tailored to sector-specific challenges, bridging the gap between technology and various domains. Collaboration with local businesses underscores the program's relevance and impact, fostering professionals who merge technological expertise with sector-specific insights. This not only bridges the IT skills gap but also drives innovation, positioning Ohio as a hub for multifunctional technology professionals, propelling economic potential and future progress.

Alignment with Institutional Strategy and Student Success

Our COF program seamlessly aligns with Mount's mission, advocating for respect, care, and consideration for all individuals while supporting students in their pursuit of academic excellence and knowledge. Our personalized COF recruitment approach mirrors the University's strategic plan, targeting historically underrepresented students such as females, first-generation, Hispanic, and rural students, aligning with the commitment to expanding computer science enrollment and enhancing undergraduate representation. This initiative resonates with the University's dedication to fostering interdisciplinary learning and leveraging liberal arts traditions to educate the next generation for positive community impact. Furthermore, the program's collaboration with the School of Behavioral & Natural Sciences underscores innovation, exemplified by projects like the Cicada Safari app, further highlighting the alignment with the University's research objectives.

Institutional Commitments to Success

Mount St. Joseph University's commitment to students thrives through personalized advising, specialized tutoring, and tailored assistance for COF cITe Scholars. The University's innovative approach encompasses resources such as student-generated guides, informative videos, and the Lost Lions app, streamlining campus navigation. Adding depth to students' academic journeys, programs like the Honors Program, Project EXCEL, and the Learning Center offer tutoring, academic progress tracking, and support for those with disabilities. The Mount's dedication extends beyond academics, evident in the Career and Experiential Learning Center, cooperative education opportunities, and the Health Professions Advising program. Social support flourishes via events, the Mount Roar! engagement app, and the MOSAIC Cross Cultural and Inclusion Center. Highlighting student well-being, resources like the Lions' Cupboard Food Pantry and the Wellness Center ensure holistic care. Regarding the COF program specifically, the program is anchored in a cohort model, showcased through orientation events and collaborative projects all of which nurture a strong sense of community among COF cITe Scholars. Further, the University's vibrant culture of student research offers spontaneous yet essential faculty-student interactions provide additional support. Collectively, these

multifaceted initiatives underscore Mount St. Joseph University's dynamic commitment to nurturing students' growth, success, and overall well-being.

EXECUTIVE SUMMARY

Muskingum University's Choose Ohio First (COF) initiative, ***Broadening Healthcare Workforce Preparation Pathways in Appalachian Ohio***, 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 15.0% of adults hold a bachelor's degree, with only 5.7% being in a STEMM discipline. Over 50% of full-time undergraduate students currently enrolled at Muskingum University are from Appalachia, while 49% are eligible for the Pell Grant, and 36% are first-generation college students.

Regional Nursing shortage. The U.S. is experiencing a critical nursing shortage that is projected to intensify over the next decade. The nation's healthcare delivery systems are overwhelmed and have been further exhausted by the challenges of Covid-19. In 2021 the Department of Health and Human Services (HHS) was strongly urged by the American Nurses Association (ANA) to declare the nursing shortage a national crisis (ANA, 2021).

According to the Bureau of Labor Statistics, the RN workforce is expected to grow by 6% over the next decade creating the need for over 200,000 new RNs each year (Bureau of Labor Statistics, 2023). The current shortage is being exacerbated by the significantly aging U.S. population and the staggering number of aging RNs expected to retire within the next 10 years. It is reported by the AHA that in 2017 more than 50% of RNs were age 50 or older and 30% were age 60 or older with 1 million RNs anticipated to retire within the next 10 years (AHA, 2021).

The Institute of Medicine calls for an increase in the number of baccalaureate-prepared nurses to at least 80% to support patient safety. According to the most recent workforce survey by the National Council of State Boards of Nursing, the current nurse workforce falls short of this with only 65.2% of RNs being prepared at the baccalaureate level. Nursing school enrollment is not growing fast enough to meet the projected demand (AACN 2022)

In Muskingum County, a county with a population of 86,113 (US Census Bureau, 2021), Genesis Healthcare System, the largest employer and only hospital in the county, currently has 95 RN positions open.

Muskingum University has been working diligently with area hospitals and colleges to aid the RN shortage by creating a more robust and sustainable health occupations pipeline in the community. Seven counties in our service area are deemed by HRSA as Health Provider Shortage Areas (HPSAs) with scores of 16 or higher (HRSA, 2023). Muskingum County is designated as one of the Ohio Governor's Certified Healthcare Shortage Areas (Ohio Office of Health Policy, 2022). The following seven focus counties have a HPSA score of 16 or higher: Muskingum, Coshocton, Guernsey, Noble, Tuscarawas, Morgan and Washington (HRSA, 2023). According to HRSA, "HPSA scores are between 0-25 with a higher score being a higher priority area. Scores are determined by the following 3 criteria: (1) Population-to-provider ratio, (2) percent of population below 100% of the Federal Poverty Level (FPL), and (3) the travel time to the nearest source of care (NSC) outside the HPSA designation area." (HRSA, 2023).

Occupational Therapist Shortage. There are 4470 licensed OTAs who live in Ohio (OOTA, 2022). Of this number 438 (9.8%) with active licenses live in 28 of the counties identified by the Appalachian Regional Commission. Only 298 (6.7%) OTAs with active licenses live in the southeastern Ohio counties.

There are 5732 licensed OTs who live in Ohio (OOTA, 2022). Of this number 272 (4.7%) with active licenses live in 28 of the counties identified by Appalachian Regional Commission. Only 183 (3.2%) of OTs with active licenses live in the southeastern Ohio counties. There are more than double the number of OTAs to OTs in these areas of Ohio. The number of OTs in these areas represents 28 of the 88 counties in Ohio 31.8% of the counties included yet only 4.7% of the licensed OTs in the state indicating a significant disparity in the availability of skilled occupational therapy services. Without the OT to initiate

the evaluation process, consumers cannot access the services. Therefore, they may not have the necessary OT services available to improve their safety, function, and engagement in the daily life activities they need and want to do.

In the 2019 American Occupational Therapy Association (AOTA) Workforce and Salary Survey only 9.1 % of occupational therapy practitioners identify as male. There is a strategic goal to increase diversity, including gender, in the profession. This statistic carries over to Ohio.

Academic Programs for COF Initiative: As the only comprehensive four-year institution within a 35-mile radius of New Concord, Ohio and Zanesville, Ohio, Muskingum University will target four COF-eligible STEMM programs through this proposal serving traditional undergraduate, adult non-traditional, and graduate student populations. These academic programs are all aligned with critical workforce need areas in nursing and occupational therapy. For traditional undergraduates, the proposal will include the pre-licensure nursing program. For students in our Muskingum Adult Program (MAP), nursing degrees will be available to registered nurses looking for career advancement through the fully online RN-to-BSN program and to those looking into enter the nursing profession from another field through the accelerated Bachelor of Science in nursing (ABSN) program which features in-person instruction supplemented by online learning. At the graduate level, the Master of Occupational Therapy (MOT) program provides career advancement for occupational therapy assistants who desire to become occupational therapists. The program is a bridge formatted program offering courses online and lab experiences face to face during 18 on-campus weekends during the 2 years of the program. This format permits working OTAs and Alternative Pathway students with a bachelor's degree in a health-related program access to an educational program to advance their career without having to quit working to attend school. There are only 21 schools nationwide (2 in Ohio) that have the designation of bridge program. Only 12 specifically target OTAs, and Muskingum University is the only program in Ohio that identifies OTAs as their primary target audience.

In addition to addressing workforce areas of need, the academic programs were selected because of their alignment with the institutional strategic plan and the availability of resources and personnel to implement a high-quality program. To best serve the COF scholars and achieve the outcomes of the proposed project, the university will build on the successful program model of our current Choose Ohio First program (2008 – present) that spans STEMM academic disciplines for both our traditional students as well as our non-traditional MAP students.

Plan to Address Regional and Statewide Economic Strengths and Needs: This proposal expands the academic scope of the current Muskingum COF program by including targeted STEMM graduate programs as defined by the workforce needs of the Appalachian Ohio region. As referenced throughout the proposal, this population has a level of educational attainment lower than that of the state and nation and is economically disadvantaged—providing scholarships for STEMM degrees will greatly benefit this underserved population. With graduate students joining our traditional undergraduate and adult continuing education COF populations, Muskingum is well positioned to make an impact in the region by producing graduates to fill the in-demand jobs of the region. This broad academic scope will best enable the education and empowerment of students leading to meaningful professional employment and improved quality of life for many families.

To inform the decision of which STEMM disciplines to include in the proposed COF program, a variety of resources were reviewed to determine the talent and workforce needs of our region. The needs of our southeastern Ohio region of Appalachia were prioritized over the statewide needs because most of Muskingum's students come from a radius of within 120 miles from our campus.

The innovative student supports described in this proposal are designed to meet the diverse needs of all students at Muskingum University helping them persist through to matriculation. 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 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 110 students to work on applied projects,

explore careers through field placements, and experience the transformative power of on-site learning through internships.

Alignment of COF Initiative with Institutional Strategic Plan: Muskingum University's FY24 COF proposal, ***Broadening Healthcare Workforce Preparation Pathways in Appalachian Ohio***, builds upon the current COF scholar program and is designed as a part of the institutional *Impact 2025* Action Plan. The plan was developed through a campus-wide collaborative action planning process that began in 2017 and shows how Muskingum intends to navigate the challenging higher education environment. The plan is centered around the mission of developing the whole student and represents the ongoing commitment to provide an excellent educational experience for all students.

Implementation of the *Impact 2025* Action Plan led to the university's receipt of two federal grants focused on strengthening the institution by accelerating student success (U.S. Department of Education Title III Strengthening Institutions Program and U.S. Department of Labor Workforce Opportunities for Rural Communities WORC initiative). The latter grant program provides workforce-based support in healthcare education and career readiness through collaboration with education and industry partners across the southeastern Appalachian Ohio area. These grant-funded programs improve and strengthen student workforce readiness through students' timely completion of impactful academic programs and cocurricular services. Notably, the state-of-the-art Impact Center funded through the Title III award, is designed to promote experiential learning, community partnership engagement, and work-based learning opportunities to help students prepare for impactful employment and service.

Institutional Assistance for Successful Implementation: The university-wide COF leadership team for our current funding has expanded to include STEM graduate program representation. This group contributed to the design of the proposed project and will play an active role in its implementation. Included on this team are representatives from academic discipline areas, workforce development, admission, marketing, student finance, institutional research, and enrollment. This team is well-equipped to provide and facilitate the delivery of all COF program support elements.

The affordability of a Muskingum University education is an important factor in student recruitment given the economically disadvantaged region we serve. The institution has agreed to a multimillion-dollar match to the COF scholarship funding requested. The university has awarded Science Division Scholarships to incoming STEM majors since 1995. The amount of funding dedicated to these awards has remained intact independent of the availability of COF scholarship funding. Science division scholarship funding levels have grown in the number of recipients, total dollars allocated, and a percentage of overall enrollment since 2008, which was Muskingum's first year of COF funding. COF scholarship funding has enabled the institution to provide an increased number of awards at higher support levels per year to our traditional undergraduate students. Adult non-traditional (MAP) students and graduate students have not been eligible for science division scholarships or other institutional aid. COF funding has been allocated in the proposed budget to these students providing them with support that would not otherwise be available. To further enhance this financial support, an assistantship model that is exclusively available to MAP and graduate COF scholars has been newly developed for this proposal. All MAP and COF scholarship recipients will also receive an assistantship that will provide a 23% institutionally supported discount on the annual tuition for full-time students.

Executive Summary

Project Rationale

North Central State College (NC State) proposes to offer 20 [Choose Ohio First](#) scholarships to new students beginning with FY24. Choose Ohio First (COF) is an essential element which supports student success at NC State. Since the inception of COF, NC State has been involved in the program and had four (4) active awards which provided funding for 82 new and 55 continuing scholars for the 2022-2023 academic year.

NC State begins the Fall 2023 semester with 119 COF Scholars in the nine targeted programs – Bioscience (5); Cyber Security (15); Networking (8); Graphic Design (8); Integrated Engineering Technology (3); Mechanical Engineering Technology (14); Licensed Practical Nursing (8); Registered Nursing (56); and Respiratory Therapy (2).

NC State believes that an increase in COF Scholarships to programs which intentionally connect scholars to employers and provides work-based learning opportunities will provide significant regional and statewide benefits to the STEM workforce.

Rationale for the Selected Populations for Recruitment

NC State intends to continue existing strategies to target the following populations to ensure outreach to adult and underrepresented populations within our region:

- Adult students in the “pre” programs of study that intend to apply for competitive health programs
- Students from career-technical education
- Students from Mansfield Senior High School, recipient of an ODHE-sponsored GEAR UP grant to improve college-going rates
- Incumbent workers, especially healthcare employees recruited into the nursing programs (LPN, RN and BSN).

Overview of Selected Academic Programs

Targeted programs include in Bioscience (degree); Business Analytics (degree and certificate); Networking and Cybersecurity (degree and certificate); Graphic Design (degree and certificate); Mechanical Engineering Technology (associate and bachelor degree); Licensed Practical Nursing (certificate); Registered Nursing (associate and bachelor degree); Physical Therapy Assistant (degree); and Respiratory Care (degree). As a result of this maximum \$360,000 investment, 100 additional students will receive COF Scholarships over five years. Data from the Program of Study section shows current college retention, persistence and graduation rates.

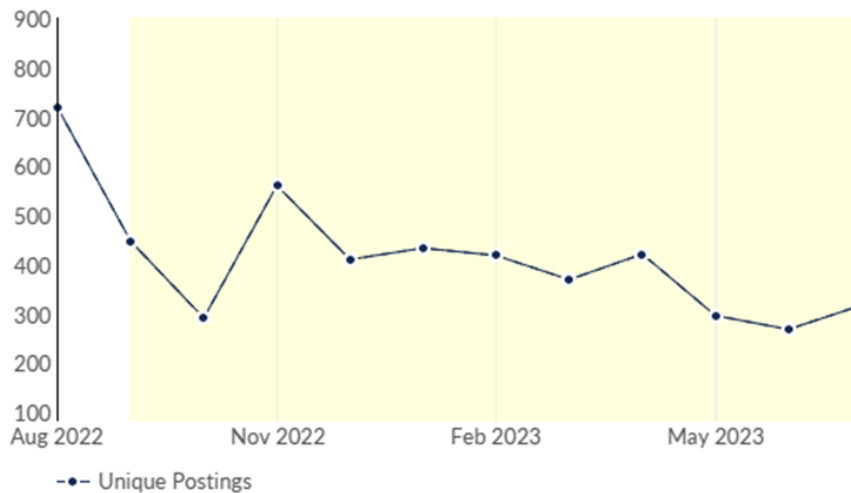
Synopsis of the Plan to Address Regional and State Economic Needs

The table represents key labor market needs over nine regional counties (Ashland, Crawford, Huron, Knox, Marion, Morrow, Richland, Wayne, and Wyandot) using data modeling software from Lightcast. It projects 1,946 annual openings from 2022 to 2028 for occupations mapped to the COF programs, with a projected increase of 1,500 net jobs. Regional median earnings range from \$23.46 to \$41.23 per hour. Program completions represent all regional postsecondary institutions amongst these counties, indicating 874 annual completions for 1,946 annual openings.

CIP Code	Description	Annual Openings	Median Hourly Earnings	Pct. 25 Hourly Earnings	2022 Jobs	2028 Jobs	Jobs Change	% Jobs Change	All Programs > All Completions > 2021 Completions	All Programs > Non-Distance Offered Programs > 2021 Completions
11.0801	Web Page, Digital/Multimedia and Information Resources Design	54	\$26.18	\$19.90	424	493	41	9%	10	10
11.0901	Computer Systems Networking and Telecommunications	191	\$40.66	\$31.17	1,734	1,906	264	16%	15	15
11.1003	Computer and Information Systems Security/Auditing/Information Assurance	188	\$40.50	\$31.17	1,699	1,874	323	21%	27	27
15.0805	Mechanical/Mechanical Engineering Technology/Technician	494	\$22.96	\$18.30	3,545	3,905	526	16%	36	36
26.1201	Biotechnology	187	\$41.23	\$29.11	1,642	1,851	189	11%	3	3
30.7102	Business Analytics	133	\$30.56	\$22.36	917	1,077	329	44%	1	1
51.0806	Physical Therapy Assistant	44	\$28.46	\$24.36	281	286	(5)	(2%)	35	35
51.0908	Respiratory Care Therapy/Therapist	43	\$25.11	\$18.00	437	479	43	10%	14	14
51.3801	Registered Nursing/Registered Nurse	472	\$34.45	\$30.19	5,073	5,552	728	15%	187	143
51.3901	Licensed Practical/Vocational Nurse Training	140	\$23.46	\$21.53	1,682	1,578	(336)	(18%)	109	109
					17,435	19,000	2,102	12%	437	393

Along with traditional labor market data, online job posting is a leading indicator of demand, especially when there is high frequency of postings for the same job. Using an analytics tool from Lightcast, thus far in 2023 there have been more than 300 monthly postings for unique jobs amongst this target group in the geographic region. The median advertised salary is \$46.71 per hour.

