

## Rising to the Challenge: Missouri S&T's Strategy for Success

Thousands of students, faculty, staff, alumni, business partners, research partners and others helped shape Missouri S&T's strategic plan. The plan was approved in 2013 and fiscal year 2014 was the first year of its implementation. The plan will undergo revisions bi-annually as we grow and learn from the implementation process. It is a living document that adapts from our successes and challenges. The plan will explain where the campus is heading and how we are going to reach our goals.

In Appendix B, you can find what actions we've completed so far. As we progress, this section will continue to grow. Likewise, you can find those actions that still need to be completed in Appendix A; this section will shrink in the coming months and years as those actions are implemented. Finally, the lower left hand corner of the document indicates when the plan's progress was last updated.

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*\*Unless otherwise specified, the baseline for all metrics in the Missouri S&T strategic plan is 2012. Commitments are accounted for in the year they were funded and implemented.*

# MISSION AND VISION

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## MISSION <sup>1</sup>

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.

## VISION

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 educational programs, products and services; and technology and ideas to solve the great challenges of our time.

**FY15 Results:**  
Number of license  
and option  
agreements  
increased by 137  
percent over baseline



**FY15 Results:**  
NSF grant expenditures per  
tenured, tenure-track faculty  
increased 30 percent from  
baseline

<sup>1</sup> University of Missouri System Board of Curators approved in September 2013

# VALUES

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## Lifelong Success

We add exceptional value. The rewards of the Missouri S&T experience extend far beyond a college education, valued degree 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 world'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, 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 environment marked by openness, understanding and valuing all people and perspectives.

# STRATEGY STATEMENT

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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.

*Missouri S&T will provide by 2020 a top return on investment.....*

Missouri S&T's reputation for providing an excellent return on investment (ROI) for students is well documented by national publications and media outlets. We intend to build on that national reputation to provide a top ROI for all of our key customers—not only our students, but also the employers who hire them, the research partners who team with Missouri S&T and the donors who support Missouri S&T through their gifts.

For each of these customer groups, we will measure ROI based on a number of metrics, including:

- \*Starting salaries for undergraduate students
- \*Engineering doctoral students per faculty
- \*Number of graduate engineering/science distance/online programs, number of students enrolled via distance or online
- \*National Science Foundation grant expenditures per faculty, number of invention disclosures
- \*Employer satisfaction with hires
- \*Donor satisfaction with the Missouri S&T giving experience
- \*Third-party resources (such as *PayScale*, *U.S. News & World Report* recruiter assessment score)

Missouri S&T will become the institution of choice for partners seeking a highly qualified, talented and entrepreneurial workforce; innovative research; relevant educational programs, products and services; and technology and ideas that help solve the great challenges of our time. We will accomplish by building mutually beneficial relationships, fostering trust and confidence, breaking down barriers Vice Provost for Graduate Studies understanding in all aspects of our educational enterprise.

*.....among public research universities...*

An anticipated outcome of this focus on ROI is an enhanced visibility and awareness of Missouri S&T's reputation as a leading technological research university.

We will benchmark our performance for each key customer group against select comparator universities.

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# STRATEGY STATEMENT

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*...to students, employers  
research partners and  
donors.....*

Missouri S&T has identified six key customer groups:

- \* Undergraduate students
- \* Research-based graduate students
- \* Employers
- \* Donors
- \* Research investors
- \* Distance and online students

*...through  
extraordinary  
access to renowned  
expertise, services  
and experiential  
learning opportunities*

What sets Missouri S&T apart? First of all, our focus. Founded in 1870 as one of the first technological universities west of the Mississippi, Missouri S&T belongs to a select niche of institutions known collectively as "technological research universities." These eight public and eight private institutions share common traits: a high percentage of STEM (science, technology, engineering and mathematics) and business majors, doctoral programs in STEM disciplines, a robust research enterprise, and thriving humanities and liberal arts programs.

Building on that focus, Missouri S&T provides:

- \* Direct, personal access to nationally and internationally known researchers, faculty, staff and facilities
- \* A broad array of experiential learning opportunities for every student
- \* Innovative public and private partnerships that deliver solutions of global importance and local impact

Missouri S&T is committed to providing an inclusive environment that fosters creativity, innovation and an entrepreneurial spirit in all we do — from ground-breaking research to modes of learning to sustainable and ethical business practices.



