Choose Ohio First

FY23 RFP

PROPOSAL SUMMARIES

ANTIOCH COLLEGE

Choose Ohio First Proposal
October 11, 2022

Antioch College has been a pioneering and values-driven institution, committed to inclusivity and equity, since it was founded in 1850. The College was among the first nonsectarian educational institutions in the United States. It was the first coeducational college in the nation to offer the same educational opportunities to both men and women, and it was the first to appoint a woman to its faculty and to its Board of Trustees. Today, Antioch is still committed to "winning victories for humanity," especially by making a transformative education available to those who otherwise can not afford a college education. This values-driven commitment is reflected in the fact that 72% of our student body is Pell-eligible, an indicator of significant financial need. Antioch College is seeking Choose Ohio First funding to boost recruitment of students in Ohio, especially those students who are interested in biomedical and environmental sciences. This initiative aligns clearly with our institutional mission and commitment to educational access. We understand that STEM fields in particular have some of the largest barriers to entry and access, especially for underrepresented and low-income individuals.

Currently, Antioch College serves 127 students with about 60% coming from within the state of Ohio. Within our most recent graduating class, about 25% of students graduated with CIP codes in Biomedical Sciences and/or Environmental Science. With Choose Ohio First funding, Antioch College will be able to reach more students in Ohio who are interested in studying the sciences and ultimately, more students in the state of Ohio will be positioned for success in high-demand STEM fields.

Antioch has unique capabilities to remove barriers to access, including in the sciences, and to prepare students for meaningful work in their chosen professions. Antioch students create self-designed majors leading to the Bachelor of Arts or Bachelor of Science degree. Faculty in the sciences have disciplinary expertise in Forest Ecosystem Analysis, Forestry, Molecular Genetics, Biochemistry & Microbiology, Environmental Science, Chemistry, and Biology. They regularly offer courses in the natural and biological sciences. Further, Antioch excels at putting education into action, including in the sciences through opportunities to study in our high-intensity microfarm, campus reforestation initiative, farm-to-table kitchen program, campus pollinator gardens and solar farm, and general commitment to student research experiences, often culminating in cooperative education experiences or capstone projects featured in our annual Colloquia of student work.

Furthermore, Antioch College's instruction around biomedical and environmental science addresses regional and statewide economic needs, and with COF scholarships, Antioch College will widen our impact in the state of Ohio. According to the U.S. Bureau of Labor Statistics, data scientists, solar photovoltaic installers, and wind turbine service technicians are among the 20

fastest growing occupations in the country. Our curriculum, especially with regards to environmental science, prepares students for work with alternative energy sources. Students can learn such skills first-hand at the college's solar array and geothermal plant. At a state level, according to Ohio's In-Demand Job List (https://topjobs.ohio.gov/list), chemists and environmental science and protection technicians are both in-demand jobs with projected growth. Antioch College's education directly addresses these needs as well; Antioch science graduates have a track record of being placed in these occupational areas. Finally, at a regional level, in Dayton, OH which is about 19 miles from Antioch College, there is a clear need for individuals in the life, physical, and social science occupations (3.6% projected growth according to Ohio Labor Market Information) – especially chemists, environmental scientists, biological technicians, and chemical technicians. There is also a demand for Healthcare Practitioners and Technical Occupations (9.1% projected growth according to Ohio Labor Market Information). Antioch College's curriculum prepares students to meet labor market demands at the regional, state, and national levels.

In June 2022, the Antioch College Board of Trustees approved the College's three-year Strategic Plan, and the COF scholarship program aligns well with this strategic vision especially the following Strategic Goal areas:
- Goal #2, Obj. #1: Align recruitment, orientation, academic assessment, and support practices through the establishment of an institution-wide Strategic Enrollment Plan.
- Goal #3: Develop, evaluate, and deliver a rigorous liberal arts curriculum that creatively interweaves both scholarship and life experience.

As part of the strategies in Goal #2, Objective #1, a strategic enrollment management planning team is meeting regularly to build out our plans for increasing enrollment, including enrollment in the sciences. The revised institution-wide Strategic Enrollment Plan will feature specific strategies to reach these end goals.

As part of the objectives and strategies in Goal #3, the College is exploring and building out curricular focuses; this includes a possible focus on sustainability, which reinforces the sciences, especially environmental science, as a vital program area within our college. Furthermore, the sciences at Antioch College are a direct extension of our mission, especially as it relates to sustainability. Antioch has strived to reduce the impact of its campus operations on the environment by establishing sustainable policies, programs, and practices that ensure it is conducting operations in an environmentally sound manner—consistent with Antioch's vision of providing a place where better ways of living are discovered. Antioch lives its commitment to environmental sustainability in a comprehensive way, perhaps unmatched by any other college. We have been recognized as an international leader for our campus operations (farm, dining, solar and geothermal renewable energy facilities, LEED-certified buildings, nature preserve) as well as our curricular focus on sustainability.

Antioch College is respectfully requesting $900,000 in scholarship funding over the five-year time period. With a COF scholarship of $7,500 and an Antioch College match of $7,500, most

COF scholars will be paying a maximum of $11,949 per year. This considerable discount will incentivize prospective students to choose Antioch College for their science studies.

The College leadership is supportive of the COF initiative and is willing to put forward the time, energy, and resources necessary for it to be successful. Prior to submitting this application, the program proposal has been shared and met with enthusiasm by those within Academic Affairs, Admission, Finance, Cooperative Education, and the President. We did not approach this decision to submit our first proposal for COF participation lightly. After careful consideration, we believe that our participation in COF is critical to advancing our enrollment approach as a college and to addressing pressing workforce needs in our surrounding communities.

ASHLAND UNIVERSITY-EXECUTIVE SUMMARY

Ashland University is requesting $1,050,000 in Choose Ohio First (COF) program funding to provide $3,000 annual scholarships to 25 scholars in our Nursing (BSN) and Dietetics programs. 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, and Physician Assistant Studies. As a medium-sized institution in north central Ohio, Ashland University hosts the only COF funded program serving our immediate region. Our support of these current scholars will build on the strengths of our COF program by serving a unique regional population with high financial need, leveraging strong academic programs in Nursing and Health Sciences, while working with business partners to provide work based learning opportunities and fulfilling regional and state needs for graduates in STEMM areas. Our support services have led to high retention and graduation rates for scholars.

Rationale for Recruitment
The majority of our undergraduate students come from high schools in Ashland and surrounding
counties, making us well located to provide this important state STEMM scholarship support to our region. Ashland University enrolls students from diverse backgrounds with 34 percent of our
students being first-generation college students and 30 percent of students being Pell eligible. 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. We are excited about the opportunity to extend the Choose Ohio First program to students in our BSN and Dietetics programs.

Program Overviews
The BSN degree program prepares students to practice the art and science of professional nursing. The program includes 128 credit hours. Graduates of the program are eligible to sit for the NCLEX-RN licensure examination. The didactic program in Dietetics is designed for students who wish to become Registered Dietitian Nutritionists (RDN) and practitioners in clinical, community, food industry, and foodservice areas of nutrition. The program includes 123 credit hours. Following completion of the program, the completion of an accredited supervised practice program is required before students are eligible to take the registration examination and obtain the Registered Dietitian Nutritionist (RDN) credential. Graduates of these programs may become licensed and credentialed health care professionals, Registered Nurses and Dieticians, committed to health-related practice, leadership, and service within their communities.

Regional Economic Strength
Based on the region served by Ashland University, we provide educational opportunities to primarily rural and suburban student populations, and we extend recruitment into the Columbus, Akron, Canton and Cleveland urban areas. Existing MOUs and affiliation agreements with academic, business, and healthcare partners enable us to develop a plethora of meaningful clinical and work-based learning experiences for our nursing and dietetics students.

The Ashland University College of Nursing and Health Sciences has existing relationships with approximately 150 clinical partners.

Supporting Student Achievement
The COF initiative is consistent with the institutional strategic plan which highlights expansion and enhancement of College of Nursing and Health Science programs. Students in the BSN and Dietetics programs receive strong support from faculty and staff. Students in both programs benefit from having professional and faculty advisors who work closely with each individual student. The Center for Academic Support offers Freshman Success Seminars and access to free tutoring throughout the program of study. The nursing program has an Assessment Technologies Institute (ATI) Success Coordinator who provides students with individualized remediation plans based upon the students' performance on standardized specialty nursing assessments. Indicators of student achievement include the BSN program's first time NCLEX-RN pass rate greater than 89% for the past three calendar years and a 95% match rate over the past 5 years for Dietetics graduates with accredited Dietetics Internship programs for those who wished to pursue this opportunity.

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 application for the BSN and Dietetics programs has the support of Dr. Carlos Campo, President of Ashland University; Dr. Carrie Keib, Dean of the Dwight Schar College of Nursing and Health Sciences; Randy Spade, Admissions; Zachary McGrain, Career Center for Life Calling; Dr. Dan Lawson, Corporate Connections; and Dr. Alexander Jordan, Financial Aid.

AULTMAN COLLEGE-EXECUTIVE SUMMARY

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

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

The mission of Aultman College is to prepare health care professionals who lead our community to improved health. As a partner in a unique integrated health care delivery system, Aultman College is a higher education institution offering a premier nursing education. Aultman College serves current and emerging needs in Northeast Ohio and beyond through academically challenging and relevant health care degree programs. In response to the need for additional Bachelor of Science in Nursing (BSN) trained nurses, Aultman College proposes this Choose Ohio First scholarship request to support students entering in the BSN program. Each year, a cohort of (5) COF scholars will be selected to join Aultman College's COF scholarship program and receive $8,631 to help cover tuition costs and other billable transactions.

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

Toward the end of their academic program, COF scholars will participate in a work-based learning/clinicals experience at one or more of Aultman College's COF business partners: Aultman Health Foundation, Aultman Hospital, Aultman Orrville Hospital, Aultman Alliance

Community Hospital, AultCare, or Altercare. The work-based learning component will provide a leadership or career exploration opportunity for COF scholars at local health care organizations to better understand career paths, build relationships with health care leaders, and secure employment upon graduation.

BALDWIN WALLACE UNIVERSITY-EXECUTIVE SUMMARY

Baldwin Wallace University (BW) has strong STEM (Science, Technology, Engineering, and Mathematics) programs and a history of excellent performance with Choose Ohio First (COF). More than **350** undergraduate STEM students have participated in the BW COF STEM Scholars program since its inception in 2008, the first year that COF funds were made available. Of particular note and described in this proposal is BW's success at recruiting (see **Section 2: Recruitment**), educating, and graduating students from disadvantaged backgrounds. Consider the following:

Of the **354 students** selected to the BW COF STEM Scholars program (through fall 2021):

- **64%** were socially disadvantaged individuals (including first-generation college students)
- **46%** were first-generation college students
- **40%** were economically disadvantaged individuals (Pell-eligible)
- **28%** were from both socially and economically disadvantaged individuals (Pell-eligible)
- **28%** were transfer students from two- or four-year institutions (**20%** from two-year institutions where students have earned their associates degree)
- **12%** were adult students

Success metrics for the program include:

- Of FTFT students entering BW in cohort years 2008-09 through 2017-18, 172 of 243 (**69%**) were STEM graduates and BW COF STEM Scholars. That percentage is **79%** if one considers students recruited to the program that did not remain as BW STEM Scholars but did complete their degree.

- The retention rate for students in the BW COF STEM Scholars program is **63%** to date (193 of 306, including students currently enrolled). That number increases to **74%** if one considers students that graduated, but not as COF STEM scholars.

- 48 of 243 (**20%**) were BW COF STEM Scholars grads that were both economically and socially disadvantaged upon entering BW.

Given the clear success in student retention and completion related to the BW COF STEM Scholars program and model (**Section 3: Student Support**), we will continue to recruit, educate, support, and graduate students in a manner consistent with the University mission and Strategic Plan: Strategic Pathways.

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 industries in in-demand occupations (**Section 6: Regional and Statewide Economic Needs and Strengths**). The BW plan to address regional and state-wide economic strengths and needs go beyond the simple alignment of academic programs. The Baldwin Wallace Strategic Plan is intimately tied to regional and state development. Consider the following strategies included in the Plan:

- 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

In particular, in this project, we focus on the **manufacturing 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 manufacturing sector and its diverse array of sub-sectors, as well as the much larger services sector.

BLUFFTON UNIVERSITY-EXECUTIVE SUMMARY

Bluffton University requests $138,600 to support a five-year initiative to enroll, support, and graduate underrepresented students in STEM majors. We define underrepresented as a female or ethnic minority in STEM or an ethnic minority or male in Nursing. The majors we have chosen are: Nursing, Speech-Language Pathology & Audiology, Food & Nutrition, Pre-Dietetics, Biology, Chemistry, Pre-Medicine and Pre-Engineering. We have selected this population due to its regional proximity to our campus. We have chosen these majors based on their necessity in the state job market.

Nursing at Bluffton consists of a four-year, dual-degree, dual-entry program in collaboration with Rhodes State College.

Speech-Language Pathology & Audiology is Bluffton's newest health sciences program. The program prepares students for high-demand careers to address growing societal needs. In Ohio, there is a growing need for speech therapists to respond to increasing demands for support from pre-K to elder care, cancer and other diseases that impact an individual's speech center.

In our Food & Nutrition and Pre-Dietetics programs, Bluffton students benefit from a long-established program and experienced teaching faculty that combines rigorous preparation in the natural science and nutrition curriculum with hands-on experiences in all four years.

Bluffton encourages students interested in medical school to declare as Pre-Medicine majors, not because of a medical school requirement but because it helps the university be attentive to the full range of academic and support services that help students gain admission to medical school. In recent years, Bluffton has typically graduated 1-2 students who attend medical school, either directly or after a gap year of community service.

A student majoring in Biology receives a broad preparation consisting of a core of biology plus the chemistry, physics and mathematics vital to the field of biology. This preparation will be a basis for entering graduate school or fields such as biological research or other medical and life science-related professions.

A student majoring in Chemistry receives strong background in the core areas of chemistry: analytical, inorganic, organic and physical chemistry. Chemistry graduates succeed in industry, graduate school, medical school, and other areas.

Designed to cover relevant physics, chemistry and mathematics, our Pre-Engineering major provides the necessary basis for mechanical and civil engineering students. Students wishing to study other engineering fields are encouraged to add chemistry, biology or computer science courses to suit their needs.

The disciplines selected for this program have a current and projected need in the economy. According to the Bureau of Labor and Statistics, over 200,000 registered Nurses will be needed through 2026. Physicians, Biological technicians (biology majors),

Health Specialists and chemists will have around 25,000 job openings through 2026. The Bureau expects over 12,500 jobs in engineering fields to open between now and 2026.

During the 2019-20 academic year, Bluffton's faculty, staff and community stakeholders developed a five-year strategic plan to guide institutional priorities and initiatives for the next five years. Our selected student populations align with critical areas of the university's strategic plan, including:

• Expand and strengthen our science programs such as growing our Speech-Language Pathology & Audiology and Pre-Engineering programs to meet state demand.

• Expand and strengthen opportunities for experiential learning across the full range of academic programs. Health science faculty are already committed to this emphasis through a highly integrated cross-disciplinary model that offers students hands-on learning and field placements across their majors. All COF scholars will participate in this model.

• Grow external partnerships with for-profit and non-profit organizations with mutual benefits, for example, discounted tuition for partners and field experiences and internships for Bluffton students--our growing partnerships will support the success of Choose Ohio First (COF) scholars.

The COF project will receive full institutional support and any assistance required to succeed. All involved departments support this project and will fulfill their assigned duties should this proposal be successful.

BOWLING GREEN STATE UNIVERSITY-EXECUTIVE SUMMARY

A. Rationale for the Selected Populations for Recruitment

Bowling Green State University (BGSU) has a long and successful history of recruiting, retaining and graduating undergraduate STEM majors through its receipt of Choose Ohio First (COF) funds from the Ohio Department of Higher Education (ODHE). Since 2008, BGSU has received *30* separate COF grant awards to support students involved in *9* different COF programs. In 2020, the university's COF program became centrally administered by the *COF Coordinating Committee,* comprised of administrators at the Director or Assistant Director level from Academic Affairs, Enrollment Management, and the Career Center. This organizational structure allows for the execution of a coordinated COF recruitment strategy that is aligned with the university's data-informed enrollment strategy. The goal of the COF Coordinating Committee goes beyond recruitment to the support and retention of COF scholars.

An essential feature of this strategy is that it uses longitudinal enrollment data to identify regions of the state that historically yield the highest number of students enrolled at BGSU and devotes the most resources to recruiting from these areas. Analytics are used to identify which areas of the state have been underperforming relative to expectations and target them for an investment of additional resources. This approach is replicated for recruiting COF students. A further advantage of the centralized administration of BGSU's COF program is that it leverages the resource of the university's Academic Investment in Math and Science (AIMS) scholarship program to recruit, enroll, retain, and graduate STEM students who self-report as being female and/or are persons of color. In doing so, state-provided COF funds supplement and do not replace those of BGSU's self-funded AIMS program.

Currently, BGSU has three active Choose Ohio First grants, grant numbers 19.71, 21.05, and 22.05. Of the COF students from grants 21.05 and 22.05 in cohorts 2021 and 2022, 18.18% self-reported as Non-White/Non-Asian, and 94% self-reported as female. Additionally, 22.73% self-reported as first-generation students. These numbers reflect the recruitment strategy to engage and enroll underrepresented populations that, include women and minorities. BGSU plans to also focus future efforts on first-generation college students both as an institution and specifically for the COF program.

B. Overview of the Selected Academic Programs

The academic programs included in BGSU's proposed COF program were selected because they fall into three broad categories: a) programs in areas of high workforce demand, b) programs that are vital to the economy of Northwest Ohio, and c) programs of traditional institutional strength. These programs and areas are outlined as follows:

- **High Workforce Demand:** Nursing, Pre-Physical Therapy, Computer Science, Software Engineering, Statistics (Data Analytics), STEM Teacher Preparation, Medical Laboratory Science

- **Vital to the Economy:** Mechatronics Engineering Technology, Electronics and Computer Engineering Technology, Manufacturing and Mechanical Engineering Technology, Systems Engineering

- **Traditional Strengths**: Environmental Science, Forensic Science, Biology, Chemistry, Dietetics, Communication Disorders, Applied Health Science

Together these programs have an average retention rate of 74.2% and work to fulfill the purpose of Choose Ohio First to deepen Ohio's economic strength by developing talent in the STEM fields.

