

MISSOURI SOUTHERN STATE UNIVERSITY

Office of the President

May 22, 2023

Dear Commissioner Boggs:

On behalf of Missouri Southern State University, I write to express the university's intent to request an update to the university's statewide mission. Currently, the statewide mission of Missouri Southern is **International/Global Education**. The university seeks to update its statewide mission to encompass three areas: International/Global Education, Health and Life Sciences, and Immersive Learning Experiences.

The university looks forward to providing significant rationale and information in support of the request. Briefly, our rationale includes:

International/Global Education: Since 1995 Missouri Southern has excelled in achieving this aspect of our mission and is committed to continuing this unique focus into the future.

Health and Life Sciences: The university has a strong array of high-quality programs in the health and life sciences, areas critical to address current and future workforce needs in the region and state. In support of this mission, the Joplin region has a unique set of healthcare and health sciences assets, and community leaders are collaborating to strategically build upon this existing strength. Also, Missouri Southern's transformation project supported by Governor Parson is a Health Science Innovation Center—a facility that will provide a foundation for further excellence and growth in the health and life sciences.

Immersive Learning Experiences: Immersive Learning has been defined by Missouri Southern Faculty as:

Immersive Learning: Learning through comprehensive experiences within realistic environments that promote cognitive and skills development, investigation, problem-solving, adaptation, and application. Examples: capstone projects, cultural immersion (study away), internships, research, service learning, community-based learning, clinical placement (clinical rotations, student teaching), practicums, hands-on laboratories, civic engagement, creative works, field studies, simulations, virtual environments,

Many of the university's academic programs and facilities are designed to provide students with opportunities to experience Immersive Learning, including the Anatomy and Physiology Human Cadaver Lab, the Health Sciences Simulation Learning Lab, the Criminal Justice Crime Scene Lab, the Nursing Virtual Reality Lab, the Edward Jones Trading Lab, and others. Students and faculty recognize that this type of education provides greater opportunity for retention of material and synthesis of information.

By including Immersive Learning in the CBHE-approved statewide mission, we would indicate our intention to highlight our existing programs that contain Immersive Learning opportunities and to seek to expand those opportunities in other programs.

I would appreciate it if you would provide the university with an application to submit a formal request for an update to our statewide mission. We look forward to working with your office on a timeline, but it would be our intent for this matter to be discussed at the Coordinating Board for Higher Education meeting in September.

The person responsible for follow up regarding the application is:

Dr. Lisa Toms, Provost and Vice President for Academic Affairs Toms-L@mssu.edu (417) 625-3172

Thank you for your consideration, and please let me know if you have any questions or guidance.

Best wishes,

Dean Van Galen, Ph.D.

Dean Van Dale

President

cc: Samantha Dickey, Interim Assistant Commissioner of Postsecondary Policy

Coordinating Board of Higher Education September 13, 2023

Tab 10, Attachment A Missouri Southern State University's Proposal for Statewide Mission Designation

MSSU Proposal for Statewide Mission Expansion



MISSOURI SOUTHERN STATE UNIVERSITY

Office of the President

July 14, 2023

Dr. Bennett Boggs Commissioner, MDHEWD Post Office Box 1469 Jefferson, City, MO 65102

Dear Commissioner Boggs:

On behalf of the students, faculty, staff, and supporters of Missouri Southern State University, it is my great honor to submit to you the institution's application for an expanded statewide mission. For nearly 30 years, Missouri Southern has successfully executed our current statewide mission in international/global education, which we propose to continue. Now, as Missouri Southern grows and responds to specific workforce needs in the state, we write to request the Coordinating Board for Higher Education consider and support our effort to include health and life sciences and immersive learning experiences into our statewide mission.

While the application itself provides extensive rationale for an expanded statewide mission, in short, we believe we have more than adequately demonstrated Missouri Southern:

- Enrolls a cross-section of Missouri students and effectively serves several of the state's special populations, including minorities and economically disadvantaged students;
- Has unusual strength in the health and life sciences and immersive learning experiences
 that respond to Missouri's current workforce needs, with licensure pass rates and placement
 rates that exceed the average in the state;
- Has the capacity to provide significant public service to address statewide needs beyond our service region in Southwest Missouri; and
- Has adopted and maintains a robust program of continuous quality improvement as evidenced by, for example, licensure exam pass rates and job placement rates in the health and life sciences.

As you will see in the application, not only does Missouri Southern have an impressive breadth of undergraduate degree programs in the health and life sciences, but we also have unique facilities, immersive learning experiences, and external stakeholder engagement activities that provide the margin of excellence in our programs. All told, Missouri Southern is a statewide leader in the health and life sciences and immersive learning experiences and we ask the Coordinating Board for Higher Education to recognize our strengths in these areas with a new statewide mission.

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If you have questions or need clarification or additional information regarding our application, please do not hesitate to reach out to me at your convenience. We stand ready to work collaboratively with the Department of Higher Education and Workforce Development staff and members of the Coordinating Board to facilitate a thorough review of these materials.

In the interim, please know how much we appreciate your consideration of this application, and we look forward to discussing it further as the process unfolds this Fall.

Best regards,

Dean Van Galen, Ph.D.

President

cc: Samantha Dickey, Interim Assistant Commissioner of Postsecondary Policy

Tab 10, Attachment A Missouri Southern State University's Proposal for Statewide Mission Designation

MISSOURI SOUTHERN STATE UNIVERSITY®

Application for Statewide Mission

Institution Name: Missouri Southern State University

Requested Areas for Statewide Mission Designation: International/Global Education, Health and Life Sciences, and Immersive Learning Experiences

Does any other public four-year institution have a statewide mission in the requested areas? No

Does the institution understand that if a statewide mission is approved in the requested areas, it will not prohibit other four-year institutions from offering the same or similar programs? Yes

Submission Date: July 14, 2023

Section I Institutional Background

History and General Information

Missouri Southern State University (MSSU) is a four-year public regional university that enrolls 4,144 students (Fall 2022) through 168 undergraduate and graduate degrees in a variety of academic areas. MSSU has served the State of Missouri and beyond for the past 86 years and continues to evolve to meet the dynamic needs of students, the community, business and industry, and healthcare organizations, to name but a few stakeholders. Established in 1937 as Joplin Junior College, the State of Missouri expanded the institution's scope to a four-year college in 1967 and granted university status in 2003. Today, Missouri Southern enrolls a diverse population of students from across the United States and numerous foreign countries.

Missouri Southern has been fully accredited by the Higher Learning Commission since 1949 and has a Carnegie classification of "Master's Colleges and Universities: Small Programs." The Board of Governors has delegated day-to-day governance of the university, depending on topic and role, to the administration, Faculty Senate, Staff Senate, and Student Senate. As a result, Missouri Southern maintains a very robust shared governance environment.

The Academic Experience

The academic programs at Missouri Southern State University are organized into three professional colleges: The College of Arts and Sciences, the College of Business, Communication, and Technology, and the College of Health, Life Sciences, and Education. Each academic college is headed by a dean who oversees faculty and curricular matters.

- The <u>College of Arts and Sciences</u> is comprised of six departments: social science, justice studies, chemical and physical science, language and literature, art and design, and performing arts. This college offers the most diverse range of subjects at Missouri Southern. As the home for the majority of MSSU's general education curriculum, the College of Arts and Sciences provides the academic basis for every degree program on campus. The college is also home to the International Institute, which provides support and coordination of the university's current statewide mission in international/global education.
- The College of Business, Communication, and Technology is comprised of several disciplines, including business, computer information science, communication, mathematics, and industrial engineering technology. Much of the college's academic programming is housed in the Plaster School of Business, which provides education in traditional business disciplines such as management, marketing, international business, finance, accounting, entrepreneurship, and economics. Understanding the central role communication and technology play in the daily work of business graduates, the addition of those two departments in 2022 allowed the college to coalesce around a core set of current business skills.
- The College of Health, Life Sciences, and Education houses more than 50% of student majors at Missouri Southern and is comprised of six departments: biology and environmental health, allied health (radiology, dental hygiene, emergency medicine, respiratory therapy, and healthcare administration), nursing, psychology, teacher education, and kinesiology. Long a center of excellence for Missouri Southern, the academic programs in health and life sciences are directly related to the workforce demands of the State of Missouri, the region, and beyond.

Programs in the College of Health, Life Sciences, and Education are notable not only for their high-quality, workforce relevance, and engaged faculty, but also for their immersive facilities that enhance classroom and laboratory instruction. The college is home to a wide variety of simulation labs and other hands-on learning opportunities. Most of the programs in this college have external advisory boards comprised of thought leaders and practitioners from across Missouri and the Midwest who provide input on curriculum, student placement, facilities, and internships.

Missouri Southern's 134 full-time faculty are very engaged in the academic life of the institution and its students. Faculty lead program and curriculum development, academic advising, employer relations, internship, and post-graduation opportunities, and much more within their discipline.

The Student Experience

Missouri Southern attracts students from over 80 counties in Missouri and 36 U.S. states, as well as foreign countries. The average class size at Missouri Southern State University is less than 20 students with 87% of classes enrolling 30 or fewer students. The student to faculty ratio is 17:1, and 100% of classes are taught by professional faculty, not graduate students. These factors lead to a student experience that is highly personalized with faculty and students developing collaborative relationships that extend beyond graduation and into professional life.