**FY16 Results:**  
**Total headcount enrollment: 8,889**  
**representing a 16% increase**  
**Total Degrees Awarded:**

# THEMES AND LEVERS/CATEGORIES OF ACTIONS

## Levers/Categories of Actions

### Theme 1

**Develop and inspire creative thinkers and leaders for life-long success**

- 1.1 Require all undergraduate students to participate in some significant experiential learning activity before they graduate
- 1.2 Foster innovation and creativity for faculty, staff, students, and administration
- 1.3 *Establish database of measures to define student access to faculty and staff\**
- 1.4 Create professional and leadership development opportunities for faculty, staff, alumni, students, and administrators
- 1.5 *Encourage and enhance collaboration in teaching and research*

### Theme 2

**Enhance reputation and raise visibility**

- 2.1 Employ transformative and focused faculty hiring and retention, including cluster hires in the signature areas, to support best-in-class achievements
- 2.2 Leverage S&T as Missouri's technological research university
- 2.3 Develop a culture of excellence in research, scholarship and creative activity among faculty, staff and students
- 2.4 Create and implement a communication and marketing plan to raise the visibility of the campus and convey our return on investment
- 2.5 Modify our conventional methods of teaching and research to accommodate current and new technology that will enhance student learning and increase faculty productivity
- 2.6 *Improve infrastructure that enables faculty, graduate student and undergraduate student abilities and accomplishments*
- 2.7 Address administrative structural changes to facilitate strategy and enhance national visibility

*Note: Italicized Levers are not currently active/\*Levers are completed*



**In 2014-2015, 138 students completed the Opportunities for Undergraduate Research Experiences program. There are 184 students signed up for the academic year 2016-2017**

## THEMES AND LEVERS/CATEGORIES OF ACTIONS

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### Levers/Categories of Actions

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#### Theme 3

Achieve sustainable growth to ensure best return on investment

- 3.1 Evaluate current academic programs and create, modify, eliminate or combine in order to ensure a relevant portfolio that supports Missouri S&T's Carnegie classification as a national research university
  - 3.2 Centralize corporate relations to improve service to existing corporate partners and to identify and establish new partnerships for the purpose of increasing/enhancing research, economic development, credit and non-credit education, philanthropy, and the hiring of our graduates
  - 3.3 Improve facilities to enhance research and student learning, and expand experiential learning
  - 3.4 Promote inclusion and increase diversity of faculty, staff, students, and administrators to remain relevant and competitive in a global environment
  - 3.5 Create and implement a student and alumni lifetime engagement strategy
  - 3.6 *Devise convenient technology-based methods of accessibility, communication and engagement with external constituents*
  - 3.7 *Market campus strengths and create a broad awareness of student opportunities and benefits to both domestic and international audiences*
  - 3.8 Exercise leadership in sustainability on campus and in the community by modeling sustainability practices in daily operations and practicing environmental stewardship
  - 3.9 Conduct a comprehensive fundraising campaign to secure private support for identified campus priorities
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**FY16 Results:**  
Bertelmeier Hall (pictured left) received Silver LEED rating

**FY16 Results:**  
The Havener Center reduced its solid waste removal cost by 50 percent.



# THEMES AND LEVERS/CATEGORIES OF ACTIONS

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## Levers/Categories of Actions

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### Theme 4

Increase and facilitate meaningful access to and interaction with renowned faculty, staff and services

- 4.1 Create a comprehensive distance and online education strategy
  - 4.2 Enhance instructional labs and methods of developing lab experiences
  - 4.3 *Enhance innovative use of technologies to improve and facilitate access*
  - 4.4 *Ensure renowned faculty teach/interact with undergraduate students*
  - 4.5 Engage in transformative doctoral student recruiting/retention and placement
  - 4.6 Improve student, faculty, staff and administrator mentoring and advising
  - 4.7 Identify and remove barriers to graduation and reduce time to degree for undergraduate and graduate students
  - 4.8 *Expand access to renowned faculty through enhanced recruiting and retention*
  - 4.9 *Promote non-traditional activities outside of classroom*
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The Experience S&T program was launched to increase graduate enrollment. The program invites graduate candidates to campus and includes hotel, meals, travel allowance, dinner with faculty, a campus tour, lab visits, and faculty visits