C. Address Regional and Statewide Economic Strengths and Needs

BGSU's proposed COF program is specifically designed to address the workforce needs and contribute to the economic strengths of Ohio. The majority of the academic programs selected for the COF program have been identified as either being of *High Workforce Demand* or *Vital to the Economy*. In particular, BGSU's focus on nursing and STEM education is in response to regional workforce needs for these fields. Also, the emphasis on advanced manufacturing is due to the university's goal to be an engaged partner with this important industrial sector of northwest Ohio. The region's advanced manufacturing industry has been an important part of economic growth and opportunities, and connecting an educated workforce is crucial to ensuring this regional strength continues. The recent launch of a multi-institution Advanced Manufacturing Center that includes BGSU demonstrates the commitment to continuing to serve these critical workforce development needs.

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

BGSU's proposed COF program is aligned with the university's strategic plan, *Forward,* which seeks both to *"support strong existing (academic) programs and develop new ones that are in great demand in areas such as healthcare and applied sciences"* and to make "*a BGSU degree more accessible to broader groups of qualified students through partnerships, pathways, and innovative programs*." BGSU's implementation of this plan has resulted in the creation of a new School of Nursing, a regional Center for Advanced Manufacturing and Logistics through a collaboration with Owens Community College and the University of Findlay, and the creation of the School of Engineering, which was approved in September 2022. Beginning in Fall 2023, the School of Engineering proposes to offer the following degrees: BS-Electrical and Computer Engineering, BS-Systems Engineering, BS-Robotics Engineering, and BS-Manufacturing and

Mechanical Engineering beginning in Fall 2023. These degrees would replace the existing engineering technology degree and represent an improved alignment at BGSU to further support academic excellence in STEM fields.

BGSU's proposed COF strategy is well-integrated into the overall university strategy, directly supporting both of these strategic initiatives. To ensure the success of its COF students, BGSU will implement a cohort model to encourage community building and provide students with various opportunities, workshops, and resources that will support student success. The COF Coordinating Committee oversees these efforts at the university.

E. Institutional Assistance Leading to Successful Implementation

BGSU will provide significant institutional support to ensure the successful implementation of the proposed COF program. In addition to providing the required $1,146,600 in scholarship match, BGSU will allocate a substantial amount of time and effort by its leadership team to sit on the COF Coordinating Committee, co-chaired by the Vice Provost for Academic Affairs and the Director of Student Financial Aid & Scholarships. The committee also includes the Director of the AIMS Program, the Director of the Career Center, and the Assistant Director of Packaging, Scholarships, and Fund Management. This commitment of personnel time will lead to the efficient and coordinated administration of the COF program to ensure its current and future success.

CEDARVILLE UNIVERSITY-EXECUTIVE SUMMARY

Cedarville University is recognized nationally for its rigorous academic programs, strong graduation and retention rates, accredited professional and health science offerings, and high student engagement ranking. We are excited for the opportunity to apply for the FY2023 Choose Ohio First award. As a recipient of previous COF awards, we understand the value of the COF program and firmly believe in its ability to strengthen Ohio's economy and our state's academic programs—two things that are inextricably linked. We also understand the importance of stewarding state of Ohio dollars well, and we believe that making an investment in Cedarville University will further the goals of the COF Program to "deepen Ohio's economic strength by developing talent in Science, including health professions, Technology, Engineering and Mathematics (STEM)-related fields through the completion of post-secondary degrees."

This award's focus is on recruiting and retaining students in "STEM fields by providing scholarship funds and connecting students to work-based learning experiences and careers in STEM fields." Cedarville is proposing to strategically use COF scholarships to recruit and retain top Ohio talent into some of our most distinguished technical degree programs. Our professional programs in particular are well-known in our region for producing highly capable graduates of strong character who bring substantial value to their employers. The reputation built by our alumni precedes our new graduates into the workforce and paves the way for employment opportunities in in-demand fields in Ohio, such as computer science, computer engineering, and cyber operations. Our students enjoy tremendous access to jobs and research opportunities at Wright Patterson Air Force Base, the largest single-site employer in the state of Ohio. Additionally, with the introduction of Intel into the state of Ohio economy, students in these computing-related majors will fill vital roles in the Silicon Heartland ecosystem helping to fuel and prosper this crucial new industry.

We are proposing a cohort size of 10 Choose Ohio First scholars across the three majors of computer science, computer engineering, and cyber operations. Our engineering programs enjoy strong support from faculty and administration, and all COF scholars in these majors will be provided tailored work-based learning experiences to better equip them for employment after graduation. COF dollars will enhance our engineering programs by making them more affordable and by helping to attract and retain top Ohio high school talent.

Cedarville has consistently set aside financial aid funds for the recruitment of minority and other diverse/underrepresented groups on campus, both through formal scholarship funds, and informal processes in the Financial Aid office. Cedarville will leverage COF scholarships with a

matching ratio in excess of 2:1 to help students who could otherwise not attend Cedarville come to Cedarville to earn engineering degrees, furthering our diversity recruitment goals and strengthening our undergraduate programs as a whole.

CENTRAL STATE UNIVERSITY-EXECUTIVE SUMMARY

Choose Ohio First: Success in STEM (COFSS)

Central State University (CSU), a Historical Black College and University (HBCU) and 1890 Land-Grant institution submits the Choose Ohio First: Success in STEM (COFSS) proposal to the Ohio Department of Higher Education, Choose Ohio First (COF) program. The COFSS aims to significantly strengthen Ohio's competitiveness within STEM disciplines, particularly in chemistry, manufacturing engineering, industrial technology, water resources management, and environmental engineering. It will also broaden Ohio's workforce as economically disadvantaged individuals are recruited into the STEM fields, thereby increasing the state's capacity to compete in a global environment.

The COFSS program targets students with the academic potential and determination to succeed in college and beyond. The program goal is to recruit, enroll, and graduate 38 high-quality students majoring in STEM and STEM education from CSU during the project period. The program participant entry will be staggered over the five-year project period, with five new students entering the program in Year 1, seven in Year 2, eight in Year 3, and nine each in Years 4 and 5. CSU will employ two strategies to achieve the project's goals.

First, we will focus on recruiting and retaining high-achieving and highly motivated students who enter CSU's honors college as a condition of receiving the COF scholarship. Honors students must have an unweighted 3.5 grade point average (GPA) to be admitted to the college and maintain a 3.5 and above to remain in the college. Furthermore, honors students must continue to show progress in meeting the requirements for General Honors, Honors in the Major and University Honors. Each honors scholar will receive the full $8,632 scholarship that, combined with CSU matching funds, will cover the full tuition, room and board, and other specified fees for a normal course of study for degree completion.

Our second focus is to recruit and retain new incoming or transfer students with a 3.0 grade point average. Each student will receive a scholarship of $8,632 based upon need as reflected by their annual FAFSA. This, combined with other CSU scholarship funds, will significantly alleviate student financial burden. The combination of COF Awards, CSU Institutional Aid, and federal Pell Grants will provide recipients the funding necessary for low-income students to attend CSU. COF scholarships will yield the highest rate of return for the state, as CSU's tuition is one of the lowest of all public institutions in Ohio.

COFSS scholarships will give preference to chemistry, manufacturing engineering, industrial technology, water resources engineering, and environmental engineering majors, although qualifying biology, mathematics and computer science majors will also be considered. CSU's selected programs will produce graduates needed in the key industries identified by the Dayton Development Coalition as driving economic growth in the Dayton region. Our targeted industrial areas include advanced manufacturing, aerospace and aviation automotive, bio health, food processing, information technology, and polymers and chemicals.

CSU has a demonstrated record of successfully producing underrepresented student groups of STEM graduates, particularly women. Although the University has enrolled only around 8% of undergraduate African-American students in Ohio, it has provided an estimated 14% of Ohio's African-American graduates in STEM in the last several years (IPEDS). This achievement is underscored by the fact that around 80% of CSU students come from low-income families; these students are eight times less likely to graduate from college than students from upper-income families. Because of this challenge, Central State will offer outside of classroom support services to ensure student success. The support services will include tutoring and mentoring, personal and professional development sessions, internships, undergraduate research experiences, and personal financial management.

CINCINNATI STATE TECHNICAL AND COMMUNITY COLLEGE-EXECUTIVE SUMMARY

Preface: This application further extends Cincinnati State's Choose Ohio First Applications over the past two years. While it is not a re-imaging of the college's COF program, it reflects what has been learned and experienced since re-starting this program in the latter half of FY21, particularly in the areas of recruitment and enrollment. This proposal also requests an increase in funding to allow for additional COF scholarships over the next five years.

a) **Rationale for the selected populations for recruitment, including recruiting underrepresented populations in the fields of science, technology, engineering, and mathematics or STEM education**

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

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

b) **Overview and rationale of the selected academic programs**

Cincinnati State began with a review of all the college's bachelor's degree, associate degree,

and certificate programs that were included within the eligible STEMM CIP codes as set forth by ODHE for the Choose Ohio First program. From there, we considered how well each program:

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

The result was a list of 43 CIP Codes within which there are 71 degree and certificate programs, which will allow the college to cast a wide net for recruiting and offer choice for potential COF Scholars among high school students, current Cincinnati State students, and nontraditional students, with a special emphasis on students underrepresented in STEMM fields, including minorities and women.

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

Each CIP code in the Cincinnati State Choose Ohio First Scholars Program leads to at least one in-demand occupation as identified by OhioMeansJobs, the Ohio Department of Job and Family Services, or regional employers. In-demand occupations in Southwest Ohio are clustered in Health Care and EMT, Engineering/Manufacturing, Construction and Surveying, Supply Chain, Aviation Maintenance, and Information Technology. All of these industries are well represented in the Cincinnati State COF Scholars Programs. This means COF Scholars can expect excellent employment prospects, magnified by their participation in one or more work based learning experiences are part of the COF Scholar Program.

d) **How the COF initiative is part of the institutional strategic plan, supports student achievement**

Cincinnati State's Choose Ohio First scholarship initiative is integrally aligned with the college's *Strategic Plan 2025, Accelerating Potential*. The COF program assists the college in producing more students and graduates, resulting in greater economic impact on the region and state. The following table outlines the college's mission, vision and values, and alignment with COF:

Cincinnati State Strategic Plan	Cincinnati State COF program alignment
Mission: Cincinnati State provides *access, opportunity, and support* in achieving success for individuals seeking exceptional technical, transfer, and experiential/cooperative education and workforce training.	High quality STEMM degree and certificate options included in COF program, supported by increased marketing and recruiting.

Vision: Cincinnati State advances the educational and economic vitality of our state and region as the college of choice.	COF programs lead to in-demand occupations that fill workforce needs and strengthen the regional/state economy.
Cincinnati State Values ***Potential for Growth and Success*** – We respect each student's background and celebrate their potential for personal growth and career success. ***Innovation*** – We support innovative approaches to learning. We anticipate and effectively respond to the changing needs of those we serve. ***Collaboration*** – We work together on behalf of our students and employers to meet community needs. ***Equity*** – We believe in contributing to a socially and economically equitable society. We honor the diversity and inclusiveness of our College community and strive to hear all voices. **Experiential Learning** – We promote experiential and lifelong learning.	The COF State COF program will actively recruit promising STEMM students from all backgrounds, with a special emphasis on women, minorities and students from economically disadvantaged backgrounds. COF Scholars will receive additional work-based learning opportunities beyond the college robust offerings in this area.
Strategic Pillar – Achieving Academic Excellence Increase career technical education attainment to meet employer and community needs: 1. Enhance student preparation for high tech, in-demand careers 2. Expand career pathways that have relevant paid co-op or experiential learning directly related to the students' career goals 3. Ensure programs and credentials lead to career success.	Employer advisory boards for each program areas, and labor market data review, provide up-to-date workforce needs. Co-Ops provide real-world experience. Each COF program will undergoes annual quality review to ensure that it leads to meaningful credentials and career success.

Supporting Student Achievement

Cincinnati State will ensure that COF Scholars are aware of available student support services including tutoring, advising and counseling. The college has also through fund raising restarted the CState Accelerate program that was part of the Ohio ASAP Replication Study. It is the college's intent to include COF Scholars in CState Accelerate where possible, which will provide them with a proven model of wraparound support including tutoring, coaching, advising and incentives that combined have been shown to improve completion rates.

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

The college's Office of the Provost will provide overall leadership for the program. The college's Enrollment Services Team, which includes, the Career Center, Marketing and Financial Aid, will lead implement the COF program plan along with the Academic Divisions and the Transfer Center. The Advancement Office will also support the program.

CLARK STATE COLLEGE-EXECUTIVE SUMMARY

a. Rationale for the Selected Populations

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 make 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.

Addiction and Integrated Treatment Studies: Health Care and Social Assistance is the largest industry sector in the region. Addiction is an issue throughout Ohio and has a major impact on Clark County, where Clark State's main campus is located, and surrounding areas. Clark County ranks fifth in the State for overdose deaths. The degree grew out of expressed employer need for clinicians trained in both addictions and co-occurring mental health disorders.

Registered Nursing: With Health Care and Social Assistance being the region's largest industry, nurses are a critical part of the regional workforce. The forecasted one-year total demand for Registered Nurses within a 60-mile radius of Springfield is 2,524. The need for nurses and the quality of Clark State's program is reflected in job placement rates; 100% of graduates from the fall 2019 and spring 2020 graduating cohorts who responded to a graduate survey were employed in a position for which the program prepared them six to 12 months after graduating.

Computer Networking: Information Technology is one of the fastest-growing career fields today. In a digital world, technical hardware is the infrastructure that either facilitates or inhibits business and cultural connections and transactions. Due to the close proximity of Wright Patterson Air Force Base, there are many high-tech businesses in the region that rely on a skilled information technology workforce.

Computer Software Development: Coding and programming is essential in industry processes today, from advanced manufacturing, to software development, and even in the development of artificial intelligence. The Web Developers and Digital Designers occupation is projected to grow by 23% from 2021 to 2023, much faster than the average across all occupations.

Cybersecurity: More and more everyday objects are internet-enabled. Whether it is a smart home device that controls the lights in a person's house, or a digital industrial robot, the "Internet of Things" means that there are more devices than ever that rely on an internet connection – and are at risk of cyber attack. The Bureau of Labor Statistics projects that the Information Security Analyst industry is expected to grow by 35% from 2021 to 2031. With new

technology-heavy companies such as Intel moving into Ohio, these types of careers will be even more crucial to Ohio's economy.

b. Overview of Selected Academic Programs

Addiction and Integrated Treatment Studies: The Addiction and Integrated Treatment Studies program falls under CIP code 51.1501, Substance Abuse/Addiction Counseling. This is Clark State's newest Bachelor of Applied Science degree program. This innovative degree program trains students in both mental health and addiction in order to better support clients with co-occurring disorders. This work occurs in outpatient and inpatient treatment settings, residential treatment programs, correctional settings, the courts, police departments, mental health settings, and family service agencies. During the first two years of the program, students take courses required to complete an Associate of Applied Science Degree in Addiction and Recovery Services and earn the Chemical Dependency Counseling Assistant (CDCA) certification from the Ohio Chemical Dependency Professionals Board, as well as coursework to qualify for the Licensed Chemical Dependency II (LCDC II). After completing the bachelor's degree, students are eligible for the LCDC III license.

Registered Nursing: The Registered Nursing program falls under CIP code 51.3801, Registered Nursing/Registered Nurse. The Registered Nursing program is offered in four pathways: Registered Nursing – Traditional Daytime; Registered Nursing – Evening/ Weekend; Registered Nursing – LPN to RN Transition; and Registered Nursing – Paramedic to RN Transition. Registered Nursing graduates are prepared to function in beginning staff-level registered nurse positions in hospitals, extended care facilities, clinics and comparable health care facilities as members of a health care team. Upon completion of the program, the graduate is eligible to apply to take the NCLEX-RN examination. Licensure is mandatory for practice as a Registered Nurse.

Computer Networking: The Computer Networking program falls under CIP code 11.0901, Computer Systems Networking and Telecommunications. The program also offers the Computer Networking – Technical Systems Support Option. Computer Networking curriculum prepares students to plan, design, implement, troubleshoot, and administer microcomputer-based networks. This curriculum can assist students in preparing for the following certifications: CompTIA (A+, Network+, Linux+, Security+, Project+); Microsoft Certified Professional, and Cisco Certified Network Associate. Computer Networking students can increase their learning (and earning) potential by participating in the cooperative education work-experience program, required for Choose Ohio First students. Through this program, students can spend up to two semesters working in the information technology field while earning college credits.

Computer Software Development: The Computer Software Development program falls under CIP code 11.0202, Computer Programming, Specific Applications. This program also has a Computer Software Development – Cybersecurity Option and a Computer Software Development – Web Development Option. The Computer Software Development curriculum focuses on programming, database, and web design. Students learn to analyze, design, and develop solutions to business problems through the use of technology.

Cybersecurity: The Cybersecurity program falls under CIP code 11.1003, Computer and

Information Systems Security/Information Assurance. The Cybersecurity curriculum prepares students to support the information security needs of businesses. This curriculum can assist students in preparing for the following certifications: CompTIA (A+, Network+, Linux+, Security+, Project+), CISSP, and Cisco Certified Network Associate. Cybersecurity students can increase their learning (and earning) potential by participating in the cooperative education work-experience program, required for Choose Ohio First students. Through this program, students can spend up to two semesters working in the information technology field while earning college credits.

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

Addiction and Integrated Treatment Studies: This program was created based on expressed regional needs surrounding the opioid crisis in Ohio. Many area employers and mental health organizations have expressed strong support for this program. Currently, a search on OhioMeansJobs for "Addiction Counselor" brings up a total of 175 jobs, with 55 of those jobs located within a 50 mile radius of Springfield. According to data from JobsEQ, employment for Substance Abuse, Behavioral Disorder, and Mental Health Counselors is expected to grow by 2.4% annually in the area within a 45-mile radius of Springfield, significantly faster than the overall 0.7% annual growth rate anticipated for all occupations. Mean annual wages for this occupation in this region are $54,600.

Registered Nursing: The Registered Nursing program works closely with area healthcare providers to ensure that the program is meeting regional needs. Since all Registered Nursing students must participate in clinical rotations, it is crucial that the program maintain a close relationship with healthcare providers to allow students to get this experience. A search for "Registered Nurse" on OhioMeansJobs currently yields 18,165 jobs, with 4,564 of those jobs within a 50 mile radius of Springfield. According to data from JobsEQ, there will be an anticipated demand of 2,146 Registered Nurses in the area within a 45-mile radius of Springfield. The anticipated annual growth for this occupation is 0.6%, close to the average of 0.7% for all occupations. The mean annual wages for Registered Nurses in this region are $73,000.

