1- Mission

The institution’s mission is clear and articulated publicly; it guides the institution’s operations.

1- Core Component 1.A

The institution’s mission is broadly understood within the institution and guides its operations.

1. The mission statement is developed through a process suited to the nature and culture of the institution and is adopted by the governing board.
2. The institution’s academic programs, student support services, and enrollment profile are consistent with its stated mission.
3. The institution’s planning and budgeting priorities align with and support the mission. (This sub-component may be addressed by reference to the response to Criterion 5.C.1.)

1.A.1. The mission statement is developed through a process suited to the nature and culture of the institution and is adopted by the governing board.

Mission was adopted by the governing board

The university’s mission statement was approved by the University Of Missouri System Board Of Curators in September 2013. The mission statement is:

Missouri S&T integrates education, research and application to create and convey knowledge that serves our state and helps solve the world’s great challenges.

Students work side by side with nationally renowned faculty who are focused on scholarship, research, service and economic development. The mission was developed as a part of the comprehensive strategic planning initiative which began in summer 2012 and involved thousands of vested constituents including faculty, students, staff, administration, research partners and alumni.

Missouri S&T, a traditional four-year public institution, was founded in 1870 as a school of mines, one of the first engineering-focused universities west of the Mississippi. Missouri S&T remains one of the nation's top technological research universities, a small group of institutions which share common traits of a high percentage of STEM (science, technology, engineering and mathematics), business majors, a robust research enterprise and a thriving humanities and liberal arts programs. For nearly 150 years, the fundamental mission of the university has been to provide technological expertise to the State of Missouri. In 1964, Missouri S&T expanded from being an engineering school under the administration of the University of Missouri-Columbia into a separate campus and the mission expanded to include STEM-oriented, business and liberal arts. Today, Missouri S&T is focused on providing a top return on investment for students, research partners, employers and donors.

1.A.2. The institution’s academic programs, student support services, and enrollment profile are consistent with its stated mission.
Academic programs are consistent with the mission

Missouri S&T’s degree programs are consistent with a comprehensive high research university and directly aligns with the university mission. The degree programs are offered through two colleges: the College of Arts, Sciences, and Business and the College of Engineering and Computing.

The College of Arts, Sciences and Business (CASB) offers a unique mix of traditional liberal arts and humanities, natural and physical sciences, behavioral/social sciences, education, business, and military science disciplines. The college includes the departments of Applied Mathematics; Arts, Languages, and Philosophy; Biological Sciences; Business and Information Technology; Chemistry; Economics; English and Technical Communication; History and Political Science; Physics; and Psychological Science. CASB also includes Missouri S&T’s Air Force ROTC, Army ROTC and teacher certification programs. The college offers undergraduate degree programs in: applied mathematics, biological sciences, business and management systems, chemistry, economics, English, history, information science and technology, multidisciplinary studies, philosophy, physics, psychology, and technical communication. The majority of academic offerings in the general education curriculum are delivered by faculty within CASB. Master’s degrees are offered in the departments of biological sciences; business and information technology; chemistry; English and technical communication; mathematics and statistics; physics; and psychological science. In addition, doctoral degrees are offered in the departments of chemistry, mathematics and statistics, and physics. For departmental clarification see the CASB organizational chart.

The College of Engineering and Computing brings together students, educators, researchers and industry to develop next-generation leaders to advance all disciplines of engineering and computing. The College of Engineering and Computing offers undergraduate B.S. degrees and graduate M.S. and Ph.D. degrees in nine academic departments. The departments include: Chemical and Biochemical Engineering; Civil, Architectural and Environmental Engineering; Computer Science; Electrical and Computer Engineering; Engineering Management and Systems Engineering; Geosciences and Geological and Petroleum Engineering; Materials Science and Engineering; Mechanical and Aerospace Engineering; and Mining and Nuclear Engineering. The college offers undergraduate degree programs in aerospace engineering, architectural engineering, ceramic engineering, chemical engineering, civil engineering, computer engineering, computer science, electrical engineering, engineering management, environmental engineering, explosives engineering, geological engineering, geology and geophysics, geotechnics, manufacturing engineering, mechanical engineering, metallurgical engineering, mining engineering, nuclear engineering, petroleum engineering, and systems engineering. For departmental clarification see the CEC organizational chart.

In sum, Missouri S&T offers 35 undergraduate programs; 34 masters programs (25 MS, 2 MA, 1 MBA, 3 MST, and 3 ME); 21 Ph.D. programs; and 8 DE programs. In the 2016-2017 academic year, Missouri S&T awarded 1,320 undergraduate degrees, 626 graduate degrees and 87 doctoral degrees.

Graduate certificates give students the opportunity to broaden their knowledge in a particular discipline, learn the latest in developing fields, and stay competitive in today's marketplace. By taking a few courses, students demonstrate advanced knowledge in a field. Graduate certificate programs may also be used as a pathway to a graduate degree program and credit earned in the certificate can be counted toward the master’s degree. A student needs to earn a B or better in each certificate course to continue on for their master’s degree without needing to submit GRE/GMAT scores. All certificate, undergraduate and graduate programs can be found in the undergraduate and graduate catalog.

Distance education is consistent with the mission
Global Learning’s Distance & Continuing Education Department administers distance education and other professional development programs to meet the educational and professional development needs of adult learners globally. In today’s world many adult learners need post-secondary education and rely on distance education and training to meet their needs. Today’s technology allows students to benefit from the expertise of Missouri S&T faculty without ever setting foot on campus. The benefit of distance education is that students can continue to work full time while attending school. It should be noted the distance program consists of cameras in the back of on-campus classrooms and are not “online” in the traditional sense; the distant student essentially sits in the back of the classroom.