Unique Postings Trend



This COF investment is now of particular importance given two “watershed” economic changes coming to the region and state. The Mansfield-based [179th Air National Guard](#) base is in the process of switching to a cyber-security mission – the nation’s first ANG cyber wing. NC State continues to collaborate with the base to support initial retraining of impacted base personnel

and training of future personnel. The construction of Intel's semiconductor facility in Licking County continues to have statewide reverberations that will impact this COF request. NC State offers the only community college-based bachelor in Mechanical Engineering Technology. This program has already been recognized as a recipient institution for the ODHE Guaranteed Transfer Pathway and is actively involved with collaborations with other institutions to provide training specifically requested by Intel.

How the COF Initiative is Part of the Institutional Strategic Plan

COF has been a critical element of NC State's strategic operation since its inception, and for several years more than 10% of the post-high school enrollment of the college have been COF Scholars. This has helped NC State maintain a five-year average 40% of its enrollment, including College Credit Plus, as STEM majors. This includes 158 minority STEM majors in 2022-23 – the highest level since before the pandemic. Finally, COF ties into the college's completion agenda, as over 5 years 59% of degrees have been STEM.

The COF process is managed by a college steering committee consisting of senior college leaders. The COF Steering Committee meets twice per month and administers all activities involving recruitment, Scholar selection, work-based learning, co-curricular engagement, academic monitoring/intervention, compliance, and annual reporting. The COF Steering Committee consists of the following leaders: Vice President of Student Services; Dean of Academic Services; Dean of Business, Industry and Technology; Dean of Health Science; Director of Accounting Services, Director of Admissions; Director of Financial Aid; Director of Marketing; Director of Student Success, Retention & Transition; and Director of Tutoring Center.

Institutional Assistance to Lead to Successful Implementation

The COF Steering Committee devotes substantive time and effort to ensure the quality and compliance of the COF program. Other key contributors include staff from tutoring center, financial aid and the business office along with student success coaches, academic advisors, and faculty who work directly with COF Scholars.

A significant leveraging contribution continues to derive from institutional and foundation scholarships to COF-eligible majors. For FY23, matching scholarships were \$161,000. A large portion of these scholarships went to recipients of NC State's Promise scholarship.

NC State has consistently in the past and plans to continue to promote the COF Scholarship through multiple channels such as the Internet, social media, print flyers and direct presentations throughout the region. During the presentations, NC State leverages a list of "top ten" reasons to choose NC State with reason being the level of scholarship awards. The COF program awarded more than \$200,000 to 142 students (11% of the post high school population) in 2022-2023 academic year.

EXECUTIVE SUMMARY

A. Rational for the selected populations for recruitment

The target population for Northwest State Community College's (NSCC) Choose Ohio First (COF) program will include non-dominant genders, youth aging out of foster care, and long-term unemployed individuals, focusing on people of color from rural northwest Ohio counties. The proposed project will increase accessibility for underrepresented populations to enroll and attend NSCC. It will also support a diverse, highly-skilled workforce pipeline that spurs growth and prosperity while providing students with opportunities for upward mobility.

B. An Overview of the selected academic programs

NSCC has introduced a COF proposal that will allow eligible students, including target populations, to earn Industry-Recognized Credentials (IRC)/certificates and/or degrees that data confirms are in-demand in the northwest region of the State of Ohio and the businesses it serves.

The selected certificate and degree programs included in this application will provide the training that students need to gain employment in the healthcare field. The selected academic programs include:

Associate Degree programs

Associate of Applied Science in Medical Assisting

Associate of Applied Science in Nursing

Certificate Programs

Phlebotomy

Practical Nursing

Completion of these programs will certify the student's competencies and build the COF scholars' qualifications to continue down the healthcare career pathway or articulate to a degree, with the potential for transferring to a four-year institution for continued credential attainment. The work-based learning opportunities embedded within the program will also assist with extending the students' traditional education into the workplace through clinicals, employer mentoring and other student supports in a continuum of lifelong learning and skill development.

C. A synopsis of the plan to address regional and statewide economic strengths and needs for these targeted academic programs

The proposed program outcomes are based on the intent to fulfill growing workforce demands in the relevant STEM fields, but also the dedication to build NSCC's capacity to provide quality, vocationally relevant education and training through an innovative COF workforce development program. NSCC's COF project incorporates the Governor's Office of Workforce Transformation'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 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.¹

NSCC's COF project includes strategies to meet the four Ohio goals listed above.

D. How the COF initiative is part of the institutional strategic plan, supports student achievement

NSCC's mission is "to serve by providing access to excellent and affordable education, training, and services that will improve the lives of individuals and strengthen communities." By providing career pathways, accelerating postsecondary industry recognized credentialing and/or degrees that have labor market value for individuals who are not on a traditional college track, and including strong employer partnerships, the COF initiative will address issues such as quality assurance and employability of graduates.

NSCC's goals are ultimately about meeting students' needs for education and training so they can obtain well-paying, meaningful jobs that also serve the broader needs of the employers and the communities in the College's service area. By doing so, more students will "Choose Ohio First." NSCC will assist the Ohio Department of Higher Education to strengthen Ohio's competitiveness through STEM disciplines/education. The programming proposed within this application will integrate with regional economies, meet statewide educational needs, and recruit and train student groups that have been historically underrepresented in STEM fields, including non-dominant genders, youth aging out of foster care, and students of color.

The proposed COF initiative is directly aligned with NSCC's FY2023-2026 Strategic Plan, most notably to Pillars I, II, and V:

Pillar One - Life Changing Education: Expand high-value transformative education, training, and services that anticipate the needs of learners and community stakeholders.

The COF program supports this pillar by meeting the needs of future learners with financial support to enroll in eligible programs that lead to high quality employment opportunities within the local economy.

Pillar Two – Learning for All: Provide equitable and inclusive access to education, training, and services to increase enrollment, retention, and completion.

¹ State of Ohio, WIOA Combined State Plan. https://workforce.ohio.gov/wps/wcm/connect/gov/cfd09e9e-e2dc-4b64-9601-8682c54bc409/WIOA_Published_Ohio_PYs_2020-2023_State_Plan.pdf?MOD=AJPERES&CONVERT_TO=url&CACHID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDD%20M3000-cfd09e9e-e2dc-4b64-9601-8682c54bc409-njVkbCy

The COF program supports this pillar by increasing access for prospective students who may not be eligible for other scholarship opportunities as well as targeting underserved populations for recruitment.

Pillar Five – Engaged Community: Strengthen and increase community partnerships through enhanced employer, learner, and community relationships.

The COF program supports this pillar through the strong involvement of employer partners who have committed to providing work-based learning opportunities for COF scholars and will find a workforce pipeline through program graduates.

E. Institutional assistance it will receive that will lead to a successful implementation

The COF program at NSCC will receive a wide array of institutional assistance to ensure successful implementation, including the following:

- Administrative Support – A dedicated project manager from the NSCC Grants Office will oversee the implementation and day-to-day activities of the COF program.
- Project Directors – Each of the Dans who overs divisions with selected CIP code programs will provide leadership to the COF initiative, also serving as an intermediary with the relevant faculty members.
- Marketing/Recruiting Support – The NSCC Admissions Office and Marketing & Communications staff will coordinate with grant staff to produce and distribute marketing materials to prospective scholars and via appropriate media outlets.
- The NSCC Advising Center will provide a variety of services to support the COF Scholars, including schedule planning, connection to institutional resources, and direct communication with the COF program manager and grant staff to ensure program success.
- The NSCC Career Services Office and Internship Coordinator will provide support to the COF program by assisting scholars with work-based learning placements and coordinating other employer engagement opportunities, as well as employment preparation services.
- The NSCC Success Center will assist the COF program through providing a variety of tutoring and academic assistance options.
- NSCC's TRIO Student Support Services program staff will provide supplemental support for eligible participants through success coaching and a variety of support services.

NSCC has committed \$1,056,000 in Matching Funds, consisting primarily of dedicated personnel time for staff listed above when contributing directly to the COF program, as well as an estimated \$24,000 in matching funds through NSCC institutional scholarships to support COF scholars.

EXECUTIVE SUMMARY

Since 2011, Notre Dame College (NDC) students have benefited from the generous scholarship support provided through Choose Ohio First (COF). The uncertainty and unrest affecting the world's safety, security, and economy, spotlight the responsibility institutions like ours have for maintaining the excellence of our nation's technology sector. This includes, cybersecurity, intelligence and counter-intelligence professionals, who through data analysis and technological advancements, make the world a safer place to live and work. Aware of the need for more highly-qualified professionals in the fields of technology, intelligence, and cybersecurity, we are pleased to share this proposal. Expanding the COF at NDC will heighten our ability to educate diverse students from our region forming servant leaders dedicated to public service.

Many students enroll at NDC with aspirations that require significant financial support to enliven their dreams. COF scholarships make an NDC education accessible to first-generation, Pell-eligible, and Ohio College Opportunity Grant-eligible (OCOG) students, attracting women and other under-represented groups into STEMM fields. NDC's 2023 COF program will provide scholarships to capable and qualified students who declare majors in cybersecurity, intelligence studies and information systems technology. These students would join a supportive COF learning community that offers personalized advising and mentoring, STEMM- specific programming, career guidance, networking opportunities, and work-based/service experiences aimed at preparing them for primary and specialized technology careers. NDC's 9:1 student to faculty ratio encourages students to build a relationship with their faculty through individualized advising and mentoring. These relationships support their academic and career preparation at NDC and beyond.

Through attentive 1:1 faculty advising, mentoring, and curricular and co-curricular programs NDC's COF STEMM program has steadily increased the number of program graduates. As a result of NDC's COF STEMM program over the past 10 years and the implementation of strategic STEMM recruitment and academic support services, the number of STEMM majors and graduates, across the board has grown. Building upon NDC's experience, faculty lead Dr. David Kirby will strengthen our current COF STEMM program with the addition of the chemistry, biology and mathematics. In collaboration with our COF STEMM@NDC leader, David Kirby, students will be provided with enhanced academic and career support services that promote persistence, completion, and career readiness. Our project team includes the Division of Sciences faculty and staff, admissions, and financial aid staff. NDC will focus our recruitment efforts on first-time, full-time students and transfer students from our three community college partners with whom we have articulation agreements: Cuyahoga Community College, Lakeland Community College, and Lorain 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 students across the three majors 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 COF scholars.
- c) Partner with our region's tech companies and industries to educate students with career-ready knowledge and skills that enable them to pursue professional careers in their chosen field upon graduation and,
- d) Cultivate relationships with area tech firms specializing in cybersecurity, intelligence data analysis and information services so that NDC's COF undergraduate scholars are competitive candidates.

NDC educates students in the liberal arts for personal, professional, and global responsibility. With its founding vision 100 years ago, The Sisters of Notre Dame advanced a mission to educate women at a

time when women may have aspired to but did not pursue a STEMM career. In recognition of our College's commitment to enrolling, educating, and graduating students with exceptional financial need, NDC is designated by the US Department of Education as a Strengthening Institutions Program (SIP)-funded college. Each year, NDC commits more than \$20M of institutional aid to students to make education accessible and affordable. An NDC education changes not only a student, but his or her family and community when a student earns a college degree.

- The year 1 to year 2 retention rates for the 2021 and 2022 cohorts were 57% and 66.67% respectively. The year 2 to year 3 retention for the 2021 cohort is 100%.
- This year, the Fall 22 to Spring 23 retention was 95% and Spring 23 to Fall 23 is 76% for both NDC STEM COF awards combined.
- 89% of graduates from the COF STEM program have entered STEM careers or pursued further STEM education after graduation since our first award (2011).



Ohio Dominican University – Executive Summary

The Choose Ohio First program at Ohio Dominican University (ODU) seeks to boost both the economic mobility of underrepresented students in our Physician Assistant Studies (PA) program, as well as the economy at large in the State of Ohio by providing substantial tuition scholarships, work-based learning experiences, and academic and career support to Ohio students seeking a Master of Science in PA Studies. ODU is particularly well suited to accomplish these goals due to its strong relationships with local hospitals, clinical sites, and school districts, in addition to our rich history of serving students who are economically disadvantaged and/or are members of an underrepresented group. An example of this partnership is the relationship ODU has developed with Central Ohio Primary Care (COPC) who opened their Care Forward Center on the ODU campus, located in Ohio Dominican's Peace Hall. In addition to treating local patients, the Care Forward Center serves as a setting to provide ODU PA students with hands on clinical experiences in a clinical healthcare setting, serving the students on campus and the surrounding community. The establishment of the Care Forward Center has improved access to quality care for those who live and work in northeast Columbus. Due to the location on ODU campus, this clinical facility expands the patient care experience and provides for the PA student workforce development.

[ODU's Physician Assistant Studies Program](https://ohiodominican.edu/academics/masters-degrees/physician-assistant-program/index.html), the first PA program established in Central Ohio, offers graduate cadaver, clinical, and simulation labs. It is both academically rigorous and challenging, offers exceptional educational training, a diversity of clinical rotations within medical organizations around the state, and service opportunities in local communities. The ODU PA Program promotes service and excellence in academics, professionalism and clinical care. The program will prepare graduates to deliver holistic, evidence-based, patient-centered care in a wide variety of practice settings.

<https://ohiodominican.edu/academics/masters-degrees/physician-assistant-program/index.html>

ODU enrolls students in the MS in Physician Assistant Studies each Fall Semester with a program that is in-demand and highly competitive. Admission requirements include a Bachelor's degree with a minimum GPA of 3.0, minimum science GPA of 3.0, required prerequisite coursework, 250 hours of patient-care experience, two letters of recommendation, and an interview. The graduation rate of the PA students is 97%. Currently, 20% of the matriculated class of 2025 graduates represent a population of individuals we have identified as underrepresented populations. This includes individuals who self-identify as being from a medically underserved area, are first generation college graduates, come from a home where English is not the primary spoken language, identify as being economically disadvantaged or are of African American or Hispanic ethnicity. In addition, 8% of the class identifies as representing more than one of those areas. With this grant, our goal is to support these individuals in their academic path to becoming healthcare providers. A focused segment of the university's strategic plan and institutional mission is to continue to recruit students of underrepresented groups and provide an environment where they can thrive and begin successful and productive healthcare careers.

Physician Assistant Studies at ODU is one of the most popular, fastest growing, and most successful programs. Healthcare positions are in high demand across Ohio, and ODU seeks to contribute to this growth through continued workforce development by recruiting and graduating qualified individuals to become certified physician assistants. The Choose Ohio First program will

assist in supporting healthcare workforce development of underrepresented students from the state of Ohio, and bolster the Ohio Dominican University PA Program. ODU Physician Assistant Studies Program students divide their 27 months into both didactic and clinical curricula. The didactic curriculum includes 15 months of classroom and lab studies. This is followed-up by 12 months of clinical curriculum rotations where students are assigned various sites (rotating monthly) – 7 core rotations (Family Medicine, Emergency Medicine, Internal Medicine, Women's Health, Pediatrics, Surgery, and Behavioral Medicine), 4 non-core rotations, and finally professional development. This includes a Transition to Practice course that involves an intensive board review program to better prepare for the Physician Assistant National Certifying Exam (PANCE). The work-based learning experiences, which are designed elements of ODU's Physician Assistant Studies and the Choose Ohio First programs, will accelerate the early careers of ODU graduates by allowing them to prepare for the increasing workforce development demands of the local and statewide economy.

As a small, Catholic, liberal arts institution, Ohio Dominican University is guided in its educational mission to contemplate truth and to share with others the fruits of this contemplation. ODU educates individuals committed to intellectual, spiritual, and professional growth, who develop into lifelong learners, serving others in a global society. ODU's Master of Science in Physician Assistant Studies promotes the Roman Catholic moral teaching on the transcendent and inherent dignity of the human person. The University's faculty, staff, and students work to guard that dignity through their respect for human life from conception to natural death and by their assurance of the right to freedom of conscience for each person involved in the Physician Assistant Studies program.