Computer Networking: According to the Bureau of Labor Statistics, "Employment of information security analysts is expected to grow 35 percent from 2021 to 2031, much faster than the average for all occupations." Network and Computer Systems Administrators are projected to grow by 3%, Computer Network Architects by 4%, Computer Support Specialists by 6%. A search on OhioMeansJobs for "Computer Network Architect" currently yields 1,263 jobs, with 596 of those jobs located within a 50-mile radius of Springfield. A search for "Network and Computer Systems Administrators" yields 2,356 jobs, with 1,144 of those located within a 50-mile radius of Springfield. According to data from JobsEQ, the anticipated one-year demand for Network and Computer Systems Administrators within a 45-mile radius of Springfield is 302, and mean annual wages are $88,400.

Computer Software Development: Web Developers and Computer Programmers consistently rank among the highest paying jobs available with an associate degree. A search for "Web Developers" on OhioMeansJobs yields 10,145 jobs, with 4,500 of those jobs located

within a 50-mile radius of Springfield. A search for "Computer Support Specialist" yields 4,227 jobs, with 1,615 of those jobs within a 50-mile radius of Springfield. A search for "Computer Programmer" yields 880 jobs, with 422 of those jobs within a 50-mile radius of Springfield. According to data from JobsEQ, over the past five years, the annual growth rate for Web Developers within a 45-mile radius of Springfield was 12.8%. This is expected to slow down, with a 1.1% growth rate anticipated in the next year, but this is still faster than the average rate of 0.7% across all occupations. The mean annual wages for Web Developers in this region are $76,500. Employment for Computer Support Specialists in this same region is also supposed to grow slightly faster than the 0.7% average growth, with 0.8% annual growth anticipated. Mean annual wages were $55,300. In this region, employment for Computer Programmers is expected to decrease, with -1.1% annual growth anticipated. However, graduates who do end up in these positions can anticipate high wages: the mean annual wages for this occupation are $81,600.

Cybersecurity: Cybersecurity is a crucial component of our increasingly connected world. The Bureau of Labor Statistics projects that the Information Security Analyst industry is expected to grow by 35% from 2021 to 2031. With new technology-heavy companies such as Intel moving into Ohio, these types of careers will be even more crucial to Ohio's economy. A search for "Information Security Analyst" on OhioMeansJobs currently yields 2,864 jobs, with 1,487 of those jobs within a 50-mile radius of Springfield. According to data from JobsEQ, the anticipated annual growth percentage for Information Security Analysts within a 45-mile radius of Springfield is 3.0%, significantly faster than the 0.7% anticipated for all occupations. Mean annual wages for this occupation in this region are $101,200.

d. Strategic Plan and 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. Clark State's Strategic Plan Goals are:

1. Develop and strengthen quality, innovative academic programs
2. Increase enrollment, student success, retention, and completion
3. Facilitate a culture that recognizes, embraces, and reflects the diversity of the communities we serve
4. Cultivate effective communication strategies and collaboration within the college.
5. Promote collaboration with our diverse communities, businesses, and industries.

Each of the selected programs aligns with initiatives under one or more of these goals.

e. Institutional Assistance

Clark State is matching the funding from this program with the time and effort of program faculty, marketing dollars, and through the use of equipment investments. Many areas of the college will be involved in supporting this program, and it will be jointly led by the

Director of Admissions and Career Services and the Director of Nursing Programs. This co-leadership embeds the program under both Student Affairs and Academic Affairs while also putting career preparation at the forefront of the program. This proposal was created with the input of members of the College's Executive Council, deans, assistant deans, and program faculty. It is fully supported by the President.

CLEVELAND STATE UNIVERSITY-EXECUTIVE SUMMARY

Cleveland State University (CSU) is requesting $1,200,000 for the five-year grant period AY 2023-24 through AY 2027-28 to support approximately 22 new undergraduate students and two Master's level students each year for total of ~120 new students. 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 STEMM 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 community.

In order to increase the total number of graduates in STEMM 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.

We will continue to fulfill existing and emerging statewide needs by supporting students in STEMM 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 Science	Pre-Dentistry
*Computer Engineering	*Mathematics	Pre-Medicine
*Computer Science	*Pharmaceutical Sciences	Pre-Occupational Therapy
*Data Science	Physics	Pre-Physical Therapy
Electrical Engineering		Pre-Physician's Assistant

Electronics Engineering Tech.	Pre-Veterinary Medicine
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 #6 state for opportunity[2] – 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 new CSU President Dr. Laura Bloomberg, CSU continues to implement CSU 2.0, an aggressive, growth-oriented plan for emerging from the global pandemic

[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

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 STEMM 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 have been identified including substantial support for student programming (see *Letter from Nigamanth Sridhar*). 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*).

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

COLUMBUS STATE COMMUNITY COLLEGE-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. **Rationale for the selected populations for recruitment, including recruiting underrepresented populations in the fields of science, technology, engineering, and mathematics or STEM education**

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. **An overview of the selected academic programs**

Biological and Physical Sciences: Columbus State offers world-class science courses, with individualized instruction, for the lowest tuition rate in the area. Students interested in transferring can take the first two years of their bachelor's degree. Students can now obtain a specialized associate degree in science, which can give them a head start when it is time to transfer to a four-year school.

Sciences courses are divided into two departments :Biological Sciences and Physical Sciences. They reside in the college's Arts and Sciences Division, Within the Biological and Physical Sciences, CSCC offers Biology, Physics, Chemistry, Engineering, and Geology (these are the disciplines included in the COF proposal; CSCC offers other sciences as well). Columbus State offers high-quality science programming that can help students obtain a career earning a family-sustaining wage and can transfer to any of dozens of Ohio colleges.

Engineering Technology: The Columbus State Community College Engineering Technology Department currently offers programs of study in Electronic Engineering Technology (Accredited by the Engineering Technology Accreditation Commission of ABET), Electro-Mechanical Engineering Technology, and Mechanical Engineering Technology. Each program

offers an associate of science degree and several short-term certificates. The Engineering Technology Department has five full-time tenure track faculty and a dedicated chairperson.

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

Biological and Physical Science: The central Ohio region is home to many hospitals, healthcare organizations, laboratories, and science related employers. Online industry publisher BioSpace indicates that there is a worldwide shortage of skilled employees in life science, healthcare, and biopharma areas. Industry leaders indicate, "The problem is not with the quality of students coming through these programs, or with the standard of education they are getting. Rather it is the practical industry understanding – or lack of it – that these students have when it comes to applying scientific knowledge in an industry setting." This highlights the importance of work-based activities such as those offered by the Biological and Physical Sciences Choose Ohio First program.

In Autumn 2020, CSCC began collaborating with Andelyn, a new biotech company in the area, to understand the role of associate-level graduates in the gene therapy lab. Working together, the partners anticipate creating innovative educational pathways to meet the needs of scientific research labs.

Engineering Technologies: The manufacturing industry continues to grow at an unprecedented rate and demands a workforce of skilled technicians to continue progress and prevent industry disruption. The United States economy as well as the regional and local economy of Columbus rely heavily on the manufacturing industry. The most recent Ohio Manufacturing Counts report from The Ohio Manufacturers' Association (OMA) shows that "Ohio has ranked second nationally in the total number of new site selections in the past eight years" (OMA, 2020-21). The report also shows that even with advanced manufacturing automation Ohio manufacturing jobs are still increasing.

Regarding the manufacturing industry and Electro-Mechanical Engineering Technology COF program, in 2019 Columbus State conducted a survey of 21 companies across central Ohio operating with NAICS codes in the 31, 32 and 33. Of these respondents, the most immediate challenges included talent acquisition, retention, and training. Over 70% of the companies said that the most likely resource to take them to the next level was employee training and workforce development. While 86% of the organizations said that they have professional development programs, 40% said they do not offer technical skills training and 35% do not offer soft skills training. All of the respondents also responded that they need front-line leadership skills training in the next 12 months.

d. 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 biological and physical science and engineering technology 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. Recently, these two areas have grown to be of large interest in the state due to the growth of biological technology and the establishment of Intel in the Columbus region. In addition, the academic programs have been selected to align with the College's strategic plan that is included in the three main pillars mentioned above. 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. Institutional assistance it will receive that will lead to a successful implementation

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

DEFIANCE COLLEGE-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.

Defiance College's Mission Statement: Defiance College graduates students to lead distinctive lives in their chosen professions through a spirit of service by preparing them "To Know, To Understand, To Lead, and To Serve".

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 that 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 previous 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 Exercise Science- Pre-Physical Therapy.

As part of our strategic plan, the Institution feels that it is critical to continue to grow our Exercise Science- Pre-Physical Therapy program. Anecdotally, local employers note the need for several medical employers in northwest Ohio are currently offering $10,000 sign-on bonuses for home health physical therapists as well as clinical therapists.

Defiance College's mission statement evidences its commitment to move students beyond the boundaries of a classroom through the application of their academic knowledge and skills in real world contexts, in order to develop leaders who will positively impact communities in Ohio and beyond. The College has been developing clear strategies to support student success most especially within STEM majors and its reach is currently limited by the lack of scholarship funding for those students with exceptional potential who lack sufficient resources to enroll and persist at the Institution. This Choose Ohio First Scholarship grant would allow the faculty and staff of the college to partner to recruit, support, and develop these students.

EDISON STATE COMMUNITY COLLEGE-EXECUTIVE SUMMARY

Edison State's 2023 Choose Ohio First (COF) Scholarship program will focus on recruiting students from specific Allied Health Science and Engineering associate degree programs at the college. These programs require extensive hands-on learning activities integrated into the curriculum, so they greatly align to the goals of COF funding. The COF scholarship will give these students a wonderful opportunity to receive strong institutional support and significant financial assistance which will ultimately help increase the likelihood of retention in their respective program. Promoting such an opportunity will generate a new breadth of excitement to prospective students for these programs, so that COF can serve as a beneficial recruitment tool to attract students and generate our future community workforce within these specialty areas.

Edison State will incorporate a new approach to selecting COF scholars by having the faculty within specific Allied Health Science and Engineering programs review the incoming students for candidacy. An assessment rubric will be created to ensure that a consistent framework is being utilized by faculty to review and select students. Some scoring metrics within the rubric will include previous GPA, coursework within the sciences, financial need, and underrepresentation as a factor as well. When considering the environment of STEM fields today, it's critical for Edison State to promote diversity and inclusion. We will emphasize the importance of recruiting underrepresented STEM populations including women in male-dominant programs, men in female-dominant programs, students of color, or any other groups with low representation.

The academic programs comprising the COF scholars for 2023 will target only the associate degree programs – Associate of Applied Science (AAS) – for specific Allied Health and Engineering programs. There are a total of eleven associate degrees.

- o <u>Allied Health</u> options will include: Medical Laboratory Technician, Veterinary Technology, and Physical Therapy Assistant.

- o Specific <u>Engineering programs</u> will be focused within three areas: electrical, industrial, and mechanical.

    - <u>Electrical</u>: Automation and Robotics, Electro-Mechanical Engineering, and Electronics Transfer.
    - <u>Industrial</u>: Industrial Operations and Operations Technology
    - <u>Mechanical</u>: Advanced Manufacturing Systems, Mechanical Design, and

Mechanical Transfer.

Please see attachments for some samples of program brochures and visit
www.edisonohio.edu/programs for more information. The Programs of Study section within
this proposal will also provide more information about the student learning outcomes for these
academic programs.

As our Regional and Statewide Economic Needs and Strengths section in this proposal will
demonstrate, Edison State's targeted programs of study are focused on meeting the workforce
needs of our state and region. Our strong partnerships with businesses in our service area will
ensure that the students in these programs have quality work-based learning experiences
during their educational journey. Those experiences are already available in the curriculum for
each of the programs. Strong relationships with business organizations also greatly benefit our
alumni! A promising career is available for graduates after they complete their studies.

Edison State has a renowned reputation in the region because of the personalized attention our
students receive. We ensure that students have the resources they need in the classroom to
fully train and prepare them for their work-based learning experiences. Each of the programs in
our proposal requires students to complete some type of work-based learning, whether that be
an internship, or clinical hours. Edison State is a registered apprenticeship sponsor for the state
of Ohio and has a robust program since skilled workers are in high demand. We work with local
businesses who offer on-site work-based learning and provide student apprentices as
employees as they learn the trade. As a result, students can fill gaps for employees within the
industry. Ultimately, by ensuring that our students are prepared through our classes and
curriculum, we serve our local businesses and foster their trust and partnership with Edison
State.

Edison State's 2023 Choose Ohio First (COF) Scholarship program embraces the institutional
strategic plan and mission of the college. The mission statement declares that "Edison State
Community College provides the learning opportunities, support services and commitment that
enable students to complete their educational goals and realize their dreams." Our students are
excited to complete their academic program to enhance their level of understanding, skillset,
and resumes so they can ensure they attain a positive role in the workforce. Students desire
financial security, so they can support themselves and their families, to give back to their
community, and to actualize their ultimate dreams as an individual. The COF initiative will
facilitate student achievement at Edison State by removing one of the most significant barriers
to success that students face, the cost of a college education. Our proposal will cover most of

the cost of a student's tuition and books through the COF scholarship –these details are covered within the budget narrative of this proposal.

Edison State's 2019-2022 Strategic Plan supports these efforts in multiple ways. The strategic plan designated five key priority areas as the "Critical Few." One of the first Critical Few is titled "Academic and Co-Curricular Programming" which has a focus on establishing "robust academic and co-curricular partnerships that includes proactive learning, experienced based evaluations, related on-the-job-training, and work-based-career-focused experiences enhancing student marketability." Another priority listed as one of the Critical Few is "Partnerships" which fully aligns with COF goals as well since the objective is that "Edison State will grow our community and business partnerships, inviting all to experience Edison State by expanding work-based learning and career opportunities." The funding from COF supports these strategic initiatives so that Edison State can support student achievement and nurture future success in the workforce. Edison State is currently developing our 2023-2026 strategic plan, but our mission and core values as a college will remain the same. We understand the vital role work-based learning has for students and are excited for the opportunity to have the 2023 Choose Ohio First program support those future plans. Current 2019-2022 Strategic Plan information can be found here: http://stage.edisonohio.edu/digipub/2019-2022StrategicPlan/index.html

As the institutional letters of support from Edison State staff indicate, the COF program will have dedicated support from many areas of the College! The Enrollment Management division will be consistent with their messaging to prospective students and are excited to introduce this COF opportunity to all who are eligible. This will generate excitement about the various benefits of the COF program and help increase enrollment interest in those specific academic programs. The Dean of Professional & Technical Programs will oversee the academic side and is excited for this new implementation to integrate faculty into the selection and support of COF scholars.

Students will connect early on with their Career Pathways Advisor to register for courses and have an individualized student plan created to ensure their needs are met. Under the Guided Pathways Advising Model, students will keep this same Career Pathways Advisor throughout the duration of their study, so they can look to their advisor as a resource. These advisors are required to check in with their advisees regularly to ensure that each student remains on a pathway toward success. Faculty within the academic program discipline also play a critical role in advising students, serving as the subject matter experts who counsel students on how to excel in the chosen field. Along a student's educational journey, resources will be shared regarding career services, tutoring, mental health, work-based learning experiences, and other wrap-around services at the college. With the entire team of Edison State faculty and staff behind them, the COF scholars will have everything they need to be successful.

HOCKING COLLEGE-EXECUTIVE SUMMARY

Nestled in the foothills of Southeast Ohio, Hocking College has become a regional asset to economic growth and workforce development for over 50 years. A leader in workforce development and post-secondary education, the college offers a diverse portfolio of credit and non-credit programs preparing individuals across Ohio for jobs in high-demand occupations. A cornerstone of the college, the School of Natural Resources has established itself as a premier education provider within the larger college community. The school produces more natural resources conservationists than any other two-year institution in the United States. The programs that make up the School of Natural Resources are diverse and varied, ranging from Agroecology to Canine Assisted Therapy. Unique programming, dedicated faculty and staff, and strong employer partners continue to keep the programs in the School of Natural Resources in the upper echelon of higher education in Ohio.

The School of Natural Resources enrolls over 400 students each year in a variety of public and private-sector-led academic programs that lead to high-demand careers. These programs draw upon multiple STEM disciplines including forestry, agriculture, biology, geography, and environmental science. A substantial number of graduates serve state and federal agencies, providing a public service that has led to nationwide recognition of the high-quality programming offered by its faculty and staff. In addition to the academic programs, the school operates several entrepreneurial ventures that provide experiential learning opportunities to students. These ventures include Lake Snowden Park and Campground, The Hocking College Fish Hatchery, Robbins Crossing 1850 Historic Village, and the Hocking College Equine Center. Additionally, students in the School of Natural Resources manage farm, forest, and wildlife areas on campus.

The Choose Ohio First Scholars Program at Hocking College continues to provide access to 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 Everyone*, equitable access to education is a priority of the college as social and economic mobility continues to be challenging particularly for historically underserved individuals. For FY23, Hocking College is

requesting funds to build upon three previous COF-targeted programs that provide scholarships for student in Computer Science, Workforce Development and the Skilled Trades, and Allied Health. For FY23, the college is requesting an additional $540,000 for new COF scholarships for students enrolled in six of the academic programs in the School of Natural Resources.

KENT STATE UNIVERSITY-EXECUTIVE SUMMARY

Kent State University is a leading regional university for Northeast Ohio, producing the most graduates of any of the universities in Northeast Ohio. 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. In addition, we continue to broaden diversity and cultural competence of our students, which is of relevance to this proposal. As part of this latter initiative, we have implemented enrollment strategies with emphasis on removing barriers, both financial and structural, to make access to higher education more equitable. Kent State University's commitment to maintaining a diverse and inclusive campus has received acknowledgement and Kent State has been a recipient of the Higher Education Excellence in Diversity Award, for the tenth consecutive year.

Kent State has been fortunate to receive generous support from Choose Ohio First in previous years. In the current proposal, we plan to continue to build on the strength of these current Choose Ohio First programs, and with a new focus on Health- and Medicine-related programs. Moreover, in the current proposal, we have included undergraduate and graduate majors. The primary reason for this focus is that jobs in the healthcare currently have the highest demands for educated workforce in Ohio and has the highest expected growth (11.3% increase over the next several years). Moreover, we have included majors that hadn't been included in our previous programs and included colleges that had not partnered previously with our Choose Ohio First program. Thus, this proposal includes health- and medicine-related undergraduate and graduate majors in the colleges of Arts & Science, Education, Health & Human Services, Public Health, Nursing, and Communication & Information, to provide access to higher education to students to be educated towards jobs of extreme high need in Ohio.

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. Moreover, Kent State was recently named a R1 institution by the Carnegie Classification of Institutions of Higher Education, which is the highest research ranking that Carnegie designates. This makes Kent State one of the top 146 research universities in the U.S. As an institution whose core mission centers on access and completion, the R1 designation shows that Kent State provides not only

an affordable and outstanding education to students from all backgrounds, but also exemplary research and creative activity experiences. Hence, Choose Ohio First scholars will have access to top-tier research and internship experiences.