## Implementation | Actions and Metrics

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### Theme 1

#### Develop and inspire creative thinkers and leaders for life-long success

##### Theme Metrics

**Metric:**

Number of academic programs and administrative departments that expect participation in sponsored or recognized opportunities that encourage creative thinking, innovation, entrepreneurship, or leadership development by its students, faculty, and staff

**Baseline:**

Current number of academic programs that require undergraduate participation in significant experiential opportunities (as defined in Action 1.1.1)

**2020 Metric:**

Each academic program requires 100% undergraduate student participation in some significant experiential learning activity and encourages graduate student participation; each department (academic and administrative) has an established plan for faculty and staff participation either as learners or advocates in developing creative thinkers and leaders

##### Key Lever Targets

**Target 1:**

By year five, ensure that all undergraduate degree programs require a significant experiential learning activity

**Target 2:**

Update and revise list of internship and externship opportunities for the semester, inter-sessions, and summer

**Undergraduate students gain valuable work experience on Co-ops and earn on average \$3,252 per month; graduate students on average earn \$3,769 per month**

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.1: Require all undergraduate students to participate in some significant experiential learning activity before they graduate**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.1.2:</b> Incorporate experiential/service learning into the core curriculum in all degree programs	FY14	8/1/14	18 months	Vice Provost for Undergraduate Studies, Vice Provost and Deans	No formal requirement for any degree	Percent of revised undergraduate programs approved
<b>1.1.3:</b> Assign responsibilities associated with monitoring experiential learning activities and maintaining the reporting of those activities to the Vice Provost for Undergraduate Studies, who will regularly inform the Executive Director of Strategy, Planning and Assessment	FY15	6/1/15	Ongoing	Vice Provost for Undergraduate Studies, Vice Chancellor for Student Affairs	Activities not currently monitored	Number of experiential learning activities
<b>1.1.5:</b> Career Opportunities and Employer Relations (COER) will continue to explore internship, externship, and inter-session opportunities	FY14	1/1/14	Ongoing	Vice Provost for Undergraduate Studies, Vice Chancellor for Student Affairs	AY12/13: 198 employer internship opportunities, 9 employer externship opportunities	List of opportunities; Ongoing target: review and revise list annually
<b>1.1.6:</b> Establish experiential opportunities through peer advising and mentoring	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	Experiential opportunities do not currently exist	Number of peer advising and mentoring opportunities

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.1: Require all undergraduate students to participate in some significant experiential learning activity before they graduate**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.1.7:</b> Identify prospective donors to expand activities at the Kummer Student Design and Experiential Learning Center through increased giving and major gifts	FY15	7/1/14	Ongoing	Vice Chancellor for University Advancement	Current level of donors	Number of memberships in "Miners by Design"
<b>1.1.8:</b> Develop promotional materials to promote experiential learning to the community and to promote options for students	FY15	7/1/14	Ongoing	Executive Director of Marketing and Communications, Vice Provost and Dean for Enrollment Management	Promotional materials do not currently exist	Number and type of promotional materials developed
<b>1.1.9:</b> Enhance the student employee training initiative through cross-campus collaboration supporting experiential learning	FY16	7/1/15	Ongoing	Vice Chancellor for Student Affairs	No training model exists	Implementation of training model
<b>1.1.10:</b> Ensure diversity and inclusion themes are incorporated into experiential learning opportunities	FY16	3/1/16	3 Years	Vice Provost for Undergraduate Studies, Vice Chancellor for Student Affairs, Vice Chancellor for Global and Strategic Partnerships		Number of themes incorporated into experiential opportunities
<b>1.1.11:</b> Identify funding sources to expand study abroad programs and maintain services related to these programs	FY17	7/1/16	2 years	Assistant Vice Chancellor of International Cultural Affairs	3 funding sources, \$16K per year	Number of funding sources and level of funding from each source