Many of the university's 4,144 students (Fall 2022) report being involved in at least one of MSSU's 73 student organizations. These opportunities for engagement with campus, the community, and fellow students range from Greek life and departmental clubs to intramural sports and political/cultural interest. Students, both on-campus and online, residential and commuter alike have ample opportunity to become involved in the life of the institution.

Within the recently completed strategic plan is an emphasis on campus vibrancy with an aim of enhancing the student experience. Objectives within this strategic goal of campus vibrancy include providing comfortable and supportive facilities, become a destination for statewide academic, educational, and cultural events, providing activities that appeal to students, and recommitting the university to excellence in our intercollegiate athletic programs. Combined, this strategic focus on campus vibrancy and the student experience will only serve to enhance students' academic and social development leading to greater rates of persistence in and completion of their chosen academic program.

Facilities and Infrastructure

When Missouri Southern became a four-year baccalaureate degree granting institution in 1967, it moved from its original home in downtown Joplin, Missouri, to a 374-acre campus on the northeast corner of the city. This move allowed the institution to build from the ground up a modern, cohesive, and highly functional physical environment. Today, Missouri Southern has over 1.6 million square feet contained in over fifty unique structures that provide students, faculty, staff, and the community instructional, support, engagement, and residential spaces.

The campus' facilities are modern, attractive, appropriate for the scope and level of instruction provided, and, as with all university campuses, a challenge to maintain. Given its strength in immersive learning experiences, Missouri Southern has invested in state-of-the-art facilities in many of its disciplines, but particularly in the health and life sciences.

A recently adopted three-year facilities improvement plan aims to take a strategic approach in four key areas: instructional spaces, infrastructure, safety and security, and wayfinding and aesthetics. Campus constituents had input on the importance of improving different facilities on campus and, in 2023, the MSSU Board of Governors allocated a specific set of funds to begin a multi-year improvement of the institution's most in-need facilities.

Section II Statutory Criteria

Statutory Requirement

RSMo §173.030(9) requires institutions seeking a statewide mission to "provide to the Coordinating Board that they have the capacity to discharge successfully such a mission." This is demonstrated by evidence supporting the following:

- a) The institution enrolls a representative cross-section of Missouri residents;
- b) The institution offers one or more programs of unusual strength, which responds to a specific statewide need;
- c) The institution has a clearly articulated admission standard;
- d) The institution is characterized by a focused academic environment, which identifies specific but limited areas of academic emphasis at the undergraduate or graduate level with a demonstrated capacity to provide significant public service or research support that address statewide needs for constituencies beyond its historic service region; and
- e) The institution has adopted and maintains a program of continuous quality improvement, or the equivalent of such a program, and reports annual appropriate and verifiable measures of institutional accountability related to such programs.

In response, Missouri Southern State University submits the following evidence demonstrating satisfaction of the five criteria listed above. Also, several letters of support have been provided by statewide entities and our governing body in support of this application. They are attached to this communication in a separate document.

The institution enrolls a representative cross-section of Missouri residents

The statewide mission designation checklist identifies three examples in which a university can demonstrate capacity to discharge such a mission. Missouri Southern meets two areas within the "special population" category:

- 1) Economically Disadvantaged Students In fall 2020, Missouri Southern enrolled 883 undergraduate students who were Missouri residents but lived outside the university's historic service region. Forty-two percent (42%) of these students received Pell grants. In this same period, the percentage of undergraduates at Missouri's thirteen public universities receiving Pell grants was 26%. Therefore, Missouri Southern enrolls a greater percentage of economically disadvantaged students from outside its historic statutory service region than the average of such students enrolled at other Missouri public higher education. This demonstrates MSSU meets the first statutory criterion of enrolling a cross-section of Missouri students.
- 2) Minority Students In Fall 2020, Missouri Southern's undergraduate student body was 24% black, indigenous, or people of color (BIPOC). When broken down by residency, 22% of MSSU students are BIPOC and come from outside the university's traditional service region. The state BIPOC student average for public universities is 21%. Therefore, Missouri Southern serves a greater percentage of BIPOC students from outside our historic service region than the state average.

While the overall BIPOC statistic demonstrates compliance with this portion of the statewide mission designation checklist, that same fact is true for specific populations. For example, at Missouri public universities, American Indian and Alaska Native students make up 0.4% of all undergraduates. At Missouri Southern, American Indian and Alaska Native student from outside the university's traditional statutory service region make up 1.7% of the institution's total undergraduate population.

A second example is black or African American students. Within Missouri's public universities, 9% of the undergraduate population is black or African American. At Missouri Southern 12.5% of the undergraduate population are students who are black or African American and come from outside the university's historic statutory service region. Therefore, in both specific populations, Missouri Southern serves students at a higher rate than average for the state's other public institutions of higher education.

The institution offers one or more programs of unusual strength, which responds to a specific statewide need

International/Global Education

In 1995, Missouri Southern requested and was granted a statewide mission in international/global education. While it is the university's understanding from MDHEWD staff that we need not demonstrate compliance in our existing statewide mission in this application, we believe providing examples of achievement in international/global education demonstrates the institution's capacity for an expanded statewide mission in health and life sciences and immersive learning experiences.

In the last three decades since being granted a statewide mission, the university has excelled at achieving this aspect of our work and proposes continuing this unique focus into the future. Examples of how Missouri Southern embraces international/global education include:

- Internationalized Curriculum Beginning in 1995, faculty began to identify opportunities to integrate international/global education into the curriculum. Now, nearly 30 years later, almost all aspects of MSSU's curriculum have an international education component. In 2004, Missouri Southern was recognized by the Association of International Educators as one of only thirteen U.S. colleges and universities that had successfully integrated international/global education into its curriculum. In addition, MSSU received the Theodore Hesburgh Award for Faculty Development to Enhance Undergraduate Teaching and Learning. This recognition was directly tied to the university's international curriculum development program. To this day, Missouri Southern continues to be a national leader in international/global education.
- Themed Semester Each year, a foreign country or region is selected for the "themed semester." During the fall, faculty, staff, students, and community members participate in programming related to the history, art, music, food, cinema, language, and culture of a selected themed country. Over the last 25 years of this program's existence, countries of focus in the themed semester have included China, Japan, India, Cuba, Russia, Mexico, France, Germany, Brazil, Egypt, Thailand, Italy, Turkey, and Spain. For fall 2022, the Czech Republic was chosen and Fall 2023 will feature Ireland. Nearly fifty diverse and

unique engagement opportunities occur each fall ranging from guest lectures to cultural meals, film festivals to immersive travel. The themed semester is the primary way Missouri Southern brings international/global education to Missouri.

• Study Abroad – Currently, Missouri Southern has exchange articulation agreements with fourteen universities spread across the globe. From Sweden to Japan, Germany to South Korea, and beyond, the institution takes seriously its effort to not only send domestic students abroad to study, but also bring international students to Missouri. These opportunities to study abroad can last a few weeks to an entire academic year and allow students, both domestic outgoing and international incoming, to immerse themselves in the history and culture of a new country. In addition, studying abroad fosters a greater understanding of peoples of diverse backgrounds and perspectives. This is incredibly valuable in a world where many businesses operate on a global scale, well beyond a particular city or region.

This need for a globally educated workforce is true in the State of Missouri as well. Developing a globally competitive workforce includes acquiring a second language, better leadership and time management skills, the ability to successfully work in diverse teams, and other soft skills so desperately sought after by a variety of industries and occupations. Each of these attributes are acquired through international/global education like that offered at Missouri Southern.

Nearly every one of Missouri's largest employers has international operations. These include Boeing, Walmart, Ford Motor Company, Hallmark, O'Reilly Automotive, Purina, and Monsanto. These companies and hundreds like them seek employees who have an understanding and appreciate for other cultures and who can work seamlessly with diverse colleagues, suppliers, manufacturers, and transportation networks around the world.

Missouri Southern's 30+ year commitment to international/global education is evident in the quality of our graduates and the response of the state's workforce to that mission. Therefore, the institution is dedicated to continuing a statewide mission in international/global education.

Health and Life Sciences

Currently, Missouri Southern offers fourteen (14) high-quality programs in the health and life sciences. In these programs, Missouri Southern has the greatest number of undergraduate degree programs in the health and life sciences among public universities in Missouri (MU-Columbia also has fourteen). See Appendix 1 for more information. This concentration of programs represents a core strength of the institution's academic offerings, with over 50% of the university's undergraduate students, who come from across the State of Missouri and beyond, who have declared a major have chosen the fields of health and life sciences. These two facts support Missouri Southern's long-standing reputation as unique among Missouri's universities for having an extraordinarily broad array of health and life science academic programs.

The timing of this request to add health and life sciences to Missouri Southern's statewide mission could not come at a more critical moment. The workforce demand in Missouri for respiratory therapists, radiological technicians, nurses, dental hygienists, paramedics, and many others has never been more acute. A 2022 study by the Missouri Hospital Association found an all-time

record turnover rate (19.5%) in 28 of the state's most critical healthcare occupations. In that same report, the MHA noted that the Missouri industry with the most job postings in the state was healthcare with over 41,435 total postings in both urban and rural areas.