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. This vision is supported by our goals to transform lives by providing access and opportunity, fostering diverse and inclusive communities, and advancing the power of discovery, learning and creative expression. Moreover, our mission at Kent State is to provide access to higher education, independent of financial background. Kent State University enrolls a diverse population of students with critical needs for financial aid and advising support. Notably, 36% of our undergraduate students are first generation and 31% are Pell eligible, demonstrating a great need for financial and advising support. Most striking are the financial needs among our underserved student populations: 49%, 50%, and 43% of African American, Hispanic, or multi-racial Kent State students (respectively) are the first generation in their families to attend college while 60%, 41%, and 42% (respectively) of these populations are Pell eligible. Thus, support from Choose Ohio First is essential to more broadly offering affordable higher education to students in Kent State's STEM programs. A comprehensive recruitment and enrollment strategy will be used that includes outreach to high school students in Ohio and emphasizes recruitment of women and socially disadvantaged individuals, and with a selection process to support these goals.

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 and the Academic Program Leaders for student support in order to facilitate retention and on-time completion. Students will be supported by teams of designated and dedicated advisors in college and campus offices, Academic Program Leaders, and faculty in their majors. In addition, events are organized to engage the students as a community and further strengthen their professional skills and preparedness for employment.

In conclusion, Choose Ohio First resources will greatly enhance STEM education at Kent State University, with focus on Health- and Medicine- related undergraduate and graduate programs for a diverse population of Ohio students and with the goal to provide them with affordable higher education and career opportunities in Ohio and fill the statewide need for professionals in jobs in Healthcare.

KETTERING COLLEGE-EXECUTIVE SUMMARY

Changing the lives of students and, through them, changing the world has been the goal of Kettering College since its inception in 1967. The college has grown since opening its doors and is now part of a much larger healthcare organization known as Kettering Health (KH), including 14 medical centers and more than 120 outpatient facilities (Kettering Health, 2021). Although the college shares the same campus as Kettering Health-Main Campus, it is free-standing with features unique to educational institutions. It is independently accredited by the Higher Learning Commission (Kettering College, 2021). This partnership provides benefits for both entities through the joint use of facilities often shared by faculty, staff and students. The larger health system – Kettering Health – also provides students many of the clinical and Work-Based Learning Experiences (WBLE) for the various career disciplines. (See Attachment G, Letter of Support from Kettering Health).

Kettering College intends to focus recruitment and retention efforts on people of color and people who have not had access to economic opportunities in the greater Dayton (OH) region. This is because inequities still exist for people of color in this area. Two indicators of economic parity are home ownership and median household income. In Dayton, 57.2% of Whites own a home, and only 35.6% of Black people own a home. In Ohio, the median household income for Whites is $56,395 and for Black people is

$30,575 -- more than $20,000 less than Whites. Disappointingly, data was not available for Dayton for median household income among Black people. For Whites, it is $52,037. It can be assumed that since there is disparity between median household income for Blacks and Whites, that it is also significantly lower for Blacks in Dayton. Respiratory care and sonography offer opportunities to people of color to hold a well-paying job, which can lead to better indicators among social determinants of health.

The two programs presented in this proposal for Choose Ohio First scholarship funds are respiratory care and medical diagnostic sonography. Respiratory care offers students a path to a bachelor of science degree. Graduates demonstrate competence in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains of respiratory care practice, as performed by

registered respiratory therapists (RRTs). After graduation, they enter a high-demand, well-paying career as respiratory therapists.

The medical diagnostic sonography program also leads to a bachelor of science degree. Graduates of the program meet the educational requirements to be eligible for national

registry certification in abdominal, vascular, cardiac and obstetrics/gynecology sonography. Registries are

administered, and credentials are awarded by the American Registry for Diagnostic Medical Sonography (ARDMS). ARDMS is recognized as the international standard in sonographer

credentialing. Since graduates take a national registry, their credentials are accepted in all fifty states (https://www.ardms.org). There are no state-to-state licensure requirements for

sonographers, since they are nationally certified through the ARDMS (Kettering College, 2022).

Locally and statewide, racial minorities experience economic inequity. This, coupled with

healthcare employers demanding a diverse candidate pool are two excellent reasons Kettering College is focusing recruitment and retention of people of color. This will be accomplished

through community partnerships with programs such as the College Promise. The College Promise provides mentoring and scholarships to students in Montgomery County who

demonstrate academic promise. These partnerships are key to Kettering College addressing these regional and statewide economic needs.

Choose Ohio First dovetails well with Kettering College's strategic plan. The strategic plan emphasizes growing community partnerships, increasing cultural competence, facilitating

cultural inclusion and immersion, increasing student enrollment from diverse populations and

backgrounds and continuing the partnership between Kettering College and Kettering Health. All of these elements are essential to success in the Choose Ohio First program.

As an institution, Kettering College is committed to the success of this proposal. The College can provide many resources that will lead to successful implementation of the funding. This

includes assessing staffing levels in departments that support the grant and hiring additional help, where appropriate. Also, monitoring student access to support services will determine if additional staff are required to provide those services in a timely way. All current support

services will remain in place, and additional services will be evaluated as needed.

LAKE ERIE COLLEGE-EXECUTIVE SUMMARY

Since 1856 Lake Erie College's 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 Lake Erie College.

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 STEMM workforce. The economy of Greater Cleveland is diverse, with robust healthcare, bio-science, and technology sectors. Reports and forecasts from Ohio Means Jobs and Team NEO project growing demand in healthcare settings for nurses, primary care practitioners, physician assistants, specialized dentists, genetic counselors, and post-secondary educators in nursing and health disciplines. Considering our Northeast region graduates ~40,000 STEMM students annually, and our current STEMM workforce is 97,000 jobs-strong with forecasted growth in 12 key sectors, 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.

Lake Erie College is prepared to help students meet our regional employment needs. Our institutional strategic plan (2018-2022) 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.*"

That careful preparation and future-focused approach is woven into our STEMM 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 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) 23, 222 (34.4%) undergraduates received Pell grants; the average award was $5,398. Among Pell awardees, 97 (15%) received the Ohio College Opportunity Grant (OCOG); the average award was $4,116. 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. Our first cohort of 11 COF students who began classes in August received an average award of $8,076/person. The College's institutional aid totaled $15,795,758 this academic year.

Painesville students are eligible for four-year tuition scholarships through the Painesville Promise, an innovative public-private collaboration between the City of Painesville and Lake Erie College. A significant population of Painesville students who enroll self-identify as Hispanic, Black, or another underrepresented minority group. In AY23, 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 a second award of $1.2MM. On

behalf of the students you may support, thank you for your consideration and the impact we can achieve together.

A) Rationale for the selected populations for recruitment: 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 are reflected in 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.

B) An overview and rationale of the selected academic programs: For the newest competitive COF program opportunity, LCCC is targeting 44 STEM CIP-defined program areas across its Math & Science, Health & Wellness, and Engineering, Business & IT academic divisions, which are linked to career pathways across in-demand fields in Northeast Ohio. Looking to support the talent needs for the emerging semiconductor technology industry, LCCC's COF Scholarship Program will fund students studying in the field of Microelectronic Manufacturing, SMART Automation, and trusted microelectronics (from certificate to bachelor's degree). 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 are 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 Healthcare Sector Partnership and more. LCCC plans to address STEM-related workforce needs utilizing a variety of data analysis, economic-development, and program-specific employer engagement (via advisory boards) 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 Math & Science, Engineering, Business and IT, and Health and Wellness.

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 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.

MERCY COLLEGE-EXECUTIVE SUMMARY

Mercy College proposes to establish Choose Ohio First scholarships for students completing Associate of Applied Science degrees in Health Information Technology and Surgical Technology. These are degrees that can be completed within five semesters with excellent hiring prospects. The two chosen programs were selected because they have consistent track records for recruiting first generation, female, minority and Pell eligible students, consistent placement of students in jobs after completion, and offer room for expansion or enrollment within the programs. Mercy will utilize the financial resources provided by the COF scholarships to provide scholarships to eligible students that will provide substantial resources towards tuition for their program. The decision to provide more substantial scholarships to somewhat fewer students is deliberate; many students wishing to complete these associate degrees do not have the financial means to pay tuition, books and fees. They are typically employed already and trying to work full-time while also attending school. The COF investment in their achievement will alleviate much ofthe burden of having to pay tuition, allowing the student to focus on their academic, social and career success instead.

Health Information Technology (HIT)
HIT professionals are experts in patient health information and medical records. Common careers in the health information management field include: Medical Coder, Compliance Specialist/Auditor, Director/Manager of Health Information Management (HIM) Department, Data Analyst, Documentation Specialist, Electronic Health Record (EHR) Implementation Specialist, HIPAA Privacy Officer and Revenue Cycle Manager.

Surgical Technology

Surgical technologists help with surgical operations by preparing operating rooms, arranging equipment, and helping doctors and assistants during surgeries. The Surgical Technology Associate in Applied Science Degree Program is designed to prepare students to provide critical support services to surgeons, nurses, anesthesia providers, and other surgical team members. Using a variety of learning resources, students will acquire the knowledge base of sterile technique, surgical instrumentation and equipment, surgical procedures, asepsis, and patient care skills.

Mercy College's Choose Ohio First program supports the strengths and needs of the region. According to the U.S. Bureau of Labor Statistics, Healthcare Support and Healthcare Practitioners and Technical occupational categories comprise 6.5% of employment in Toledo, Ohio, substantially higher than the national average of 5.9%. In the Healthcare Support occupational group, the percentage of employment in Toledo, OH is 4.3%, which is consistent with the national level (4.4%). Both Health Information and Surgical Technologist occupations are projected to grow in the next decade; surgical technologist are projected to grow 9% and

medical and health service managers are projected to grow by 32%. Both programs fulfill a need for opportunities with reduced barriers to first time degree seekers and offer quality jobs that pay a family-sustaining wage with prospects for growth.

MIAMI UNIVERSITY-EXECUTIVE SUMMARY

Through the Ohio Department of Education's Choose Ohio First program, Miami University seeks to create and launch the Choose Ohio First – Biotechnology, Bioscience, and Assistive Technology (COF-BBA) Scholars program at its main campus in Oxford, OH.

Overview of Selected Academic Programs and Student Support

The grant proposal requests $850,000 in funding over five years to provide scholarships to students pursuing undergraduate or graduate degrees in biosciences and closely related engineering disciplines at Miami University. Degree programs to be supported include biomedical engineering, chemical engineering, computer science, software engineering, mechanical engineering, electrical engineering, computer engineering, biology, biochemistry, microbiology, chemistry, and medical laboratory science.

Recruitment strategies and student support mechanisms of the program are designed to enhance educational and career opportunities for students from under-represented populations in the selected STEM disciplines. The COF-BBA 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 Ohio Choose First Program), such as co-ops and internships, with Ohio employers in the scholars' identified fields of interest.

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

The rationale for selecting these academic programs, and for supporting graduate degree programs in addition to undergraduate programs, is based on clear national and state-wide trends demonstrating increased demand for highly skilled STEM workers in these disciplines to support continuing growth of the biotechnology, bioscience, and assistive technology sector of the economy. According to a recent Pew Research Center report, the U.S. Bureau of Labor Statistics released an updated analysis of employment projections to account for labor market shifts stemming from the pandemic. In addition to anticipated job gains in computing and healthcare, the updated analysis pointed to strong gains in research and development in STEM, including physical, engineering, life sciences, and health-related job clusters. Jobs in biosciences and biotechnology are expected to see strong growth. This national trend is consistent with current trends in the state of Ohio. According to the Ohio Bioscience Report released by BioOhio in June 2022, in the past five years employment in the Ohio bioscience sector has increased by 15% (10,905 jobs). Between 2020 and May of 2022, Ohio bioscience companies announced 77 projects expected to create an additional 7,350 jobs with capital expenditures of

$2 billion. In light of these trends in in-demand STEM occupations, the first aim of Miami University's COF-BBA Scholars program is to increase the number of skilled technical graduates of biotechnology, bioscience, and assistive technology related programs through COF scholarship support, to facilitate continued growth of this industry in our state.

Rationale for Selected Populations for Recruitment

The second aim of the proposed COF-BBA Scholars program at Miami is to increase recruitment and retention of students from under-represented populations in the selected STEM disciplines. There is growing recognition locally and nationally of the importance of increasing diversity in STEM disciplines. At the same time that the STEM workforce is experiencing critical demand for new talent in industries such as engineering and biotechnology, these industries 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-BBA program will provide critical scholarship support to enhance educational opportunities for students from under-represented populations. The cohort-based model leverages existing institutional best practices and support systems, and combines them in ways that better serve all students. The COF-BBA 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-BBA 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-BBA Scholars program targets in-demand academic programs that are aligned with University strategic priorities and workforce needs and supported through partnerships with Ohio-based companies.

Although there is room for improvement, 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-BBA 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-BBA Scholars faculty mentoring committee, which draws from existing faculty already trained in recognizing bias and 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 and the College of Arts and Sciences), the Division of Enrollment Management and Student Success (EMSS), the Center for Career Exploration and Success (CCES), the Graduate School, and the Office of Research for Undergraduates, 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 retention, graduation, and creating a more welcoming and inclusive environment for all students.

MOUNT CARMEL COLLEGE OF NURSING-EXECUTIVE SUMMARY

MCCN is a private, not-for-profit, Roman Catholic institution located on the Mount Carmel Health System (MCHS), Franklinton campus just west of downtown Columbus, Ohio. Undergraduate education at MCCN is based on a foundation of arts, sciences, and humanities. This general education foundation is designed to foster skills in analysis, decision-making, critical thinking, and leadership. These areas of emphasis are consistent with the MCCN mission statement," *…to prepare them academically and professionally as competent and compassionate nurse leaders, who are lifelong learners, and who possess the moral courage to continuously promote the health of individuals and communities.*

The graduate nursing programs at MCCN are competitive and rigorous, combining didactic, simulation, and clinical experiences that prepare students to enter professional practice and provide competent and compassionate care to individuals, families, groups, and communities. The strength of MCCN's academic practice partnerships supports real-world experiential learning as a foundational element of the program that promotes learners' development of essential competencies and the transition to professional practice. Student support structures offered by MCCN cultivate a foundation for academic success while also fostering personal and professional growth.

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

To award Choose Ohio First (COF) scholarships to students who are enrolled in the graduate nursing program at Mount Carmel College of Nursing (MCCN). MCCN is a competitive and rigorous graduate nursing program combining didactic, simulation immersive, and clinical experiences that prepare students to enter professional practice and provide competent and compassionate care to individuals, families, groups, and communities. The rationale for the project is threefold: 1) remove financial barriers that limit students' success in advanced nursing practice, 2) market to increase the recruitment and retention of students that wish to enter advanced nursing practice roles, and 3) support students' transition from school to advanced nursing practice. Scholarships will be awarded to students that meet the selected criteria and who have demonstrated financial need and are enrolled full-time in the graduate nursing program.

Nursing can be a fulfilling career and now more than ever, nurses are in high demand. Advance practice nurses are essential to support access to care given imbalances in provider access versus healthcare access demand. With more than 118 years of experience in educating nurses, Mount Carmel College of Nursing strives to pursue strategies to recruit applicants from a variety of backgrounds to pursue a high-demand career with unlimited opportunities to meet the healthcare needs in their communities. The Choose Ohio First scholarship program at

Mount Carmel College of Nursing will allow qualifying students the opportunity to help finance their education.

b. An overview of the selected academic programs

Family Practice Nurse/Nurse Practitioner - 51.3805 - "A program that prepares registered nurses to provide independent general care for family groups and individuals in the context of family living. Includes instruction in family theory and intervention, role synthesis, family primary care, nursing practice and health care policy, holistic practice, pediatric practice, gerontological practice, health assessment, clinical pharmacotherapeutics, clinical techniques, and pathopsychology" (The Classification of Instructional Programs (CIP), 2022).

Completion rates for the graduate program have generally risen in recent years, from 76 percent among the 2019 graduates to 82 percent in 2022. Additionally, MCCN's APRN certification pass rates are consistently high, as reported by the certifying organizations. For the most recent full calendar year (2021), graduates of the FNP specialty who tested though the American Association of Nurse Practitioners (AANP) had a first-time pass rate of 83 percent, and graduates of the AGACNP specialty who tested through the American Nurses Credentialing Center (ANCC) had a 100 percent first-time pass rate.

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

An anticipated need for advanced practice nurses to meet the demands in healthcare is expected to exceed the available supply; potentially impacting the quality and safety of care delivery. Moreover, the call for an increase in the number of master-prepared nurses in healthcare as a foundation for driving quality patient outcomes has been in existence since 2010. The Choose Ohio First funding targeting Master of Science degree programs in STEM areas contribute to workforce development in support of market needs yet supports the academic preparation of advanced practice nurses that aligns with the promotion of desired patient outcomes in care delivery.

The Choose Ohio First Program grant stands to support the pursuit of graduate nursing education for students who may not otherwise have the financial resources to seek a graduate nursing degree; helping to meet the current and long-standing demand for advanced practice nurses within the central Ohio and Ohio regions. The graduate programs of MCCN prepare graduates with the professional knowledge and skills necessary for APRN practice in a variety of healthcare settings. Because MCCN offers options in graduate APRN program tracks including the Family Nurse Practitioner, Adult-Gerontology Acute Care Nurse Practitioner, or Psychiatric Mental Health Nurse Practitioner, students are able to choose the program track that best fits their interests.

Students attending MCCN's graduate nursing education programs attend clinical practice experiences within a variety of healthcare settings. However, Mount Carmel Health System, Fairfield Medical Center, Ohio Health, and Nationwide Children's Hospital are primary clinical

partners supporting practice experience resources integral to student learning. Many students enter these agencies for professional employment upon graduation. Employment rates for the program consistently represent 100% of graduates being employed within 1 year of graduation. Both MCHS and NCH, as well as other clinical partners, demonstrate a commitment to employing graduates of the program.

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

A major pillar of MCCN's strategic plan is to boost both enrollment and retention over the next three years. By employing more targeting marketing and recruitment initiatives to increase the number of applications and admissions each by 5 percent each year, MCCN plans to grow enrollment through both new and transfer students. Simultaneously, the multi-faceted newly branded Student Success Center is tackling both the retention of students and the tutoring of students preparing to take their certification exam. These two tandem efforts will allow the number of graduates to begin to grow within four years and will bolster the ability of current students to pass their certification exam.

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

Mount Carmel College of Nursing is a member organization of <u>Mount Carmel Health System</u> (MCHS). As such, MCCN appreciates priority access to clinical resources within the Health Systems four major hospitals located in the Central Ohio area. MCCN's strong academic clinical partnerships with MCHS, FMC, Ohio Health, Nationwide Children's Hospital, and a number of other regional health care agencies and independent providers ensure that students gain relevant, real-world experiences as a foundational element of the academic experience.