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.2: Foster innovation and creativity for faculty, staff, students, and administration**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.2.1:</b> Create and promote an innovation team that solicits and considers creative suggestions from the Missouri S&T family; empower owners for implementation. Create a fund to implement several each year	FY14	7/1/13	7 years	Chancellor, Executive Director of Strategy, Planning and Assessment	No prior team or funds	Success rate in reaching funded project metrics; Ongoing Target: achieve 80% success rate in funded projects
<b>1.2.2:</b> Implement a Learning Commons with state-of-the-art collaborative technology, practice presentation rooms, experimental technology lab with video editing and 3D printing capability for teaching, learning, and research	FY15	7/1/14	6 years	Vice Chancellor for University Advancement, Vice Chancellor for Finance and Administration, Library Director	Learning Commons does not currently exist	Begin implementation of learning commons, establish collaborative learning spaces
<b>1.2.3:</b> Devise a plan for TedX-like series for students, faculty, and staff (e.g., experiential learning activities, professional development, TedX Thursday)	FY14	7/1/14	2 years	Vice Provost for Undergraduate Studies, Vice Provost for Graduate Studies, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Provost and Deans	Usage percentage in learning activities	Plan and implementation; Ongoing Target: implementation

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.2: Foster innovation and creativity for faculty, staff, students, and administration**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.2.3 a:</b> Council of Graduate Students will host Ted Talk style inspirational lectures to showcase ideas and "ignite" the campus and Rolla community	FY15	7/1/14	Ongoing	Council of Graduate Students, Vice Provost for Graduate Studies	AY13/14: 1 event	Number of events
<b>1.2.4:</b> Encourage entrepreneurship in the campus community through entrepreneurship courses to feed the campus business "incubator" including interdisciplinary coursework that attracts creative students who want to make a difference	FY16	7/1/15	Ongoing	Vice Provost and Deans, Technology Transfer and Economic Development Director	26 students participating	Number of students participating
<b>1.2.5:</b> Foster awareness of co-curricular opportunities (e.g., intersession or alternative spring break events) for interdisciplinary groups of students, faculty and/or staff focused on providing solutions for problem-solving, innovation or leadership and link to career readiness	FY14	9/1/13	2 years	Vice Provost for Undergraduate Studies, Vice Provost for Graduate Studies, Vice Chancellor for Student Affairs, Vice Provost and Deans	AY13/14: Miner Challenge- 59 students and 3 staff	Number of faculty, staff and students involved in events, percentage increased will be measured
<b>1.2.6:</b> Continue developing minor and certificate programs (e.g., leadership, entrepreneurship, humanitarian engineering and science, and creativity)	FY14	9/1/13	2 years	Vice Provost for Undergraduate Studies, Vice Provost for Graduate Studies, Vice Chancellor for Student Affairs, Vice Provost and Deans	0 programs	Programs developed; Target year two: one more program added

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 1.2: Foster innovation and creativity for faculty, staff, students, and administration

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.2.7:</b> Encourage participation in cross-disciplinary or global experiences (e.g., arts and humanities experiences for engineering, science and business students, study abroad)	FY16	7/1/15	Ongoing	Vice Provost for Undergraduate Studies, Vice Chancellor for Student Affairs, Vice Provost and Deans, Assistant Vice Chancellor for International and Cultural Affairs	23 students participated in semester long study abroad	Number of students who study abroad
<b>1.2.8:</b> Identify ways in which graduate students' research can be transformed into entrepreneurial application	FY14	7/1/14	Ongoing	Vice Provost for Research, Vice Provost for Graduate Studies	3 new student businesses	Number of entrepreneurial activities
<b>1.2.9:</b> Encourage an environment that promotes student-staff interaction through research and/or entrepreneurship	FY16	7/1/15	Ongoing	Vice Provost for Undergraduate Studies, Vice Provost for Graduate Studies, Vice Provost and Deans, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs	6 staff engaged	Increased staff engagement

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.2: Foster innovation and creativity for faculty, staff, students, and administration**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.2.12:</b> Develop student, faculty and staff affinity groups	FY16	3/1/16	2 years	Provost, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs	Zero affinity groups currently exist	Number of affinity groups
<b>1.2.13:</b> Infuse curriculum to enhance campus diversity and inclusion competencies	FY16	3/1/16	2 years	Vice Provost and Deans, Provost, Vice Provost for Undergraduate Studies, Vice Provost for Graduate Studies	Zero courses are currently infused	Number of courses that incorporate pedagogies that promote diversity and inclusion competencies
<b>1.2.14:</b> Explore creating a Diversity Certificate program for students, faculty and staff aimed at enhancing campus climate	FY16	3/1/16	2 years	Provost, Vice Provost and Deans, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs	Diversity Certificate does not currently exist	Determine Diversity Certificate options