These two data points (turnover rate and vacancies) are especially relevant in areas where Missouri Southern excels. For example, in Missouri in 2022:

- Staff nurses (R.N.) had a 17.4% vacancy rate and a 19.4% turnover rate
- Radiology technicians had a vacancy rate of 14.2% and turnover rate of 16.3%
- Respiratory therapists had a vacancy rate of 11.6% and a turnover rate of 16.5%

This level of vacancy and turnover are indicative of position after position in the health and life sciences, necessitating a statewide mission imperative for Missouri Southern to continue to strengthen and expand its offerings in these areas.

As this core academic strength in health and life sciences has developed over the last thirty years, Missouri Southern has invested in its faculty, facilities, and infrastructure to support these fourteen high-quality academic programs. Recent examples of investment include:

- An extensive renovation of the university's science facility, Reynolds Hall, to include state-of-the-art laboratory and teaching facilities that support both the health and life sciences.
- Construction of the Leon Health Sciences Building, a modern facility containing clinical facilities for all the institution's health science programs. This includes simulation facilities for nursing, respiratory therapy, EMT/paramedic, and radiology.
- Plans to construct a \$40 million Health Science Innovation Center to expand clinical facilities in support of nearly all MSSU's health and life science programs. This includes a full simulation hospital, expanded cadaver lab, and collaborative research labs for both internal and external research partners.

Finally, most of Missouri Southern's academic programs in the health and life sciences have received specialized accreditation, thereby ensuring current and prospective students a high degree of quality and workforce relevance. External accreditations include:

- Nursing the Accreditation Commission for Education and Nursing (ACEN).
- <u>Dental Hygiene</u> The Commission on Dental Accreditation of the American Dental Association (CODA).
- Allied Health The Commission on Accreditation of Allied Health Education Programs (CAAHEP), the Joint Review Committee on Education in Radiologic Technology (JRCERT), and the Commission on Accreditation for Respiratory Care (CoARC).
- Environmental Health and Safety The National Environmental Health Science and Protection Accreditation Council (NEHSPAC)

Missouri Southern State University currently has a core strength in the health and life sciences as demonstrated by its high-quality academic programs, facilities, and faculty. As a leading academic center in the health and life sciences in Missouri, MSSU is responding to a critical workforce need

in the state that will allow Missouri to continue to grow economically. As evidence of this fact, healthcare providers are three of the top seven employers of Missouri Southern graduates. Based on these facts, the institution's request to add health and life sciences to its statewide mission is therefore appropriate and clearly justified.

Immersive Learning Experiences

Founded first as a community college and then expanded over 55 years ago to a four-year institution, Missouri Southern has always had a focus on engaging students in their learning. Many of our strongest academic programs are enhanced because of this focus on immersive learning. With several recent additions, Missouri Southern has developed a core body of programs and facilities that allow the students to learn by doing.

The critical role immersive learning plays in a student's educational experience was recently codified into Missouri Southern's five-year strategic plan. Objective #1 under strategic goal #1 (academic excellence and quality programs) reads: Immersive learning experiences . . . will be essential to academic programs. By placing immersive learning front and center in the university's new 2023-2028 strategic plan, Missouri Southern is very clearly communicating to current and prospective students and employers its commitment to and the value of hands-on learning.

As part of that strategic planning process, university faculty developed a definition of immersive learning experiences:

Immersive learning is learning through comprehensive experiences within realistic environments that promotes cognitive and skills development, investigation, problem solving, adaptation, and application.

Missouri Southern believes immersive learning experiences enhance the students' classroom, laboratory, and studio experiences by helping them develop skills that will make them more effective on the job. For example, a life science major could utilize virtual reality (VR) to enter the blood stream, see red blood cells flow through veins, arteries, and the heart, and learn firsthand how blockages can be addressed through intervention both surgical and therapeutic. Experiences such as these are possible using immersive learning without ever stepping foot in a clinical setting and are replicable and customizable to a degree impossible in the real world. They, therefore, strengthen a student's academic learning and, ultimately, their efficacy in the workforce.

Examples of immersive learning experiences at Missouri Southern include:

- <u>Cadaver Lab</u> Currently, Missouri Southern is the only Missouri public college or university that has a cadaver lab open to undergraduate students. This facility gives students majoring in health and life sciences a distinctive advantage not only in the workforce, but also in their pursuit of graduate degrees.
- Dental Hygiene Clinic Dental hygiene students can work on real patients and practice their clinical skills under the guidance of MSSU faculty and a supervising dentist. Open two days per week, this immersive learning experience is critical to mastering proper technique, patient interaction, and working with a supervising dentist.

- Patient Simulation Lab To allow students the opportunity to have simulated patient experiences before engaging in clinicals with real patients, MSSU's simulation lab is a state-of-the-art high-fidelity lab containing six adult patients and two youths.
- Study Abroad Last year, 132 Missouri Southern students traveled abroad to immerse themselves in the language and culture of a foreign country. This experience transforms their perspective of both their academic discipline and working in a global economy.
- Global Leaders Program In 2021, Missouri Southern launched the Global Leaders program to enhance the leadership development of its most academically talented students. As part of this program, unique among Missouri universities, students receive a \$4,000 stipend to travel, participate in internships, and travel to academic conferences. Leadership speakers are also brought to campus regularly as part of the Global Leaders initiative.
- Nursing VR Lab Funded by private gifts in 2022, the nursing virtual reality (VR) lab provides students with a truly immersive experience in a wide variety of patient care scenarios. Students who slip on the VR goggles are transported to real-world learning experience that is very difficult, if not impossible, to replicate in actual clinical experiences.
- Ambulance Simulator EMT/paramedic students at Missouri Southern graduate knowing exactly what it feels like to treat a patient while moving down a bumpy road at a high rate of speed. MSSU's two-bay ambulance simulators provide immersion into that cramped environment where time, accuracy, and quick thinking are critical to quality patient care.
- Acacia Center Students studying in MSSU's applied behavioral analysis program can work directly with autistic clients and their families. The Acacia Center is a real-world environment that offers ABA therapy, treatments focused on social skills, emotional regulation, vocational/daily living skills, as well as parent/caregiver consultation.
- <u>Mock Courtroom</u> Missouri Southern is home to a courtroom that precisely replicates the layout and feel of a real facility. The mock court room allows the university's pre-law and criminal justice students to immerse themselves in the experience of litigating and testifying in a trial something of great value as they prepare for careers in the law.
- Student Investment Portfolio For over 20 years, Missouri Southern's economics and finance majors have had the opportunity to invest actual dollars as part of the Missouri Southern Foundation's investment portfolio. Initially a \$250,000 fund, the student's diligence in researching and investing has more than doubled the fund's value.
- <u>Lion Cub Academy</u> Early childhood education students receive hands on experience working with children ages one to six in MSSU's Lion Cub Academy. A fully licensed operating day-care, the LCA provides hands-on experience in this high-demand field.
- TV Production Studio Communication students at Missouri Southern can experience live broadcasts both in front of and behind the camera. The university's state-of-the-art television production studio allows hands on practice for students entering a wide range of workforce opportunities in the state.

- <u>Digital Media Lab</u> Using a MoExcels grant in 2022, Missouri Southern created a digital media lab to enhance its programs in digital art, design, and communication.
- MOSO CAPS Started in 2022, Missouri Southern is home to the nation's only CAPS (Center for Advanced Professional Studies) program housed on a university campus. High school students are placed in jobs with industry to "test drive" high-demand careers in Missouri. This immersive experience is coupled with college courses in relevant disciplines to better prepare them for the rigors and expectations of college study.
- Shooting Range As a licensed basic training center for the Missouri Peace Officer Standards and Training program, Missouri Southern is one of the few institutions to have a fully-functioning indoor firing range. This allows both criminal justice and law enforcement academy students to hone their firearms skills in a safe environment.
- Work-Based Learning Industrial engineering technology students at Missouri Southern gain real-world experience through project work with industry partners in four courses during their undergraduate program. All students do a 5S project, capability study, facilities management project, and six sigma project at an organization as part of the curriculum.

In its current fundraising campaign, Lions Forward, Missouri Southern is seeking a \$3 million investment from private philanthropy to enhance existing and create new immersive learning experiences across campus. This goal represents roughly 10% of the overall campaign goal of \$31.5 million and demonstrates the institution's commitment to immersive learning and the impact it can have on our graduates and the state's workforce needs for generations to come.

Given the breadth and depth of immersive learning experiences at Missouri Southern and the degree to which they have been integrated into the curriculum, it is appropriate that the State of Missouri recognize this core strength of the institution by designating MSSU as having a statewide mission in immersive learning experiences.

The institution has a clearly articulated admission standard

Missouri Southern State University's clearly articulated admission standard is "moderately selective" as defined by RSMo §173.0052(6) and approved by the Coordinating Board for Higher Education.

The institution is characterized by a focused academic environment, which identifies specific but limited areas of academic emphasis at the undergraduate or graduate level including the identification of programs to be continued, reduced, terminated, or targeted for excellence.