Experiential learning embedded throughout the nursing program not only serves as a foundation for students to gain essential professional competencies but also promotes an opportunity for students to gain exposure to a variety of health care agencies in consideration as future employers. MCCN's strong academic clinical partnerships facilitate student access to employment opportunities in clinical care support roles during the program of study, fostering workplace connections within the Ohio region in support of future employment within these agencies upon graduation.

MOUNT ST. JOSEPH UNIVERSITY-EXECUTIVE SUMMARY

The School of Behavioral and Natural Sciences and the Center for IT Engagement (cITe) at Mount St. Joseph University (the Mount) continues to "light the way'' through the successful implementation of the Choose Ohio First (COF) Program. First introduced on campus during the 2020 fiscal year, COF Scholars in our cITe Scholars program double major in – 1. Computer Science with a Social Computing (previously called Natural Language Processing) concentration, and 2. an additional STEM or liberal arts field. The goal of this STEM-interdisciplinary program is that students can apply technology skills to their additional fields to become highly-skilled and sought-after professionals. We have had noteworthy success in recruiting non-traditional STEM populations—we have approximately 59% female students, 32% first-generation students, and 22% rural students; this recruiting success is beneficial for not only our Ohio community, but it is also well-aligned with the University's strategic plan goal of growing student enrollment of underserved populations.

The cITe Scholars program at the Mount meets the needs felt by Ohio's businesses and families. Our business arm, cITe Inc., benefits not just students (by offering real-world experiences), but also the Ohio industry through partnerships that provide affordable IT services to clients. One of cITe's key clients is Bayley, a provider of health services to senior citizens in the Cincinnati area. cITe Inc. is also currently developing Here2Engage, a platform for area institutions to drive client and student engagement. The cITe Scholars program also offers students work-based opportunities to collaborate with Mount researchers in meeting Ohio community needs. For instance, Dayton, Ohio experiences a high infant mortality rate–in response, a researcher and student team this year launched a family-strengthening (to promote infant vitality) app, MomsThrive.org. The Mount is also engaging in not-for-profit humanitarian projects such as our English for Ukraine project which is an opportunity for students to do online course design and language tutoring for refugees (thereby applying linguistic concepts also relevant to artificial intelligence/computing to a different sphere).

The creation of the cITe Scholars academic program and for-profit arm has received robust institutional backing. One of the Mount's strategic goals is to create "centers of excellence that drive student engagement"–cITe has the full support of University leadership, faculty, and administration (as evidenced through the letters of support from the Provost, CFO, Program Dean, Office of Admission, Career and Experiential Learning Center, and Learning Center/Project EXCEL). Namely, the administration has shepherded the creation of cITe Inc. and has strongly backed our non-profit projects. Recruitment-wise, the cITe COF program scholarship is being showcased by the Office of Admission, and the Mount continues to strengthen articulation agreements with two-year colleges in the area. The cITe program will graduate its first cohort in 2024. We anticipate that these students will be a boon to one of Ohio's fastest-growing sectors, IT, because our students will not only know IT, but also, how to apply IT to solve real-world Ohio issues.

MUSKINGUM UNIVERSITY-EXECUTIVE SUMMARY

Muskingum University's Choose Ohio First (COF) initiative, ***Broadening STEMM Career 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.

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 offer twelve COF-eligible STEMM programs through this proposal serving traditional undergraduate, adult non-traditional, and graduate student populations. These academic programs are all aligned with high demand state and regional workforce need areas. For traditional undergraduates, the eligible majors will include computer science, general engineering, mathematics, nursing, and math and science education. For students in our Muskingum Adult Program (MAP), nursing degrees will be available to registered nurses looking for career advancement through the 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. At the graduate level, eligible degrees include the Master of Business Information Systems (MBIS), Master of Occupational Therapy (MOT) as well as Master of Arts in Education (MAE) and Master of Arts in Teaching (MAT) for those pursuing math or science teacher licensure.

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.

It is worth noting that Muskingum has joined nine other private institutions and three community colleges in Ohio to partner with Kent State University on a *Pathways to a Semiconductor Career* grant from the Intel Corporation. The collaborative project scales existing educational opportunities and develops new experiential curricula, while strengthening pathways that provide multiple on-ramps for learners seeking to enter, reskill, or upskill in areas relevant to semiconductor fabrication. Muskingum will work with the educational partners to expedite transfer pathways from the community colleges to Muskingum's bachelor's degree programs. Our students will have access to micro-credential certificates in specific technologies that will be offered by the consortium partners, including clean room techniques, smart manufacturing processes, and data collection and analysis. These micro-credentials will be offered by consortium partners through summer institutes, hybrid online courses and certificate programs, and virtual reality technology that will simulate laboratory

and manufacturing equipment concepts and operations. Access to research experiences and internships will be facilitated through will be facilitated through the consortium partnership and Intel workforce development initiatives. COF students in the STEMM fields of engineering, computer science, mathematics, and information systems will be well-prepared for career opportunities in the semiconductor industry through Muskingum University's participation in this powerful partnership.

Alignment of COF Initiative with Institutional Strategic Plan: Muskingum University's FY23 COF proposal, ***Broadening STEMM Career 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 STEMM 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 STEMM 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.

NORTH CENTRAL STATE COLLEGE-EXECUTIVE SUMMARY

<u>Project Rationale</u>

North Central State College (NC State) proposes to offer 10 [Choose Ohio First](#) scholarships to new students beginning with FY23. Choose Ohio First (COF) is an essential element which supports student success at [NC State](#). For more than five years, NC State has been involved in the COF program and has three (3) active awards which provided funding for 90 brand new scholars for the 2022-2023 academic year.

At the beginning of the fall semester, NC State had 140 COF scholars in the 11 targeted programs – Bioscience (1); Business Analytics (2); Cyber Security (12); Networking (12); Graphic Design (9); Integrated Engineering Technology (2); Mechanical Engineering Technology (27); Licensed Practical Nursing (12); Registered Nursing (55); and Respiratory Therapy (8). The college has capacity to expand its current offering and is committed to meet the COF program requirements including work-based learning experiences for each of the above stated academic programs plus Physical Therapy Assistant. The Physical Therapist Assistant AAS program is a COF-eligible program that has not been included in NC State's COF portfolio previously.

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.

<u>Rationale for the Selected Populations for Recruitment</u>

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

- Students from career-technical education at the secondary or adult levels
- Students from Mansfield Senior High School, recipient of an ODHE-sponsored GEAR UP grant
- Aspire program graduates
- Incumbent workers

<u>Overview of Selected Academic Programs</u>

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 (degree); Physical Therapy Assistant (degree); and Respiratory Care (degree). As a result of this maximum $180,000 investment, 50 additional students will receive COF scholarships over five years. Data from the Program of Study section shows current college retention, persistence and graduation rates.

<u>Synopsis of the Plan to Address Regional and State Economic Needs</u>

The table represents key program outputs over nine regional counties, comparing NC State and all post-secondary institutions in this region with matching CIP codes. It projects 1,494 annual openings from 2021 to 2027, with a 2% increase in net jobs. Combined median earnings are $62,000 a year. All of the completions represent NC State students. Data is from EMSI.

CIP Code	Description	Annual Openings	Median Hourly Earnings	Pct. 25 Hourly Earnings	2021 Jobs	2027 Jobs	Jobs Change	% Jobs Change	Institutional Completions > All degrees > All Completions > 2020 Completions	Institutional Completions > All degrees > Non-Distance Offered Programs > 2020 Completions
11.0801	Web Page, Digital/Multimedia and Information Resources Design	47	$23.95	$18.12	465	492	27	6%	13	13
11.0901	Computer Systems Networking and Telecommunications	144	$38.44	$29.13	1,787	1,824	37	2%	0	0
11.1003	Computer and Information Systems Security/Auditing/Information Assurance	139	$38.39	$29.07	1,726	1,766	40	2%	7	7
15.0805	Mechanical/Mechanical Engineering Technology/Technician	393	$21.94	$16.81	3,454	3,490	36	1%	16	16
26.1201	Biotechnology	149	$38.97	$28.03	1,672	1,795	123	7%	7	7

30.7102	Business Analytics	95	$31.23	$22.46	791	893	102	13%	0	0
51.0806	Physical Therapy Assistant	37	$26.90	$23.43	275	286	12	4%	11	11
51.0908	Respiratory Care Therapy/Therapist	32	$23.99	$20.26	426	436	10	2%	15	15
51.3801	Registered Nursing/Registered Nurse	325	$32.81	$28.61	4,768	4,841	73	2%	63	63
51.3901	Licensed Practical/Vocational Nurse Training	134	$21.49	$18.43	1,849	1,729	(120)	(6%)	0	0
		1,494			17,214	17,554	340	2%	132	132

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 EMSI, thus far in 2022 there have been 3,254 postings for unique jobs amongst this target group in the geographic region. The median advertised salary is $51.15 per hour. Most postings have taken place in Richland, Huron and Wayne counties. According to the following chart, posting have increased for the region throughout the year
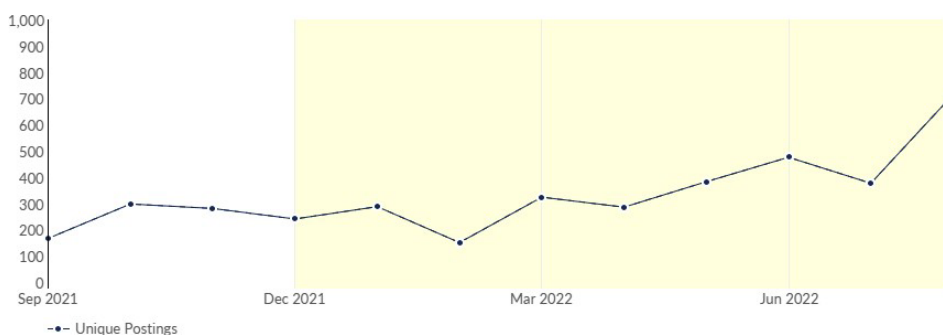
How the COF Initiative is Part of the Institutional Strategic Plan

COF has been a critical element of NC State's strategic operation for almost a decade. The COF process is managed by an ad-hoc college committee of senior leveled 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 Financial Aid; Director of Accounting Services, Director of Admissions; Director of Marketing; Director of Student Success, Retention & Transition; and Director of Tutoring.

<u>Institutional Assistance to Lead to Successful Implementation</u>

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 FY22, scholarships were slightly over $190,000.   A large portion of these scholarships went to the 152 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. One of the top reasons is the level of scholarship awards which includes Choose Ohio First.

NORTHWEST STATE COMMUNITY COLLEGE-EXECUTIVE SUMMARY

a. rationale for the selected populations for recruitment

The target population for Northwest State Community College's (NSCC) Choose Ohio First (COF) program will include women, 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 advanced manufacturing, cybersecurity, agricultural, and design, among other fields. The selected academic programs include:

Associate Degree Programs

Electrical Engineering Technology

Electro-Mechanical Engineering Technology

Mechanical Engineering Technology

Cybersecurity & Network Administration

Visual Communications and Graphic Design

Agronomy

Certificate Programs

Plastics Manufacturing

Computer Technician

Cybersecurity

Agribusiness

Completion of these programs will certify the student's competencies and build the COF scholars' qualifications to continue down the STEMM 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 internships, 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 following four goals for preparing an educated and skilled workforce, including youth and individuals with barriers to employment and other populations along with meeting the skilled workforce needs of employers.

Goal 1: Coordinate efforts across entities (public, private, local, and State) to reduce unnecessary duplication and maximize resources.

Goal 2: Leverage technology and data to create efficiencies and improve services and outcomes.

Goal 3: Deploy locally driven programs that produce results.

Goal 4: Invest in and promote education and training for jobs that

> 1. empower people with 21st Century skills and strengthen Ohio's strategic economic advantage, and

> 2. ensure that our State has a workforce to support the health and well-being of Ohioans,

their families, and communities.[7]

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, facilitate the completion of industry recognized credentials and/or degrees in a cost effective manner, and recruit and train student groups that have been historically underrepresented STEM fields, including women, aging out foster care youth, and students of color.

The proposed COF initiative is directly aligned with NSCC's FY2020-2023 Strategic Plan, most notably to Pillars I, II, and V:

Pillar One - Life Changing Education: Create and maintain high quality, transformative, and safe educational environments that meet the needs of our current and future learners.

> 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: Promote collaborative partnerships that serve our learners and provide an equitable opportunity to succeed.

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[7] 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&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDD M3000-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: Create intentional communications and interactions between the College and its stakeholders to strengthen our 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 Deans who oversee 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 SSS program staff will provide supplemental support for eligible participants through success coaching and a variety of support services.

NSCC has committed $1,200,000 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.

Since 2011, Notre Dame College (NDC) students have benefitted 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. Cybersecurity, intelligence, and counter-intelligence professionals make the world a safer place to live and work through data analysis and technological advancement. 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 to prepare them for primary and specialized technology careers. NDC's 9:1 student-to-faculty ratio encourages students to build relationships 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 ten 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 leads Gregory Moore and Matthew Crowley will strengthen our current COF STEMM program by adding the cybersecurity, intelligence studies and information systems programs. 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 cybersecurity, intelligence studies, and information services faculty and staff, admissions, and financial aid staff. NDC will focus 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 Technology @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 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 Tech undergraduate scholars are competitive candidates.

OHIO DOMINICAN UNIVERSITY-EXECUTIVE SUMMARY

The Choose Ohio First program at Ohio Dominican University seeks to boost both the economic mobility of underrepresented students in STEM and STEM Teacher Education, as well as the economy at large in the State of Ohio by providing substantial tuition scholarships, work-based learning experiences, and ample academic and career support to Ohioans seeking STEM and STEM Teacher Education degrees. ODU is particularly well suited to accomplish these goals due to its strong relationships with local STEM businesses and school districts – particularly in the health sector – and its rich history of serving students who are economically disadvantaged and/or are members of an underrepresented group. Currently, approximately one-third of ODU STEM students fit into each of those two categories. 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 careers.

STEM programs (including the newest programs in Data Science and Cybersecurity) at ODU are some of the most popular and fastest growing – particularly with students interested in professions in the health sector, data statistical analysis, and digital security. Since these are currently areas of high demand in the job market, there is a need to further support student interest. For this reason, the Choose Ohio First program will support students in academic programs related to biomedical, public health, and data analytics fields: biology, biopsychology, chemistry, environmental science, exercise science, mathematics, data science, cybersecurity, and teacher education in both mathematics and science. A key factor that can separate one recent graduate from another in these fields is an element of experience outside the classroom. Thus, the work-based learning experiences, that are part of the Choose Ohio First program, will help accelerate the early careers of ODU graduates by allowing them to prepare for the increasing workforce development demands of the local and statewide economy.

As a small, liberal arts institution, dedicated to the success of our students, ODU has proven through current COF scholarship grant awards, our readiness and capabilities to provide individual academic support and career advice to students in the Choose Ohio First program. The Academic Resource Center on campus is able to provide academic support with a team of both undergraduate tutors and full-time professional specialists. The Career Development Center on campus has record of accomplishment in helping students develop professional resumes, to polish their "soft skills", and to uncover career opportunities that are well suited to their goals and passion. The ODU leadership team for the Choose Ohio First program will be comprised of three representatives from the STEM faculty, Daniel Little, (Ph.D.), Annie Witzky (Ph.D.) and Anna Davis (Ph.D.). In addition, the team includes directors of the Academic Resource Center and Career Development Center, Brianna Doyle (Ph.D.) and Travis Sheffler (MA), respectively, and the Director of Undergraduate Admissions, Kaylee Meade (MA). 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.

OHIO NORTHERN UNIVERSITY-EXECUTIVE SUMMARY

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

Specifically, the proposal aims to increase enrollment at Ohio Northern University in Biological Sciences (26.0101), Biochemistry (26.0202), Chemistry (40.0501), Molecular Biology (26.0204), Medical Laboratory Sciences (51.1001), 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 staff time, and many students will receive significantly more from ONU than from Choose Ohio First.

During the past two years, reorganization of the workforce due to COVID-19 has raised the demand for students trained in STEM-related research and health professions. Students with training in biology, molecular biology, chemistry, biochemistry, 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 current pandemic environment. Students with training in the practice of nursing and pharmacy possess skills that are greatly needed in Ohio.

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 2018-2028, 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 94,000 jobs, an 11.3% 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.

Due largely to Ohio's aging population, these health care occupations, noted in [Appendix J of the Ohio Job Outlook 20218-2028](#) report, were expected to experience growth by 2028: physician assistants (27%), nurse practitioners (24.6%), genetic counselors (20%), respiratory therapists (19.5%), psychiatrists (12.8%), biological scientists (7%), medical scientists (5.7%), life and physical science occupations (4.9%), life scientists (4.8%), and physical scientists (3.8%). 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.

According to a 2021 United States Bureau of Labor Statistics (BLS) report titled *[Industry employment gains due to the pandemic](#)*, "several industries are expected to benefit from structural labor market changes caused by the virus and the health implications of the global pandemic. These industries are predominantly concentrated in scientific research and development…. Increased demand for research into infectious disease properties, treatments, and cures underpins the projected rise in employment." Across the United States, growth in employment opportunities in research and development in the life and physical sciences is projected to "more than double from the baseline [pre-COVID pandemic] projections, accelerating from 4.1 to 8.4 percent" and possibly increase to 12.6 percent. The report notes that "employment opportunities in the pharmaceutical and medicine manufacturing industry also stands to benefit from increased preparation for pandemics and production of vaccines." Projections by the BLS suggest that growth in this area is expected to see a 5.4 percent rate of increase from the baseline.

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 research and health professions fields. Special attention in the recruitment process will be given to under-represented populations, including students of color, women, and students from rural areas. 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 through a $3,400 matched Choose Ohio First scholarship per year to the Ohio workforce pipeline is a tangible way for Ohio Northern to assist Ohio in helping the state to refocus on STEM and health sciences by preparing the next cohort of scientists, laboratorians, and health care professionals.

Ohio Wesleyan University is honored to have the opportunity to partner with the Ohio Department of Higher Education to offer Choose Ohio First scholarships to its first two cohorts, and looks forward to building on that momentum should additional funding be approved. Funding has enabled us to recruit and retain Ohio residents from underrepresented backgrounds and lessen financial barriers to obtaining a degree in STEM fields. OWU recently hosted Chancellor Gardner on campus as a speaker at the re-dedication of our historic Slocum Hall, where we were humbled to hear Chancellor Gardner 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.