ODU is committed to the success of our students and has shown through the current COF scholarship grant awards, our readiness and capabilities to provide individual academic support and career development to students in the [Choose Ohio First program](https://ohiodominican.edu/financial-aid/scholarships/choose-ohio-first.html). The ODU PA Program Administrative team for the Choose Ohio First program will be comprised of three representatives from the PA faculty, Cameron Powell (Division Chair, Program Director & Assistant Professor), Nicole Powell (Associate Program Director & Assistant Professor) and Maria Gluys (Academic Coordinator & Assistant Professor). 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 in both the lives of students and in the economic and social prosperity of the State of Ohio. <https://ohiodominican.edu/financial-aid/scholarships/choose-ohio-first.html>

Executive Summary: Preparing Ohio's STEM and Health Professions Workforce, FY24

Ohio Northern University (ONU) has served the state of Ohio by providing quality undergraduate education integrating practice with theory for more than 150 years. As ONU is located in rural Ohio, strategic partnerships with employers and industries are vital to student success through experiential and work-based learning, including internships, co-ops, and community-based research. Ohio Northern has strong existing relationships with regional and local employers that reach into rural underserved areas and these companies recognize the quality education our students receive, as evidenced by ONU's 96% or higher placement rate in each of the past 4 years. The purpose of this proposal is to increase, through Choose Ohio First scholarship funds, the enrollment of students at ONU in STEM and health professions, and prepare professionals for in-demand occupations in Ohio.

Specifically, the proposal aims to increase enrollment at Ohio Northern University in Electrical Engineering (14.1001), Biological Sciences (26.0101), Biochemistry (26.0202), Chemistry (40.0501), Molecular Biology (26.0204), Neuroscience (26.1501), Mathematics (27.0101), Medical Laboratory Sciences (51.1005), Pharmacy (51.2001), Pharmaceutical Biomedical Sciences (51.2010), Nursing (51.3801), 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 25 students per year into the Choose Ohio First STEM and health professions program at ONU with a \$3,400 scholarship per student. ONU will match each Choose Ohio First scholarship 1:1 with University-funded scholarship monies, and most students will receive significantly more scholarship funding from ONU than from Choose Ohio First.

Reorganization of the workforce is occurring in Ohio due to the impact of COVID-19, Intel's new high-tech Ohio campus, significant investment in transportation electrification, and the continuing slow rate of growth of Ohio's population. As a result, there is increased demand for students trained in STEM-related research and health professions, and technology. Students with training in biology, molecular biology, chemistry, biochemistry, and medical laboratory science can use their skills in laboratories and testing facilities. Students skilled in pharmaceutical biosciences can aid research into new drug-related therapies to address needs in the post-pandemic environment. Students with training in the practice of nursing and pharmacy possess skills that are greatly needed in Ohio. Students skilled in electrical engineering and mathematics will be sought after in the coming years of electric vehicle and chip manufacturing in the state.

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 Job Outlook Employment Projections 2020-2030](#), strong growth in "the service-providing sectors will be led by the health care and social assistance industry, which is expected to add more than 86,000 jobs, a 10.6% increase". Growth is expected in the following sectors: home health care services, specialty hospitals, residential mental health facilities; offices of other health practitioners, community care facilities for the elderly, and outpatient care centers. Growth is also expected in the Computer and Mathematical Occupations in industries such as computer systems design and management of companies and enterprises.

Specific science and health care occupations, noted in [Appendix J of the Ohio Job Outlook, 2020-2030](#) report, that are expected to experience growth by 2030 include: physician assistants (28.6%), nurse practitioners (48.5%), genetic counselors (24.6%), respiratory therapists

(21.3%), psychiatrists (11%), biological scientists (2.3%), medical scientists (15.4%), life scientists (15.2%), and epidemiologists (25.7%). Since 2020 and the onset of the COVID-19 pandemic, laboratory and health care opportunities have continued to abound. For example, open positions in nursing top the list of [in-demand jobs](#) in every part of Ohio.

Computer and mathematical occupations are projected to be in the top 10 fastest growing occupational group in Ohio from [2020-2030](#) (Figure 9, pg.12). These projections were made prior to the announcement of major technology investment in Ohio, and demand is projected to increase for the number of jobs in this fast-growing occupational group ([2020-2030](#) Figure 10, page 13). Appendix J of the Ohio Job Outlook 2020-2030 notes growth in positions that require at least a Bachelor's degree: information security analyst (26.7%), data scientists and mathematical science occupations (26.6%), computer and information research scientists (17.8%), electrical engineers (6.7%), and computer and information systems manager (5.6%).

As growth is projected in the occupations listed above, Ohio will continue to see very little growth in population. "Ohio's total population is expected to grow 0.3% in 10 years, and the working-age population will see 0.5% growth", rates that are much lower than that of the US population (7.4% and 8.5%, respectively, [Outlook 2020-2030](#), pg 3). To meet the demands of workforce preparedness, mechanisms such as Choose Ohio First can attract college-going students to ONU to study these majors.

Ohio Northern University has a rich tradition of working with Choose Ohio First to bring students to campus, helping them successfully move through the college experience to graduation, and on to the workplace. Previous Choose Ohio First grants at ONU have been directed to STEM Education, Health Professions, Computer Science and Computer Engineering, Healthcare and Infrastructure majors. Ohio Northern University's collaboration with the State of Ohio has benefitted many of Ohio Northern University's students, and ultimately the general population of Ohio. The current proposal is an opportunity to expand that effort and increase the number of students who will 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 and the mission of Ohio Northern University. ONU will strategically use Choose Ohio First scholarships to support recruitment and retention of students in STEM and health professions fields. Special attention in the recruitment process will be given to under-represented populations. ONU's retention and completion rates are built into this model. Prior Choose Ohio First awards have demonstrated success in enrollment in the University's programs. In sum, adding 25 students annually through a \$3,400 matched Choose Ohio First scholarship to the Ohio workforce pipeline is a tangible way for Ohio Northern to assist the state of Ohio to strengthen the workforce of STEM and health sciences by preparing the next cohort of scientists, laboratorians, engineers, and health care professionals.

Executive Summary

Rationale

Ohio University is pleased to submit this proposal for 2024-29 Choose Ohio First funding to enhance the attraction, retention and successful completion of students in biological sciences, business analytics/information systems, chemistry, physics, and STEM-related education fields. Of particular importance to the institution is the Choose Ohio First program's emphasis on recruiting and supporting students from underrepresented populations who frequently overlook these fields of study as a result of systemic barriers. The funding requested through this program will support 24 students per annual cohort and 120 students throughout the award's period of performance. Ohio University is requesting \$351,000 and pledges an additional \$351,000 in matching funding or in-kind (personnel time) to be used as additional scholarship awards to these cohorts of students. Ohio University faculty and staff will be joined by industry partners in providing hands-on, work- based learning opportunities for all Choose Ohio First scholars. In return, Ohio University will teach and train students for the in-demand jobs of the future in the aforementioned fields.

Overview of Selected Programs

The specific programs involved with this proposal are Biological Sciences (preprofessional), Chemistry and Biochemistry, Physics and Astronomy, Science and Math Education for Adolescent to Young Adult and Middle Childhood Education, Educational Research and Evaluation, Counselor Education, and Business Analytics/Management Information Systems.

Within the College of Arts & Sciences at Ohio University, the undergraduate programs of Biological Sciences (preprofessional), Chemistry and Biochemistry, Physics and Astronomy provide the opportunity to add qualified workers to healthcare, manufacturing, and technological sectors.

Within the College of Business, the undergraduate programs of Business Analytics and Management Information system address expert predictions of shortages of analytics professionals.

With the College of Education, the graduate programs of Teacher Education (Mathematics/Science AYA and MCE), Mixed Methods Research, and Counselor Education address the shortage of qualified teachers, mental health workers, and analysts.

Statewide Economic Strengths and Need for Targeted Programs

Ohio University is keenly aware of the region in which it is based and the communities that it serves. Southeast Ohio sits in the heart of Ohio's 32-county Appalachian Region. This region is characterized by Appalachian Regional Commission based upon its distinct social, economic, and cultural characteristics. High rates of poverty coupled with per capita income and high school graduation rates that lag behind the national average often make attending college seem unattainable to many students in this area. Data from the ARC bears this out by showing that residents of Appalachian counties achieve baccalaureate or higher degrees at rates that consistently lag behind the national average. Ohio University's Choose Ohio First will make special efforts in its outreach and recruitment efforts on students from this region with an interest in pursuing careers in related disciplines.

Throughout the state of Ohio, reports, including ones from Ohio Department of Education, highlight shortages and high demand for STEM/Math focused education fields, healthcare professionals, and analytical skills. As local employers, whether they are school districts or multinational corporations moving into Ohio, higher education institutions need to respond to their local contexts by helping to develop a highly trained and skilled workforce that can meet the demands of local economics.

Strategic Planning & Student Achievement

This proposal aligns with university's *Strategic Pathways for Ohio University's Future* strategic plan by building stronger alliances with industry, by increasing access and affordability for students from underserved populations in highly-sought-after STEM disciplines, and by providing the State of Ohio with qualified and capable qualified students. The work will be supported by a number of units across the institution all unified in their mission to support student success and degree completion. Outreach and marketing will be coordinated through the Office of Undergraduate Admissions in close consultation with the each College's Associate Dean for Academics. Once enrolled, students will participate in career orientation workshops, join a peer-mentor cohort and Learning Community, and be provided with professional academic advisors who will design a personalized course of study that will chart a path for on-time graduation. Professional career counselors in both the college and in the Ohio Career Network will work together closely to provide students with access to professional development opportunities as well as internship and Co-op and job postings and interviews through Ohio University's Handshake portal which connects students to thousands of jobs and internship opportunities annually. Finally, the college's faculty will provide the technical and analytical knowledge that will prepare Choose Ohio First Scholars for the rigors of careers.

Commitments

This proposal has the support of the senior leadership of the institution and brings together the entire breadth of Ohio University administrative and academic units focused on the academic success of our students. From the moment they consider attending Ohio University to the moment they graduate, Choose Ohio First Scholars will find supportive peers, staff members, and faculty all united in their desire to see them achieve their academic and career goals.

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 (OWU) is honored to partner with the Ohio Department of Higher Education to offer Choose Ohio First scholarships. The university looks forward to building on current momentum should additional funding be approved. Funding enables us to recruit and retain Ohio residents from underrepresented backgrounds and lessen financial barriers to obtaining a degree in STEM fields. In October 2022, OWU hosted Chancellor Gardner as a speaker at the rededication of our historic Slocum Hall, where we were humbled to hear him say that OWU was one of the Choose Ohio First program's strongest partners. We respectfully seek the opportunity to grow our partnership with the Ohio Department of Education to expand access to our Choose Ohio First scholarship program.

We propose a cohort of 10 students to ensure the quality of additional support and mentorship and 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.

Overview and rationale of the selected academic programs

OWU extends the advantages of a liberal arts education to all students to prepare them for work, life, global citizenship, and democracy. The fundamental strength 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 problems in fast-growing STEM occupations. A STEM major paired with a liberal arts education prepares OWU graduates to be the next generation of the workforce to keep pace with a changing economy and drive economic development in their towns, regions, and states. Specifically, the STEM curriculum in 13 academic departments is the foundation for 23 majors at OWU that are supported by the Choose Ohio First program. Those graduates will go on to propel the economic growth of Ohio and fill needed gaps in STEM employment throughout the state.

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.

Plan to address regional and statewide economic strengths and needs

Central Ohio and Delaware County, in particular, continue to experience strong growth, notably among employers who hire STEM graduates. In 2022 research published by the Federal Reserve, “like the nation at large, the metropolitan areas of the Fourth Federal Reserve District—Ohio, and parts of Pennsylvania, Kentucky, and West Virginia—have seen growth in STEM and healthcare fields in recent years. A high and growing share of the District's labor force is employed in these occupations.” Metropolitan areas in Central Ohio have higher STEM and healthcare employment shares than the national average. A key to the promise of economic progress through STEM and healthcare employment growth is that these higher-skilled positions are better paying than most other occupations. OWU is prepared to lead the way in providing graduates for these growing fields.

An additional example of the growing investment in STEM opportunities in Central Ohio and recognition of OWU's leadership in the STEM fields, OWU was recently named as one of the seven institutions to receive a portion of the \$17.7 million of grants from Intel to develop semiconductor education and workforce programs. The funding is intended to help OWU and other Ohio colleges and universities

address semiconductor manufacturing workforce shortages and technical challenges, and to develop new capabilities with an emphasis on chipmaking.

<https://www.dispatch.com/story/news/education/2022/09/09/intel-invests-17-7-million-for-ohio-semiconductor-research-education/66804476007/>

OWU's comprehensive liberal arts curriculum and exceptional STEM programs attract and equip students who possess the necessary qualifications and adeptness to seamlessly transition to Central Ohio's multifaceted workforce. This workforce sustains essential industries, technology nuclei, cutting-edge computing services, biomedical and health sectors, aerospace development hubs, logistic management, manufacturing, agriculture, and various other professions. While the specific skill sets may vary among these diverse fields, the foundational proficiencies OWU instills its graduates are adaptable and universally applicable. The growing demand for our STEM graduates reinforces Ohio's economic competitiveness fostering a climate of progress, ingenuity, and burgeoning talent. Ohio's economy hinges in part on a liberal arts educational system like OWU's that paves the way for collective success. OWU takes seriously the task of not only educating but also preparing graduates for pathways in high-demand careers that require postsecondary education.

Between 2018 and 2022, nearly 30% of our graduates earned degrees in STEM disciplines. Among 2022 STEM graduates, 61% have gone directly into the workforce while 24% have pursued graduate studies. Though our outcomes data for the graduating class of 2023 is preliminary, we are encouraged by the growth in the number of STEM majors to 35% from 30% from the previous year. Using preliminary data, a full 36% of our 2023 graduates are working full-time in a STEM field and 27% are continuing their education in STEM field. These statistics make us confident that our graduates remain committed to STEM fields of study after graduation.

Women, traditionally underrepresented in STEM fields, have excelled in them at OWU, comprising nearly 60% of our STEM majors during 2018-2023. Within the first two cohorts of COF scholars, 65% are women. Another traditionally underrepresented group who thrives at OWU are first-generation students. The newly established Bishop Elevate office aims to create a supportive network that fosters a sense of belonging and empowerment for first-gen students. Navigating higher education can be complex, and we are dedicated to equipping the nearly 19% of our students who are first-gen students with the tools and skills they need to demystify the college experience, achieve their full potential, and thrive in their academic pursuits and beyond.

Rationale for the Selected Populations for Recruitment

The admissions team is pleased to inform prospective students, parents, and high school counselors about the Choose Ohio First scholarship program in support of STEM majors. If our proposal is approved, funding will help OWU to recruit and retain Ohio residents and lessen financial barriers to earning their degree in STEM fields.

As commitment to OWU's strategic pillars, OWU's Office of Admission is particularly attentive to the recruitment of students from diverse backgrounds. Our Diversity Recruitment plan 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 STEM majors who are from marginalized and historically underrepresented backgrounds.

Alignment with Institutional Priorities and Institutional Investment for Successful Implementation

The Choose Ohio First initiative aligns with OWU's strategic priorities. Approved by the OWU Board of Trustees, three strategic pillars guide our work in our relentless pursuit of a brighter future for Ohio Wesleyan. Those strategic pillars are:

- Develop a distinctive and transformational student experience.
- Build a diverse and inclusive campus community.
- Achieve financial sustainability through innovation and entrepreneurship.

As it pertains to the COF opportunity, the transformational student experience builds on OWU's tradition of excellence in STEM, informed by a holistic liberal arts perspective to ensure cross-disciplinary thinking instead of compartmentalization. OWU reaffirms its commitment to underrepresented students by continuing to recruit and enroll high quality students and provide them with the resources and support to be successful, regardless of their background. The COF scholarship serves as a conduit for the university's broader commitment to underrepresented groups of students in the STEM disciplines by providing additional financial resources and cultivating a campus community characterized by diversity and inclusivity.

In addition to strategic planning, OWU has significantly invested in its experiential learning infrastructure which will allow for continued success of the COF program. OWU has invested in the creation and expansion of the OWU Connection, its signature experiential learning opportunity for students. Created in 2008, the OWU Connection has expanded and been a draw for prospective students and an important component of our retention strategy. Significantly, in 2022, OWU faculty adopted a complete integration of the OWU Connection into the curriculum, including a required experiential learning opportunity for each student, which could include research, internships, or other hands-on learning experiences. OWU's investment in the OWU Connection dovetails with COF's commitment to the value of work-based learning experiences.

Within the OWU Connection, one critical area in which OWU has invested is the Career Connection Office, which plays a crucial role in developing students' readiness for internships, research, and employment as a complement to their classroom learning. Additionally, the power of employer partnerships through an active Career Connection program have been a part of the success in growing our pipeline of successful STEM graduates in recent years.

Some highlights of the growth of our Career Connection Office include:

- Significantly investing in human capital to expand the office's reach
- Developing innovative programming responsive to student and employer needs
- Creating internship and employment opportunities through Alumni and Employer Partner Networks
- Creating Career Communities that offer industry-specific content and resources, including STEM
- Actively engaging OWU's student body through a variety of peer channels, including the hiring of interns and Career Connection Ambassadors, who communicate career-oriented services to fellow students, offer advice on programming, and serve as leaders at career-oriented events.