Over the last decade, Missouri Southern, like many institutions of higher learning in the state, has gone through several cycles of program evaluation, reduction, and termination. This exercise is a valuable and ongoing process as the institution attempts to maintain its academic focus, financial sustainability, and service to the state.

The institution will, consistent with its focused academic environment, also have the demonstrated capacity to provide significant public service to address statewide needs for constituencies beyond its historic statutory service region.

Missouri Southern's historic statutory service region is defined in RSMo §174.453(4) as Barton, Jasper, Newton, McDonald, Dade, Lawrence, and Barry Counties in the State of Missouri.

International/Global Education

Having had a statewide mission in international/global education for nearly three decades, Missouri Southern is a national leader in this arena as characterized by the institution's academic and co-curricular programming. The following two examples illustrate how Missouri Southern is uniquely providing significant public service in the area of international/global education:

- Themed Semester Each year, a foreign country is selected for the "themed semester." During the fall, faculty, staff, students, and community members participate in programming related to the history, art, music, food, cinema, language, and culture of a selected themed country. For fall 2022, the Czech Republic was chosen and Fall 2023 will feature Ireland. Nearly fifty engagement opportunities occur each fall. For example, each year MSSU hosts an international food and beverage festival, widely attended by members of the public and campus community.
- Southern Safari For many years, Missouri Southern has produced an international travel program for alumni, community members, and other constituents. Known as Southern Safari, this program allows adult learners to immerse themselves into the themed semester country through guided tours with MSSU faculty and staff. For example, in 2003, the themed semester country was Cuba. Subsequently, nearly forty alumni and friends traveled with MSSU faculty to Cuba to better understand the country, its history and culture.

Missouri Southern has long felt its statewide mission in international/global education was created to bring the world to Missouri Southern and Missouri Southern to the world. In achieving that mission, Missouri Southern has developed and annually produces a broad spectrum of unique activities not typically found on other university campuses.

Health and Life Sciences

As was mentioned earlier, over half of Missouri Southern's current undergraduate students major in disciplines in the health and life sciences. Such a high concentration of academic emphasis brings the health and life sciences to the forefront and provides Missouri Southern the opportunity to serve the State of Missouri in a way unique among the state's public universities. The following three examples illustrate how Missouri Southern is providing significant public service to address statewide needs of constituents beyond its historic service region:

■ Early Acceptance Program — Missouri Southern, through a unique partnership, attracts high-achieving students from across the State of Missouri, including metropolitan areas such as Kansas City, St. Louis, and Springfield, and the state's rural areas. In 2017, Missouri Southern entered a one-of-a-kind partnership with Kansas City University's medical school located in Joplin, Missouri. Known today as the Missouri Southern-Kansas

City University Early Acceptance Program (MKEAP), this program allows high-achieving students graduating from high school to be simultaneously accepted to both MSSU's accelerated three-year pre-medicine undergraduate program and KCU's Doctor of Osteopathic Medicine program. This seamless early acceptance program means a student graduating from MSSU does not have to take the MCAT nor apply for admission to KCU. Instead, they walk across the stage at commencement and move directly into their first year of medical school. The 2017 medical school early acceptance partnership provided Missouri Southern 25 spots each year in KCU's entering medical school class. A separate agreement reached in 2022 created an identical program for ten MSSU students entering KCU's dental school.

Currently, Missouri Southern is the only university with whom Kansas City University has such a unique partnership and, to our knowledge, the only public university in the nation with both an accelerated pre-med program, customized pre-med curriculum, and early acceptance programs to both a medical and dental school.

Many of these MKEAP students will stay in Missouri and help mitigate the state's critical shortage of doctors and dentists, particularly in rural areas.

- Health Science Innovation Center Missouri Southern is currently in the design phase of constructing a transformational, best-in-class education and training facility to serve its burgeoning health and life science academic programs. Known as the Health Science Innovation Center, this \$40 million facility will be constructed on MSSU's campus and opened in 2026. Containing several spaces that will dramatically enhance not only the university's current health and life science programs, but new programs currently being developed. These spaces include a full simulation hospital with suites for critical care, surgery, emergency medicine, obstetrics/gynecology, and home health care; a radiology laboratory containing a ceiling-mounted x-ray system, a mobile x-ray unit, c-arm mobile imaging unit, and a 16-slice CT scanner; and collaborative research space to facilitate both undergraduate research and faculty research within Missouri Southern and with statewide partners in education and industry. This magnificent facility will allow Missouri Southern to not only produce more graduates in the health and life sciences, but also provide training opportunities for industry professionals across the State of Missouri and the region. Both of these steps forward will significantly impact the university public service profile.
- Engagement with Missouri Biotechnology Association (MOBIO) The university has established a growing relationship with the Missouri Biotechnology Association (MOBIO), Missouri's statewide industry association dedicated to championing the life sciences. This relationship provides the university with a statewide perspective on the life sciences and an opportunity to collaborate with leading Missouri life science entities. A letter from MOBIO in support of Missouri Southern's request for a statewide mission in health and life sciences is included as part of this proposal. Currently, MSSU is working with MOBIO to develop collaborative outreach and education programs, focused on high school students, that would help expand the state's talent pipeline in the health and life sciences. The President of Missouri Southern State University, Dr. Dean Van Galen serves on the MOBIO Board of Directors.

Responsiveness to Workforce Needs – Through contact with individual health systems and employers as well as through the Joplin Regional Alliance for Healthcare and Health Science, Missouri Southern is closely aligning its programs and initiatives with the state and region's workforce demands. For example, Missouri Southern is currently working collaboratively with the Missouri State Board of Nursing to chart a path whereby the university could, in the coming years, expand its annual cohort of nursing students from 30 to 60, and perhaps beyond. While this will require the approval of the MSBN, factors such as the Health Science Innovation Center will have a significant impact on that application and the university's ability to impact the public's healthcare in the decades to come.

Immersive Learning Experiences

Missouri Southern has long had a reputation as an institution that values learning by doing. A number of the university's academic programs have immersive learning experiences built into their curriculum and facilities (see list previously in application). Missouri Southern believes immersive learning brings technical competence to our graduates beyond that found simply in traditional classroom or laboratory experiences. To that end, the university has proactively invested in immersive learning, even including it as one of the seven strategic priorities in its current comprehensive fundraising campaign, *Lions Forward*. The following two examples illustrate how MSSU is providing significant public service in immersive learning experiences:

- Elementary Student Free Sealant First- and second-year health science students at Missouri Southern participate in an annual program that provides free dental sealants to second and sixth graders in rural Missouri school districts. The program is a benefit not only to university students who learn hands-on skills, but it also provides low-income elementary school students with free sealants, which in the long run helps to prevent cavities. Prior to the sealant application, MSSU dental hygiene students, under the supervision of faculty, perform a routine dental exam. Results of this exam also help these students with early intervention on oral health problems that might otherwise go undetected. In addition, MSSU nursing students provide education classes related to good oral healthcare (e.g. the impact of soda on one's teeth and the importance of brushing and flossing). The elementary school free sealant program is offered both on Missouri Southern's campus and remotely thanks to the purchase of a dental hygiene trailer, thereby providing significant public service to rural elementary schools across Missouri. While this program is used here to illustrate immersive learning experiences, it also is indicative of the broader statewide impact of our academic programs in health and life sciences.
- Law Enforcement Academy Located in the same campus facility as the university's criminal justice undergraduate and graduate programs, the MSSU Law Enforcement Academy trains police officers to fill the state's critical demand for such public safety officials. A significant amount of the training in the law enforcement academy is immersive in nature, including gun safety and proficiency using the university firing range; offensive and defensive driving skills in the institution's auto simulation laboratory; crime scene investigation skills in the in-house crime scene and laboratory; and safety protocols related to traffic stops. All combined, these immersive learning experiences through the law enforcement academy, available to both students and the state's current officers, provides an important way to teaching tactical skills that previously could only be learned on the job a dangerous situation for all involved.

The institution has adopted and maintains a program of continuous quality improvement, or the equivalent of such a program, and reports annual appropriate and verifiable measures of institutional accountability related to such programs.

Missouri Southern is highly attentive to indicators of quality such as student learning, retention, persistence, and graduation rates, graduate placement rates, and employer satisfaction. The university utilizes these measures to help inform an ongoing commitment to quality improvement across the institution. Additional information is available upon request and was recently provided extensively to the Higher Learning Commission as part of our year four mid-cyl3e review in 2023.

Missouri Southern State University maintains a robust protocol of course and program assessment as well as a comprehensive schedule of program review. The university's Program Assessment and Review Committee manages these processes for all academic units. Historically, academic programs complete a comprehensive program review process every five years and an assessment report every two years. Continuous quality improvement specific to the areas for which Missouri Southern is applying for a statewide mission:

International/Global Education

For courses that have international/global content, the performance of faculty and the curriculum is evaluated every semester. In addition, Missouri Southern has robust relationships with partner institutions of higher education around the globe. These relationships allow MSSU to know of opportunities for improvement on an ongoing basis. Changes to improve the quality of the international/global experience are made continuously as cultural and political climates shift around the world.