Cooperative education is consistent with the mission

Since 1984, the United States Army’s Engineer School has partnered with Missouri S&T to give Active Army Officers the opportunity to earn master’s degrees in engineering management, civil engineering, environmental engineering, or geological engineering in conjunction with attending the Engineering Captains Career Courses (ECCC). Officers are granted eight hours of graduate credit for satisfactorily completing the ECCC toward a certificate in either military construction management or military geological engineering. The credit is supplemented by four hours of instruction by Missouri S&T faculty members, so that four three-credit courses are earned (each 2 ECCU plus 1 S&T in terms of credit hours). Upon completion of the certificate requirements and ECCC, these officers are allowed to remain at Fort Leonard Wood to complete the 18 credits to earn a master’s degree. The Military Construction Management certification program is open to ECCC students holding a Bachelor of Science in engineering or a hard science with a minimum cumulative GPA of 2.75, and who have a minimum of 12 months of professional employment experience. Once admitted to the program, students take the four designated courses. In order to receive a graduate certificate students must have an average cumulative GPA of 3.0 or better in the certificate courses, which then allows the student to be accepted into one of the Master of Science programs. The partnership not only allows Army officers to earn degrees in engineering, but exposes traditional students and faculty to the officer’s experiences and viewpoints.

Professional development is consistent with the mission

Missouri S&T offers conferences and courses to expand knowledge and earn professional development hours. There are a variety of national and international technical conferences, symposiums and seminars offered. Missouri S&T’s Professional and Continuing Education programs connect students with the exceptional expertise of S&T’s teaching and research faculty to enhance knowledge. Missouri S&T’s full-service event planning and program development can work with organizations and individuals to host and coordinate events and create customized training opportunities.

Professional development opportunities are offered for S&T faculty. For example, seminars on proposal writing, copyright in the classroom, maximizing citations, and intellectual property are offered each year. A Service Learning Symposium showcasing service learning opportunities on campus, within the UM System and within the community is offered. This symposium also includes a student poster presentation and a civic engagement fair. Since its inception in 2014, a Control System Forum has engaged 1,259 participants in 24 sessions with presenters from Harvard, Notre Dame, University of Illinois and University of Florida.

Student support services are consistent with the mission

Missouri S&T is committed to student success and offers a variety of support services. The university is committed to fostering the overall well-being of the student and offers a variety of programs which support the mind, body and spiritual health:

- Counseling Services - utilizes a brief-treatment model which are time-limited sessions provided by professionally trained and licensed counselors and psychologists; staff members work
collaboratively with clients to clarify issues, support existing strengths, address problems or arrange referrals

- Disability Support and Student Wellness - focuses on the unique challenges a student with a disability faces providing reasonable and appropriate accommodative services to ensure equal access
- Case Management - is designed to support students throughout their experience in order to best achieve their academic, personal and professional goals; helping students face challenges by identifying immediate needs, providing appropriate resources, and partnering with the student to develop an action plan
- Testing Center - serves the campus and the greater Rolla area community by providing a courteous and secure atmosphere for testing and assessment services
- Student Health Services - provides a variety of health and wellness services to students; from labs to flu shots to physicals and sports medicine, these services are provided by highly qualified health professionals who are dedicated to improving and maintaining the health of the entire campus community
- Athletics - promotes academic excellence, sportsmanship, leadership opportunities, and loyalty to the institution; student-athletes are challenged to better manage their time, to develop and master teamwork, persistence, cooperation, self-confidence and goal-setting
- Intramurals provides participants with a comprehensive array of activities, a friendly and knowledgeable staff, and a safe playing environment. All activities will be social, competitive, and sporting in nature while encouraging and promoting the value of fair play and a healthy lifestyle
- Fitness Center - houses equipment and programs designed to help students reach their health and fitness goals
- Student Recreational Center - houses three basketball/volleyball/badminton courts, four racquetball courts, a squash court, an aerobics room and a three lane track
- Career Opportunity and Employer Relations - is dedicated to helping students and alumni pursue their career dreams; assisting students in all stages of their careers, from summer internships, to co-ops and full-time employment
- Fraternity and sorority life is dedicated to creating unique opportunities for personal and professional growth by forging new, meaningful relationships, fostering an inclusive environment, and encouraging deeper engagement with the campus and local communities
- Residential Halls - helps students learn how to develop a better self-awareness, communicate across differences, and engage in their community
- Student Success Center - offers a quiet environment where students can relax between classes, grab a cup of coffee, and study using a variety of resources; throughout the semester there are programs and activities to help enrich the students’ educational experience
- Student Veterans Resource Center - is a nexus of resources and support student veterans might need to succeed in their educational goals; it serves as a place to network, find and connect with veteran peers, and to study or relax during the school year
- Writing Center - offers peer writing consultants that are available to help students produce their best written work, no matter the skill level or topic; for brainstorming ideas, outlining a paper, or proofreading a final draft, they can offer a reader's perspective, providing valuable feedback and guidance tailored to meet student needs
- Student Diversity, Outreach and Women’s Programs - fosters diversity and inclusion in the campus community by providing a welcoming climate for all students. The department aims to support underrepresented, first generation, and low income students through programming, retention, and mentoring initiatives

Enrollment profile is consistent with the mission
Missouri S&T has a diverse enrollment with students attending from every county in Missouri, every state in the nation and over 60 countries. Fall 2017 undergraduate enrollment was 6,920 and graduate enrollment was 1,964. Of those numbers, 2,067 were female, 1,057 were minority, and 702 were underrepresented. The average high school GPA for entering freshmen was 3.64 with an average ACT of 28.1. International enrollment was 1,054, of whom 812 were in graduate degree programs.

A part of serving the university mission is by providing a strong distance education program. In 2016, this graduate only program had 897 students.