Per the recommendation of the program and based on our past experiences, we are limiting our proposed cohort to 10 students, to ensure the quality of additional support and mentorship OWU will provide these scholarship recipients. In addition, 10 students will align with OWU's 1:1 matching fund requirement. OWU will use COF funds to enhance the aid packages of these students to help make a bachelor's degree from OWU more affordable.

Overview and rationale of the selected academic programs

Ohio Wesleyan University extends the advantages of a liberal arts education to all students to prepare them for work, life, global citizenship, and democracy. The core expertise of liberal arts graduates – critical analysis, deep and coherent reading, and communication across differences — are transferable skills that are not discipline- or major-specific — enabling employers to solve big problems in fast-growing STEM occupations. A liberal arts education prepares STEM students to be the next generation of the workforce in a manner that allows them to keep pace with a changing economy and drive economic development in their towns, regions, and states. More specifically, the STEM curriculum in 13 academic departments supports 28 majors at Ohio Wesleyan.

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. Our internal research reflects that approximately 50 students per class declare majors which comprise the CIP codes.

Plan to address regional and statewide economic strengths and needs for these targeted academic programs

Central Ohio and Delaware County in particular, continue to experience strong growth, particularly 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." In the Fourth District, 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. Ohio Wesleyan stands prepared to lead the way in providing graduates for these growing fields. https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2013-economic-trends/et-20130924-stem-and-healthcare-employment-trends-in-ohio-pennsylvania-kentucky-and-west-virginia.aspx

An additional example of the growing investment in STEM opportunities in Central Ohio and recognition of Ohio Wesleyan'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 Ohio Wesleyan 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/

Ohio Wesleyan's liberal arts curriculum and excellent STEM programs attract and educate students who are qualified and well prepared to move directly into Central Ohio's diverse workforce to support core industries, technology hubs, advanced computing services, biomedical and health services, aerospace, logistics, manufacturing, and agriculture, among other employment opportunities and needs. As much as skill requirements may differ across these fields, the core expertise that OWU graduates gain are transferable, and the demand for our STEM graduates helps to strengthen Ohio's economic competitiveness and fosters growth, innovation, and talent. Ohio's economic strength depends upon education systems that help everyone succeed and OWU educates and prepares graduates to succeed at in-demand careers that require a postsecondary education.

Between 2018 and 2022, 27 percent of our graduates have earned degrees in the STEM disciplines. Among 2021 STEM graduates, 86% have gone directly into the workforce while 14% have pursued graduate studies.

Women, traditionally underrepresented in STEM fields, have excelled in them at OWU, comprising nearly 60% of our STEM majors during the 2018-2022 time period. OWU is well-positioned to support Choose Ohio First scholars to obtain their degrees in STEM majors as part of a robust liberal arts education.

Rationale for the Selected Populations for Recruitment

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

OWU's Office of Admission is particularly attentive to the recruitment of students from diverse backgrounds and our Diversity Recruitment plan both outlines our efforts and provides guidance to staff to ensure that OWU is inclusive in its efforts to recruit, admit and enroll Ohio students interested in 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 perfectly with Ohio Wesleyan's strategic priorities. The OWU Board of Trustees approved three strategic pillars that guide our work as we progress over the coming years, toward creating a better 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 silos. OWU renews 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 enables the University to expand its reach with underrepresented groups of students in the STEM fields by providing additional financial resources and helps to build a more diverse and inclusive campus community.

In addition to strategic planning and alignment work, Ohio Wesleyan 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, Ohio Wesleyan 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 has been through its Career Connection Office. We understand the critical role the Career Connection Office plays in developing students' readiness for internships, research and employment as a complement to their classroom learning. We also know the power of employer partnerships that can be fostered through an active Career Connection program and have seen success in growing our pipeline 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 that's responsive to student and employer needs
- Creating internship and employment opportunities through the creation of the Alumni and Employer Partner Networks
- Creation of Career Communities which offer content and resources around specific industries, including STEM
- Actively engage the OWU student body through a variety of peer channels, including through the hiring of interns and Career Connection Ambassadors, who spread the word about career-oriented services to fellow students, offer advice on programming and serve as leaders at career oriented events.

As a result of these investments, Ohio Wesleyan 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 reinforce OWU's commitment to a vibrant liberal arts education and STEM programs strengthened by the liberal arts — and to the 180-year history of the institution. We are focusing on institutional strengths and collaboration to create opportunities for research, travel, and learning within and across disciplines. The COF opportunity has been a natural extension of these efforts and allowed us to expand access to underrepresented STEM scholars.

OTTERBEIN UNIVERSITY-EXECUTIVE SUMMARY

Otterbein University – a nationally recognized, private, co-educational university in Westerville, Ohio – requests a Choose Ohio First (COF) grant to advance the Ohio Department of Higher Education's goal of increasing the number of Ohio residents completing postsecondary studies in allied health, pre-veterinary studies, and veterinary technician studies.

Otterbein's proposed programs will increase the enrollment, retention, and timely completion of students in Otterbein's **allied health and equine programs** through scholarships and a comprehensive, cohort-based support system. Each of these programs prepares graduates for occupations in high demand fields in Ohio, specifically industries like healthcare and veterinary medicine that continue to face workforce shortages. These programs were selected because of their alignment with eligible Ohio Department of Higher Education STEM CIP codes and industry needs in Ohio. The equine sciences and health and sports sciences department will actively recruit eligible majors, prioritizing efforts towards, but not limited to, underrepresented populations of low-income students, Pell grant eligible students, students of color, and men.

The equine science department at Otterbein University prides itself on experiential learning opportunities and individualized attention. The intensive horse centered curriculum expands traditional thinking of the equine industry by providing in depth opportunities to study the horse at our Austin E. Knowlton Center for Equine Science. The Bachelor of Science in equine pre-veterinary/pre-graduate studies offer a knowledge base that serves students will in future veterinary courses across species. The equine veterinary technology (EVT) program offers a unique curriculum through Otterbein and a consortium agreement with Columbus State Community College (CSCC). Students in this program gain hands-on experience with horses and other species and graduate highly prepared to enter the field as registered veterinary technicians.

The allied health major at Otterbein University is designed to expose students to the wide variety of options for study and career opportunities in the health care arena. The Bachelor of Science in allied health gives students a background deeply rooted within the sciences and includes observational experiences as early as the first year. This allows students to do an early career exploration and gain a greater appreciation for the connection between their course content and future career.

Based on the financial needs of Ohio-based students in these majors, Otterbein plans to provide **50 unduplicated undergraduate students in allied health, pre-veterinary studies, and veterinary technician studies majors**. In five cohorts of 10 students over the five-year grant period, students will receive at least $12,000 and up to $18,000 annually in scholarship support made possible by dedicated matching funds. COF scholarship amounts will be based on the individual student needs and will supplement-not supplant- existing resources. Otterbein has detailed a plan to recruit, enroll, retain, and graduate students in these majors who are residents in Ohio and have unmet financial needs. Recruitment plans will leverage Otterbein's longstanding partnership with Columbus State Community College.

Otterbein has exceptional capacity to strengthen the talent pipeline in allied health and veterinary medicine fields by ensuring that graduates of these programs secure employment or pursue graduate education in Ohio upon graduation. All COF scholars will engage in work-based learning including internships, research projects, and community engagement opportunities. Otterbein has committed to engaging our full student body in work-based learning in a way that fosters career exploration and development from the first year. Our commitment to work-based learning leverages strong partnerships with industries and institutions in Ohio.

Otterbein University is a current grantee with three Choose Ohio First awards for computer science, chemistry, environmental chemistry, environmental science, physics, engineering (STEMM), math, math education, and nursing programs. Our recruiting and cohort models have proven successful with strong connections among the Otterbein offices or enrollment, marketing, and student success and career development to support the COF scholar.

RHODES STATE COLLEGE-EXECUTIVE SUMMARY

This Choose Ohio First 2023 (COF23) grant opportunity is focused on broadening Rhodes State College's (RSC) previous Choose Ohio First awards in fields that represent critical STEMM workforce needs in our area. While the COF23 grant opportunity will be widely marketed to all potential high-achieving students interested in STEMM, COF23 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 STEMM focused programs and demographic data that met the COF23 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 STEMM programming. The College has selected the following STEMM programs and certificates to be COF eligible: Advanced EMT Certificate; Agronomy; Artificial Intelligence; Associate of Science Pre-Health Concentration; Cardiographic Technician Certificate; Concrete Technology; Construction Management; Electromechanical Engineering Technology; Dental Hygiene; Digital Media Technology; Electronic Engineering Technology; Emergency Medical Services; General Prep - Dental Hygiene; General Prep - LPN to ADN Transition Program; General Prep – Nursing; General Prep - Physical Therapist Assistant; General Prep – Practical Nursing Certificate; General Prep - Radiographic Imaging; General Prep -Occupational Therapy Assistant; General Prep -Respiratory Care; Health Care Technology; Industry 4.0 Certificate; Manufacturing Engineering Technology; Mechanical Engineering Technology; Medical Billing & Coding Certificate; Network Security; Nurse Assistant Certificate; Nursing; Occupational Therapy Assistant; One-Year Maintenance Certificate; Paramedic Certificate; Phlebotomy Certificate; Physical Therapist Assistant; Practical Nursing Certificate; Radiographic Imaging; Respiratory Care; Sterile Processing Certificate; Surgical Technology; and Web Programming/Computer Programming.

To ensure that these chosen COF23-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. 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.

RSC understands the importance of aligning strategic planning with requests for external funding opportunities. The College is currently implementing the 2021-2024 Strategic Plan that focuses on strategic enrollment management planning through Key Performance Indicators (KPIs). Selected KPIs that relate to this initiative include enrollment, retention and on-time completion. The Choose Ohio First (COF) Scholarship grant is an opportunity to assist RSC students financially as they pursue a quality education in STEMM programs.

Recipients of the COF scholarship will help diminish the financial insecurities 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. All of which assists in retention and on-time completion.

Scholars that engage in enrichment activities and quality RSC STEMM 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 that choose a path directly to in-demand STEMM 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 FY23 COF Scholarship grant cycle. For specific details related to the strength-based approach see section 3, Student Support.

In October 2020, the College underwent a reorganization to align operations with new agile workforce response and leadership philosophies implemented by the President and Cabinet. The reorganization and new philosophies align College operations better to meet the strategic plan for enrollment and the student-centered initiatives designed to provide a well-educated quality workforce. The College understands the importance of a cross-functional level of support for the FY23 COF Scholarship plan. RSC has assembled a team of campus leaders to provide an integrated approach the grant process and provide student support. The team consists of administrators, department leaders, student services leaders and faculty.   Additionally, as part of the October 2020 reorganization the College created the position of Coordinator of First Year Programs within the Division of Enrollment Management. To ensure the greatest possibility of success for the College's COF programs,

this position has been given a leadership role over all of the College's COF programs, in addition to active oversight by the Vice President of Enrollment Management.

SHAWNEE STATE UNIVERSITY-EXECUTIVE SUMMARY

This Choose Ohio First Application allows Shawnee State University to continue being responsive to workforce needs throughout this region and the state while providing engaging academic programming. There are three nodes, or areas, of academic programs that we believe are essential to address. This grant application focuses on engineering (plastics and electromechanical), chemistry, and mathematics (actuarial science). The leadership team at SSU thinks about the Choose Ohio First Scholarship applications and subsequent awards as one cohesive package that helps the institution "level up" academic programs creating a new academic environment because more students enroll in the programs. The classroom discussions are better, the projects more comprehensive, and students will complete their coursework thanks to the Ohio Department of Higher Education investments.

The first "recent" Choose Ohio First award, 16-52, allowed SSU to recruit a more extensive and diverse class of incoming students into its nationally ranked gaming program. The pandemic presented enrollment challenges, but the numbers seem stable. The next COF award provided support to our health sciences programs. Due to the healthcare needs of the region, and the desire to improve the nursing program at SSU, the team focused on the awards to nursing students. However, many other classifications of instructional program (CIP) codes were in the mix. Last year's award was the first multi-node application, two programs that do not connect but help the university accomplish critical strategic objectives. The two areas were cybersecurity and occupational therapy. This year's proposal is taking the multiple node approach, two different areas of campus with a connection between three of the four programs. All of them are important to the ability of the university to support the workforce needs of the region and state.

The leadership team at Shawnee State University selected these programs because they can attract qualified students, but there is no density of them now. According to the admissions data, there is a significant interest in these programs but not enough to matriculate to SSU. Not enough in the sense that these programs have excellent faculty, modern equipment, and other supports that will be wasted without additional students. The SSU Choose Ohio First ecosystem's programmatic support and the obvious financial support should entice students to enroll and eventually graduate from SSU.

Shawnee State University (SSU) is a public university that offers every level of degree and credential to people of this region of the state. Since our last submission, there have been improvements in several of our academic programs, in addition to external validation from several national partners. As an example, the plastics engineering program was recently accredited by ABET and is the only program like it in Ohio. The rest of the engineering department also benefits from this recognition due to the interconnectedness of the programs and shared space and resources. A new buzzword in this space, "Mechatronics," represents mechanical and electrical engineering relationships. No matter the current naming convention, the electromechanical engineering program is a well-rounded degree, and graduates can work

in various fields. As a campus community, we are working to strengthen the entire engineering program deliberately. In conjunction with the digital simulations program, these two programs allow the whole engineering department to take a tangible step forward.

We also have new energy in our College of Arts and Sciences. Dr. Kim Inman, comes from the sciences and recognizes their role in various educational and workforce initiatives. Dr. Inman started earlier this semester (Fall 22) and is open to opportunities to increase enrollment in programs that directly connect to the workforce and multiple in-demand jobs. One of these areas is actuarial science. This program has connections to the insurance industry, a powerhouse in Ohio. But the skills are also valuable if a person "just wants to do math" in another occupation or continue academic studies in another area. To be sure, our focus is on connection to insurance because we know that Ohio needs thousands of workers each year in this field and because an overwhelming majority of the students at SSU are from Ohio and want to stay here after graduation. Dr. Inman also believes the time is right to support chemistry programs. It is an outstanding major in and of itself, but it also serves as the foundation for many other in-demand fields and occupations. This region is home to various companies that depend on chemistry knowledge, such as petroleum, recycling, manufacturing, water treatment, and construction.

As a regional comprehensive university, most students attending SSU come from the region surrounding it. An overwhelming majority of the students are from Ohio, and a majority are from this part of Appalachian Ohio. This fall, SSU brought in its largest class of new students since 2019, thanks to a more concerted effort driven by data and lessons learned. The pandemic impacted enrollment as students collectively determined how to meet their educational goals best while adjusting to a rapidly changing environment. Many students rethought the need to attend college. This, coupled with a precipitous drop in the local student population in two years, means SSU must operate at a high level to attract a discerning student population.

A discerning student population plus online competition means external resources have never been more important to an open-access institution in an area of economic challenges competing for funding against some of the best universities in the world. Grants, gifts, and mentorship support allow Shawnee State University to be the best version of itself. Choose Ohio First is one of those partnerships.

SSU has (finally) found some rhythm with our Choose Ohio First administrative processes. Our current Choose Ohio First director also serves as the workforce director; it is a split appointment. She spends her time on those two areas, and campus leadership believes it makes sense due to the relationship between the needs of employers and the reason the state provides this program to students pursuing STEM degrees. While crosswalks between the classification of instructional programs (CIP) and standard occupation codes (SOC) exist, it is also helpful to know what specific employers in this region need when considering external assistance.

In addition to local workforce needs, one project has captured the attention of all sectors of the Ohio economy; the Intel investment in central Ohio. The team at SSU believes that our overall programmatic portfolio aligns well with the workforce needs of the Intel project, a project so large that it impacts the entire educational and workforce infrastructure at the state level. Intel's publicly shared associate degree needs and specialization in specific levels and degree fields are similar to many of our programs and degree portfolios.

As exciting and essential as the Intel project is to Ohio, there is a concern in this region is what happens when skilled workers throughout this region of Appalachia decide to leave their current jobs to work at Intel. According to OhioSE, the JobsOhio partner in this state region, our service area is also [home to some of the most robust super-commuters in the state](). The prospect of skilled employees leaving is not limited to the edge of our service region; given the propensity of people to drive for work, it could affect all of southeast Ohio. Or they might move and leave, contributing to our collective brain drain. Local employers are concerned about the state of the workforce in this region if there is a pull to Intel. SSU must help fill any vacuum created by that pull.

To address the potential pull and meet everyday workforce needs, we like to say that we "3D print" our workforce to meet the needs of this region. We do not have the population for employers to post a job and wait until enough qualified people show up to meet the demand. The relatively lower levels of education, the continued impact of the opioid epidemic, and the low labor force participation numbers of this region all require great intentionality to address the specific needs of regional employers.

State University has engaged in partnerships that enhance our ability to serve our students and the region. Our Choose Ohio First director, Angie Duduit, has positioned the university as an essential partner in several workforce partnerships that connect our students and academic leaders with workforce leaders from throughout the state. Her work with companies such as Honda strengthens the relationship with industry, a tangible benefit to COF students at SSU. Angie, was able to generate many contacts and forge some timely partnerships. She will spend more of her time on COF activities this year and others can take over some of her workforce responsibilities as needed.

SSU requests $1,000,020 to fund five years of Choose Ohio First activity. This provides multiple cohorts of students in mostly four-year programs, but also our associate in electromechanical engineering. There are several goals in the SSU strategic plan that connect to this proposal.

- Goal 1: We serve the region by offering programs that students need to thrive in a dynamic world.
- Goal 2: We strive to grow our enrollment and build a diverse and sustainable student body.
- Goal 3: We prioritize student success in our decision-making.

- Goal 4: We enhance the quality of life of our community and region through positive partnerships.
- Goal 5: We provide student-centered and customer-focused processes in our administrative operations.
- Goal 6: We use evidence, data, and best practices when making decisions.
- Goal 7: We are a diverse community that is equitable and inclusive

It is fair to say that this RFP response checks all of the strategic plan objectives. Choose Ohio First allows SSU to elevate the status of the programs while deliberately working to create a diverse student population. The scholarships and additional on-campus support for student success. All of this is in service to the community and region. There are a variety of offices on campus and in the community ready to support this endeavor. Most of the administrative offices connected to COF (Choose Ohio First) are all located in the same division, Advancement and Enrollment Management. The reallocation of people and resources was not a mistake. The colocation of these functions in the same division should help address issues as they arise more efficiently than in the past. It also creates the conditions to make this the best version of Choose Ohio First at Shawnee State University, thanks to lessons learned, organizational structure, and timing of other projects.

STARK STATE COLLEGE-EXECUTIVE SUMMARY

Stark State College (SSC) proposes the following program in response to the Ohio Department of Higher Education's FY23 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 and socially disadvantaged populations will be encouraged to apply for COF scholarships, as these populations are typically underrepresented in STEMM fields.