Health and Life Sciences

Because of the licensure requirements for many programs in the health and life sciences, assurance of quality is built into the pass rates on licensing examinations. The most recent pass rates for Missouri Southern graduates include:

LICENSURE EXAM PASS RATES

Program	2023	2022	2021	2020
Nursing	92%	87.8%	88%	79%
Dental Hygiene	100%	96%	91%	100%
Respiratory Therapy	73%	90%	87%	90%
Radiology	100%	100%	100%	100%
Paramedicine	Not Available	72%	50%	50%

Each of the above pass rates represents a benchmark above the industry standard, thereby demonstrating the quality of MSSU's health and life science programs when compared to other post-secondary peers.

Another measure of quality and continuous improvement in the health and life sciences is the job placement rate for recent graduates. Given the workforce demands for such graduates, a high placement rate might be anticipated, the strength of the academic program and the skills those students bring to industry is also a factor in high placement rates. For the last four years, the job placement rate in the health sciences has been:

JOB PLACEMENT RATES

Program	2023	2022	2021	2020
Nursing	100%	94%	87%	98%
Dental Hygiene	100%	100%	100%	100%
Respiratory Therapy	91%	100%	87%	90%
Radiology	100%	100%	100%	100%
Paramedicine	100%	100%	100%	100%
Healthcare Administration	Not Available	85%	100%	100%

Finally, most of the academic programs in the health and life sciences at Missouri Southern State University are externally accredited, thereby ensuring current and prospective students a high degree of quality and workforce relevance. External accreditations include:

- <u>Nursing</u> the Accreditation Commission for Education and Nursing (ACEN).
- Dental Hygiene The Commission on Dental Accreditation of the American Dental Association (CODA).
- <u>Allied Health</u> The Commission on Accreditation of Allied Health Education Programs (CAAHEP), the Joint Review Committee on Education in Radiologic Technology (JRCERT), and the Commission on Accreditation for Respiratory Care (CoARC).
- Environmental Health and Safety The National Environmental Health Science and Protection Accreditation Council (NEHSPAC)

Immersive Learning Experiences

While immersive learning experiences themselves are not individually accredited nor evaluated, they are an important component of specialized accreditation within the degree program they serve. For example, the simulation hospital is an important element of accreditation for both the nursing, dental hygiene, and allied health fields. The value of immersive learning experiences is found in the enhanced technical skills practiced in those environments. The outcomes of those enhanced skills are, therefore, to be found in licensure pass rates and job placement rates.

Section III Mission Implementation

Over the past nearly three decades, Missouri Southern has demonstrated success in implementing and living out its current statewide international/global education mission. This level of commitment will also be exhibited in implementing two new elements of its statewide mission: health and life sciences, and immersive learning experiences. Examples of how Missouri Southern plans to implement new elements of its statewide mission include:

Health and Life Sciences

- Academic Program Development: Missouri Southern has already begun to develop new academic programs that will further enhance its strength in the health and life sciences and provide evidence of implementation of a new statewide mission. These master's degree programs include healthcare administration, nursing, and a healthcare emphasis within the new Master of Science in data analytics degree.
- Talent Recruitment: The university will continue and intensify its efforts to recruit students, and faculty, in the health and life sciences. Initiatives will include intensified admissions and marketing to majors in those two fields, continued development of new high-demand academic programs, and ensuring a supportive environment for faculty, staff and students.
- Facilities: A new \$40 million Health Science Innovation Center is currently in the design phase with groundbreaking planned for spring 2024 and opening in early 2026. Containing a full simulation hospital, radiological laboratory, collaborative research space, and training/conference facilities, this state-of-the-art facility will play a critical role in implementing the new statewide mission. It will also serve as a training and education resource in the health and life sciences in collaboration for industry throughout Missouri.
- External Engagement: In addition to engagement by faculty with their respective disciplines, the university will engage external groups focused specifically on the health and life sciences. This includes the Joplin Regional Alliance for Healthcare and Health Science (a group of business, education and community leaders that was established in 2022) and the Missouri Biotechnology Association. In addition, Missouri Southern seeks national perspectives on the growing fields of health and life sciences and is currently engaged with TEConomy, a consulting group assisting in the development of a strategic plan in healthcare and health education. Crowder College and Kansas City University's schools of osteopathic and dental medicine are also part of this initiative.
- External and Philanthropy Support: The university will continue its robust and successful efforts in seeking external funding to support health and life sciences at MSSU. The university has already secured over two-thirds of matching funds originally required by the State of Missouri for the Health Science Innovation Center. In addition, through a recent \$1 million gift, the university will launch the Willcoxon Innovation in Healthcare Summit and the Willcoxon Scholars program in 2024.

Faculty Development: Missouri Southern faculty in the health and life sciences will have numerous professional development opportunities to learn best practices when it comes to integrating immersive learning experiences into their classroom and field activities. For example, a recent philanthropic gift allowed the university to create a virtual reality lab in its nursing program. Faculty in nursing have received training in how to use that VR lab across the program's curriculum. Such training will be vital to the ongoing implementation and success of immersive learning experiences at Missouri Southern.

Immersive Learning Experiences

Facilities: The university will continue to invest in existing and develop new immersive learning spaces and platforms (including virtual). As an example, the new Health Science Innovation Center will include a simulation hospital and new virtual learning spaces. The university's commitment to immersive learning is documented in its 2023-2028 strategic plan as well as being one of the seven goals of the institution's current comprehensive fundraising campaign and, as such, will provide a platform for multiple academic units to strengthen immersive learning experiences in their curricula.

Is there evidence the institution requesting statewide mission has consulted with the institution's board members regarding the change in form and function of the board.

Missouri Southern State University's Board of Governors voted on May 17, 2023, to approve the institution's proposal to expand its statewide mission to include health and life sciences and immersive learning experiences. While this new mission will significantly enhance the institution's academic programs, no change in the form and function of the MSSU Board of Governors is anticipated.

Section IV Conclusion

A History of Service to the State

Since 1995, Missouri Southern State University has successfully implemented a statewide mission in international/global education. The institution's leadership in this area and service to the state are well documented both within this application and in the minds of the thousands of internal and external constituents served over the past 28 years. While Missouri Southern wishes to continue its statewide mission in international/global education, two new centers of excellence have emerged that clearly merit acknowledgement by the state: health and life sciences and immersive learning experiences.

Recognizing Strengths

As Missouri Southern continues to grow and serve the state's academic, cultural, and workforce needs, the university sees an opportunity to formally acknowledge a long-identified strength in the areas of health and life sciences and immersive learning experiences. Academic vibrancy in these

two areas has emerged because of Missouri Southern's strong ties to business and industry. As the State of Missouri experienced greater demand in the health and life sciences, Missouri Southern responded with expanded programs and capacity. As industry leaders recognized the benefit of immersive learning experiences in better educating graduates and preparing them for an immediate impact in the workforce, Missouri Southern responded by adding more such opportunities.

All told, MSSU has emerged as a leader in the health and life sciences and immersive learning experiences not simply because it chose to do so, but because it embraced its founding role in expanding opportunities for Missouri residents to live a better life by fueling the state's burgeoning economy – a win for both citizen and state.

Formal Request

MSSU's students, faculty, staff, alumni, and stakeholders from across Missouri respectfully request the Coordinating Board for Higher Education formally acknowledge the statewide impact Missouri Southern is having in the areas of global/international education, health and life sciences, and immersive learning experiences by expanding the university' mission. A statewide mission in these three areas will allow Missouri Southern to better meet the growing demand for talent in a state that has no limits to its long-term potential.

Justification for this expanded mission, as the university has demonstrated throughout this application, is that Missouri Southern:

- Serves students and employers from across the state;
- Has unusual strength in global/international education, health and life sciences, and immersive learning experiences;
- Has the capacity to provide significant public service to the state in these areas; and
- Is focused on continuous quality improvement in pursuit of this new statewide mission.

Your thoughtful consideration of this application is greatly appreciated.

Appendix I: Undergraduate Degree Programs in the Health and Life Sciences at Missouri Public Universities

Includes Associate and Bachelor's Degree Counts by CIP codes using the Missouri College and Degree Inventory from Missouri Department of Higher Education and Workforce Development

	CIP	Harris-Stowe	Truman	Northwest Missouri	Central Missouri	Lincoln	Missouri Southern	Missouri State	Missouri Western	Southeast Missouri	MU - Columbia	MU - Kansas City	MU - Science & Tec	MU - St. Louis
Biology, General	26.01	1	2	2	1	1	2	3	1	1	2	2	2	2 🛱
Biochemistry, Biophysics and Molecular Biology	26.02	***************************************	1	************			Maria de		1	1	11		ARRAMINI AND THE PROPERTY OF T	1 7
Microbiological Scienes and Immunlogy	26.05						7.00 (Chie				11	·		=== <u>=</u>
Physiology, Pathology and Related Sciences	26.09	*********		Taktomie (ricolectect)	***************************************			******************************	AND THE PERSON OF THE PERSON O		entre Lagrania		**************	‡
Biomathematics, Bioinformatics, and Computational Biology	26.11				1									
Ecology, Evolution, Systematics, and Population Biology	26.13			1										. II.
Sports, Kinesiology, and Physical Education/Fitness	31.05		1		2		2	1	1	2				1 9
Health Services/Allied Health/Health Sciences, General	51.00			1	1		wan dange	1		1	1	1		
Communication Disorders Sciences and Services	51.02		2		1			1		1	1			Soci
Dental Support Services and Allied Professions	51.06						2				Y 45 C	2		1
Health and Medical Administrative Services	51.07	1					1		1	1				S I
Allied Health and Medical Assisting Services	51.08								1		11			a
Allied Health Diagnostic, Intervention, and Treatment Professions	51.09		1	3	1	1	2	3	1	1	1			₫.
Clinical/Medical Laboratory Science/Research and Allied Professions	51.10			1	1	1	rre t ipi	1	1	1				<u> </u>
Public and Environmental Health	51.22		1				2		1	1	1	1		
Rehabilitation and Therapeutic Professions	51.23		1								M.10			
	51.31			1			44.554	1		1	**************************************			d i
	51.38		1	1	1	2	1	2	1	1	2	2	_	2 3
Health Professions and Related Clinical Sciences, Other	51.99						3. 1							Attachment A The Designation
														ion
TOTAL	L	2	10	10	9	5	14	13	9	11	14	8	2	6