As a result of these investments, OWU has seen significant results, including an increase of approximately 200% in weekly programs over the past two years and a 55% increase in student appointments among STEM majors during that same period.

Specific to the COF proposal, OWU has convened a cross-divisional workgroup to plan, implement, and assess the COF program. This workgroup includes representatives from the Admissions, Financial Aid, Advancement, Career Connection, and faculty divisions to ensure robust partnership and a holistic approach to supporting our COF scholars.

Our strategic pillars firmly underscore OWU's unwavering dedication to fostering a sound liberal arts education and STEM programs to meet the growing needs of dynamic field. Our current emphasis harnesses institutional strengths and fosters collaborations that pave the way for enriched opportunities in research, travel, internships, and interdisciplinary learning. OWU's persistent focus on these foundational elements of undergraduate education has garnered prestigious national rankings, as evident in the latest "Best Colleges" listing from *U.S. News and World Report*, along with accolades from the *Princeton Review*, *Fiske Guide to Colleges*, *Money Magazine* and others. The Choose Ohio First scholarship program has been a natural extension of our collective resolve to provide life-changing experiences for our students and has allowed us to expand access to underrepresented STEM scholars.

Rhodes State College

EXECUTIVE SUMMARY

This Choose Ohio First 2024 (COF24) grant opportunity is focused on broadening Rhodes State College's (RSC) previous Choose Ohio First awards in fields that represent critical STEM workforce needs in our area. While the COF24 grant opportunity will be widely marketed to all potential high-achieving students interested in STEM, COF24 seeks to increase the number of students who are supported by this scholarship by eliminating previous barriers to the funds. To that end, the College is in the process of implementing a new suite of financial aid technology. This technology will allow the COF team to take a more proactive approach to identifying students who meet the COF eligibility criteria and provide outreach to those students to connect them with the COF program. Additionally, the project will seek to increase the number of under-represented populations entering these programs. High school enrollment data was used to identify area high schools for an additional recruitment focus. The selected schools have STEM focused programs and demographic data that met the COF24 criteria. Marketing will also be focused on adult populations, in our service area who meet the criteria, including with area employers who wish to upskill their incumbent workforce.

To ensure there is ample opportunity for student participation, RSC has selected a broad array of STEM programming.

- Advanced EMT Certificate
- Agricultural Robotics and Intelligence
- Agronomy
- Artificial Intelligence and Machine Learning
- Associate of Applied Science in Agricultural Technology
- Associate of Science - Pre-Health Concentration
- Cardiographic Technician
- Certificate in Concrete Technician
- Construction Management
- Dental Hygiene
- Digital Media Technology
- Electro-mechanical Systems Technology
- Electronic Engineering Technology
- General Prep - Dental Hygiene
- General Prep - LPN to AD Transition Program
- General Prep - Nursing
- General Prep - Occupational Therapy
- General Prep - Physical Therapy Assistant
- General Prep - Practical Nursing
- General Prep - Radiographic Imaging
- General Prep - Respiratory Care
- Health Care Technology
- Manufacturing Engineering Technology
- Mechanical Engineering Technology
- Medical Billing & Coding Certificate
- Network Security
- Nurse Assistant
- Nursing
- Occupational Therapy Assistant
- Phlebotomy Certificate
- Physical Therapy Assistant
- Prescription Mapping in Agriculture
- Radiographic Imaging

- Respiratory Care
- Sterile Processing
- Surgical Technology
- Web Programming/Computer Programming

To ensure that these chosen COF24-targeted academic and certificate programs support regional and statewide economic strengths and needs, the College not only relied on conversations with our business and industry partners but also examined two different sets of data provided by the Ohio Department of Job and Family Services and the Ohio Development Services Agency (Appendix H-Industry Letters of Support). The College identified the closest corresponding occupations in the State of Ohio's Occupational Projection report, and all show occupational growth. The College also works closely with area employers to match students with high quality work-based learning opportunities as well as job openings upon graduation. In addition, career advancement information related to STEM occupations as well as assistance in honing job search skills will be offered to the scholars by the College.

Recipients of the COF scholarship will help diminish the financial insecurities that RSC students often face. This will reduce the need to work long hours or extra shifts, thereby increasing their ability to focus on their academics and engage in enrichment activities, assisting in retention and on-time completion.

Scholars who engage in enrichment activities and quality RSC STEM programs will be able to take advantage of articulation agreements and transfer opportunities. The unused or saved federal funding reduces or eliminates the scholars' need to acquire student loans as they continue their educational experiences. COF scholars who choose a path directly to in-demand STEM careers will be able to use earnings within the community rather than paying student loan debt, which fulfills the College's mission to change lives, build futures, and improve communities.

High-achieving students require a different support focus than non-scholar students (McClellan, Creager, and Savoca, 2018). All registered RSC students have access to tutoring, advising, success coaching, and career development services. Previous COF scholarly plans have taken a deficit-based approach when providing educational support. Research indicates that a strength-based approach is effective for student scholars in retention and on-time completion (Wilson, 2019). The College plans to use a strength-based approach for the FY24 COF Scholarship grant cycle. For specific details related to the strength-based approach see Student Support. The College understands the importance of a cross-functional level of support for the FY24 COF Scholarship plan.

Summary

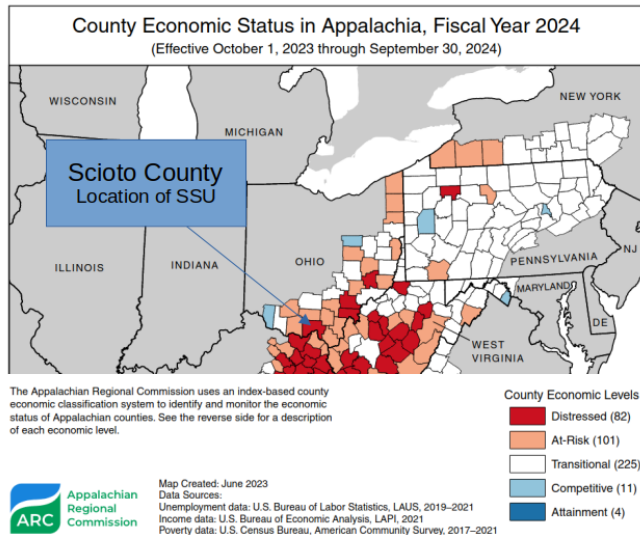
Provide a rationale for the selected populations for recruitment, including recruiting underrepresented populations in the fields of science, technology, engineering, and mathematics or education majors with a STEM focus.

Choose Ohio First allowed Shawnee State University to stabilize programs during an exceedingly challenging time in higher education. The scholarship also allowed the university to grow programs while providing resources to students to enhance the quality of programs. No doubt, Choose Ohio First funding allowed SSU (Shawnee State University) to maintain its national ranking for Game Design in the Princeton Review without the benefits of this program. Many of the other benefits appear throughout this application. SSU seeks \$999,880 funding for the following programs.

Healthcare	Advanced Technology	Support
Respiratory Therapy	Electromechanical Engineering	Teacher Education: Science and Math
Biomedical	Computer Engineering	<i>The teacher education program helps address local workforce shortages and state needs generally.</i>
Health Administration	Plastic Engineering Technology	
Nursing	Cyber Security	
Medical Laboratory	Gaming (Digital Simulations)	

Shawnee State University is in Portsmouth, Ohio. Most students who enroll at SSU come from the counties contiguous to Scioto County, the university's home county, or counties that border a county. Internally, the team at SSU refers to this area as "PALS-JR+." The "plus" refers to the counties surrounding Pike, Adams, Lawrence, Scioto, Jackson, and Ross counties. These counties have above-average poverty and extremely low labor force participation rates.

Shawnee State University serves students from some of the most economically distressed counties in the country, according to notable sources such as the Appalachian Regional Commission (ARC) and the United States Census. The [map below](#) is a truncated version of a map that shows the economic ranking of each county, although the ARC only shows Appalachian counties on the map. SSU students enroll from the counties that surround the university, and that region is one of the poorest in the United States.



Provide an overview of the selected academic programs.

The programs identified in this application are essential to the university's and the region's long-term success. Shawnee State University welcomed a new (Interim) President a few months ago. The former Vice-President of Advancement and Enrollment Management now serves as president and is using his experience, [per the strategic plan](#), to fully maximize the capabilities of the healthcare and advanced technology programs at SSU. These programs provide valuable training to students while supporting the Shawnee State University service region with talented individuals.

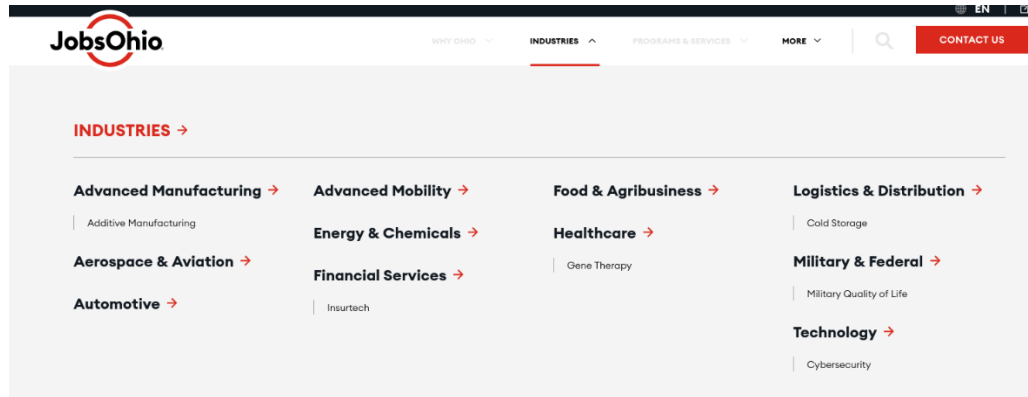
The programs in this application are organized into two primary areas of concern: healthcare and advanced technology. There is one program that allows the others to exist: teacher education programs in math and science. Since our last submission, there have been improvements in several of our academic programs, in addition to external validation from several national partners. For example, the plastics engineering program was recently accredited by ABET and is the only one in Ohio to acquire this important standard. The rest of the engineering department also benefits from this recognition due to the interconnectedness of the programs and shared space and resources.

The electromechanical engineering program is a well-rounded degree, and graduates can work in various fields. As a campus community, we are deliberately working to strengthen the entire engineering program. That department also includes cybersecurity, gaming (digital simulations), and computer engineering. That means the entire department would be COF-eligible if ODHE funds this application. The chair of the Engineering Technology Department, Adam Miller, is one of the best faculty members on campus and is now in charge of [technology transfer at SSU](#).

The healthcare programs are vital to the university because there is significant interest in most of them, and students can stay in the region after graduation. Higher education can be a scary proposition for some first-generation college students and their families, but that can be assuaged with the opportunity of a good-paying job within 30 miles of their home. Nearly 60% of the students at SSU identify as the first in their family to attend college.

Provide a synopsis of the plan to address regional and statewide economic strengths and needs for these targeted academic programs.

Below is a screenshot of the targeted industries publicly available on the JobsOhio homepage. Again, the overlap between the areas of statewide opportunities and historic strength overlaps with the proposed scholarship programs in this application. This overlap is important because the JobsOhio focus industries are the industries the highest levels of leadership want to attract to Ohio, or retain existing Ohio businesses. It makes sense to offer academic programs that support these industries.



Describe how the COF initiative is part of the institutional strategic plan, supports student achievement.

The programs in this application are also part of a renewed commitment of the university to devote more resources to signature programs in areas of need and student interest. While the final plans require additional refinement, there is no doubt that healthcare and advanced technology are the university's priorities for the foreseeable future.

Describe commitments by the institution that will lead to successful implementation of the COF program.

The university reorganized the Choose Ohio First Leadership on campus. The new program leader is Sheena Shifko. Last year, the SSU Board of Trustees recognized for her outstanding work in the classroom by awarding her the Distinguished Teaching Award for 2022. Associate professor Shifko will provide a new perspective on the Choose Ohio First program as the university takes its next iterative step.

The current presidential administration at Shawnee State University has made and will continue to make choices that reflect those values. Examples include identifying new people for leadership, funding priorities that enhance the student experience through program development, campus placemaking, and targeted enrollment initiatives.

An excellent example is some of the "third spaces" now available in the [Kricker Innovation hub that opened in March 2023](#). Many of the advanced technology programs in this application will benefit from this facility.

Other administrative commitments include expanding the grants and sponsored research operations and using funding from other sources to provide a better student experience.

Sinclair Community College, Dayton Ohio
Choose Ohio First – Health Sciences
Executive Summary

Provide a rationale for the selected populations for recruitment, including recruiting underrepresented populations in the fields of science, technology, engineering, and mathematics or education majors with a STEM focus.

Sinclair's COF Health Sciences project will focus on using the COF scholarship to recruit first-generation college students and underrepresented racial and ethnic minorities to the health sciences. The project has an added emphasis on recruiting parents with dependents under the age of five, as these students can benefit from free or reduced-cost childcare on campus through our federally-funded CCAMPIS Program. The project will recruit new student community college students from area school districts with racially and ethnically diverse student bodies, including the school districts where we have Educational Talent Search and Upward Bound programs to assist students with completing high school and being the first in their families to enroll in college.

Provide an overview of the selected academic programs.

The Health Sciences Division at Sinclair educates students to become competent and compassionate health professionals through the use of cutting-edge technology, health and wellness activities, evidence-based practice, and inter-professional initiatives.

Promoting health and wellness, the Health Sciences division has earned a strong reputation for preparing professionals to encourage healthy lifestyles, assess levels of wellness and treat compromised health. New students taking 6 credit hours or more in one of the following programs will be eligible for COF Health Sciences Scholarships:

- Allied Health (Community Health Worker)
- Dental Health Sciences
- Emergency Medical Services
- Medical Assisting
- Mental Health and Addition Services
- Nutrition and Dietetics
- Nursing
- Radiology
- Rehabilitation Services (Occupational and Physical Therapies)
- Veterinary Sciences
- Respiratory Care
- Surgical Technology

Provide a synopsis of the plan to address regional and statewide economic strengths and needs for these targeted academic programs.

Nationwide, Dayton ranks 70th out of the top 100 metropolitan areas for educational attainment. Fewer than 40% of adults age 25+ in the region have an associate degree or workforce credential. Dayton has the fifth highest poverty rate of U.S. cities with at least 100,000 residents, with 27.6% of Dayton residents earning income below the poverty level compared to 12.8% nationwide.¹ The region's economy previously thrived on low-skilled jobs in manufacturing, but

¹ U.S. Census Bureau. (2021). American Community Survey 5-Year Data (2009-2021). Retrieved Aug 1, 2023 from <https://www.census.gov/data/developers/data-sets/acs-5year.html>

these jobs have disappeared. Today, postsecondary graduates are in demand for a variety of “middle skill” jobs. Now more than ever, economic success requires postsecondary credentials with market value. According to the Ohio Labor Market Information Projections, jobs in the Health Care Industry are projected to grow over 10% in the next ten years. Community colleges like Sinclair are key players in providing equitable and affordable access to post-secondary education and training the next generation of healthcare workers.

The Dayton area is a hotspot for healthcare jobs: there are ample employment opportunities in the field, yet the existing supply of trained workers is insufficient to meet demand. With one in five healthcare workers projected to retire in the next ten years, this trend will likely increase unless job training programs are put in place to prepare the future workforce. In the past 12 months, 344 employers were posting 16,856 unique job postings in healthcare fields in Sinclair’s eight-county service region.² At the February 2022 Future of Healthcare event hosted by the Dayton Business Journal at Sinclair, staff shortages were at the forefront of the discussion. The panel agreed that “stabilizing the healthcare workforce in the long term will involve a combination of admitting more students to training programs, partnering with local employers to ensure that students can successfully enter the field, and providing support, including mental health services, to combat burnout.”³

Describe how the COF initiative is part of the institutional strategic plan and supports student achievement.

Sinclair’s Choose Ohio First program will directly align with Sinclair’s mission statement: “*Find the need and endeavor to meet it by providing high quality, accessible learning as a college of and for the community.*” The COF initiative will make learning more affordable and thus accessible for COF scholars and will meet regional needs for well-trained and qualified healthcare workers who have both academic and practical skills to succeed in the workplace. The COF project aligns with Sinclair’s three strategic priorities: Alignment, Growth, and Equity. The COF project is in alignment with regional workforce needs and the financial support it offers will grow the number of students enrolled in health science degrees. It fosters equity by ensuring that COF scholarship recipients reflect the holistic diversity of the region and that all students have the wrap-around supports they need to succeed.

Describe commitments by the institution that will lead to successful implementation of the COF program.

Sinclair has been awarded and successfully implemented three prior COF projects and is committed to supporting this COF project with institutional match dollars and interdepartmental collaboration and support. The COF committee will include representatives from the Health Sciences Academic Departments, Financial Aid, Academic Advising, and the Office of Work-based Learning. Further assistance with program promotion and outreach will be provided by Student Enrichment and Admissions and Marketing.