Distance students typically enroll in one or two courses per semester. The on-campus student contingent are largely traditional, taking 13.5 credit hours per semester. Thus, Missouri S&T is primarily a residential, traditional campus.

1.A.3. The institution’s planning and budgeting priorities align with and support the mission. (This sub-component may be addressed by reference to the response to Criterion 5.C.1.)

Budget priorities align with the mission

Missouri S&T’s planning and budgeting are directly aligned to the university’s mission and strategic plan. These strategic goals are: 1) develop and inspire creative thinkers and leaders for lifelong success; 2) enhance reputation and raise visibility; 3) achieve sustainable growth to ensure best return on investment; and 4) increase and facilitate meaningful access to and interactions with renowned faculty, staff and services. One of the core strategies within the plan is allocating resources to hire additional faculty. In fall 2017, the campus had added 51 additional faculty.

Fiscal 2017 budget priorities allocations: $15,577,457 dedicated to instruction, $9,133,075 for research, $1,191,272 for public service, $3,843,913 for academic support, $7,313,899 for student services, $2,088,720 for instructional support, $9,200,758 for operations and maintenance of plant facilities, and $8,087,000 for scholarship. Fiscal 2018 priorities are outlined in 5.C.

Campus Master Plan aligns with the mission

A master planning process iteration was started in fall 2013 which relied on extensive campus and community involvement through the use of advisory and steering committees, open campus meetings, surveys, and interviews. All constituents helped define the future vision for the Missouri S&T campus, which led to the production of the Master Plan document in the spring of 2014. An abbreviated process was completed between October of 2016 and March of 2017 to update the plan. Completed projects include:

- Student Diversity, Outreach, and Women’s Programs recruits and supports S&T’s female and traditionally underrepresented minority students. The office also coordinates summer camps and workshops for pre-college students, and promotes awareness about female and multicultural issues to the entire campus community
- The new James E. Bertelsmeyer Hall provides S&T’s Chemical and Biological Engineering Department a state of the art teaching and research facility. The new facility consolidated the teaching and research activities for this department that had been spread over multiple buildings on campus
- The university promenade provides for a new pedestrian gateway to the campus. The additional hardscapes, trees, shrubbery, flowers and lighting provide an improved environment for everyone to enjoy while enhancing one of the prominent entries to campus

Research focus aligns with the mission
The campus is focused on increasing its research expenditures in order to better “create and convey knowledge that serves our state and helps solve the world’s great challenges.” Net grant and contract expenditures were $27,072,611 for fiscal 2014, $24,353,915 for fiscal 2015, $30,021,749 for fiscal 2016 and $32,689,925 for fiscal 2017.
1- Core Component 1.B

The mission is articulated publicly.

1. The institution clearly articulates its mission through one or more public documents, such as statements of purpose, vision, values, goals, plans, or institutional priorities.
2. The mission document or documents are current and explain the extent of the institution’s emphasis on the various aspects of its mission, such as instruction, scholarship, research, application of research, creative works, clinical service, public service, economic development, and religious or cultural purpose.
3. The mission document or documents identify the nature, scope, and intended constituents of the higher education programs and services the institution provides.

1.B.1. The institution clearly articulates its mission through one or more public documents, such as statements of purpose, vision, values, goals, plans, or institutional priorities.

Vision

In the 2013-2018 strategic plan a vision statement was created:

“Missouri S&T will be the leading public technological research university for discovery, creativity and innovation. We will cultivate curiosity, creativity and confidence in our graduates. We will be the institution of choice for partners around the world seeking a highly qualified, talented, and entrepreneurial workforce; innovative research; relevant education programs, products, and services; and technology and ideas to solve the great challenges of our time.”

The vision statement has been updated for the 2018-2022 plan:

“To be a premier land-grant institution dedicated to the creation and inclusive sharing of knowledge to advance the educational, health, cultural, economic and social interests of the people of Missouri, the nation and the world.”

Values

The campus mission, vision, strategy and culture are all tied to a set of six intrinsic values.

- **Lifelong Success.** We add exceptional value. The rewards of the Missouri S&T experience extend far beyond a college education or gratifying career. The Missouri S&T experience prepares you for a fulfilling life defined by the confidence to succeed, a desire to excel, and a love of learning that never stops.
- **Creativity.** We are innovators. Building a better world demands a creative spark, innovative and entrepreneurial approaches, and curiosity to discover and explore new solutions to the word’s great challenges.
- **Integrity.** We hold ourselves accountable for our actions. We strive to uphold the highest ethical standards, to conduct ourselves with trustworthiness and respect for all of humanity and to instill in our campus community these same principles.
- **Sustainability.** We live by example as stewards of the public goodwill, the financial resources entrusted to us and the environment, and we emphasize resilient and sustainable practices in all our endeavors.
• **Partnerships.** We are great partners. We focus on adding value and creating mutually beneficial partnerships. The solutions to today’s great challenges require agile collaboration, teamwork and engagement with our stakeholders, both on campus and in the greater business, civic, national and international communities.

• **Inclusion.** We are an inclusive, welcoming community. We seek to build a creative learning community marked by openness, understanding and valuing all people and perspectives.

Strategy Statement aligns with the mission

During the strategic planning process the strategy statement was developed and it states, “Missouri S&T will provide by 2020 a top return on investment among public research universities to students, employers, research partners and donors through extraordinary access to renowned expertise, services and experiential learning opportunities.” Thus the mission to integrate education, research, and application was the foundation of the strategic plan.