Coordinating Board of Higher Education September 13, 2023

JOPLIN REGIONAL ALLIANCE FOR HEALTHCARE & HEALTH SCIENCE



July 13, 2023

Dear Commissioner Boggs:

The Joplin Regional Alliance for Healthcare and Health Science is a collaborative coalition of key regional leaders who are envisioning, supporting and advancing excellence and growth in health-related initiatives. Our group understands the critical importance of healthcare and the life sciences as a driver of Missouri's economy and quality of life, and the need to develop talent and models of excellence in the health and life sciences. Based on the unique strengths and clear commitment of Missouri Southern to these areas, we are writing to strongly support the request of Missouri Southern State University to expand its statewide mission to include health and life sciences.

Missouri Southern supports a significant number of high-quality programs in health and life sciences. These academic areas constitute historical and current strength of MSSU—over 50% of the university's students with declared majors in the health and life sciences—and the university's array of health and life science academic programs is extraordinarily broad for a regional public university. This includes some relatively unique programs such as dental hygiene and environmental health and safety, and recently added programs in healthcare administration and biomedical sciences.

We are excited about the university's clear commitment to further the development of its health and life science programs to serve the region and the State of Missouri. Of special note is a facility that will support future collaboration and growth—the \$37.5 million Health Science Innovation Center that is currently in the design phase with completion scheduled for spring 2026.

Beyond the obvious academic strengths of Missouri Southern, we point out that the university's location in Joplin and far southwest Missouri makes it especially well-suited for this distinctive statewide mission:

- The Joplin metropolitan area is a regional hub for health care and health and life science education. The region benefits from two strong healthcare systems (Mercy-Joplin and Freeman), and an extraordinary array of educational institutions including Missouri Southern, Crowder College, and the Kansas City University (KCU) medical school (opened in 2017) and the KCU dental school (opened in 2023). Missouri Southern is actively collaborating with these entities on academic pathways, internships, clinical placements, and the MOSO CAPS program.
- Missouri Southern is in a region of the state that exemplifies the serious population health
 challenges and disparities that plague much of Missouri. Missouri Southern is a critical part of
 the Joplin Regional Alliance for Healthcare and Health Science, and part of our goal is to build a
 new model for economic and community development to help address challenges faced by
 underserved populations in much of rural Missouri. Much can be learned here.

It is these unique challenges and opportunities that have brought us together as a group of leaders—to benefit not only Joplin but the State of Missouri—and potentially to serve as a national role model.

We urge you to support the inclusion of Health and Life Sciences in the Coordinating Board for Higher Education's statewide mission for Missouri Southern State University.

Sincerely,

Jeremy Drinkwitz

President, Mercy Health SW MO, KS, Mercy Hospital Joplin **Nick Edwards**

Joplin City Manager

Paula Baker

President and CEO, Freeman Health System

Katricia Pierson, Ph.D.

President, Crowder College

Stephanie Brady

Executive Director, Community Clinic of SW Missouri

Rudy Farber

Chair, Community Bank & Trust

Bryan Vowels

CEO/Financial Advisor, Vowels Stovern Wealth, LLC

Keenan Cortez

Joplin Council Member/Mayor Pro-Tem

Ryan Stanley

Civic Leader/Former Joplin Mayor

Travis Stephens

President, Joplin Area Chamber of Commerce

Dr. Tracy Godfrey

Chief Medical Officer, Access Family Care

Dean Van Galen, Ph.D.

President, Missouri Southern State University



July 12, 2023

Dr. Bennett Boggs Commissioner Missouri Department of Higher Education and Workforce Development 301 West High Street; Suite 860 Jefferson City, MO 65101

Commissioner Boggs:

I am writing on behalf of the collective membership of the Missouri Biotechnology Association (MOBIO). MOBIO is Missouri's only statewide industry association dedicated to championing life sciences. MOBIO was recently made aware of Missouri Southern State University's application to the Missouri Department of Higher Education and Workforce Development (MDHEWD) for an expanded statewide mission, most notably the addition of the health and life sciences. We have reviewed materials provided by Missouri Southern and enthusiastically write today to endorse this application for a mission change.

Missouri Southern has a significant number of high-quality health and life sciences programs that form a solid core to the university's academic programs. As we understand it, over 50% of the university's students have declared majors in the health and life sciences areas. Many of these academic programs hold significance to MOBIO and the industries we represent, including the university's outstanding program in environmental health and safety – one of the finest such baccalaureate programs in that field in the Midwest. The State of Missouri made a significant investment in that program recently with a MoExcels grant. These funds allowed Missouri Southern to modernize and expand its curriculum in environmental health and safety to help meet the growing workforce demands of the state.

In addition, Missouri Southern has made a clear commitment to further develop its academic capacity in health and life sciences. Missouri Southern recently completed a comprehensive renovation of its science facility — completely modernizing its labs and classrooms to better prepare graduates for the industry. Planning is underway for a \$40 million health science innovation center. This center will positively impact how Missouri Southern educates health and life sciences students. The addition of simulation laboratories, collaborative research space, and expanded teaching facilities will dramatically impact the university's quality of graduates, thereby benefiting the entire State of Missouri.

Finally, we are impressed that Missouri Southern is taking a leadership role in convening the industry in collaborative, strategic conversations about how to leverage best the university's strengths in the health and life sciences. The creation of a regional healthcare alliance and Missouri Southern's active participation in MOBIO activities leads us to believe the institution takes seriously its role in responding to industry needs in educating students in these two critical areas.

P.O. Box 148 · Jefferson City, MO 65102-0148 · PHONE: 573.690.9267 · mobio.org

MOBIO's definition of the life sciences is intentionally broad and all-inclusive. It would be a critical mistake to categorize the life sciences as only human-health oriented when agricultural technology like plant sciences, animal health and nutrition, and biofuel developments will continue to have their systems discovered over the next century. Our industry is comprised of top Ph.D. / M.D. researchers, but these positions can only be effective in Missouri if the entire workforce pipeline is filled with educated and up-skilled talent that can continue to learn and evolve to succeed in tomorrow's knowledge-based ecosystem. Many institutions across Missouri have incredible life sciences successes, from conducting novel research to training health care clinicians. We are thrilled that Missouri Southern is directly steering into this great economic opportunity that will continue strengthening our state and country.

Based on the factors described above, Missouri Southern is clearly positioned to effectively carry a statewide designation as a leading institution of higher education in the areas of health and life sciences. We applaud their focus in these two areas, endorse their application for an expanded statewide mission, and encourage MDHEWD and the Coordinating Board for Higher Education to approve this initiative.

If you, your staff, or members of the Coordinating Board have questions about our endorsement of this application, we stand ready to visit at any time.

Best regards,

Kelly Patrick Gillespie Executive Director



July 12, 2023

Dear Commissioner Boggs:

TEConomy Partners is a global leader in research, analysis, and strategy for innovation-driven economic development. Our firm has a long history of working in Missouri, including projects for the Missouri Technology Corporation, Missouri Department of Economic Development, Missouri Agricultural Foundation, the University of Missouri, Cortex, and the STL GeoFutures Initiative. Currently, we are developing a comprehensive strategy for advancing the Joplin regional economy, focusing on the community's education and healthcare assets. On behalf of TEConomy, I am writing to strongly support the request of Missouri Southern State University to expand its statewide mission to include health and life sciences.

We are finding that the Joplin region has an extraordinary base of assets in higher education and advanced healthcare for an area of its size. Two large hospital systems (Freeman and Mercy-Joplin) serve a critical role as healthcare providers for a multi-state regional population. In addition, the presence of both a medical school and dental school (unique for a community of Joplin's size), in combination with Missouri Southern State University and a robust community college system, provide broad assets across a spectrum of post-secondary education. While these assets are real signatures for Joplin, there are evident gaps in alignment between the higher education and healthcare sectors regarding the supply of graduates with the credentials and education needed to fulfill a wide spectrum of healthcare careers. For example, our analysis shows that the hospital systems can absorb upwards of two times the number of nurses educated across the broad SW MO and adjacent multi-state region. This imbalance between supply and demand exists also in multiple allied health occupations.