² Data Source: Lightcast™, https://analyst.lightcast.io/analyst/?t=4P2wb#h=r7Yb2&page=edo_industry_snapshot&vertical=standard&nation=us, 2023. Source: Lightcast™, accessed Aug 3, 2023.

³ Tastan, MacKenzie. 2022. DBJ Panel: Partnerships between industry and education will shape future of healthcare in Dayton. Dayton Business Journal. Feb 17, 2022.

Choose Ohio First Application

Executive Summary

Southern State is eager to support the strategic effort to deepen the State's economic strength through investments in Science, Technology, Engineering, and Mathematics (STEM) initiatives. This application represents the first independent effort Southern State Community College has presented since Choose Ohio First (COF) launched in 2007. As such, the College has been conservative in its approach by narrowing the program selection to Computer Technology Pathways including Networking, Programming, Cybersecurity, and Robotics. In addition to representing an in-demand workforce need, this program also represents the faculty commitment and an eager student body that will likely pursue the opportunities that COF represents. Southern State's participation is well-supported through its declaration of strategic priorities and the institution is committed to successful implementation.

The Computer Technology program has long been a student and employer favorite with enrollments growing consistently since Spring 2019 and internships outpacing all other programs in the portfolio. Additionally, the faculty members representing this program, Dr. Josh Montgomery and Mr. Brian Birkhimer have a long history of being innovators, collaborators, and generally champions for students. The unique program design, integrating general computer science with specific concentration tracks including networking, programming, cybersecurity, and robotics, represents the flexibility students need to shape a highly marketable foundation in computer technology. Southern State is confident that this program can attract students, achieve the COF goals, and ultimately serve as a model to introduce other programs into COF in the future.

The Computer Technology program is a degree program that focuses on the design of technological information systems, including computer systems, as a solution to business and communication support needs. The program includes instruction in the principles of computer hardware and software components, programming, application support, and human interface design. After the students complete the first-year fall semester, students then select two of four focus areas for their course of study to complete their Associate's Degree. Embedded in the program are pre-requisite courses for various certifications such as CompTIA A+, CISCO Networking Academy Certification, CompTIA Security +, CompTIA Pentest+, and CompTIA CySA+. After completion of the program, students are able to design, code, and develop applications for multiple operating systems to control operations inside and outside of a

computer system. Students are able to create and implement a plan to install, configure, and troubleshoot multiple computer operating systems and networking hardware and software.

The Computer Technology program touts unique features that are widely appealing to local employers including professional outcomes and clear pathways for advanced education. Embedded in the program design includes specific learner outcomes targeting general professionalism principles. Shaped based on the feedback of the program's active Advisory Committee, students are expected to demonstrate fundamental competencies related to the job search, the interview, and post-hire workplace professionalism. Additionally, articulation and transfer agreements with highly reputable four-year institutions such as the University of Cincinnati, Franklin University, Western Governor's University (WGU), and Bellevue University are popular features among students and employers alike.

While Southern State is primarily situated in rural southern Ohio, the proximity of our region is within the 100-mile loop of the State's most substantial economic expansion. Intel, Honda, and various suppliers have rightly assumed the headlines, the growing demand for cyber intelligence professionals is not to be underestimated. Professionals in these fields who live in the region routinely approach the College and encourage expansion to address the ever-increasing need for cyber technicians who can support demands up to the Department of Defense.

Beyond addressing regional and statewide workforce needs, Southern State's participation in COF is consistent with institutional priorities for student success. As part of the College's 2023-2025 Strategic Plan, the College specifically noted that *participation in model initiatives aimed at improving student success* is a specific strategy for improving the retention and success of our students. Models such as COF fit squarely in this space. The College has experience in other endeavors such as MDRC's initiative to incentivize continuous summer enrollment (2017), Strong Start to Finish (2021), Guided Pathways (ongoing), and many locally generated initiatives that readily serve as a guide for the COF model. In short, Southern State is experienced and poised to add another initiative aimed at supporting student achievement.

The College is committed to being a valuable contributor to the Choose Ohio First program by providing the proper training of support staff, encouraging and supporting a skilled and engaged faculty, and having a high level of expectations for the success of the program. As a reflection of the dedication to the project, the College will be contributing to the 1:1 match requirement of the grant. The matching funds are supported by letters of commitment from the institution's President, Dr. Nicole Roades, and local business leaders. The Southern State COF team member's contribution breaks down to an average of 16 hours of institution personnel

support with an average hourly rate of \$34.43 per person, a total over the five years of \$39,388.40. Additional activities to support the program will include social events, special presentations, interview and selection committee panel, and marketing production for a five-year span of in-kind of \$15,350. The College pledges its dedication to the project through the number of individuals assigned to this project and is complimented by their ability to share their skills and knowledge to make the program efficient and beneficial for each student.

Stark State College (SSC) proposes the following program in response to the Ohio Department of Higher Education's FY24 Choose Ohio First (COF) program request for proposals. 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, its plan to address regional and statewide economic strengths and needs for these targeted academic programs, its alignment with the College's strategic plan, and in other institutional assistance:

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, non-traditional students, and socially disadvantaged populations will be encouraged to apply for COF scholarships, as these populations are often underrepresented in STEMM fields.

Overview of selected academic programs

For this proposal, Stark State has identified 53 total programs corresponding to 34 different CIP codes. Of these, 19 CIPs correspond to 34 programs within the Business, Engineering and Information Technologies Division and 15 CIPs correspond to 19 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 seek 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.

Alignment with the College's strategic plan

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 STEM-industry workforce needs across Northeast Ohio. Stark State College's strategic plan is strongly aligned with the goals of ODHE's Choose Ohio First program, as demonstrated by the College's four strategic priorities: *student access; student success; career success and workforce; and our people*. The COF initiative aligns with each of these strategic priorities, as outlined in the project rationale section of the project narrative.

Institutional assistance

This program is a cross-department/Collegewide effort that will receive full support from areas including, but not limited to, enrollment management (admissions, registration, Gateway advising, and financial aid), academic affairs, learning and engagement (student support), and career services.

Furthermore, the College commits to providing the required 1:1 match for all Choose Ohio First funding distributed to students. Through this request, Stark State College is requesting a total of \$1,012,000 over a five-year period to support Choose Ohio First scholarships. Further details related to this match commitment are included in the project narrative section of this proposal.

This institutional assistance will help facilitate the successful implementation of the FY24 Choose Ohio First funding awarded.

Executive Summary

The Christ College of Nursing and Health Sciences (Christ College) is a private institution of higher learning in Cincinnati, Ohio and has been dedicated to delivering the highest quality healthcare education to students since 1902.

Christ College (<https://www.thechristcollege.edu/>) is affiliated with The Christ Hospital Health Network and is located on the Network's main campus. The Health Network includes two hospitals and more than 100 centers and physician practices in the Ohio, Kentucky, and Indiana tri-state region. Christ College focuses on bridging the academic and practice environments for students by guaranteeing clinical placement for all nursing students within The Christ Hospital Health Network or one of the College's many healthcare partners. Both Christ College and The Christ Hospital Health Network are secular institutions.

What makes Christ College distinct among its peer colleges is a 120-year legacy of nursing excellence, providing students hands-on clinical experience. Students know sharing a campus with the industry-leading healthcare professionals at The Christ Hospital fosters academic excellence and promising career opportunities. U.S. News & World Report recently named The Christ Hospital #1 in the Cincinnati Region for the ninth consecutive year and #3 in the state of Ohio (<https://tinyurl.com/2stdk8tn>). The Christ Hospital Health Network continues to make the Forbes list of Best-In-State Employers, based on employee feedback (<https://tinyurl.com/398mh3n8>).

As the region recovers from the COVID-19 pandemic, demand for healthcare workers has far outpaced supply. The healthcare worker vacancy rate in Greater Cincinnati hospitals is at its highest percentage in 15 years, according to new survey data released by the Health Collaborative (<https://tinyurl.com/yfkm5thc>). The need for healthcare professionals is projected to continue growing, with the Bureau of Labor Statistics estimating that the demand for Registered Nurses will grow 6% in the next ten years. Growth has been exasperated by a wave of retirements and workers transferring to different occupations due to job dissatisfaction (<https://tinyurl.com/azsaum46>).

Christ College has the means to correct this imbalance. With Choose Ohio First scholarship funds, Christ College plans to recruit and retain students in its Bachelor of Science in Nursing (BSN) program to meet the regional and statewide need for nurses. Christ College's use of Choose Ohio First scholarships will encourage more students to pursue healthcare careers by relieving the financial burden that many college students face and ultimately alleviate the staffing shortage in our healthcare system.

As it has done successfully in the past, Christ College plans to utilize Choose Ohio First scholarships to recruit a cohort of 70 students into the BSN program over five years. A portion of the recruitment and enrollment efforts for the Choose Ohio First scholarship program will be targeted at under-represented populations in the nursing field, including men as well as students from Black, brown, Indigenous, or other historically marginalized communities.

The Choose Ohio First initiative and Christ College have similar goals of growing the number of STEMM (Science, Technology, Engineering, Math, and Medicine) professionals in Ohio and connecting students to work-based learning experiences that will set them up for success in their careers. The College aims to be known as the premier destination for healthcare education by 2030. The Choose Ohio First initiative will contribute to the College's 2020-2023 Strategic Plan. Key outputs of the plan include establishing sustainable models for mentoring and coaching, creating opportunities outside of the classroom to practice concepts, and developing flexible pathways to increase student enrollment and achievement.

Scholarships such as Choose Ohio First make healthcare careers more accessible and will increase college enrollment during this critical time. The pandemic has contributed greatly to a shortage of hospital workers nationwide. According to a recent report published by the Health Collaborative, nearly 6,000 healthcare jobs were unfilled at the end of 2021 in Greater Cincinnati. The number of vacancies grew substantially over the last year and is two times higher than previous years (<https://tinyurl.com/yfkm5thc>). Staff shortages run the risk of negatively impacting patient outcomes. With insufficient medical staff, there is an increased risk of preventable events such as falls and infections, the length of a patient's stay

increases, and patient deaths increase according to the American Nurses Association (<https://tinyurl.com/29rtb4n4>).

To increase the supply of nurses in our community, Christ College wants to make earning a healthcare degree more affordable. Scholarships, including Choose Ohio First, are part of Christ College's strategic initiative to increase enrollment and support student achievement. Most college students graduate in debt due to student loans. In 2020, nearly 60% of Ohio college graduates carried student loan debt at an average of about \$30,000, according to The Institute for College Access and Success (<https://tinyurl.com/5re7rbdd>). Borrowers with private loans are even deeper in debt, averaging nearly \$55,000 per borrower. With compounding interest, it typically takes graduates decades to pay off these debts (<https://tinyurl.com/85pb2vbe>). The added financial strain caused by the 2020 recession has deterred many students from even starting college to pursue their careers. The Choose Ohio First scholarship opportunity will encourage more students, particularly nontraditional students, to earn their degree and contribute to the healthcare world with their unique skillset and experience.

Christ College is currently a participating institution in the Choose Ohio First program. Institutional supports have been put in place to assist Choose Ohio First scholars as well as all students attending Christ College. The College has refined the curriculum of incoming freshman to promote retention and improve the student experience. Curriculum changes to the First Year Experience include a focus on growth mindset, emotional intelligence, and empathy as well as early connections with advising coaches and campus resources.

Increasing diversity among the student body at Christ College is another strategic initiative of the College. Currently, diverse students at Christ College make up 26% of the student body. While this percentage has increased steadily over the years, it still falls below the general population. A portion of Choose Ohio First scholarships will be reserved for under-represented populations in nursing, boosting the overall diversity of our students and nurses in the field.

The Enrollment Management Team creates and fosters partnerships throughout the community to advertise the educational opportunities available at Christ College. Once a student is recruited and enrolled at Christ College, they are connected with the Student Success Team who focus on retaining students and providing them a rewarding experience. A newly established department, Career Services and Talent Partner Team, utilizes the strengths of Greater Cincinnati's business community to provide all students with career development activities. Through a student-centered approach to education, Christ College ensures that students are successful in school and in their future careers.

Future of Microelectronics Science and Manufacturing in Ohio

The Ohio State University - Choose Ohio First Scholarship

Executive Summary

The investment by Intel in central Ohio will create an epicenter of semiconductor and microelectronics manufacturing in the State of Ohio. These developments within Science, Engineering, Technology and Math (STEM)-related fields improve Ohio's economic growth, labor force, living standards, competence, and competitiveness at the national and international levels. Industries require the most dedicated STEM workforce of any sector of the economy. We must be prepared to support students and families with many different options and pathways to enable them to participate in this new segment of Ohio's economy. For these reasons, an emphasis at The Ohio State University (OSU) supporting this workforce with the appropriate STEM graduates is key.

In this Choose Ohio First (COF) program, The Ohio State University (OSU) proposes to expand STEM majors that integrate into the semiconductor and microelectronics manufacturing sectors of our economy. Future of Microelectronics Science and Manufacturing in Ohio will provide scholarships to students majoring in Computer and Information Science, Computer Science and Engineering, Electrical and Computer Engineering, Industrial Systems Engineering, Materials Science and Engineering, Engineering Technology, Data Analytics, Statistics, and Physics. This proposal shapes a program design for students to be recruited into these majors and participate in STEM outreach activities, lecture series, seminars, workshops, events, tutoring, and mentoring that help them feel welcomed to the university community and choose a pathway early in their academic career of undergraduate studies. COF students will be guided by Ohio House of Science and Engineering (OHSE) staff, academic advisors, and career services staff to seek opportunities for work-based learning experiences such as cooperative education, internships, and research that align with their interests and JobsOhio investment in Central Ohio. The emphasis in this proposal on majors associated with JobsOhio connects this program to an important university initiative and supports its success in areas such as engineering and computation.

In addition, through our contacts with technology employers such as Intel, Advantest, Process Technology, and others we will convene a focus group to stay updated with the newest workforce needs and hiring practices. This feedback will be used to advise students through their process of seeking work-based learning experiences in these disciplines. Our COF program will be supported by two different colleges: College of Arts and Sciences and College of Engineering that are ranked highly nationally and regarded for their strengths in academic instruction. Therefore, through this proposal OSU will be able to envision and eventually supply more STEM graduates and also graduates outside of the traditional STEM disciplines to the Ohio workforce.

EXECUTIVE SUMMARY (3 pages maximum)

a. Award Request Rationale

As a comprehensive urban research institution of higher learning, The University of Akron (UA) aspires to become a leading institution in Northeast Ohio as it remains dedicated to student success through support and engagement. Training undergraduate and graduate students in STEMM areas that directly affect the economic competitiveness of Ohio is one of our strengths. Our overarching goal is to recruit typically underrepresented students into STEMM programs, keep the STEMM talent in Ohio and connect that talent with Ohio employers.

UA has had a successful ongoing partnership with Choose Ohio First and its support for undergraduate education. While we continue to leverage these funds to support undergraduates, this year we are seeking to expand that support and utilize Choose Ohio First funds to support graduate education and skilled workforce development in the STEMM fields. While the Graduate School is seeking funds to begin to target graduate support, the undergraduate efforts are ongoing. Specifically, UA has committed to preparing and graduating 100 undergraduate STEMM scholars by 2027. With the funding from FY22, 22.37 Grant, and support from ODHE (Ohio Department of Higher Education) UA will increase the number of undergraduates graduating from 100 to 150 by 2028 as The University of Akron implements strategies to improve targeted enrollment. At the graduate level, initial goals for the requested funding will provide support for up to 125 graduate students. This will include recruiting underrepresented populations to the STEMM fields, the latter will include specific recruitment of men to the nursing and counseling programs and women to the math and engineering programs, as well as recruiting students that reflect the full racial and ethnic diversity of our surrounding community.

The country is still struggling with economic hardships due to the COVID-19 pandemic. At UA these hardships have included a decline in graduate school applications that have yet to fully recover. And, while we are once again seeing an uptick in international applications, the domestic applications continue to lag the previous two years of enrollment. Furthermore, many potential graduate students are not able to prioritize continued education due to increased work and family responsibilities. Because many are still trying to recover from the pandemic and adjust to the challenges of the “Great Resignation,” it is imperative that scholarship dollars are available to reduce students’ need to work, as well as provide support for graduate education. UA is requesting the maximum award amount of \$1,176,000 for the FY24 proposal. The goal of this funding will be to establish the Choose Ohio First Graduate Scholars Program (COFGSP) to support degree completion for native Ohioans in STEMM master’s and doctoral degree programs. To accomplish this goal, we will target quality undergraduate students from UA and around the state of Ohio. We will develop a comprehensive and sustainable program to develop the STEMM skilled workforce by reducing student financial burden and providing a support structure to enable timely graduation. This program will have lasting benefits not only for Choose Ohio First graduate STEMM students but for the greater UA and Akron communities.