Not only does the plan align to the mission, metrics and results do as well. Missouri S&T’s reputation for providing an excellent return on investment for students is well documented by national publications and media outlets. We build partners who team with Missouri S&T and the donors who support the university through gifts. We use return on investment metrics associated with our constituents. We evaluate the starting salaries for undergraduate students; the number of engineering doctoral students per tenure, tenure track faculty; the number of students enrolled via distance or online; employer satisfaction with hires; and donor satisfaction with the Missouri S&T giving experience.

**Goals**

The campus 2014-2018 strategic plan was created around four primary goals: 1) develop and inspire creative thinkers and leaders for lifelong success; 2) enhance reputation and raise visibility; 3) achieve sustainable growth to ensure best return on investment and 4) increase and facilitate meaningful access to and interactions with renowned faculty, staff and services.

Developing and inspiring creative thinkers and leaders began with the decision to require all undergraduate students to participate in some significant experiential learning activity before they graduate, the Quality Initiative for Missouri S&T. A significant experiential learning activity is required for all undergraduate students as of fall 2015. Academic departments determine what comprises an acceptable experience with activities such as undergraduate research, student design teams, study abroad, internships, co-op, service learning, and mentoring or coaching as approved experiential activities. The development of the Innovation Team furthers the inspiration of creative thinking and fostering of innovation on-campus.

The second goal focuses on enhancing reputation and raising visibility through development of the research signature areas; instilling a culture of excellence in research, scholarship and creative activity; and implementing a communication and marketing plan to raise the visibility of the campus.

The third goal focuses on sustainable growth to ensure best return on investment. This goal utilizes strategies to evaluate academic programs, enhance corporate relations, improve physical facilities, foster a culture of diversity and inclusion, ensure lifetime engagement for all graduates, become environmentally sustainable, facilitate a comprehensive campaign, improve technical innovation and achieve fiscal sustainability.

The last goal focuses on development of a distance and online strategy; enhancing instructional labs on campus; doctoral recruiting, retention and placement; mentoring and advising; and removing undergraduate and graduate barriers to graduation.
The campus 2018-2022 plan focuses on five primary goals: 1) excellence in student success - striving for excellence in areas such as academic quality and diversity, learning experiences, retention rates, graduation rates, career outcomes and debt at graduation; 2) excellence in research and creative works - striving for excellence in areas such as intellectual merit, extramural research, high-quality publications, citations, curated exhibits; 3) excellence in engagement and outreach - striving for excellence in areas such as outreach with local, state and global communities, creating innovative partnerships with industry, and workforce development; 4) inclusive excellence - striving for excellence in inclusive efforts into access and success, campus climate and community engagement; and 5) excellence in planning and operations and stewardship - striving for excellence in areas such as long-term planning and process for operating and capital needs, accountability for stakeholders, and organizational structures to achieve objectives of research, teaching, and engagement.

1.B.2. The mission document or documents are current and explain the extent of the institution’s emphasis on the various aspects of its mission, such as instruction, scholarship, research, application of research, creative works, clinical service, public service, economic development, and religious or cultural purpose.

Institutional emphasis on instruction

The university committed to hiring faculty to improve instructor workloads and allow for increased research and scholarship. The focus on enhancing the culture of teaching excellence is highlighted in the current strategic plan.

Research emphasis

College faculty lead many Missouri S&T research centers, laboratories, and consortia, including: Center for Aerospace Manufacturing Technologies, Center for Biomedical Science and Engineering, Center for Electromagnetic Compatibility, Center for Environmental Science and Technology, Center for Infrastructure Engineering Studies, Energy Research and Development Center, Environmental Research Center for Emerging Contaminants, Intelligent Systems Center, Materials Research Center, Peaslee Steel Manufacturing Research Center, Rock Mechanics and Explosives Research Center, Small Modular Reactor Research and Education Consortium.

The identification of the four research signature areas, areas in which S&T has strength and significant opportunity to grow, also demonstrates the university focus on scholarship. These new signature areas are: Advance Materials for Sustainable Infrastructure; Advanced Manufacturing; Enabling Materials for Extreme Environments; and Smart Living. Each of the signature areas hired four to five faculty, developed a proposal process for seed grants, and engaged graduate students for research opportunities.

The campus is focused on increasing its research expenditures. To assist the campus with grant proposals, the Office of Sponsored Programs received funds for two new grant writers and one technical illustrator.

The Opportunities for Undergraduate Research Experiences (OURE) program accepted 184 students for the 2016-2017 academic year. This is an increase of 33% over prior year and 67% since 2012. Undergraduate research aligns with the university mission.

Technology Transfer and Economic Development

In serving the State, the mission of “…application to create and convey knowledge” is not just scholarship, but the creation of new technology and applications, as well as dissemination. That portion of the mission is in part addressed by technology transfer and services provided to businesses.
In Fiscal 2017, the Technology Transfer office managed 175 active cases, 47 new disclosures, filed 37 patent applications, issued 15 new patents, and executed seven new and amended two license agreements with $540,000 in royalty income.

Missouri S&T’s Small Business Technology Development Center exceeded all small business administration goals. The center provided business counseling to 111 clients in eight counties surrounding Rolla. The clients generated increased sales of $6.8 million and created 97 new jobs. New startups or business expansions often experience challenges finding capital and the center worked with local bankers and businesses to assist in raising $7.1 million in capital. Center staff provided 35 training courses for 369 individuals in the areas of business startup, financial management, social media marketing, and intellectual property. The center is very active in the “Boots to Business program at Fort Leonard Wood providing business training and counseling to service men and women as they transition from military life to the civilian sector.

1.B.3. The mission document or documents identify the nature, scope, and intended constituents of the higher education programs and services the institution provides.

Scope

The mission of the university is outlined on the main strategic plan website; provided in new Board of Curator Orientation, new Trustee Orientation; Alumni magazine; Research magazine; handouts for entering freshmen, and posters are disseminated throughout campus for the entire community and intended constituents to view.