MSSU plays a critical role in helping the region solve its healthcare workforce challenges, and we believe an expansion of MSSU's mission to include health and life sciences can play a supportive role in advancing these efforts. The University is already engaged in extensive educational programs that bring high-quality education to students studying healthcare and life science-focused majors. Indeed, upwards of 50% of the student body at MSSU is enrolled in programs in these fields. Healthcare and life sciences education delivery will be further enhanced by forthcoming investment on the MSSU campus in the Health Science Innovation Center, a \$37.5 million facility set to open in 2026.

MSSU is clearly a key strategic institution in meeting the region's current and future needs and opportunities for economic advancement rooted in the large and fast-growing healthcare sector. We believe the ongoing growth and development of MSSU in meeting regional and state needs would be enhanced by formally recognizing Health and Life Sciences as a statewide mission for the University. We respectfully encourage the Coordinating Board for Higher Education to consider expanding the designated mission of Missouri Southern State University to include Health and Life Sciences.

Sincerely,

Simon J Tripp

Principal and Senior Director

Innovating Tomorrow's Economic Landscape

Figure 1: There is a significant supply and demand imbalance between regional job postings for graduates with healthcare credentials and regional higher education output. Source: TEConomy analysis of NCES IPEDS and Lightcast Job Postings data (Datarun 2023.2).

Total Degrees and Unique Job Postings for Key Roles (2017-2022) in MOKAN Region

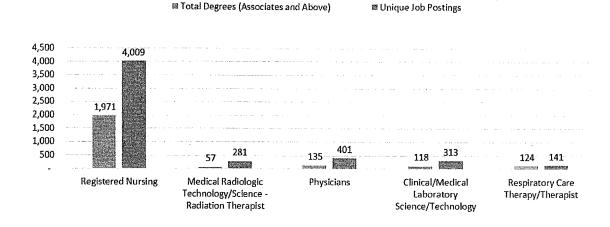


Figure 2: The region has experienced overall increases in demand for healthcare workers since 2018, with an especially steep rise in job postings starting in January of 2022. Source: TEConomy analysis of Lightcast Job Postings data (Datarun 2023.2)

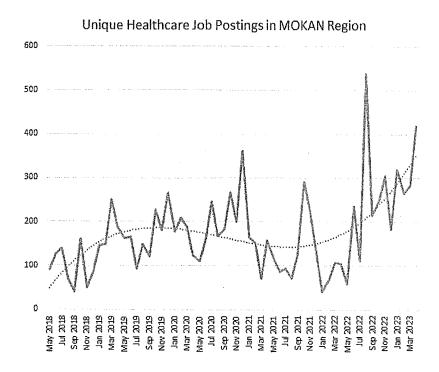
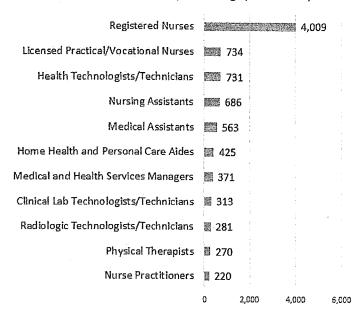


Figure 3: Nursing is the highest demand occupation, but multiple allied health positions are also evident. Source: TEConomy analysis of Lightcast Job Postings data (Datarun 2023.2)

Leading Occupations by Unique Postings (2017-2022)





MISSOURI SOUTHERN STATE UNIVERSITY

Board of Governors

July 11, 2023

Dear Commissioner Boggs:

Missouri Southern State University is proposing to update its statewide mission to add **Health and Life Sciences** and **Immersive Learning Experiences** to our current statewide mission of **International/Global Education**. One of the requirements of a successful proposal to the Coordinating Board for Higher Education is to provide evidence that the institution's governing board, in this case the Missouri Southern State University Board of Governors, has been consulted on this matter. In this case, <u>approval of an expanded mission for Missouri Southern will not result in any change to the form and function of the board.</u>

However, on behalf of the Board of Governors, I want to communicate that the Board is fully informed and is unequivocally supportive of this request. President Van Galen provided the Board with extensive background on the process and rationale for the requested update in statewide mission prior to a special meeting of the Board held on May 17, 2023. At that meeting, the Missouri Southern Board of Governors unanimously approved the following resolution:

- Maintain our selectivity status as moderately selective.
- Maintain international/global education concept as part of our Statewide Mission.
- Add Health and Life Sciences to our Statewide Mission.
- Add Immersive Learning Experiences to our Statewide Mission.

The proposed update in the university's mission would be an important acknowledgement of Missouri Southern's current strengths and statewide impact and would support the university in its commitment to be appropriately strategic and focused. I would appreciate your positive consideration of this request.

Sincerely,

Anita Y. Oplotnik

Chair, Missouri Southern State University Board of Governors

Additional Data for Proposal

Missouri Southern State University Response to MDHEWD Request for Additional Data Related to Expansion of CBHE-Approved Statewide Mission

- We are requesting additional information about the evidence of "Enrolling one or more groups of special population students such as minorities, economically disadvantaged, or physically disadvantaged from outside its historic statutory service region at rates exceeding state averages of such populations enrolled in the higher educational institutions of this state;" (173.030(9), RSMo):
 - The documents identified data from Fall 2020 indicating MSSU enrolled approximately 24% BIPOC students and that 22% of those students were from outside of the university's traditional service region. Please clarify if IPEDS is the data source, and please provide updated data for Fall 2022.
 - Overall undergraduate figures come from IPEDS Fall 2020 Enrollment data. IPEDS data is the only way to select data from other institutions. Fall 2020 date was used because in that section to have access to financial aid data. Academic year 2020-2021 is the most recent IPEDS financial aid data available.
 - Fall 2021 IPEDS enrollment data for all Missouri Public Institutions indicates those figures are the same as Fall 2020. MSSU enrolls 24% black, indigenous, and people of color (BIPOC) students whereas the rate for public universities in Missouri is 21%.
 - The rate for BIPOC students is still 24% at MSSU for fall 2022. IPEDS data for Fall 2022 has not been released, so the rate for public universities in Missouri is not available.
 - The source of data for service region information is a MSSU generated file because county of origin is not reported to IPEDS. For Fall 2022, 23% of undergraduates from our historic service region are BIPOC, and 19% of undergraduates from outside the university's traditional service region are BIPOC, which represents a decrease from 22% in Fall 2020.
 - The documents provided compelling information regarding specific populations enrolled outside the school's historic service region. Would your institution please provide more recent data regarding MSSU's enrollments compared to the state average?
 - IPEDS comparison data to other public universities in Missouri is only available for Fall 2021.
 - For Fall 2021, within the state of Missouri, American Indian and Alaska Native students make up 0.4% of the undergraduate enrollment in public Missouri universities. At Missouri Southern, American Indian

and Alaska Native students comprise 3.5% of our total undergraduate population. Of our undergraduate students from Missouri, 1.3% are American Indian or Alaska Native students from outside our historic statutory service region. Thus, MSSU serves this population at a higher rate than average.

- For Fall 2021, within the state of Missouri, Black or African American students make up 9% of the undergraduate enrollment in public Missouri universities. Of our undergraduate students from Missouri, 11.6% are Black or African American students from outside our historic statutory service region. Thus, MSSU serves this population at a higher rate than average.
- We can provide MSSU data only for Fall 2022, but we do not have state averages because IPEDS data is not available for Fall 2022.
 - Fall 2022 undergraduate enrollment of American Indian and Alaska Native Missouri residents at MSSU from outside our historic statutory service region is 1.6%
 - Fall 2022 undergraduate enrollment of Black or African American
 Missouri Residents at MSSU from outside our historic statutory service region is 10.0%
- Please provide the most recent data on which programs students from those populations enrolled.
 - The chart below reflects the Fall 2022 enrollment of undergraduate students.
 - Twenty-eight percent (28%) (266/957) of our BIPOC students are enrolled in Health & Life Sciences programs.
 - Our overall enrollment in Health & Life Sciences program consists of 27% (266/997) BIPOC students.

MSSU Undergraduate Students	by Pro	gram a	nd Race ((Fall 2022))
	ВІРОС	White	Non US Resident	Unknown	Grand Total
Life & Health Sciences Majors Total	266	688	19	24	997
Biology, General	76	191	6	10	283
Biochemistry, Biophysics and Molecular Biology		1			1
Sports, Kinesiology, and Physical Education/Fitness	32	78	2	2	114
Dental Support Services and Allied Professions	24	47		3	74
Health and Medical Administrative Services	21	41		2	64
Allied Health Diagnostic, Intervention, and Treatment Professions	10	37		1	48
Clinical/Medical Laboratory Science/Research and Allied Professions	5	5			10
Public and Environmental Health	16	49	1		66
Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing	35	95	5	2	137
Health Professions and Related Clinical Sciences, Other	47	144	5	4	200
Other Undergraduate Majors	579	1525	67	77	2248
Non-Degree Seeking	112	544	48	103	807
Grand Total	957	2757	134	204	4052

- 2. We are requesting additional information about the evidence of one or more programs "of unusual strength" particularly "placement rate significantly higher than average" and/or "licensure or registration rates...significantly higher than average."
 - In the tables for the licensure exam pass rates and the job placement rates for health sciences program graduates, do you have data that shows these rates are higher than the state average?