The Choose Ohio First Program at The University of Akron serves the following populations:

- Ohio Residents
- 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 looking to enhance or change their career
- Former and current military personnel
- BIPOC and students underrepresented in STEMM fields
- Other populations underserved by limited access to higher education
- Students who would not normally undertake STEMM degrees
- Current students struggling to continue in STEMM due to financial or academic hardships

In addition, we now seek to include:

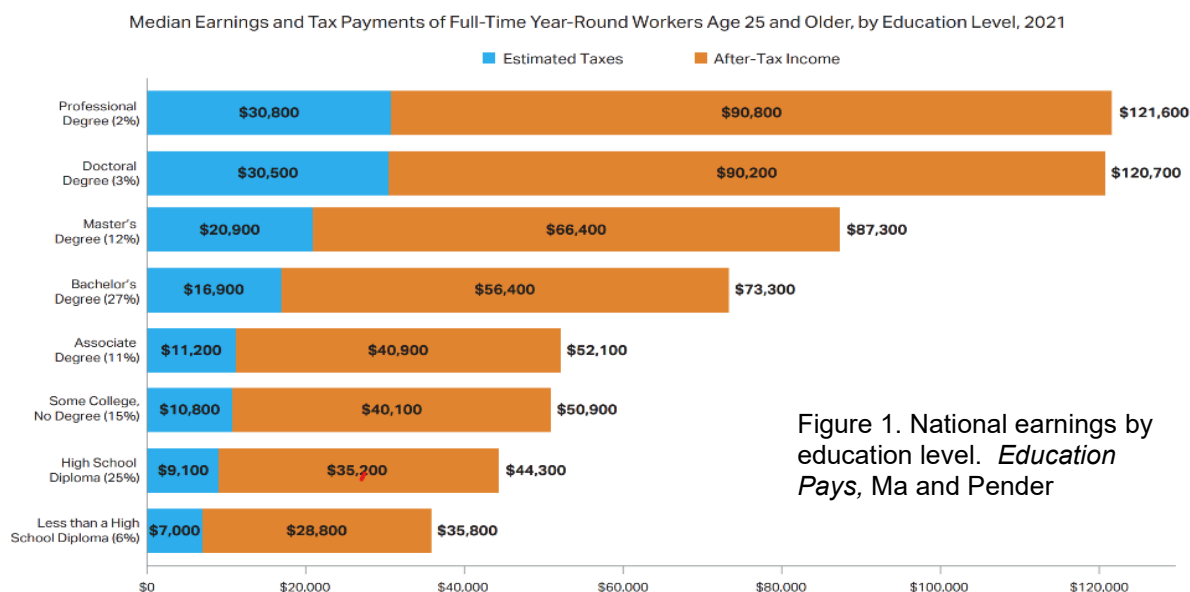
- Ohio residents seeking graduate degrees (master’s and doctoral) in STEMM fields; all recipients must qualify for either a teaching assistantship (TA) or research assistantship (RA)
 - We will prioritize students based upon need and underrepresentation in the STEMM field

b. Overview of Selected Programs

The selected majors were chosen to increase the number of skilled employees for Ohio’s workforce. The current undergraduate COF program covers all engineering and engineering technology fields, biology, math, chemistry, physics, pre-med, nursing, computer science related fields, emergency management, and STEMM education at UA. The COF funds requested in the current application will seek to support graduate students entering graduate programs with these same CIP codes, specifically in biology, chemistry, math, geosciences, statistics, nursing, computer science and engineering. In addition, we will expand the program to include doctoral programs in psychology and counseling. These fields of study are vital to the ongoing economic recovery of Akron, northeast Ohio and beyond. Nationally, STEMM occupations are a priority and policymakers believe that support for targeted recruiting and retaining more students in STEMM fields is an efficient way to quickly train the much-needed additional STEMM professionals.

c. Addressing Regional and Statewide Economics

The benefits of higher education to our region and state are the same as those seen at the national level. The benefits of a higher education degree to the recipient have been widely documented and acknowledged. For example, current statistics indicate that, as shown in Figure 1 for the median earnings and tax payments of full-time, year-round workers aged 25 and older, those with a bachelor's degree have an after-tax income that is 40% greater than their counterparts with a high school diploma. Those with a master's degree have an aftertax income that is 50% greater than their counterparts with a high school diploma and 15% greater than their counterparts with a bachelor's degree. However, only 29% of Ohioans at least 25 years of age or older have at least a bachelor's degree, which lags behind the national average of 33%. Specifically, in Akron and the surrounding region, where 30% of the population is Black, only 22% of the population 25 years+ hold a bachelor's degree or higher. The median household income is \$42,000 and 23% are living in poverty. COF funds at the undergraduate level have been critical to improving these statistics. Continued support from COF will enable us to build upon the success of the COF undergraduate scholars program and partner with them to support the continuation of these scholars into graduate programs. This will be one of our major opportunities for recruiting students. We will visit undergraduate classes in UA STEM programs and speak with UA Honors students. In addition, we will send messaging to and visit 4-year colleges/universities and our two HBCU universities in the state of Ohio. We will send targeted messaging to UA's McNair Scholars who are Ohio residents and will utilize social media, our website and online informational meetings to recruit potential students to the COF program and educate them of its benefits.



Broad inclusion in the STEM workforce is critical for continued technology and discovery advancement. Problem-solving and innovation are maximized when diverse perspectives, backgrounds and experiences are considered. Thus, a competitive research sector must foster and promote the recruitment, retention, and success of individuals from as many diverse backgrounds as possible. Despite initiatives that have increased students from underrepresented groups majoring in STEM fields, significant disparities in attainment of higher education degrees and in the workforce remain. Underrepresented racial and ethnic minorities (URMs) comprise 27% of the U.S. population and earn 22% of all STEM bachelor's degrees. However, they earn only 9% of STEM doctorates.

We have seen similar challenges at The University of Akron (UA), a STEM-focused, public R2 research institution in Akron, Ohio. For the Fall of 2022, undergraduate enrollment was 12,848 students. Of these, 22% were first generation students, 16% were minority and 29% were Pell eligible; for the 2021-2022 academic year, \$18.5 million in Pell funding was disbursed. Retention numbers showed a growing disparity among first generation and minority cohorts; for Fall 2021, the retention rate of first-generation students (56%), minority students (56%) and Pell-eligible students (57%) were 10 points lower than their counterparts (67%). Graduation rates showed the same disparity; for Fall 2021, the four-year graduation rate of first-generation students (26%), minority students (18%) and Pell-eligible students (22%) were 6-14 points lower than their counterparts (32%).

Many studies have identified factors that increase persistence and achievement of URM in STEM. Climate, personal relationships, enrichment programs, and sense of belonging in STEM communities are major considerations in persistence. Similar factors apply to first-generation and low-income students but are frequently further amplified by reduced preparation for college, fewer resources, and/or need to earn an income while they study for a degree. COF funding and the resultant co-curricular activities designed to increase persistence and achievement of URM in STEM are starting to change this narrative. Specifically, within our undergraduate COF scholars we are seeing a 92% retention rate for the 2022-2023 scholars. As of Fall 2021, there was a 21% 4-year graduation rate and a 73% 5-year graduation rate among COF scholars.

The 5-yr graduation rate is typical of our engineering programs that are 5-yr programs with co-op; ~70% of the COF scholars are in the engineering disciplines. This more recent (2022-2023) cohort included 40 freshmen/transfer students, the average GPA was 3.5 and the average ACT score was 24. Demographically, 28% were minority, 27% were white and 74% were first generation/Pell. We anticipate the success rates of our COF scholars to move the needle on the poverty in the Akron area while also increasing the skilled STEMM workforce in the region. We will continue the undergraduate efforts and expand this support to include graduate students, which will grow the skilled workforce in the region and beyond.

d. COF Alignment with Institutional Strategic Plan

The University of Akron's promises and mission are committed to efforts that provide innovative pathways for students. These promises include providing education to and sharing knowledge with those who seek it; and, to connect to and serve our community. As largely a commuter school, these pathways include focus on Ohio residents. Consistent with ODHE initiatives, we seek to provide students an efficient and cost-effective pathway to degree completion. With our vision and ongoing commitment to build community and provide superb academic programs in STEMM fields relevant to the future, COF Scholars will be challenged and prepared for a STEMM workforce requiring advanced skill sets and degrees.

e. Institutional Commitment Leading to Successful COF Program Implementation

UA is actively engaged in efforts to close identified gaps in the regional STEMM workforce. UA is a member of the TeamNEO, Talent Development Council (TDC) which seeks to close the talent gap in workforce development, by aligning partnerships among stakeholders in higher education and industry. This council has active and engaged partnerships throughout the Northeast Ohio region that are currently working to clearly define local strategies to impact regional outcomes that build deeper and more responsive talent pools. Currently the TDC is strategically focused on high school graduates/adults and college students. With the TDC helping to drive a regional agenda that aligns higher education with business requirements, an ecosystem-wide, needs-based, all-inclusive workforce is highly achievable.

The University of Akron has previously implemented several initiatives to ensure cost-effective and efficient pathways to degree completion. These efforts enable students to take advantage of the strength and reputation of UA's STEMM degree offerings. At the undergraduate level, UA has developed secondary education partnerships that include College Credit Plus (CCP) with wraparound services where students can earn both high school and college credit, while state funds pay all tuition, fees and textbooks. UA's Early College High School Programs provide opportunities to earn a high school diploma and significant college credit in a supportive, rigorous academic environment. The program is designed to meet the needs of low-income youth, first generation college students, English language learners, students of color and traditionally underrepresented minorities in the K-12 and post K-12 environment. Completion of the program enables the student to complete the first two years of college, often resulting in an associate's degree and/or industry certifications. These partnerships aid the students in transitioning to higher education, increasing college access, reducing cost and time to degree completion, while increasing high school retention and graduation rates. Typically, 85-90% of the graduating seniors continue onto a bachelor's degree with 80-85% staying at UA. Additionally, UA has developed a Taskforce to create a robust and engaging experience for first year students that ensures equity in all programs and initiatives; examines process, procedures and programmatic structures and their impact; reviews, collects and reports on the coordination and assessment of the programs and monitors second year retention; and recommends improvements to programs and feedback on new initiatives based upon assessment. Recommendations have led to the development of learning communities, a new student orientation and peer mentoring services.

At the graduate level, UA has made significant strides to provide undergraduates with cost-effective options for advanced degrees. Students in the Accelerated Pathways (4+1 offerings) can accelerate their time to degree completion earning their undergraduate and graduate degrees in as little as five years. Currently we have accelerated offerings in: Applied Mathematics; Accounting; Accounting/Taxation; Computer Science; Statistics; English; Speech Language Pathology; Biomedical Engineering; Civil Engineering; Mechanical Engineering; and Chemical Engineering. In any accelerated pathway, students are permitted to take nine hours of graduate coursework as seniors in good standing that double count towards the completion of both their undergraduate and graduate (masters) degree. In addition, students are charged the lower, undergraduate tuition rate for the nine double-counted hours and maintain their undergraduate scholarships through the end of their undergraduate degree. UA also has the Akron Master's Program which provides a pathway by which Institutes of Higher Education can partner with The University of Akron to provide graduate level coursework to students accelerating their undergraduate degree completion at their home institution before they pursue the completion of their graduate degree(s) at UA. To encourage this skilled workforce to remain in the region upon degree completion, UA has also instituted an Out-of-State Surcharge Reduction for Domestic, Graduate Students. As such, out-of-state, domestic students that earn an undergraduate degree at UA or any other Ohio college or university are charged a \$1/credit hour surcharge, essentially eliminating the out-of-state surcharge, a savings which exceeds \$9000 for a 30-credit hour graduate degree. The program acknowledges the regional benefits to our workforce when we retain this pool of talent. Utilizing the COF program to advance the skilled workforce in Northeast Ohio is consistent with the ongoing commitment the UA has made to its students and community; these efforts strongly position us to successfully implement the COF graduate program.

Executive Summary

The goal of the Promoting Access and Equitable Opportunities in STEMM Fields project is to increase, retain, and graduate greater numbers of underrepresented, ethnic, economically disadvantaged, and first-generation STEMM students at the University of Cincinnati (UC). The rationale for identifying and supporting students from these demographic backgrounds is historical in nature. Underrepresented, ethnic, economically disadvantaged, and first-generation students experience significant challenges enrolling, retaining and graduating from the STEMM fields at UC. Addressing these challenges through this Choose Ohio First funded project will directly benefit participating students as well as creating process improvements that will assist similar students in future periods of enrollment.

UC has identified academic programs from our College of Nursing, the College of Engineering and Applied Sciences, College of Arts and Sciences, College of Medicine, College of Allied Health Sciences, Clermont College, and School of Information Technology programs. These programs have been selected to participate in this project because of their academic quality, their commitment to diversifying and improving student support programming, significant career opportunities for graduates and their roles in meeting UC's "Next Lives Here" strategic plan for our campus and greater Cincinnati community.

This project looks slightly different in each of the participating colleges, but all are committed to developing graduates that will fulfill the workforce needs of the State of Ohio with a focus on Southwestern Ohio and the Cincinnati areas. Employment projections for these academic programs are all expected to grow between 5% and 12% over the next several years. Additionally, all participating academic programs will be reinforcing and bridging our human and technological resources to proactively assist students in creating a personalized path to achieving success under our Bearcat Promise framework. Our goal is to have participating students graduate with a degree in one hand and a plan for their career and professional development in the other with the skills and competencies to successfully navigate a lifetime of career choices in an ever-changing, technical, global market.

UC's Promoting Access and Equitable Opportunities in STEMM Fields project addresses several key aspects of our "Next Lives Here" strategic plan. Student support programming established as part of this project will facilitate the academic excellence goals UC has established. Relationships between UC and employers under the project will expand our innovation agenda already established through the 1819 Innovation Hub and our Co-Op 2.0 programs. UC's well-being is inherently linked with the physical, social, and economic health of our community and city. Cincinnati, and its business, civic, education, and cultural offerings, provides us an opportunity to reach beyond our campuses to lead real-world learning, problem-based research and scholarship, and creative endeavors that address the multifaceted challenges affecting individuals and communities in our increasingly urbanized society. Our participation in this Choose Ohio First project will only serve to further improve UC's and Southwestern Ohio's communities.

The entire Bearcat and Southwestern Ohio community is committed to the success of this and all Choose Ohio First funded projects at UC. Our administration, academic colleges, enrollment, student affairs and campus service organizations have come together to develop and support the project and the participating students completely. Additionally, relationships with local and statewide employers will grow stronger because of UC's participation in this project. Employers have committed to providing the real world opportunities and interactions that allowed UC's cooperative education programs to be ranked number one among public universities nationally and ahead of privates like Duke University, Stanford University and Carnegie Mellon University.

Executive Summary

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 helps students interested in pursuing a STEM 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 students to access a UD degree with support from the COF Scholarship.

To select our 25 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 Program (WISE) and the STEM Summer Bridge Program. Each of these is a strategic mission-centric institutional initiative that provides programming and support available to all students, focusing on promoting success strategies for those historically underrepresented in STEM fields. 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 (WISE) is a community of learners that creates a strong support system to foster success and academic curiosity. The Multi-Ethnic STEM Summer Bridge Program allows entering STEM majors the opportunity to acclimate to campus and preview specific coursework prior to their first semester at the University of Dayton.

We intend to award COF Scholarship funding to students who have significant financial need as determined by the FAFSA. Further, students participating in these institutional initiatives will be given preference when awarding the COF Scholarship. The additional source of funding for students strengthens our efforts to expand access to UD. The University of Dayton provides over \$230 million per year in scholarship and grant assistance to our students, and we are committed to matching the COF funding dollar for dollar; UD will exceed a dollar-for-dollar match with our institutional investment in financial aid.

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, the Office of Experiential Learning 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. STEM 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, 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.

COF Scholars will experience integrated student learning, both inside and outside 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 STEM fields in Ohio.

Our eligible programs of study have 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 STEM-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

The University of Findlay (UF) is poised to meet the region's workforce demands 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 become employed in their desired career as well as for regional employers to gain access to top talent. Through its Choose Ohio First (COF) initiative, UF aims to recruit, train, and graduate students in programs that significantly align with the workforce needs in the region and the state as a whole.

Findlay-Hancock County's annual workforce needs stem from retirements and industry growth. As Site Selection magazine's #1 micropolitan community in the nation, a title held for nine 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) *2028 Jobs Outlook* data for licensure-, bachelor's, and graduate-level positions in the healthcare, manufacturing, energy, and financial industries. Specifically, for Northwest Ohio, OMJ projects that the regional healthcare industry will experience exceedingly high growth, with over 5,000 anticipated openings, suggesting that employers across the sector, and the patients they serve, will be in dire need. In fact, Governor DeWine identified mental/behavioral health and nursing as two of Ohio's eight critical career clusters because of their substantial impact on all Ohioans. Moreover, pharmacists, since they are on the frontlines of delivering vaccines and can bridge the primary-care physician gap in underserved communities, will continue to be in demand. The fourth wave of the opioid epidemic, of which Ohio sits at the epicenter with the fourth highest overdose rates in the country in 2020, has further intensified the need for trained healthcare workers.