Constituents

Missouri S&T has identified six key constituent groups: undergraduate students, research-based graduate students, employers, donors, research investors and distance/online students. The university benchmarks its performance for each of the key constituent groups against select comparator universities. This benchmarking focuses on return on investment which enhances the reputation as a public leading technological research university.
1- Core Component 1.C

The institution understands the relationship between its mission and the diversity of society.

1. The institution addresses its role in a multicultural society.
2. The institution’s processes and activities reflect attention to human diversity as appropriate within its mission and for the constituencies it serves.

1.C.1. The institution addresses its role in a multicultural society.

Statement of Nondiscrimination

In June 2014, the Board of Curators voted to include gender identity and gender expression to the university’s statement of nondiscrimination. As stated in the Collected Rules and Regulations: “The applicable rules and policies, the University of Missouri does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age, disability or status as a protected veteran.”

The university affirms its commitment to providing equal opportunities by establishing the Equal Opportunity Policy statement in Section 320.010 of the Collected Rules and Regulations. The university's nondiscrimination policies apply to any phase of its employment process, any phase of its admission or financial aid programs, and other aspects of its educational programs or activities. Additionally, this policy and the existing Title IX policies apply to allegations of sexual misconduct or allegations of other forms of sex discrimination, as defined in Section 600.020C, occurring within the university’s educational programs and activities and instances occurring in other settings, including off-campus if there are effects of the conduct that interfere with or limit students’ ability to participate in or benefit from the university’s educational programs and activities.

Chancellor’s Committee for Diversity and Inclusion

Missouri S&T encourages personal engagement in exceptional academic and professional programs thereby cultivating a lifelong commitment to learning, ethics, civic responsibility and openness to cultural diversity for all constituents. The Chancellor’s Committee for Diversity and Inclusion is commissioned by the Chancellor and is responsible to the Chancellor and the appropriate delegated staff on ways to move the university community toward infusing diversity and inclusion into the campus culture. It is charged with developing, designing and implementing a campus climate assessment. The committee develops recommendations that define diversity and inclusiveness consistent with the university's values. It assesses the campus and identifies impediments to diversity and inclusion and proposes changes to eliminate any impediments.

Student Diversity, Outreach and Women’s Programs

Student Diversity, Outreach and Women’s Programs mission is to actively increase the number and diversity of prepared and motivated first through twelfth-grade students through science, technology, engineering and math (STEM) enrichment-focused camps and workshops; to recruit, support and retain female and traditionally underrepresented minority students in STEM fields through educational and professional development resources. Through programs and partnerships, SDOWP supports diversity-related programming and promotes awareness about female and multicultural related issues; helps foster
an academic and professional environment that supports the students of Missouri S&T and strengthens the campus community.

1.C.2. The institution’s processes and activities reflect attention to human diversity as appropriate within its mission and for the constituencies it serves.

Internal processes reflect attention to human diversity

The Title IX Strategic Curriculum Committee is a cross-functional committee composed of members from all levels. The committee is split into three working groups: 1) content and curriculum – creating a complete inventory of prevention efforts on campus, both inside and outside of the classroom; 2) bystander and online education – an assessment of engagement of Missouri S&T’s Step UP! Program and Not Anymore; and 3) assessment and sustainability – focused on continued committee makeup, annual assessment of Title IX prevention efforts, and marketing of Title IX resources.

Enrollment processes reflect attention to diversity as demonstrated through articulation agreements. In 2015, an articulation agreement was completed with Mission College, a predominantly Hispanic-serving community college located in the Silicon Valley area. The campus is looking into arranging agreements with additional colleges in the area such as Ventura College located in California, a campus with a 49% Hispanic population. To help increase the number of African-American transfer students, a renewal of the articulation agreement with Lincoln University, a HBU in Jefferson City, was signed.

To demonstrate commitment to diversity and inclusion, Missouri S&T reallocated funding to support Human Resources, Student Affairs, and Title IX in 2015 by establishing a Mental Health and Sexual Assault work group; creating an Office of Institutional Equity, Diversity and Inclusion; hiring a health educator prevention specialist; hiring a compliance specialist; hiring a director of institutional equity, diversity and inclusion; hiring a university investigator; hiring support staff for training programs, Title IX operations, and student wellness.; and hiring an intake officer.

To demonstrate university dedication to departments that attract underrepresented minority or female faculty members, departments receive a $10,000 incentive to their equipment and expenses budget for every such faculty member hired. The department retains the $10,000 recurring funds as long as that faculty member remains with the department.

Since 2012:

- Female faculty has increased by 36%
- Underrepresented faculty has increased by 3%
- Female students has increased by 16%
- Minority students has increased by 38%
- Underrepresented students has increased by 20%

The university has developed a series of trainings to address cultural competency and enhance inclusion. Some of these trainings include:

- A fully integrated face-to-face Diversity 101 workshop implemented into the monthly new employee orientation
- Workshops staff and students attend on sexual discrimination – how to recognize it, how to prevent it, and what resources are available
- Not Anymore, an online program, focusing on prevention of sexual assault, was implemented in fall 2015 and this workshop is a requirement for new students
• An in-depth, interactive, diversity and inclusion course hosted in the online learning management system has been developed. This stand-alone professional development tool can also be used as a part of an HR certification process
• A training session for faculty and staff focused on eliminating gender violence and discrimination in the classrooms provided by our counseling staff
• Safe Space Training for the campus community developed by Institutional Equity, Diversity and Inclusion in collaboration with leadership and cultural programs
• Black History Month events hosted by leadership and cultural programs, which also develops events to heighten awareness and understanding of the LGBTQA community

In response to the Ferguson crisis and additional outside events, equity and inclusion partnered with leadership and cultural programs to develop multiple events. A display of “things heard at S&T” highlighted micro-aggressions underrepresented students have experienced on campus. Giving Voice, a touring workshop on micro-aggressions, was provided for students. Students are regularly engaged to ensure the university maintains focus and quickly addresses any concerns.