Overview of selected academic programs
For this proposal, Stark State has identified 51 total programs corresponding to 31 different CIP codes. Of these, 17 CIPs correspond to 32 programs within the Business, Engineering and Information Technologies Division and 14 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 are seeking in qualified STEMM job candidates. The College will use COF scholarships to increase the number of talented individuals completing in-demand certificates and degrees that lead to stable STEMM careers. Increasing retention and completion of STEMM scholars will create a pipeline of trained workers able to help bridge the existing workforce skills gap.

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 STEMM-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/College-wide effort that will receive full support from areas including, but not limited to, enrollment management (admissions 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 $930,000 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 successful implementation of any FY23 Choose Ohio First funding awarded.

THE CHRIST COLLEGE OF NURSING AND HEALTH SCIENCES-EXECUTIVE SUMMARY

The Christ College of Nursing and Health Sciences (TCCNHS) 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. 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). With Choose Ohio First scholarships, TCCNHS plans to increase enrollment and graduation of healthcare professionals. TCCNHS proposes using Choose Ohio First scholarships to recruit and retain students in two of its pathways: Bachelor of Science in Nursing (BSN) and Associate of Applied Science in Diagnostic Medical Sonography (DMS).

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

What makes TCCNHS distinct among its peer colleges is a 120-year legacy of nursing excellence, providing students hands-on clinical experience at The Christ Hospital Health Network. Students know sharing a campus with industry-leading healthcare professionals fosters academic excellence and promising career opportunities. U.S. News & World Report recently named The Christ Hospital #1 in the Cincinnati Region for the eighth consecutive year and #5 in the state of Ohio. This year, the Christ Hospital Health Network was named to the Forbes list of Best-In-State Employers, ranking 12th in the state out of 100 employers.

The College is unique in its partnership with The Christ Hospital Health Network, affording students the security of guaranteed placement at Cincinnati's most preferred hospital. Prior to the pandemic, Greater Cincinnati had one of the fastest growing economies in the Midwest (https://tinyurl.com/yckt8cvz) and had surpassed Columbus as the largest metropolitan economy in Ohio (https://tinyurl.com/pmezeub7). Enrollment at TCCNHS continues to grow despite economic challenges brought on by the pandemic and the demand for scholarships increases as the student base expands. With each academic year, a growing number of students seek scholarships and financial assistance for their education. Currently, 98% of the student body at TCCNHS requires some form of financial aid. Resources within TCCNHS can provide partial support for only 20% of students, making scholarships essential.

TCCNHS plans to utilize Choose Ohio First scholarships to recruit a cohort of 70 students into the BSN and DMS programs 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 and sonography fields, including men as well as students from Black, brown, Indigenous, or other historically marginalized communities.

Scholarships such as Choose Ohio First make healthcare careers more accessible and will increase college enrollment during a 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). This lack of staff is leading hospitals to implement crisis standards of care, postponing care for some patients to prioritize using limited resources on those most in need (https://tinyurl.com/yc4ckeea).

The need for healthcare professionals is projected to continue growing. While the Bureau of Labor Statistics estimates that the demand for Registered Nurses will grow 6% in the next ten years (https://tinyurl.com/5ycskfpy), the need for Medical Sonographers will grow by 10% (https://tinyurl.com/ycx74vnk). Growth in both professions will be exasperated by a wave of retirements and workers transferring to different occupations due to job dissatisfaction (https://tinyurl.com/azsaum46). The Choose Ohio First scholarship program 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.

Most college students graduate in debt due to student loans. In 2019, 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/yvarsupn). 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. After years of growth in enrollment, TCCNHS saw its first decline in students this past year. 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.

The Choose Ohio First initiative and TCCNHS have similar goals of connecting students to work-based learning experiences and growing the number of STEMM (Science, Technology, Engineering, Math, and Medicine) professionals in Ohio. The College aims to be known as the premier destination for healthcare education by 2030. The Choose Ohio First initiative will contribute to the four goals laid out in the College's 2020-2023 Strategic Plan: Foster Adaptable Learners, Develop Leaders Through Transformational Experiences, Support Passion and Purpose, and Enhance Scholarly Development and Compassion. 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.

TCCNHS 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 TCCNHS. As part of the Strategic Plan, the College's Center for Excellence 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 mentors.

Increasing diversity among the student body at TCCNHS is another strategic initiative of the College. Currently, diverse students at TCCNHS make up only 26% of the student body, below that of other nursing institutions and the general population. A portion of Choose Ohio First scholarships will be reserved for under-represented populations in healthcare, boosting the overall diversity of our students and professionals in the field.

The Admissions and Recruitment Team creates and fosters partnerships throughout the community to advertise the educational opportunities available at TCCNHS. This team aims to increase accessibility to education and broadening the diversity of the student body. Once a student is recruited and enrolled at TCCNHS, 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 career development activities. Through a student-centered approach to education, TCCNHS ensures that students are successful in school and in their future careers.

THE OHIO STATE UNIVERSITY-EXECUTIVE SUMMARY

Advancement and Inclusion in Ohio's STEM Workforce
Choose Ohio First Scholarship at The Ohio State University

Advances and innovations in computing, technology, biological, agricultural, and environmental science contribute to the industries of Ohio and drive the development of new businesses and technologies that enhance its economy, environment, and social fabric. Employment in Ohio has increased, reflecting high-volume and growth demand for biochemists, agricultural and food science technicians, statisticians, and database administrators. Simultaneously, improvements in biotechnology and computer science have advanced industries such as healthcare, engineering, and manufacturing by preparing technological communities for the future. These industries require the most dedicated STEM workforce of any sector of the economy. For these reasons, an emphasis at The Ohio State University (OSU) supporting this workforce with the appropriate STEM graduates is crucial.

In this Choose Ohio First (COF) program, OSU proposes to expand STEM majors that integrate into the biotechnology and computer science sectors of our economy. Advancement and Inclusion in Ohio's STEM Workforce will provide scholarships to students majoring in Biomedical Engineering, Computer & Information Science, Computer Science & Engineering, Data Analytics, Electrical & Computer Engineering, Engineering Technology, Food, Agricultural & Biological Engineering, Information Systems, Mathematics, Microbiology, Molecular Genetics, and Statistics. This proposal shapes a program for underrepresented students to be recruited into these majors and participate in STEM outreach activities, 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 career services staff, Ohio House of Science and Engineering (OHSE) staff, and academic advisors to seek opportunities for work-based learning experiences such as research, internships, and co-ops 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 computation, agriculture, and health sciences.

In addition, through our contacts with life science and biotechnology employers such as Andelyn Biosciences, Caesar Creek Software, DOW Chemical Company, Erie Insurance, Forge Biologics, General Electric Aviation, and Lubrizol we will convene a focus group to stay updated with the newest hiring practices and workforce needs. This feedback will be used to advise students through their process of seeking work-based learning experiences in these fields or cognate areas. Our COF program will be supported by three different colleges: College of Arts and Sciences, College of Engineering, and College of Food, Agriculture, and Environmental Sciences that are ranked highly nationally and regarded for their strengths in academic instruction. Thus, through this proposal Ohio State will be able to contribute to boosting the state economy by preparing our students to be the most "job-ready" graduates in Ohio.

THE UNIVERSITY OF AKRON-EXECUTIVE SUMMARY
Choose Ohio First FY23 (Expansion for 22.37 Grant)

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Executive Summary

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 students in STEMM areas that directly affect the economic competitiveness of Ohio is one of our strengths. The University is looking to leverage the model of COF to target Black, Indigenous, and people of Color (BIPOC) students in STEMM and create a unique environment to increase underrepresented students' graduation rates in key STEM fields such as Biomedical Sciences, Engineering and Health professions.

UA has committed to preparing and graduating 100 STEMM scholars by 2027. As a model program for retention, expanded funding to the FY22, 22.37 Grant, and support from ODHE (Ohio Department of Higher Education) will allow UA to increase the number of graduates from 100 to 150 by 2028 as The University of Akron implements strategies to improve targeted enrollment. The country is still struggling with economic hardships due to the onset of the COVID-19 virus, which is making it difficult for Scholars to finish course work within a 4-5 (with Co-Op) year period or persist toward graduation. Because many families 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. UA is requesting the maximum award amount of $1,200,000 for the FY23 proposal to increase new Scholars' degree completion in the next 5 years. The goal will be to add additional funds to target quality BIPOC and underrepresented students from around the state of Ohio. This will be an opportunity to bridge a support structure for Ohio residents.

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
  - The increase from the FY23 proposal will set a recruiting benchmark of 25% for each cohort
- 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

b. **COF Overview & Programs**

The selected majors were chosen to increase the number of skilled employees for Ohio's workforce. The current 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. All fields of study will be vital to the economic recovery the region will face. There are additional CIP codes that UA will add to this grant as an expansion of the FY22 proposal (22.37 grant).

Advancements within the medical and science fields, as well as the use of social media, have created opportunity for science and technology to become more compatible with business and consumers, which will be needed as the country emerges from the COVID-19 pandemic and loss of workforce from the "Great Resignation."

The University of Akron's promises and mission are committed efforts to provide innovative pathways for students and the surrounding community. With a vision to be diverse and provide superb academic programs relevant to the future, COF Scholars will be challenged and prepared for the workforce. The proposed 25% benchmark for BIPOC and underrepresented Scholars, reaffirms UA's commitment by doing its part to provide a diverse workforce for Ohio.

c. **Regional and Statewide Economics**

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

Needs (academic programs): According to Ohio Means Jobs (OMJ 2020), there are over 50 STEMM fields of study for which the total annual job openings exceed 20,000. These occupations requiring baccalaureate degrees need qualified employees. With the overwhelming predicted demand, especially in health care, The University of Akron will support the region by supplying additional graduates through Choose Ohio First. The number of opportunities will be negatively impacted over the next year due to COVID-19 but are expected to rebound for Northeast Ohio by 2025. A diverse workforce will be needed to face the challenges that will arise during the rebound period.

d. **Institutional Plan**

The FY22 proposal (22.37 Grant) outlined the following as to how COF fits within UA's strategic plan and how the plan would be supported:

Part of the University's vision is to be an institution of innovation willing to invest in unique approaches that increase opportunity for students and reduce their cost of attendance. In 2020, The University of Akron's strategic plan, completed in 2021, includes the following promises:

1) **We promise to provide education to and share knowledge with those who seek it.**

    The University of Akron is affirming its promise to remain true to the liberal arts tradition of developing holistic thinkers, the paradigm upon which this University was founded 150 years ago. We will provide students with the opportunity to gain knowledge, skills, and insight that will enable them to make an impact on a rapidly changing world. We will provide a transformative growth experience to all learners and will help them to approach problems critically, collaboratively, and creatively. Our graduates will emerge with the ability to lead lives of significance.

    > **1.1** The University of Akron affirms its promise to produce the highly skilled graduates who are needed to power the local economy and who possess the intellectual capacity to tackle complex problems.

    > **1.3** The University of Akron will increase flexibility in order to empower students as they pursue their passions. Initiatives
    > *1.3.1* We will develop and expand scholarship opportunities to help our students achieve their educational goals.

2) **We promise to connect to and serve our community.**

    The University of Akron affirms its promise to be the region's most influential public research university, to facilitate resurgence of the local economy, and to engage with the citizens of Akron and the surrounding communities.

    > *2.1* The University of Akron will enhance its collaborations with local leadership in Akron, Summit County, and surrounding areas.
    > *2.1.3* We will increase the number of internships and cooperative learning opportunities for students to interact with regional organizations.

The Choose Ohio First (COF) Initiative is in alignment with the University's current Strategic Plan and its promises. The expansion of the 22.37 grant will create an

opportunity for UA to leverage one of its greatest resources and go above and beyond in its promise to serve Akron's community as well as NE Ohio.

e. **Completion Plan**

To ensure students complete their degrees on time, the program provides individualized support for each Scholar. Scholars are monitored on their progress and create plans to ensure steady progression to graduate within the time frame available for COF financial support. UA is streamlining pathways and support systems for students to enhance the student experience. A collaborative effort is in development between the offices of Multicultural Development and Academic and Retention Support by expanding the peer mentoring component to connect with Scholars through their Learning Communities and First-Year Experience course. Program coordinators in collaboration with Career Services will work with Scholars in learning about career opportunities and how to move closer to graduation each semester. Review of academic work at the conclusion of the semester will set up adjustments if Scholars' struggle in course work needed for degree completion. By providing resources and other support, Scholars will adjust their paths to continue toward completion. The development of an overall support program for BIPOC STEMM students as a subgroup to COF will demonstrate how to capitalize from the history and success of its model program and bets practices.

The University of Akron also has dedicated faculty and staff that will give added support beyond academics. Research opportunities, mentoring, and workforce development will be made readily available for Scholars. The College of Engineering and Polymer Science, Career Services, as well as the Co-Op office work with future engineers to gain experience in the classroom that translates to real world application in the workplace. The Co-Op office provides guidance and support for engineering majors to take advantage of hands-on experiences to make students more desirable employees with experience.

TIFFIN UNIVERSITY-EXECUTIVE SUMMARY

a. Rationale for Selected Populations for Recruitment

Tiffin University ("the University" or "TU") proposes a Choose Ohio First (COF) scholarship program, which seeks to develop a pipeline of talented students to help increase Ohio's competitiveness in the Science, Technology, Engineering, and Mathematics (STEM) disciplines. The project goal is to help ensure a well-qualified workforce for STEM-related industries. The proposed CIP Codes are 29.0207 and 42.2707 for Tiffin University Cybersecurity and Forensic Science bachelor's degree programs respectively. The rationale for choosing the proposed majors is largely the projected career growth, student success, and the need for students to mitigate the costs of higher education.

The proposed scholarship program will support TU's increased COF Scholar recruitment and funding five diverse cohorts of 36 talented STEM scholars from Ohio, a total of 180 COF Scholars, with special consideration for socially disadvantaged students. Undergraduate COF Scholars will be selected based on their degree, major, and other qualifying factors that meeting the published COF criteria. Students will not need to use an application to apply for the COF grant, but rather they will be automatically awarded should they meet COF scholarship criteria. Through this approach, high-achieving and high-need students will receive a higher amount of scholarship. This method ensures academically talented, socially disadvantaged students, such as those from lower-income households, will receive an amount that meets their needs and encourages them to pursue careers in STEM.

The five-year funding model distributes an average of $2,361 per academic year to each COF Scholar for a total of $1,190,000. TU understands that the Choose Ohio First grant is most effective as a recruitment, retention, student success, and cost control when offered as an additional benefit and will not replace existing discounts and scholarships. TU will meet the 1:1 match with existing institutional aids.

Of TU students enrolled, 54% are female, 22% are minority (additional 5% are international), 31% are first- generation college students, and 42% of undergraduates are low income as defined by Pell eligibility. By providing COF scholarships to undergraduate STEM majors, TU will be able to remove financial barriers, reduce student debt, and increase student success.

Prospective COF scholars will be recruited from Ohio with additional consideration for students who are socially disadvantaged. Despite current recruitment and enrollment efforts, there is an institutional need to strengthen the recruitment of underrepresented and socially disadvantaged students. The University has prioritized the recruitment of underrepresented individuals, as demonstrated by TU's Strategic Plan. As a result of the proposed COF scholarship program, TU anticipates increasing recruitment and graduating five diverse cohorts totaling 180 talented STEM scholars who are prepared and ready to join Ohio's workforce.

b. Overview and Rationale of Selected Academic Programs

Tiffin University ("the University" or "TU") proposes a Choose Ohio First (COF) scholarship program, which seeks to develop a pipeline of talented students to help increase Ohio's competitiveness in the Science, Technology, Engineering, and Mathematics (STEM) disciplines. The project goal is to help ensure a well-qualified workforce for STEM-related industries. The proposed CIP Codes are 29.0207 and 42.2707 for Tiffin University Cybersecurity and Forensic Science bachelor's degree programs respectively. The rationale for choosing the proposed majors is largely the projected career growth, student success, and the need for students to mitigate the costs of higher education.

Cybersecurity: Cybercrimes increased over 600% in 2021, while the average cost of a single data breach was a record breaking $4.24 Million. The U.S. Bureau of Labor Statistics (BLS) estimates that the growth rate for cybersecurity occupations will be around 20% between now and 2024 (Amit, 2022). ONET Online lists 20 positions under the cybersecurity category. While most positions will see average growth between 5% and 10%, Information Security Analyst growth is predicted to be higher than 15%. Cybersecurity Degrees in Ohio cites a 20% growth projection.

The Cybersecurity program covers essential workforce requirements – from Cybersecurity fundamentals to computer science basics to legal/policy aspects. Instructors bring extensive Cybersecurity experience and local connections. The National Security Agency (NSA) and Department of Homeland Security (DHS) have designated Tiffin University as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE). Some of the courses in the Cybersecurity curriculum are designed with embedded industry credentials including CompTIA Security+, CompTIA Network+, and EC-Council Certified Ethical Hacker. All graduates will have completed a 150-hour internship. Professionals in this area aid criminal investigations by collecting and analyzing evidence.

Forensic Science: TU is proud of the many local and regional partnerships in the Forensic Science fields. All graduates will have completed a 150-hour internship. Professionals in this area aid criminal investigations by collecting and analyzing evidence. They collect evidence from crime scenes, store it in conditions that preserve its integrity, use photography/videography to document evidence, and testify in court. Forensic science technicians typically need at least a bachelor's degree. According to the Bureau of Labor Statistics, more jobs are expected to be added by the year 2024 with an expected increase of 27%, higher than the national average. Scholarships for these programs will enhance recruitment, enrollment, and retention efforts, thus creating a pipeline of talented workers in this field of study.

c. Synopsis of the plan to address regional and statewide economic strengths and needs for the targeted academic program

The Ohio Department of Job and Family Services 2028 Ohio Job Outlook Employment Projections Ohio_Job_Outlook_2018-2028.pdf (ohiolmi.com) projects Ohio economy is expected to add 138,000 additional jobs between 2018 and 2028. The report projected 685,000 job openings annually. Though the health care and social assistance services and industries are expected to add the most jobs followed by hospitality, transportation, and professional and technical services, these services and industries will be supported by students graduating with both the Cybersecurity and Forensic Science programs.