Nursing Licensure Exam Pass Rates and Placement MSSU vs. State Average

	2023	2023	2022	2022	2021	2021	2020	2020
	MSSU	State	MSSU	State	MSSU	State	MSSU	State
		Avg.		Avg.		Avg.		Avg.
		Pass		Pass		Pass		Pass
		Rate		Rate		Rate		Rate
First Time	92%	89.2%	87.8%	83.96%	88%	86.74%	79%	89.99%
NCLX Pass		(2 nd qtr.						
Rate		Only)						
Placement	100%	NA	94%	95%	87%	93%	98%	94%
Rates								

The licensure exams for the other health science programs, which include dental hygiene, respiratory therapy, radiology, and paramedicine do not publish the state averages for pass rates. The placement rates are also not available through the accrediting agencies. However, we do have access to the national pass rates, with the exception that the 2023 pass rates are not yet available. They are indicated in the table below. There are no statewide nor national placement rate data available.

Other Health Science Licensure Pass Rates

Program	MSSU 2023	MSSU 2022	Natl Avg. 2022	MSSU 2021	Natl Avg. 2021	MSSU 2020	Natl Avg. 2021
Dental Hygiene	100%	96%	84%	91%	97%	96%	84%
Respiratory Therapy	73%	90%	77.3%	87%	75.2%	90%	80.4%
Radiology	100%	100%	83.5%	100%	83.8%	100%	83.5%
Paramedicine	100%	72%	77%	50%	76%	50%	77%

3. Finally, please provide the most recent data on the number of undergraduates who participate in each of the immersive learning experiences noted in the documents.

The Immersive Learning experiences listed in the application document are only a small sample of the opportunities available to students. The number of students who studied abroad in 2022-2023 are listed below.

Study Abroad 2022-2023

Country	Faculty	Number of Students
Czech Republic, Austria	Dr. Chad Stebbins, Dr. Dom	20
	Buccieri, Dr. Amber Mintert	
Spain	Dr. Andrea Cullers, Ms.	20
	Stephanie Schiding	
Summer in Sweden	Dr. Ed Outhouse	6
Italy (MSSU/KCU Early	Dr. Christine Bentley, Dr. Victoria	14
Acceptance Program)	Rhodes	
Belize	Dr. David Penning, Dr. James	17
	Willand	
Ireland (Honors)	Dr. Michael Howarth, Dr. Jody	17
	Jensen	
Ireland (Art)	Kyle Mckenzie	11
Summer in South Korea		7
Fall Full Semester Study Abroad		5 to UK, 1 to Japan, 1 to Czech
Students		Republic
Spring Full Semester Study		4 to Spain, 1 to Austria, 1 to
Abroad Students		South Korea, 2 to France, 1 to
		Australia, 1 to UK, 1 to Japan
Grand Total		130

The table below summarizes the number of courses in most disciplines that contain immersive learning components and the student enrollment in those for each of the last two years.

Enrollment in Courses with Immersive Learning Component

Disciplines	Number of	Student	Student
Disciplines	Courses with	Enrollment in IL	Enrollment in IL
	Immersive	Courses	Courses
	Learning	2021-2022	2022-2023
Art	33	472	492
Chemistry	18	443	472
Criminal Justice	10	320	327
Geography	3	86	44
Geology	2	23	23
History	6	35	35
International	2	28	22
Studies			
Music	39	548	604
Physical	10	187	137
Science/Physics			
Theatre	41	249	110
Communication	12	130	94
Industrial	16	186	142
Engineering			
Technology			
Business	4	36	48
Internships			
Biology	40	1457	1350
Dental Hygiene	11	300	293
Education	21	757	795
Environmental	10	185	222
Health			
Kinesiology	12	341	318
Medical	7	12	14
Technology			
Nursing	20	312	268
Paramedicine	9	88	70
Psychology	8	165	165
Radiology	10	165	103
Respiratory	8	74	87
Honors	4	49	52

Examples of unique learning environments and activities include the following:

In CJ 200 Crime Scene Investigation I and CJ 340 Crime Scene Investigation II, students use the Crime Scene House in Anderson Justice Center to observe and process mock crime scenes. The Crime Scene House is a group of rooms in the basement of the building that are set up to look like various rooms of a house or office building. Instructors set up a mock crime scene complete with evidence and bodies represented by dummies. Students find, document, and process evidence in the mock crime scene. There are cameras set up in each room so that an instructor can record the student's actions in the crime scene. Instructors review these recordings and show students what they did well, what they missed, and how to improve their observation and investigation skills before they must participate in an actual crime scene investigation.

In **HIST 395 Reacting to the Past**, Dr. Rebecca Schriver uses active learning role-playing games. Students are assigned the roles of historical figures. They must research the historical figure and act as that person would during the game. Each student is required to make at least two public speeches during each game. Students are required to research and write to prepare for their roles and must learn diplomacy and to work with others with whom they might not agree. They also must think on their feet as the game progresses. They are actively immersed in the historical event that the game is portraying.

In **IET 471 Senior Design,** students apply their technical and non-technical knowledge to actual industrial problems. The design activity includes identification of problem, objective, financial benefits, activity plan, customer analysis, data collection and analysis, generation and evaluation of solutions, and recommendations for and where possible, development of systems improvement. Students present their project to a diverse audience that consists of fellow classmates, the students enrolled in IET 271 Engineering Technology Seminar I and IET 271 Engineering Technology Seminar II (mostly freshmen and sophomores), invited alumni and invited IET industrial advisory board members. Other deliverables, besides the presentation, include a report and a poster. Several companies from the community sponsor a variety of projects.

In multiple nursing courses, the lack of clinical experiences to prepare students for real clinical environments is shown to contribute to nursing procedure error. Thus, the MSSU Nursing VR program works towards narrowing that gap and its many challenges. Simulation is a valuable teaching-learning strategy and now considered a key component of nursing education. MSSU Nursing is unique by offering its students directed learning in a Virtual Reality environment for over 200 patient case scenarios carefully integrated into the curriculum and clinical experience. MSSU Nursing is the first in the 4-state corner region to incorporate Virtual Reality simulation into its nursing curriculum with its implementation in the Fall of 2021. Additionally, the model of approach for simulation has evolved in the MSSU Nursing program to include the use of both VR and high-fidelity simulation offering students yet another innovative way of enhancing the needed learning. An example is the learning of women's health concepts and neonatal resuscitation. In NURS 407 Concepts of Women's Health and Obstetrical Nursing, students participate in the role of the RN during a precipitous delivery using Virtual Reality technology and then after delivery move to the high-fidelity simulation lab to perform neonatal resuscitation in a highly realistic situation. In a hospital setting, these situations are rare, but nursing performance must be at its most ready state to prevent disastrous outcomes. This same model of completing care in Virtual Reality and then transference to the high-fidelity simulation aspect is used in

pediatric and adult simulation scenarios. Additionally, Senior students in the last semester of the program complete a mass casualty Virtual Reality scenario as a team of caregivers pulling together, collectively, the knowledge and skills gained from all previous scenarios in addressing an explosion at a chemical plant.

New technology, purchased through the MOExcels grant, will offer even more unique opportunities for students in the communication major. They will be involved in the editing of virtual sets - called 'assets' and then will utilize those as backgrounds for shows through both our green screen studio and on the new LED wall. The LED wall will give them the opportunity to create 3D virtual world videos working both in front of and behind the camera. **COMM 201 Video Production** and **COMM 200 Audio Production** classes will give students the educational framework to utilize the LED wall and green screen for class projects and even possible productions requested by the community.

Considering the demands of gross anatomy curricula in professional schools, MSSU installed a cadaver dissection suite on campus in 2011 and incorporated prosected human specimens into undergraduate anatomy courses such as BIO 201 Human Anatomy, BIO 221 Anatomy and Physiology II, BIO 331 Comparative Anatomy. To take full advantage of the cadaveric facility, a novel dissection-based course, BIO 0475 Advanced Human Dissection, was developed for highly motivated pre-professional students to complete as part of their undergraduate degree. The course was conceived as an advanced exploration of human anatomy designed to prepare students for professional school or specialized graduate study. The AHD course is taught in terms of the 'patient' by incorporating a clinical-based approach to dissection. Medical imaging, such as an X-ray or CT scan, and histology are utilized during the investigation. At the end of the semester, students present a summary hypothesizing the whole-body donors' lifestyle, possible diagnoses of chronic and acute illness, and a probable cause of death. The presentation of patient cases plays a significant role in developing critical thinking, effective communication, and teamwork skills.

Eighty percent (80%) of respondents to a survey of former AHD students indicated they were selected for an anatomy fellowship, as an anatomy teaching assistant, or as an anatomy tutor in professional schools. With the cadaver lab expansion, we've grown our anatomical research. We presented more than 30 studies at national conferences such as the American Association of Clinical Anatomists (AACA), American Association for Anatomy (AAA), American Association of Veterinary Anatomy, International Federation of Associations of Anatomists and received multiple awards for oral and poster presentations. Additionally, CJ 498 Forensic Death Investigations utilizes the lab in their curriculum and MUS 166 Applied Performance: Voice and MUS 366 Advanced Applied Performance: Voice utilize the lab to examine the portion of the anatomy that serves as the instrument of the vocalist.