International affairs

The Office of International and Cultural Affairs (ICA) coordinates international activities, administers all matters involving immigration for international students and scholars, and provides advisement services to the university’s international population. ICA is responsible for the recruitment of international students, and serves as a direct contact with U.S. government agencies, embassies, consulates, and the private sector concerning international activities. The office administers Missouri S&T’s Applied Language Institute, which houses the Intensive English Program (IEP). The mission of the IEP at Missouri S&T is to assist international students in attaining the proficiency level needed to meet language standards and promote a successful transition to academic programs. The program provides courses in English grammar, writing, reading comprehension, listening comprehension, pronunciation, and presentation at four proficiency levels.

Study abroad

The office of international and cultural affairs coordinates study abroad opportunities for Missouri S&T students. Students may choose from a variety of exchange opportunities including semester or year abroad, faculty-led short term exchange, summer abroad, and experiential learning opportunities such as Engineers Without Borders. Semester, year, or summer abroad programs offer opportunities to earn credit towards the student’s Missouri S&T degree programs in approximately 50 countries.

Leadership and cultural programs

Leadership and cultural program’s mission is to assist students in developing skills they need to serve as successful leaders in a global community. We realize that in order to be successful citizens and competitive in the job market, students need to be culturally competent and possess strong communication, leadership, and personal management skills. We contribute to student retention and satisfaction by enhancing students’ educational experience through providing quality programs and resources. Our programs include cultural celebrations, skill development workshops, dialogue series, and experiential learning activities on and off campus.

New student programs

New Student Programs is responsible for the campus orientation programs, which includes Preview, Registration, and Orientation (PRO); opening week orientation; transfer transitions orientation; veterans’ orientation during opening week; mentors; and PRO leaders. New Student Programs serves to orient and welcome new students to Missouri S&T; facilitates the transition to college life through interaction with
faculty/staff members, peers and upperclassmen; provides information concerning academics; resources on campus; builds the foundation for future success; and introduces the concepts of professional development and leadership.

During a one-day PRO session in the spring or summer, incoming students take placement exams; learn more about student success, campus resources, and living options; obtain their miner card (campus ID); activate computer accounts; and meet with an academic advisor to determine students’ fall class schedules. Opening week orientation takes place the week before fall classes. This program includes new student convocation, participation in student mentor groups, academic workshops, team projects, and activities that will assist with a positive transition to S&T.

**Student Success Center**

The Student Success Center provides effective information and support for the students in their journey toward their educational goals. The center is a centralized location, designed for students to visit and feel comfortable about utilizing the campus resources available. The Student Success Center was developed as a campus wide initiative to foster a sense of responsibility and self-directness to all S&T students by providing peer mentors, caring staff, and approachable faculty and administrators who are student-centered and supportive of student success. The objectives of the center are to: coordinate and support programs and retention efforts that foster student success at Missouri S&T; collaborate with academic and non-academic departments on resources available to help enrich students’ educational experiences; guide students on the path to success by providing referrals to appropriate campus departments and resources to help them achieve at the best of their ability and reach their educational goals.

**Student Veterans Resource Center**

The Student Veterans Resource Center (SVRC) is designed to empower and educate all student veterans on utilizing campus tools and resources to be successful students. The SVRC was developed as a campus wide initiative dedicated to our student veterans by providing a comfortable and resourceful study area; success coaches; peer mentors; knowledgeable and caring staff; effective programs and events; and approachable faculty and administrator who are supportive of student success for all veterans on the S&T campus.

**Religious Organizations**

Students at Missouri S&T are able to join any registered student organization or, through the appropriate process, begin one. There are many such organizations with a religious element namely: All Nations Christian Fellowship, Baptist Student Union, Campus Crusade for Christ, Catholic Newman Center, Chi Alpha, Christian Campus Fellowship, Common Call Campus Ministry, Fellowship of Christian Athletes, Geeks for God, Hillel of Missouri S&T, Koinonia (Student Fellowship of Church of Christ), Latter-Day Saint Student Association, Lutheran Student Fellowship, Muslim Student Association, Restoration Campus Ministries, and Voices of Inspiration.

**Student Organizations**

In addition to religious organizations, a number of registered student organizations are focused on human diversity:

- DaVinci Society - seeks to provide a safe zone for gay/lesbian/bisexual/transgendered students and their supporters; to illustrate a positive and honest view of our community through educational and social events, as well as, to provide a network of support for our members
• Delta Omicron Lambda - promotes women's issues and unity among Missouri S&T students through service, participation and education

• Amnesty International - brings a greater awareness of global issues of social and humanitarian interest, particularly those of human rights, to the Missouri S&T campus; educates the S&T campus about human rights and violations of such rights as outlined in Amnesty International appeal; and provides members with the opportunity to respond to the aforementioned appeals

• African Student Association - promotes a greater understanding of the various cultures on the African continent and provide a network of support among the African students on campus

• Association of Black Students - unites and obtains further representation for black students; fosters growth in the culture and studies of the black race; and strives to improve the relations among all students and the members of the community

• Chinese Students & Scholars - provides an opportunity for Chinese students and scholars to explore and experience the Chinese culture

• India Association - creates improved understanding among students from India and other nationals on the campus

• International Students Club - promotes social and cultural relations between international students and other Missouri S&T students

• Korean Students Association - promotes friendship among Korean students and between Korean students and all other students at Missouri S&T