Using COF Scholarships as a recruitment and retention strategy, TU understands that this grant is best featured as an additional benefit and not replace existing discounts and scholarships. Unique promotion of this opportunity is planned as is a student support strategy to improve retention and graduation rates for COF Scholarship recipients. The University has expanded its digital and social marketing efforts to continue to build its brand within the State of Ohio for TU's STEM programs and the COF scholarship program. By these intentional engagements, the expectations are to extend the University's regional and state-wide recruitment footprint. These initiatives are purposeful examples of an innovative approach to counteract demographic student enrollment shifts. Tiffin University's website includes webpages dedicated to the Choose Ohio First Scholarship Program.

d. Institutional strategic plan which supports student achievement

The University has developed and nurtured a learning-centered setting and a sense of community for its students, faculty, and staff. TU's mission is to "Educate students by linking knowledge to professional practice." The University's purpose is "Transforming lives through education." TU strives to meet its mission and purpose for all students by creating an environment focused on student success. TU's vision is to be "a premier university for challenging students to enhance their global competencies and 21st-century skills necessary for success in a diverse world."

Reflecting the mission and vision of TU, the new Strategic Plan, "Transform TU/Envisioning Our Future 2022-2027", lays a sound foundation for the University.

The current four strategic themes or priorities are Academic Growth, Capacity Building, Pivot Culture, and Student Transformation. The strategic themes for TU provide a clear vision for immediate and future success, while staying true to the University's mission, vision, and values. Each strategic theme addresses innovation, financial resources, internal processes, and organizational capacity.

As part of the Strategic Plan's emphasis on Student Transformation – Improved Student Success, the University has focused its efforts on improving enrollment, retention, and

graduation rates. The programs included in this COF Cybersecurity and Forensic Science Scholarship program are critical to the University's strategic plan. Recruiting students into these programs addresses the University's mission by preparing students for the 21st-century workforce. The COF opportunity clearly aligns with TU's Strategic Theme for Academic Growth – Offering the Unexpected and Engaging and Building Strategic Alliances. COF also enhances TU's Capacity Building through enhanced brand and reputation.

e. Institutional assistance assuring a successful implementation

Recruiting students into the selected academic programs not only addresses TU's strategic priorities but also addresses the University's mission by preparing students for the 21st-century workforce. TU's mission is to educate students by linking knowledge to professional practice with a vision to be a premier university for challenging students to enhance their global competencies and 21st-century skills for success in a diverse world. Without viable thinking and communication abilities, students in the 21st century will not be able to engage intensively in the cultural, social, and technological changes impacting all professional roles in society.

The general education courses prepare students to be critical thinkers, engage in teamwork, communicate with clarity, and understand cultural and ethical implications of human behavior. With these abilities, a person will be successful in any career choices he/she makes.

As part of the Strategic Plan's emphasis on Student Transformation - Improved Student Success, the University has focused its efforts on improving retention and persistence with a goal of increasing first-year student retention rates to 70%. In addition to the University's robust, evidence-based student success services, the COF Scholars will receive a strong promotional campaign regarding the services plus additional features designed specifically for COF Scholars. These include a cohort model learning community through which shared experience which enhance their academic engagement. Engage, Explore, Connect, and Impact courses are offered in Freshman, Sophomore, Junior, and Senior Years respectively enhancing their readiness for STEM careers. Mentors will be assigned for additional engagement, support, and motivation throughout their academic journey.

Undergraduate students engaged in any work-based experience at Tiffin University are assigned a faculty supervisor who is responsible for overseeing the work-based experience. Prior to the start of the work-based experience, the faculty supervisor ensures that the student is prepared for the work-based experience, approves the work-based plan, verifies with the work-based supervisor that a plan is in place to ensure that the required 150 hours can be completed and provides the workplace site supervisor with a student evaluation form. Once the workplace experience begins, the faculty supervisor stays in contact with the student and site to ensure success. Measures of success are the multiple evaluations completed during the experience.

UNIVERSITY OF CINCINNATI-EXECUTIVE SUMMARY

The goal of the Diversifying Yield and Retention 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 Diversifying Yield and Retention 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.

UNIVERSITY OF DAYTON-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 historically underrepresented students to have access to 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 Integrated Learning-Living Community (WISE ILLC) and the STEM Summer Bridge Program. Each of these initiatives directly impacts women and/or historically under-represented individuals who are of strategic institutional importance. The UD Sinclair Academy is a partnership between the University of Dayton and Sinclair Community College designed to ease the pathway to a four-year degree. Students are members of both campus communities from day one, and they have access to UD advising, research opportunities, facilities and amenities while taking classes at Sinclair. The Women in Science and Engineering Integrated Learning-Living Community (WISE ILLC) is a community of learners that creates a strong support system to foster success and academic curiosity. The 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.

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

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

COF Scholars will experience student learning that is integrated, occurring both inside and outside of the classroom to fulfill our mission to educate the whole person. Our strong completion rates and employment outcomes in the identified programs of study reflect the success of our approach and our ability to meet the workforce needs in identified STEM fields in Ohio.

In determining our eligible programs of study, we identified those that had at least one in-demand occupation based on data from Ohio Means Jobs. Graduates of the identified programs go on to make contributions to our regional and statewide 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.

UNIVERSITY OF MOUNT UNION-EXECUTIVE SUMMARY
University of Mount Union Choose Ohio First Scholars' Program:
Expanding University Partnerships to Increase and Enhance Pathways to STEM College and Career Opportunities

The University of Mount Union (UMU) is excited by the opportunity to submit its second Choose Ohio First proposal so that we may increase access for underrepresented students from the State wishing to pursue STEMM majors and careers. Building upon UMU's existing and vibrant partnerships, we propose to continue collaborating with Akron North High School and Alliance High School and to also engage in formal partnership with Hoban High School (Summit County) who we now collaborate with in terms of our enhanced College Credit Plus offerings. Additionally, we aspire to support our neighboring local high schools in Stark County (ie. Perry, North Canton, GlenOak and Canton City) since we've seen an uptick in our recent recruitment and matriculation efforts from these districts and would like to provide "gap funding" to students from these local high schools wishing to study STEMM related disciplines at Mount Union. This expansion will continue allowing our UMU COF Scholars to choose from any of our undergraduate majors that align with approved STEMM CIP codes. We do not want to limit Scholar choice, and we believe that the small size of our annual cohorts and the program design can adequately support this strategy. Scholars thus have access to our natural sciences, math, engineering, computer science and nursing programs, and will be afforded multiple opportunities to gain work-like experiences through internships, undergraduate research, and discipline specific student organizations.

Specifically, we seek an additional $630,000 in scholarship support for students from two regional pools that do not typically believe they can access a small, teaching centered private university, or any university at all. Our primary focus will be to recruit students from Akron Public Schools' North High School. As of March 2020, UMU became the Sister University to North, which is distinguished as the most diverse high school, with an 86% diversity rate, in the State of Ohio. We are already committed and have begun to work with North faculty as curricular liaisons to develop course content aligned to their career academies in health, computer science and business, as well as preparation of students for the ACT, student success programs such as camps, and financial aid workshops for students and families. Our prioritization of North High School stems from a mutual desire to increase college attainment in this population; roughly 34% of North graduates in the classes 2017-2019 matriculated to either a 2yr (20%) or 4yr (14%) institution of higher ed. For the class of 2020, those numbers plummeted to 15% overall, with only 2% matriculating to a 4-year college or university. In 2021, 32% of North graduates matriculated to either a 2- or 4-year institution of higher education. Any scholarship funds not awarded to Akron North graduates will be utilized for Alliance area students with demonstrated sociodemographic disadvantage, as these students are not typically represented in UMU's long standing Investment Alliance scholarship program. Remaining funds will be prioritized for Archbishop Hoban High School students, given our current CCP agreement. Finally, the local districts previously mentioned, all within 30 miles of Mount Union, will be included to utilize any remaining funds.

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

Additionally, all Mount Union STEMM undergraduate programs included in this COF proposal address both regional and statewide economic needs. Our examination of Ohio's 2028 Job Outlook indicates substantive employment growth in the NE Ohio labor markets in Data Processing (18.2%) and Computer Systems, Design and related services (16.4%). According to TeamNEO, roughly 40% of the State's economy stems from NE Ohio. Key NE Ohio industries specifically supported by Mount Union STEMM graduates include clusters in smart and additive manufacturing, aerospace and automotive, bio-health (delivery and tech transfer), advanced materials (polymers, steel), and information technology. This proposal, with its focus on increasing access to STEMM baccalaureate education for highly diverse, underrepresented students from the region, will advance NE Ohio's ambition to capitalize on its "strong history of innovation." Finally, for Ohio to strengthen its economy, it must increase degree attainment, and specifically expand its tech workforce; achieving this aim requires us to increase recruitment and retention of our underrepresented populations such as those targeted in this COF proposal.

UNIVERSITY OF TOLEDO-EXECUTIVE SUMMARY

Employers in Northwest Ohio and throughout Ohio are seeking college-educated graduates of science, technology, engineering, and mathematics (STEM) disciplines at an increasing rate. Furthermore, recent developments such as the ground-breaking of the Intel foundry in New Albany and the formation of the Great Lakes Clean Hydrogen project led by the University of Toledo, the demand for a highly skilled workforce in STEM disciplines is only growing.

To help address this demand, the University of Toledo is pleased to submit Choose Ohio First - Technical Workforce in STEM Education (COF-TechWISE) proposal. The goal of this proposal is to attract highly qualified students to STEM degree programs in three unique and specialized STEM disciplines available at the University of Toledo: actuarial sciences, engineering technology and pharmaceutical sciences. Graduates of these disciplines have expertise in advanced manufacturing, pharmaceutical / cosmetic production and financial analytics that can support the technical requirements of Ohio's growing employer base.

A. Rationale for selected populations

The rationale for these programs is to attract additional enrollment, increase the number of graduates and to meet the demand of employers. Local and regional employers are having difficulty filling positions in advanced manufacturing, automation, and construction; new pharmaceutical, biotechnology and formulation ventures are under development; and existing financial services and insurance industries need expertise to support the needs of Ohio residents, existing industry and developing industry.

Although the primary rationale is to meet employer needs, these specific disciplines meet other COF goals as well. As of Fall 2022, the overall percentage of URM undergraduates in the College of Engineering is 8.7% with 79.5% in state. However, the Engineering Technology programs selected for this proposal are 14.2% URM with 87.8% in state. Similarly, the undergraduate programs in the College of Pharmacy and Pharmaceutical Sciences are 19.2% URM, 68.9% female and 73.6% in state. These programs provide opportunities to attract in state and under-represented populations into STEM disciplines.

B. Overview of selected programs

Actuarial Science

Actuarial science is one of three data-oriented career options offered in the BS program in Mathematics at The University of Toledo, and it is often the least understood by new students. Consequently, although the need for actuaries is significant, due to the unique career path leading to becoming an actuary, students often do not appreciate the attractiveness of an actuarial career. The previous COF investment in actuarial sciences between 2016-2020 did attract many students to the program who have since graduated and entered the profession in Ohio and renewing the program will doubtlessly allow continued growth in this area. Renewed COF funding for actuarial science at UT would complement other efforts the Department is making to spread the word about the actuarial profession to K-12 students in Northwest Ohio, which includes bringing the Actuarial Foundation's Modeling the Future Challenge to area high schools. These initiatives and the support of our COFACT partners will undoubtedly increase the number of highly qualified actuaries in the State of Ohio to meet the rising demands of the insurance and financial industries.

Engineering Technology

In addition to the strong four-year programs, the Department of Engineering Technology offers an undergraduate minor in software engineering. Through this project, students in Construction Engineering Technology (CET), Mechanical Engineering Technology (MET) and Electrical Engineering Technology (EET) will be provided the means and support to complement their undergraduate engineering technology degree with a minor in software engineering. Although this project focuses on engineering technology programs, the software engineering minor is structured such that it is accessible to a broad range of majors at UToledo including but not limited to Engineering Science and Engineering Technology programs. The project can be expanded to include high-achieving students from other academic programs, providing students with a bridge to increase their level of computing skills.

Pharmaceutical Sciences

The BS in Pharmaceutical Science (BSPS) is an interdisciplinary applied science degree that prepares students for employment in manufacturing, management, government, research, and for further training in the pharmaceutical sciences and biotechnology. BSPS degree holders are prepared for entry level jobs in the pharmaceutical sciences/biotechnology, to enter graduate programs leading to MS and PhD degrees, as well as to begin professional programs leading to careers as health care providers (MD, DDS, physician's assistant). The program offers five distinct fields of specialization (majors): Cosmetic Science & Formulation Design, Medicinal & Biological Chemistry, Pharmaceutics, Pharmacology & Toxicology, and Pharmacy Administration. Our cosmetics science major is the first undergraduate degree program in the field in the U.S., offering our students entry into the personal care product industry. The

objective of this proposal is to increase the number of Ohio residents who graduate with a BSPS degree and pursue careers in the State of Ohio.

BSPS students who enter the program direct from high school take basic courses in science, mathematics and general education during their freshman and sophomore years. Beginning with the junior year foundational courses in the pharmaceutical sciences and advanced training in their field of specialization such as medicinal chemistry, pharmacology, biochemistry, pharmaceutics, and cosmetic science are offered. After completing two semesters, each student is required to find and participate in a 400-hour internship in their field of specialization to prepare them for employment or for post-graduate training.

C. Economic needs for selected programs
The proposal is designed to meet the needs of employers in existing and emerging industries such as advanced manufacturing, finance, insurance, pharmaceuticals, cosmetics, and biotechnology. Historically, the mandatory coop program in the College of Engineering has provided employers with a direct line to existing academic programs to communicate their changing needs in terms of the skills their industries require. One of the goals of the COF-TechWISE program is to expand the scope of experiential learning opportunities for students in the Actuarial Science and Pharmaceutical Sciences program. 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-TechWISE proposal is well aligned with our strategic plan. We are in the process of adopting a new 5-year strategic plan, and the strategic goals and vision were approved by the Board of Trustees in June 2022. 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.

E. Institutional support
Support for COF-TechWISE will be provided by Enrollment Management, the Center for Student Success Coaching, Career Services in addition to the specialized student support functions

within the Colleges of Engineering, Natural Sciences and Mathematics and Pharmacy and Pharmaceutical Sciences 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. We will also provide a single point of contact for communication between the ODHE and the individual degree programs listed in this proposal.

WRIGHT STATE UNIVERSITY-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, 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 190 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 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 STEM 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.

XAVIER UNIVERSITY-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, Life Sciences for Business, Business Analytics), natural sciences (Biology, Environmental Science, Applied Physics, Biophysics, Engineering Physics, Physics, Applied Chemistry, Chemistry, Chemical Science), and STEM education (Teaching Life Sciences, Teaching Physical Sciences, Teaching Life Sciences and Chemistry, Teaching Life Sciences and Physics).

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

Addressing regional and statewide economic strengths and needs

The programs 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, Thermo Fisher Scientific is a world leader in the science and pharmaceutical fields, and the Cincinnati site is a pharmaceutical contract development and manufacturing site with around 800 employees supporting over 100 customers. Thermo Fisher has a need for students from all STEMM majors both for their strong co-op and internship programs, but also for full time employment. Beyond being fantastic employers and collaborators on their own, Cincinnati Children's Hospital's Translational Core Laboratory and CTI Clinical Trial & Consulting Services have announced a partnership. Both Cincinnati Children's and CTI are strong supporters of Xavier students for clinical, research, and data-based roles. Cliniceval is a rapidly expanding company in Cincinnati, Ohio, pursuing a mission to assist in the development of life-saving therapies for patients in need. They have found Xavier students and graduates to be of the strongest caliber to align with their core vision and values (Commitment, Integrity, and Socially Conscious).

Xavier has a strong tradition of and commitment to producing leaders in these in-demand fields for our regional and state economy. Over 70% of our 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. 35% of the students are first generation students, 22% 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
  - Admissions Counselors (recruiting)
  - Financial Aid Counselors (scholarship crediting and counseling)
  - Success coaches (college success)
- Career Development
  - Career Coaches (career discernment, mock interviews, resume prep)
  - 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.

YOUNGSTOWN STATE UNIVERSITY- EXECUTIVE SUMMARY
YSU Undergraduate and Graduate Education and Training in STEMM

The YSU-COF 2023 proposal, **YSU Undergraduate and Graduate Education and Training in STEMM Choose Ohio First (YSU-GrEaT COF)**, promotes further education and workforce development opportunities for YSU students through partnerships with regional employers as well as relevant training and professional development. 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 or exceed this funding through an in-kind match consisting of graduate assistantships, private scholarships, and support from the Office of Academic Affairs. Our proposal supports STEMM majors at YSU with focus upon graduate programs in STEM and includes collaboration with our Office of Diversity, Equity, and Inclusion and regional high schools on initiatives to promote the scholarship to underrepresented groups to achieve our goal to produce a trained workforce that meets the needs of the region and State of Ohio.

Rationale for Targeted Population
Our target population consists of STEMM-interested Ohio students interested in pursuing graduate degrees in STEM, as well as high school and community college students with emphasis upon STEMM underrepresented groups. YSU-GrEaT COF targets the Youngstown-Warren area because of the need in training and developing a 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." We focus our recruitment efforts on underrepresented groups because of a particular need in the region and at YSU to train a diverse workforce and provide opportunities to all students.

Targeted Academic Programs
Although all STEMM-related majors and programs are eligible, the proposal targets STEM graduate programs because of the potential impact of the COF scholarship upon recruitment and development of these programs at YSU and the regional need for a workforce better trained through continuing education. During academic year 2021-2022, the College of STEM revised its graduate programs to make them more responsive to the needs of the students and the region. As a result, enrollment in these programs grew 75% between Fall 2021 and Fall 2022. The graduate program in computer science grew from 23 students to 114 students in one year! All STEM graduate programs have an internship option for completing the degree in as little as 12-18 months. We have the infrastructure in place to develop these programs further and promote experiential learning as part of these students' education. Additionally, we will promote our Data Analytics Certificate to better equip our undergraduate and graduate students 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 Northeast Ohio region and work-based learning; many regional STEMM positions go unfilled as indicated by feedback

from employers and students. The specific academic emphases will enable us to train and provide a qualified workforce for employers in the region and the State.

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 experiential 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-GrEaT COF through its annual STEM internships and career expos, services provided by the Office of STEM Professional Services Careers, Internships & Co-ops, and the support of personnel in the development and offering of programs and resources to encourage experiential learning.

Program Components
YSU-GrEaT 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 graduate program or major;
- attend all cohort meetings (unless meeting times conflict with a class);

- work with the YSU-GrEaT COF Coordinator and the Office of STEM Careers, Internships & Co-ops to secure a transcribed professional practice experience or REU;
- participate in the STEM Expo and/or other career and internship fairs on campus (if applicable);
- complete at least one transcribed internship, co-op, or research experience before graduation;
- 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.

Choose Ohio First Submission

Miami University, Oxford, OH

Project Directors: Dr. Jessica Sparks and Dr. Keith Hohn

Project Co-Directors: Dr. Kumar Singh and Dr. Jennifer Blue