Additionally, the state and region are in urgent need of science and math educators. Both fields 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 in science and math teachers have persisted each year since 1997, a gap that is likely to have wide-ranging downstream impacts on the ability for the area's workforce to meet industry needs of tomorrow.

To strengthen the pipeline of talented STEM professionals, UF's proposed COF program targets the following academic areas: 1) health professions, a term that collectively refers to 15 specialties; 2) STEM education; 3) pharmacy; 4) computer science; 5) biology; 6) mathematics; 7) chemistry; 8) biochemistry; 9) environment, health, safety, and sustainability (EHSS); and 10) animal science. UF's COF program will strategically recruit high school students, transfer students, and graduate students from the northwest. As a key component of UF's strategic plan to "embrace professional, cultural, and intellectual diversity," the University is particularly interested in continuing to recruit a high number of students from traditionally underrepresented populations with an emphasis on increasing enrollment of individuals who are first-generation, diverse in race/ethnicity, identify as female, and come from financially and socially disadvantaged backgrounds who have a history of low representation in the STEM field. The recruitment of underrepresented students into UF's COF program is a priority for the University. UF will market COF opportunities to potential students with a multipronged approach. To accomplish a broader reach, UF will market our COF opportunities through official university social media platforms. A more targeted marketing campaign will be conducted with prospective students whose information we acquire from companies such as ACT, NRCCUA, and Niche, who offer services to high school and college students interested in pursuing a college degree. With this population, we will narrow our outreach to students

interested in COF degree programs who also are underrepresented. To this population, we will send emails recruiting them to UF's COF programs. When these identified students respond with interest by either inquiring, visiting campus, and/or applying for admission, we will provide them with information about COF, including the opportunities and requirements of the program. Additionally, during recruitment events, such as open house events and scholarship competition events, we will market Choose Ohio First opportunities. Lastly, we will send emails during the recruiting cycle to high school college counselors marketing Choose Ohio First opportunities for underrepresented students.

Selected scholars will receive between \$1,500 and \$8,904 per academic year in COF scholarship aid until graduation, provided that scholars meet certain expectations related to demonstrating continued academic and co-curricular success. UF's COF scholars will also be awarded institutional merit aid packaging (\$12,000-\$21,000 for undergraduate students, \$15,000-19,000 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 while encouraging 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 85 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 Choose Ohio First Scholars' Program: Buckey Ready Health Providers

The University of Mount Union (UMU) is excited by the opportunity to submit an application to the Choose Ohio First grant program so that we may increase access for underrepresented and financially disadvantaged students from the State to advanced practice health careers - with special focus on Physician's Assistants, Physical Therapists and Nurse Practitioners.

Student debt is a significant concern for students, but few recognize that their anxiety regarding that burden negatively impacts the health outcomes for many of us when graduates feel forced to seek more lucrative positions situated in urban centers. Our aspiration for this request is thus threefold; to prepare practitioners with focused training in Ohio-specific health challenges, to mitigate shortages in emergency medicine practitioners, and to attract students both interested and better able to afford to remain in the region. We believe lower debt, and increased training regarding the needs of Ohioans may attract more students to support the medically underserved in Health Professional Shortage Areas (HPSA's) in Stark County and surrounding communities (OHIO HPSA). We thus seek \$881,496 in scholarship support for Ohio health professions graduate students.

COF scholarship funding will also accelerate our efforts to mitigate the significant staffing shortages of physicians in regional ER's, by continuing to produce Physicians Assistants that serve in that setting, and by attracting students to our new, first in Ohio MSN ER program in Fall of 2024. According to [Medicus Healthcare Services](#) "In the 2023 Match, emergency medicine residency programs saw a significant decrease in new residents, with 555 unmatched positions. This number of unfilled residency positions increased by 253% (336 people) from 2022 to 2023. For decades, emergency medicine was the top-pick residency for graduating medical students. Many relate the change in popularity to COVID-19." Mount Union has pursued this unique nurse practitioner pathway due to the dearth of such programs across the US. These aims directly align to the strategic aims of the University – to continue to develop academic programs that meet the industry needs of our state and region, and expand our footprint in partnership with employers and the community.

Additionally, all Mount Union STEMM Graduate programs included in this COF proposal address both regional and statewide economic needs. Our examination of Ohio's [Occupational Outlook to 2030](#) indicates substantive employment growth, and all three professions are listed as Ohio's fastest growing occupations. Ohio's labor market analyses list Nurse Practitioners as #1 with a 48.5% increase, Physician Assistants is listed at #9 with a 28.6% increase, and Physical Therapists demonstrate an anticipated growth of 14.1%. Examination of [Ohiomeansjobs.gov](#) (August 15, 2023) indicated that there are 123 unfilled Nurse Practitioners positions, 135 Physical Therapy positions and 17 Physician Assistant positions within a 30-mile radius of our campus. Choose Ohio First is a critical resource for recruiting highly qualified candidates to commit to advanced practice and to build excitement and interest regarding the important work that needs to be done to improve the lives of Ohioans.

SUMMARY

A. Rationale for selected populations

Employers in Northwest Ohio and throughout Ohio are seeking college-educated graduates of science, technology, engineering, and mathematics (STEM) disciplines at an increasing rate. There is a growing need for skilled professionals in health professions, data and information sciences, and other STEM disciplines. Furthermore, with recent developments such as the Intel foundry in New Albany, the formation of the Great Lakes Clean Hydrogen project led by the University of Toledo, and the rapid growth of artificial intelligence applications in manufacturing and service sectors, the demand for a highly skilled workforce with training in a range of STEM disciplines is only growing.

To help address this demand, the University of Toledo is pleased to submit Choose Ohio First – Health and Data (COF-HD) proposal. The goal of this proposal is to attract highly qualified students to a range of unique STEM degree programs available at the University of Toledo that provide a skilled workforce for several growing sectors in the Ohio labor market. Graduates of these disciplines will provide skilled health care professionals; data and information scientists, administrators, and analysts; and other STEM disciplines that can support the technical requirements of Ohio's growing employer base.

Although the primary rationale is to meet employer needs, these disciplines provide opportunities to attract Ohio students and traditionally under-represented populations into STEM disciplines. As of Fall 2022, the programs listed below consisted of 44.3% female, 23.8% Pell-eligible and 19.3% first generation students. Thus, these University of Toledo programs serves a substantial number of students from populations traditionally under-served in STEM disciplines and therefore have an opportunity to increase the representation of these populations in STEM disciplines.

B. Overview of selected programs

We have selected 20 undergraduate degree programs across 17 CIP codes for the COF-HD proposal. These programs fall into the following categories:

Health Professions

Several undergraduate programs in the COF-HD proposal produce graduates that can directly enter healthcare professions and/or prepare graduates for continued study in health professions at the graduate level. These programs include the BS in Speech Language Pathology (510203); the BS in Health Care Administration and the BS in Health Care Administration Compliance (510702); the BS in Health Information Administration (510706), the new BS in Radiation Therapy (510907); the BS in Respiratory Care and the BS in Registered Respiratory Therapy (510908); the BS in Public Health (512207); and the BS in Recreational Therapy (512309). To prepare students for continued study in health professions, we also offer a new BA and BS in Health Sciences (510000) with concentrations for pre-medicine / dental, pre-physician assistant, pre-physical therapy, and pre-occupational therapy, in addition to concentrations for social determinants of health and human performance. Furthermore, our BS in Biochemistry (260202) and new BS in Neuroscience (261501) also provide opportunities for students that wish to pursue continued studies in MD, DDS and PA programs.

Data and Information Sciences

We also offer undergraduate programs in the COF-HD proposal to provide skills in rapidly growing areas such as data science and analytics, information systems. These programs include the BBA in Information Systems (110401), the new BS in Data Science (307001), the

University of Toledo Choose Ohio First
Health and Data (COF-HD)

new BA in Data Analytics (307101). Three other programs in this area, including the BA in Geography (304401) with its emphasis on Geographic Information Systems, the BS in Health Information Administration (510706), and the BBA in Operations & Supply Chain Management (520203), focus on specialized applications heavily reliant on data and information systems. Finally, traditional STEM disciplines such as the BS in Mathematics (270101) and the BS in Physics (400801) have a long history of training graduates that are prepared to apply their knowledge toward the solution of problems that require analysis of complex data sets.

New Programs

To meet the changing needs of Ohio employers, we have introduced several new undergraduate degree programs over the past three years. These include the BS in Neuroscience (261501), the BS in Data Science (307001), the BA in Data Analytics (307101), the BA and BS in Health Sciences (510000) and the BS in Radiation Therapy (510907). We believe we can utilize the scholarship funding provided by the proposed COF-HD program to help promote these new programs and ensure direct from high school and transfer students from Ohio gain awareness and are attracted to these programs.

C. Economic needs for selected programs

With a focus on both health care and data, this proposal is designed to meet the needs of employers in health care and in other existing and emerging industries. According to Ohio Labor Market Information (OLMI; <https://ohiolmi.com/>), the health care sector will add nearly 300k jobs in Ohio between 2020 – 2030, which represents a 9.7% growth of jobs in this sector relative to 2020 levels. Furthermore, there are a range of industries that require expertise in data analysis and information systems, including advanced manufacturing, financial services, and the healthcare sector. According to OLMI, Ohio will add 2.3k jobs in this sector, representing 3% growth of jobs in this sector relative to 2020 levels. Finally, Ohio will experience strong growth - over 18k jobs added this decade with 6.9% growth relative to 2020 levels – in the professional, scientific, and technical services sector. In addition to having the ability to employ graduates from the programs in the data and information sciences included in this proposal, this sector can also utilize the scientific and data processing skills for students in fundamental STEM disciplines such as Geography, Mathematics, Neurosciences and Physics.

As a precursor to full-time employment, many of the proposed programs and applied STEM disciplines and already have required experiential learning opportunities through clinical experiences or internship opportunities. One of the goals of the COF-HD program is to expand the scope of experiential learning opportunities for students in fundamental STEM programs such as Geography, Mathematics, Neuroscience and Physics where it is not yet required. Thus, the impact of this proposal will last well beyond the scholarship funding by strengthening the connection and communication between these academic programs and the Ohio employers they serve.

D. Relationship to strategic plan

Aside the needs of Ohio employers for a skilled workforce, the COF-HD proposal is well aligned with our strategic plan. We recently adopted a new 5-year strategic plan which took effect July 2023. The vision statements include fostering research, innovation, discovery, and creative work that transform our world, and developing and strengthening relationships that invest in our mission to improve the human condition. To achieve this vision, strategic goals include expanding research, innovation, and scholarship by enhancing the quantity and quality of external funding, publications and scholarly activities and building strong strategic partnerships that drive economic growth and development, apply expert knowledge, solve complex issues, and promote experiential learning.

University of Toledo Choose Ohio First
Health and Data (COF-HD)

E. Institutional support

Support for COF-HD will be provided by Enrollment Management, the Learning Enhancement Center, the Center for Career Services in addition to the specialized student support functions within the College of Arts and Letters, the John B. and Lillian E. Neff College of Business and Innovation, the College of Health and Human Services, the College of Medicine and Life Sciences, and the College of Natural Sciences and Mathematics as described in the proposal text. The Office of Provost will play a coordinating role including support for cohort-building activities such as monthly seminar series, logistical support for soliciting and reviewing candidate applications, and data for annual reporting. The Provost will also provide a single point of contact for communication between the ODHE and the individual degree programs listed in this proposal.

Executive Summary

A. Rationale

Employment opportunities are emerging as the economic sectors in Ohio's southeast region grow and change, however with these opportunities come new demands on local workers' skills and knowledge. For students to take advantage of new employment opportunities, they must have access to and engage in career-specific education and skills training that can help them succeed both in the classroom and in their pursuit of employment.

Science, Technology, Engineering, and Math (STEM) have long been economic drivers in the southeast Ohio region and WSCC has been fortunate to be able to grow programs in these fields to help meet the demands of the local workforce. Science related fields, including health professions, are critical to the success of this region, which has a great need for trained individuals and has been a strategic focus of the college. Our region, on pace with national trends, has seen a significant increase in demand for skilled workers in STEM-related fields, especially within manufacturing and healthcare, a demand that continues to outweigh the supply. As an active partner in college fairs, career days, job and resource fairs, individual high school visits, financial aid and paying for college workshops, and other special events to attract and recruit traditional, non-traditional, first-generation, and underrepresented students. WSCC continues to invest in upgraded equipment, software, machinery, and curriculum to best prepare students to fill these in-demand occupations within the region and remains committed to doing everything possible to address this gap.

Traditionally underserved students define WSCC. Students in poverty, parents, first-generation, Pell-eligible, and adults comprise over 80% of the student body. And while the racial minority population of the Appalachian region is only 4%, WSCC's 9% minority enrollment is slowly increasing. Integrating meaningful pathways for academic and career transformations (IMPACT) is designed to improve recruitment, retention, persistence, work-based learning opportunities, and graduation for all our students, especially those traditionally underserved.

The Choose Ohio First Scholarships will help enhance the college's recruitment plan from both local high schools and non-traditional students who aspire to pursue a STEM-related career. The scholarships will help attract students who may not have thought of a community college or felt they were not "college material." A comprehensive marketing plan is in place to heighten the awareness of this opportunity with aligned strategies such as "VIP Admissions" (**See "Recruitment Strategy" on page 5**) to best support students and carry out the vision to address regional and statewide workforce needs.

B. Overview of Academic Programs

As a higher education institution offering 44 certificate and degree programs in four academic divisions: Health; Engineering and Industrial Technology; Business and IT; and Law/Public Safety, WSCC takes great pride in offering curriculum and work-based learning experiences that address regional and state education and economic needs, especially those focused on developing talent in STEM-related fields. Those WSCC program offerings included within this Choose Ohio First Scholarship Program are:

11.1006 (Help Desk Cert)	51.0908 (Respiratory)
15.0404 (Electrical Engineering)	51.0911 (Radiology)
15.0613 (Advanced Manufacturing & Automation Cert)	51.1501 (Chemical Dependency)
15.0699 (Process Technician & Chem Op Cert)	51.3501 (Massage Therapy)
43.0403 (Cyber Security & Cyber Security Cert)	51.3801 (ADN & BSN)
47.0604 (Automotive Service & Automotive Cert)	51.3901 (Practical Nursing)
47.0613 (Diesel Truck & Truck Cert)	51.1004 (Medical Laboratory)
51.0707 (Health Info Management & Medical Billing Cert)	24.0101, 24.0102, or 24.0199 (*Associate of Science) <i>*requires supporting documentation</i>

C. Synopsis of plan

A constant college-wide priority at WSCC is to maintain awareness of local training and employment needs and to connect students with local, in-demand careers to help meet that need. WSCC's plan will provide a foundational understanding of the transformations that need to occur for the success of our students, our region, and our institution. Guided by a well-known principle expressed by Dr. Steven Covey in 7 Habits of Highly Effective People: "Begin with the end in mind," for WSCC students, and for the people of the Mid-Ohio Valley, that "end" must be more than a college credential. It must be an intentional fusion of relevant education leading to high-demand career opportunities that fuel continual regional economic vitality. IMPACT creates the pathway to that "end."

The IMPACT plan involves three key activities. First, WSCC will implement a robust, comprehensive marketing plan to heighten community awareness of the COF and WSCC eligible programs and extend an invitation for eligible students to be a part of this program to help students identify their path. Second, WSCC will build on their success of Guided Pathways to expand that concept to Guided Career Pathways for every student. Third, through career-informed academic enrichment, WSCC will significantly increase work-based learning opportunities for all students. This IMPACT plan will transform siloed academic and career initiatives into cohesive pathways that foster lifelong student success and a highly trained workforce for in-demand jobs.

D. Institutional Strategic Plan

WSCC's institutional strategic plan, goals, and objectives directly reaffirms the college's commitment to students and to the MOV economic development, all in direct alignment with the COF program. The college's strategic plan serves as the foundation for the IMPACT plan and includes seven points of emphasis:

1. **Student Access** - Implement innovative delivery models and recruitment strategies to attract learners, including the development of high impact career pathways to support the region's most vital industry sectors.
2. **Expand Business Sector Partnerships** - Engage business leaders to ensure aligned curricula for training new employees to meet workforce needs, and provide work-based learning opportunities for students to gain real-world experience through co-ops, clinicals, internships, and applied projects.