• Malaysian Students Organization - strengthens relations among Malaysian students at Missouri S&T, promotes friendly relations between Malaysian students and other students, and increases campus awareness of the Malaysian culture

• Muslim Student Association - is devoted to preserving and educating the university community about Muslims and Islamic culture; and serves as a forum for Muslims throughout the University to come and learn

• Thai Students Association - promotes friendship and understanding of Thai customs among Thai students and other people on campus; and provides guidance to new Thai students coming to Missouri S&T

• Turkish Students Association - promotes a close relationship and better understanding between Turkish, American and all international students at Missouri S&T

• Vietnamese Student Association - promotes and maintains friendly relationships as well as to support cultural, educational, and social activities related to the Vietnamese culture

• Society of Hispanic Professional Engineers - a national professional society which encourages Hispanic students to pursue careers in engineering

• National Society of Black Engineers - a national professional society which encourages minority students to pursue careers in engineering; aids students in seeking financial aid and provides tutoring
1- Core Component 1.D

The institution’s mission demonstrates commitment to the public good.

1. Actions and decisions reflect an understanding that in its educational role the institution serves the public, not solely the institution, and thus entails a public obligation.
2. The institution’s educational responsibilities take primacy over other purposes, such as generating financial returns for investors, contributing to a related or parent organization, or supporting external interests.
3. The institution engages with its identified external constituencies and communities of interest and responds to their needs as its mission and capacity allow.

1.D.1. Actions and decisions reflect an understanding that in its educational role the institution serves the public, not solely the institution, and thus entails a public obligation.

Serves the State

STEM education is at the heart of today’s high-tech, high-skill global economy. For America to remain economically competitive, our next generation of leaders—the students in Missouri’s classrooms today—must develop the skills that will help make them the most productive in the world. As a State institution, Missouri S&T offers education to Missouri residents at a low rate supported by state appropriations. The investment by the legislature results in a return on investment in the form of graduates in the STEM fields. Governance flows from the people of Missouri in that University System and its governing Board of Curators was created by the act of legislature, and that the Governor appoints and Missouri Senate confirms the Curators. There is a direct connection between the fundamental mission of the university while the public is also served indirectly by several S&T programs.

Project Lead the Way (PLTW) is the leading provider of rigorous, relevant, and innovative STEM education curricular programs in elementary schools. Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning, and a love of learning for K-12 educators. Those educators are trained at S&T during summer sessions. As a result, students in K-12 are exposed to STEM careers. PLTW's comprehensive curriculum is designed by teachers, university educators, engineering and biomedical professionals, and school administrators.

Missouri S&T’s Teacher Education Program fills a state need and is a top-ranked Teacher Education Program that certifies students to teach elementary or secondary education. Students earn a bachelor’s degree in their concentration or content area, giving students options outside of the classroom. Elementary education graduates earn a bachelor of arts in multidisciplinary studies with a concentration in math or science and are certified to teach grades 1-6 in Missouri, focusing on the core STEM subjects of science, technology, engineering and mathematics. Secondary education graduates earn a bachelor of arts or science in their chosen concentration and are certified to teach grades 9-12 in the state of Missouri. These students can choose from one of eight concentrations – applied math, biology, chemistry, economics, English, history, physics, or psychology.

Student Life

Student Life at Missouri S&T, contributes to the betterment of our local, surrounding, and global communities. We do this by offering students a variety of opportunities to become actively engaged
through service. This is possible due to the mutually beneficial partnership that exists between community organizations and the university. Annual events such as the Civic Engagement Fair, Make a Difference Day, Martin Luther King Day of Service, and the Miner Challenge Alternative Spring Break program are some of the volunteerism highlights of the academic year.

Missouri S&T offers an alternative spring break - Miner Challenge. Every year, students engage in immersive volunteer experiences across the U.S. and Internationally. Participants bond as a small team throughout the year while they develop leadership skills, gain awareness of social issues and work to improve communities. The experience culminates with an alternative break service trip that lasts between 5-14 days.

Community

Celebration of Nations gives area residents and Missouri S&T students a chance to showcase and celebrate vibrant cultural diversity. The community is exposed to several foreign cultures.

Curtis Laws Wilson Library supports the land grant mission. The campus community can utilize the library and its resources by going on the library's homepage. If books or materials are not available at Missouri S&T, the campus community has access to availability at other University of Missouri libraries and/or search a larger alliance of Missouri libraries.

Sustainable practices

Missouri S&T has a policy on sustainability. The Center for Sustainability develops, leads and promotes campus initiatives. The center manages S&T’s Solar Village and EcoVillage as research and outreach assets for the university, providing an ideal setting for corporate and government partnerships to demonstrate and test new energy and environmental technologies. The Center for Sustainability also leads outreach activities through coordination of conferences and workshops, developing campus and community outreach programs, promoting relevant research activities, and engaging current and future corporate, government and community partners.

Student Service Organizations

Many student organizations engage in service of some sort. Missouri S&T has at least seven student organizations devoted primarily to service:

- Alpha Phi Omega - a national service fraternity performs various nonprofit services for the entire student body and the community
- Circle K - a service organization with the objectives of promoting leadership and patriotism
- Gamma Alpha Delta - leads interested students in projects designed to alleviate human suffering and need, and encourages brotherhood among students as they work together for the common good
- Habitat for Humanity - a service organization with the objective of responsibly channeling student energies through participation in the Habitat mission of meeting the need for affordable housing
- Intercollegiate Knights - an honorary service fraternity established to foster college spirit, traditions, create leaders, serve the community and develop friendships among our members
- Lambda Sigma Pi - a service fraternity whose purpose is to develop friendship, inspire leadership, and promote service to the community
• Omega Sigma - a service organization dedicated to providing various leadership opportunities and promoting unity and friendship through volunteerism

1.D.2. The institution’s educational responsibilities take primacy over other purposes, such as generating financial returns for investors, contributing to a related or parent organization, or supporting external interests.

Supporting external interests

Missouri S&T is home to some of the top researchers in the world, and the faculty continues to pioneer new frontiers in a wide array of disciplines — from biomaterials that can heal open wounds to nanotechnology for faster, more efficient computing to the development of an “Internet for energy.” Corporate Relations works closely with corporate partners and major federal funding agencies, S&T faculty make discoveries every day that impact our world in such areas as electrical and cyber systems, energy, environmental engineering, civil infrastructure, and manufacturing engineering. With twenty-five centers, labs and institutes, Missouri S&T offers one of the most diverse, most technologically advanced research community in the world.

Corporations can access this research community and develop relationships that will help meet specific challenges in their industry with new technology and licensing opportunities. S&T’s Innovation Park is a research facility that provides businesses with information about new technology and access to research on the campus. Businesses can leverage cutting-edge research in energy, environment, manufacturing, materials, and civil and cyber infrastructure. In addition, businesses can explore ideas ready for commercialization by working directly with Missouri S&T’s Office of Technology Transfer and Economic Development.

The Office of Technology Transfer and Economic Development (TTED) serves as the focal point for technology commercialization, entrepreneurship, business development, and economic development for Missouri S&T. Our mission is to grow Missouri's economy by advancing technology commercialization, encouraging entrepreneurship, and promoting business opportunities. We provide information and data used for policy-making and administer policies, programs, and projects that raise the standard of living in the Rolla region and the state of Missouri. Our goal is to identify and leverage new economic opportunities and retain business wealth within the community.

In January 2011, Missouri S&T opened the Technology Development Center at Innovation Park. It's located at 900 Innovation Drive across the street from Phelps County Regional Medical Center off of 10th Street in Rolla, Missouri. The facility provides Class A office suites and shared office space for a variety of clients, particularly technology-oriented tenants. The building is about 22,000 gross square feet with roughly 18,000 square feet of leasable space. The Technology Development Center was the first building constructed at Innovation Park which is the newly designated research park at Missouri S&T.

The Student Business Incubator Program (SBIP), operated by the Office of Technology Transfer and Economic Development (TTED) is intended to provide resources and services to new student business ventures at Missouri S&T. Only student businesses are eligible to become participants in the program. A student business is defined as a for-profit business that is 51% owned by full-time or part-time undergraduate or graduate students at Missouri S&T and in which the majority of employees of the business are full-time or part-time undergraduate or graduate students at Missouri S&T. Student businesses are admitted as participants of the Student Business Incubator program at TTED’s sole and absolute discretion. Participants in the Student Business Incubator program may also be given preference in the Missouri S&T Entrepreneurial Internship and Co-Op Program. This internship program is designed
to encourage Missouri S&T students to consider and explore entrepreneurship as a career option. Entrepreneurial internships or co-ops last approximately three (3) to four (4) months. Missouri S&T’s (TTED) hires students as interns or co-ops at competitive salaries to develop and pursue a concept for an entrepreneurial venture that the students identify.

Kauffman FastTrac® programs help entrepreneurs start, grow, and lead innovative businesses. FastTrac® is offered throughout the United States and in selected countries around the world through a variety of affiliate organizations. By helping entrepreneurs succeed, FastTrac® programs help to further economic development efforts. As part of its mission, the Office of Technology Transfer and Economic Development (TTED) provides business management assistance to small businesses and aspiring entrepreneurs. This includes FastTrac® NewVenture®, TechVenture®, and GrowthVenture® programs.

The Small Business Administration (SBA) provides funding for Small Business Development Centers (SBDCs) and Small Business and Technology Development Centers (SBTDCs) throughout the country. The SBA’s Office of Small Business Development Centers (SBDC) manages the program which provides management assistance to current and prospective small business owners. SBDCs and SBTDCs offer one-stop assistance to individuals and small businesses by providing a wide variety of information and guidance in central and easily accessible branch locations. The program is a cooperative effort of the private sector; the educational community; federal, state, and local governments; and is an integral component of Entrepreneurial Development’s network of training and counseling services.

The University of Missouri Extension is the lead center for the Missouri SBTDC program. The Office of Technology Transfer and Economic Development at Missouri S&T operates as an SBTDC service location under a contract with the University of Missouri Extension. The Missouri SBTDC program provides subsidized and unsubsidized services to strengthen the competitiveness of Missouri businesses. Additionally, the Missouri SBTDC program encourages and enhances technology research and development, technology transfer, and technology deployment and strives to increase the participation of small businesses in the innovation and commercialization of new technology.

The Missouri Procurement Technical Assistance Center (PTAC) is a statewide, cooperative effort of University of Missouri Extension and the Department of Defense. Missouri PTAC is a member of the nationwide Procurement Technical Assistance Network. The mission of the Missouri PTAC is to help small businesses deal with regulations and red tape associated with selling to government organizations. Such obstacles often keep highly qualified suppliers from selling to federal, state, and local government organizations. The Missouri PTAC assists businesses — including small, disadvantaged, and women-owned firms — in obtaining federal, state, and local government contracts. Our procurement specialists help clients identify opportunities and understand the contracting process so they can take advantage of government sales dollars.
1. Criterion 1S - Summary

The institution’s mission is clear and articulated publicly; it guides the institution’s operations.

Summary

Missouri S&T’s mission was developed through a collaborative campus effort and approved by the University Of Missouri System Board Of Curators. It has been made publicly available through a variety of electronic and printed materials. The mission helped to drive the university strategic planning effort which is consistent with educational programs and diverse enrollment goals.