3. **Strengthen Career Services** - Raise awareness of in-demand careers and related educational programs, help students develop and complete a career pathway that includes real-world experience and connection to future employers, and support graduates in securing employment.
4. **Student Success** - Provide an affordable, student-centered environment that empowers students to identify and fulfill their educational and career goals with a timeframe that meets their needs and improves their lives.
5. **Strengthen Guided Pathways Strategies to Increase Student Completion** - Continue to strengthen Guided Pathways strategies including onboarding, advising, student support, transfer, and co-curricular activities to help students build meaningful employee-student and student-student relationships to increase student persistence, retention, and completion.
6. **Increase Graduates** - Expand the 8-week course delivery model designed to provide a more manageable schedule and reduce time to degree completion for certificate- and degree-seeking students.
7. **Impact Quality of Life** - Expand partnerships and develop programs to attract and support the needs of the underrepresented people in our community. Promote employee and student engagement in communities cultural and civic activities.

E. Institutional Commitments

With great pride in creating an atmosphere focused on students and their success, WSCC faculty and staff are committed and deeply invested in helping students reach their full potential and maximizing the IMPACT on their lives.

- Recruiting, onboarding, and retaining highly trained and skilled faculty and staff to consistently and effectively engage with students.
- Heightening awareness and promotion of academic programs, especially STEM-related programs aligned with the COF program, through the day-to-day marketing and recruitment efforts.
- Making the student admissions process as seamless and efficient as possible to reduce anxiety and overwhelming feelings often associated with completing college applications and new student onboarding.
- Connecting all students with Success Coaches trained to support students with academic and career planning, registration, and holistic wrap-around support throughout their entire academic journey.
- Embedded curriculum that connects students with work-based learning opportunities.
- Professional development – WSCC is committed to supporting professional development opportunities for faculty and staff to provide college-wide continuous quality improvement.
- A cultural commitment to working across siloes enables the college to undertake major transformations through inter-division collaboration to achieve strategic goals.
- Accountability — WSCC uses the Four Disciplines of Execution (4DX) system to ensure unit-by-unit focus on the major goals of the institution and will utilize this system to ensure the outcome monitoring and reporting are effectively carried out.

Executive Summary

Building the Next Generation of Ohio's STEM and Healthcare Talent

The Choose Ohio First (COF) program is well integrated with Wittenberg University's mission of providing a liberal arts (and sciences) education dedicated to intellectual inquiry and wholeness of person so students lead personal, professional, and civic lives of creativity, service, compassion, and integrity. Wittenberg offers 12 distinct COF-eligible programs, led by distinguished faculty and our students have access to state-of-the-art laboratory and field research sites. Established academic programs such as Biology, Chemistry, Physics, Math, Computer Science, and Nursing, will be augmented with interdisciplinary programs such as Data Science, Biochemistry and Molecular Biology, Information Systems, and Environmental Science, and finally complemented by two new programs in Neuroscience and Public Health.

With support from COF, Wittenberg will be able to enroll more STEM, healthcare, and STEM Education students by providing the needed resources for matriculation. COF support for about 75 individual students on a four-year model plan, with 15 students in one of five cohorts, will also help Wittenberg reach its goal of retaining more students and producing more graduates in these fields. The byproduct of recruiting and retaining more STEM, healthcare, and STEM education students will be to positively impact the regional and state economy while also responding to in-demand occupations in Ohio. Wittenberg's STEM programs are well resourced through need-based research grants, cooperative agreements with various research programs, and special interest scholarships. COF funding will not displace these existing resources but will supplement our work to increase the number of work-ready STEM, healthcare, and STEM education students from Wittenberg University.

Every graduate of Wittenberg University completes at least three work-based learning opportunities during their time on campus. These work-based learning opportunities may look like an internship with a local or regional business, conducting research with a faculty member, or student teaching in a local school. Choose Ohio First Students at Wittenberg will complete at least one of these experiential learning opportunities in their field of study and collaborating partners (as evidenced by this submission's support letters) will benefit directly through increasing their talent needs by training and hiring Wittenberg COF scholars.

To reach potential COF Scholars, Wittenberg's Enrollment Management division plans to implement several strategies including, but are not limited to the following:

- Collaborating with Ohio high schools, specifically in underrepresented communities to organize informational sessions and application workshops to showcase Wittenberg University;
- Utilizing our existing transfer agreements with local community college to facilitate seamless transfer pathways for STEM students, offering scholarships and resources that encourage enrollment in a bachelor's degree program;

- Creating targeted email and marketing campaigns about the Choose Ohio First Program, scholarships, application deadlines, and upcoming events to interested students;
- Collaborating with high school STEM programs to identify talented underrepresented students by offering workshops, summer camps, and bridge programs to expose students to Wittenberg.

Wittenberg's [Connections Curriculum](#) ensures that students are exposed to the needed workforce skills in Ohio's in-demand occupations. The specific academic programs at Wittenberg chosen for the Choose Ohio First program meet the needs of Ohio's businesses in shoring up workforce gaps. Namely, critical areas in which wages meet or exceed 80% of the state median, have a projected growth of 36% or higher, and/or have project annual openings exceeding about 590 annually.

All COF Scholars, during their time at Wittenberg will be supported through targeted interventions, advising, and cohort/community building through Wittenberg's COMPASS Sweet Success Center. The COMPASS Sweet Success Center will offer COF-specific services around success coaching/tutoring, academic skill building, time management and organization, accessibility services, and career coaching and development.

The desired outcomes of the Choose Ohio First program align well with several components of Wittenberg's current strategic plan: *Engaging Our Community and Advancing our Shared Future*. For instance, under the theme of *Engage and Excel*, Wittenberg is expanding experiential learning opportunities. Commitment to supporting COF scholars with work-based learning fits well with this initiative. Under the theme of *Compete and Win*, Wittenberg is working on developing partnerships with other academic institutions and businesses to create new learning paths and is evidenced by Wittenberg's many partnering affiliation agreements. The COF initiative is directly aligned with our strategic plan and will be critical in moving the institution forward within these two themes.

This proposal has the full commitment from both institutional members and community partners. Documentation of that commitment is attached to this proposal. Dr. Brian Yontz, Provost, will serve as the main contact and leader of the COF initiative and will be supported by Maribeth Stevens, VP of Enrollment Management, Sigrun Olafsdottir, Director of Financial Aid, Dr. Darby Hiller, Associate Provost, and Dr. Casey Gill, VP of Student Development and Dean of Students.

EXECUTIVE SUMMARY

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 University, 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 industry in the Dayton region is health care led by Premier Health, Kettering Health and Dayton Children's Hospital.

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 from traditional and underrepresented populations in the critical Science, Technology, Engineering, Mathematics, and Medicine (STEMM) areas needed by these industries and employers.

Wright State has participated in the Choose Ohio First Scholarship program since its inception through scholarship programs and has developed a number of strategic support services for Choose Ohio First Scholars including academic support and career-related services. In the current academic year, the Choose Ohio First program is supporting over 200 students majoring in STEMM programs. These scholars receive full support from the departments of enrollment management, financial aid and student success.

The proposed enhanced Wright State Choose Ohio First (COF) Scholars program will continue to 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. In addition, this proposal includes STEMM education majors to support our regional schools. The Wright State COF Scholars program focuses on STEMM occupations including engineering disciplines, biology, chemistry, mathematics & statistics, neuroscience, physics, information systems, medical lab science, public health, STEM education, 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. COF Scholars will have a dedicated advisor to facilitate career development and academic support in the Student Success Center.

Executive Summary

Xavier University would like to offer a yearly cohort of 23 talented students a \$3,682 per year Choose Ohio First scholarship, matched by Xavier, to attend Xavier in one of our high-quality STEM 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 highly qualified Ohio students who apply and 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 allows 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 STEM 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, Computer Science, Mathematics, Biological Sciences for Business, Business Analytics and Information Systems), natural sciences (Biology, Environmental Science, Applied Physics, Biophysics, Engineering Physics, Physics, Chemistry, Chemical Science), and STEM education (Teaching Integrated Sciences).

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 in the Choose Ohio First Scholars program all connect to the strengths and needs of the regional economy. The region has a demonstrated need for expertise in health care, technology, and analytics. Students from the majors in the Choose Ohio First program often end up pursuing careers in these areas. For example, Q labs offers research and development services for a variety of industries. They have a growing need for well-rounded people who are knowledgeable in STEM and have a creative mind. Mercy Health is a top health care provider in the Cincinnati area and engages with Xavier students while they are still pursuing their degrees and hires them in a variety of roles post-graduation. There will continue to be a demand for qualified candidates, from direct care roles to administrative support.

Makino produces the world's most accurate and highest quality metal-cutting and EDM machines. They have an ongoing requirement for qualified engineers and technical personnel to work on their complex machines. Spectra-Tech Manufacturing, Inc., is one of only a few privately-owned companies that make printed circuit boards in the United States. The manufacturing plant provides not only manufacturing and assembly services for their customers, but they also offer engineering services that support electronic manufacturing and prototyping.

Xavier has a strong tradition of and commitment to producing leaders in these in-demand fields for our regional and state economy. Around 70% of our STEM graduates stay in our region or state. We currently enroll about 50% of STEM 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.

How Choose Ohio First is part of institutional strategic plan

Xavier's Board of Trustees approved Strategic Themes and Priorities for Xavier University in September 2022. The priorities described in this plan include several directly relevant to our Choose Ohio First (COF) @ Xavier project:

- Deepen our academic excellence through bold leadership in health and biomedical sciences
- Expand our commitment to immersive, high-impact, experiential learning
- Redefine teaching excellence through inclusive pedagogy
- Implement a comprehensive, transformative first year experience
- Set the national bar for innovative, comprehensive holistic collegiate health
- Achieve excellence across Diversity, Equity, and Inclusion, Accessibility and Belonging (DEIAB) innovation, outcomes, and impact
- Reimagine a radical model of integrated vocational discernment

The Choose Ohio First program at Xavier emphasizes experiential learning, uses a cohort model to help provide excellence in outcomes that are transformative for students, and integrates vocational discernment through its activities.

How Choose Ohio First supports student achievement

COF @ Xavier supports student achievement by providing funding to make Xavier accessible to students who benefit from a personalized liberal arts education and providing these students a cohort to help ensure their success.

Half of the students in our STEM programs are now from out-of-state. Our surveys of the STEM students who apply, are admitted, but do not enroll indicates finances as the reason half do not enroll. Data on the unmet financial need of these students suggests that the additional funding provided by this grant could make Xavier feasible for at least an additional 23 students per year. This project primarily targets students who are Ohio residents admitted to Xavier with interest in one of our STEM programs and who have unmet financial need that can be met with this scholarship.

Many of these students with unmet need are socially disadvantaged, as described in the Choose Ohio First Request for Proposals. 31% of the students are first generation students, 21% are Pell Eligible.

While leveraging Xavier's already-extensive support systems, students will experience an intentional process of discernment, professional mentorship, and work-based experiential opportunities. These experiences, combined with Xavier's rigorous education, will lead to student achievement.

Assistance to achieve successful implementation

Xavier's institutional assistance to successfully implement the proposal includes

- Enrollment Management and Student Success
 - o Admissions Counselors (recruiting)
 - o Financial Aid Counselors (scholarship crediting and counseling)
 - o Success coaches (college success)
- Career Development
 - o Career Coaches (career discernment, mock interviews, resume prep)
 - o Professional Mentoring (career discernment, networking, professionalism)
- Academic Programs
 - o Academic Advisors (academic success)
- Project Director (cohort mentoring and management)

Xavier's project team involves faculty and staff from across the above areas. Students are provided an easy one-stop Canvas course location to find information on the program and to record their progress through the Choose Ohio First Scholars Program. Xavier University will ensure that the Choose Ohio First

students participate in a co-op, internship, or research laboratory experience by working with each student individually to explore opportunities that align with their professional goals. Students in the cohort are provided a complete four-year engagement plan that enables them to successfully prepare and earn an internship and a job with an Ohio company in their field. The team meets with the cohort as a whole group each semester so the students and Xavier team get to know each other. The project team provides appointments throughout the semester for one-on-one assistance in each of the support areas. The project team checks in on the cohort throughout the semester and reaches out to those who are not successfully progressing.

Executive Summary: YSU STEMM Advancement integrating Data COF

YSU-COF's 2024 proposal, **YSU STEMM Advancement integrating Data Choose Ohio First (YSU-SAID COF)**, promotes further education and workforce development opportunities for YSU students and features experiential learning in data analytics. We request **\$1,120,000** over five program years to fund an estimated \$4,000 per student for 20 students per new cohort who are pursuing graduate degrees, undergraduate degrees, and/or certificates. As an institution, YSU is committed to meet this funding through an in-kind match consisting of non-public scholarships and support from the Office of Academic Affairs. Our proposal supports STEMM majors at YSU, targets our growing data analytics program, and includes collaboration with our Division of Workforce Education and Innovation, the Office of Diversity, Equity, and Inclusion, Honors College, and regional high schools. This collaboration furthers our goals to produce a trained workforce that meets the needs of the region and State of Ohio and to promote the scholarship to underrepresented groups.

Rationale for Targeted Population

Our target population consists of STEMM-interested Ohio students with an emphasis upon STEMM underrepresented groups. YSU-SAID COF focuses our efforts in the Youngstown-Warren area because of the need to train and develop a diverse workforce equipped with the skills required for employment within the region, particularly at the GM-LG Ultium battery plant and the other advanced manufacturing facilities comprising "Voltage Valley." This also furthers the University's mission to serve the region.

Targeted Academic Programs

All STEMM-related majors and programs are eligible for YSU-SAID COF. YSU SAID COF will attract STEMM students interested in integrating data analysis into their education and training. We target data science and analytics because of the potential impact of the COF scholarship upon student involvement and participation in the YSU Data Mine and growing data analytics program while recognizing and meeting the need for a workforce better trained in data competency. We have the infrastructure and plans in place to develop our data analytics program further. Engaging YSU-SAID COF scholars in the YSU Data Mine and promoting this unique experiential learning opportunity as part of the students' education will better equip them with skills sought by regional and state employers.

Regional/State Strengths and Targeted Academic Programs

All STEMM programs included in this proposal are strongly linked to the Northeastern Ohio region and work-based learning. This funding, if awarded, enables us to train and to provide a qualified workforce for employers in the region and the State. Coupled with current COF funding, we will promote our STEMM 4+1 programs to current COF undergraduates, who could receive funding for both STEMM undergraduate and graduate degrees and receive the additional training and skills necessary to positively impact the region.

Relationship to Institutional Strategic Plan and Support of Student Achievement

The YSU strategic plan consists of three emphases: Student Futures and Lifelong Learning, Academic Distinction and Discovery of Knowledge, and Collective Impact with the Region. The COF initiative promotes and enhances our efforts in all three of these areas.

Our focus on Student Futures and Lifelong Learning challenges us to develop academic programs to train a workforce of students realizing their individual aspirations. We identify areas of research, service, and scholarship that focus upon life-long learning and mutually beneficial community engagement in alignment with community partners. The COF initiative clearly aligns and promotes this goal. The COF focus on student work-based learning promotes this initiative at YSU and provides us the support necessary to promote these opportunities to Ohio students.

Academic Distinction and Discovery of Knowledge includes the goal to “develop internships, service, experiential and applied learning projects with local businesses and organizations that provide opportunities for students to apply their knowledge in scholarly activity.” The COF initiative, especially in the targeted academic programs, enables us to foster greater connection to regional employers and allows us to design programs to train the local workforce to meet employers’ needs.

The third area, Collective Impact with the Region, challenges us to ensure our partnerships are inclusive, equitable, and accessible. The COF initiative supports our efforts to target populations underrepresented in STEMM for opportunities within the region. We will listen to the needs of employers and address those needs through training and academic programs to strengthen the regional workforce.

Institutional Assistance

The COF program is highly valued at YSU and receives institutional assistance to promote the initiatives outlined in the RFP. YSU will support YSU-SAiD COF through the YSU Data Mine, annual STEM internship and career expos, services provided by the Office of STEM Careers, Internships & Co-ops, and the support of personnel in the development and offering of programs and resources to encourage work-based learning. Letters of support attest to the broad assistance provided by the institution, including the Division of Workforce Education and Innovation, YSU Honors College, and student support services such as the Mathematics Achievement Center.

Program Components

YSU-SAiD COF scholars will be required to adhere to the following:

- maintain at least a 3.00 GPA during the award year;
- make timely progress in their STEMM program or major;
- attend all cohort meetings (unless meeting times conflict with a class);
- participate in the YSU Data Mine for at least one academic year or obtain the YSU Certificate of Data Analytics and complete at least one transcribed internship, co-op, or research experience before graduation;
- work with the YSU-SAiD COF Coordinator and the Office of STEM Careers, Internships & Co-ops to secure a transcribed research experience, professional practice experience, or REU (if applicable);
- participate in the STEM Expo and/or other career and internship fairs on campus (if applicable);
- complete all required surveys and exit interviews;
- complete an internship/research presentation; and
- comply with any and all recommendations of the COF Coordinator concerning academic progress, including the acceptance of, and working with, any private tutors.