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.4: Create professional and leadership development opportunities for faculty, staff, alumni, students, and administrators**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.4.1:</b> Identify, develop and implement professional development plans to enhance leadership, creativity, and innovation for the staff in each department or unit	FY14	10/1/13	5 years	Vice Chancellor for Human Resources, Equity and Inclusion	ALDP- 5 2nd round Talent Review- 6 Development Plans- 2	Develop department and unit plans; Ongoing Target: implementation
<b>1.4.2:</b> Streamline and integrate professional development and leadership plans for students to enhance creativity and innovation	FY15	7/1/14	5 years	Vice Chancellor for Student Affairs	7,514	Number of plans developed
<b>1.4.3:</b> Integrate meaningful developmental experiences designed to enhance students interpersonal, communication, and leadership skills	FY15	7/1/14	5 years	Vice Chancellor for Student Affairs, Vice Provost for Undergraduate Studies, Vice Provost and Dean for Enrollment Management	357	Number of experiences developed

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 1.4: Create professional and leadership development opportunities for faculty, staff, alumni, students, and administrators**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>1.4.4:</b> Promote a multi-dimensional model of wellness that incorporates whole-person concept and encourages lifelong health	FY15	7/1/14	Ongoing	Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs	No model currently exists	Model developed
<b>1.4.5:</b> Increase the percentage of on-campus graduate students who participate in one or more professional development activities	FY15	7/1/14	6 years	Vice Provost for Graduate Studies	AY13/14: 5% on-campus participation rate	Increase on-campus graduate participation rate to 30%
<b>1.4.6:</b> Create an interdisciplinary student leader certificate program	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	No task force or certificate program exists	Develop program; Target year two: develop and pilot program with a targeted group; Target year three: fully implement the program

## Implementation | Actions and Metrics

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### Theme 2

#### Enhance reputation and raise visibility

##### Theme Metrics

**Metric 1:**

Percentage of General Operating Revenue dedicated to institutional marketing and visibility efforts comparable to best-in-class universities  
(Baseline: 0; 2020 Target: 1%)

**Metric 2:**

Increase the number of additional faculty members through strategic hiring to leverage S&T as Missouri's technological research university  
(Baseline: 0; 2020 Target: 100)

##### Key Lever Targets

**Target 1:**

Number of faculty hires (2020 Target: 100)

**Target 2:**

Increase undergraduate enrollment (Baseline: 5,843; 2020 Target: 6,343) and increase Ph.D. enrollment (Baseline: 517; 2020 Target: 717)

**Target 3:**

Increase net grant and contract expenditures (Baseline: \$36.3M; 2020 Target: \$40M)

**Target 4:**

Increase citations per tenured, tenure-track faculty (Baseline: 75; 2020 Target: 125)

**Target 5:**

Increase the number of agreements to enhance current portfolio on campus (Baseline: 0; 2020 Target: 3)

**FY16 Results: The number of female department chairs has tripled**



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.1: Employ transformative and focused faculty hiring and retention, including cluster hires in the signature areas, to support best-in-class achievements**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.1.2:</b> Develop and implement a process to transparently allocate all faculty positions to impact strategic plan and progress on unit performance measures	FY14	7/1/13	7 years	Provost, Chancellor, Vice Provost and Deans	No process currently exists	Number of open and new faculty positions allocated to impact strategic plan and progress on unit performance measures; Target year seven: all open positions filled strategically
<b>2.1.3:</b> Develop and implement a process to allocate faculty raises aligned with the strategic plan to address retention and reward high productivity	FY14	7/1/14	6 years	Provost, Chancellor	No process currently exists	GRA allocated faculty raises for retention/productivity
<b>2.1.4:</b> Identify and pursue companies, foundations, and individual donors for charitable gifts to hire two national academy stature faculty in endowed chair positions in strategic areas #1 and #2	FY14	7/1/13	7 years	Vice Chancellor for University Advancement, Vice Provost for Research	0 hires	Number of national academy stature faculty hired; Target year three: 1; Target year four: 2; Target year five: 1

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.1: Employ transformative and focused faculty hiring and retention, including cluster hires in the signature areas, to support best-in-class achievements**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.1.5:</b> Hire four faculty to complement each endowed chair hired under Action 2.1.4	FY14	7/1/15	5 years	Provost, Vice Provost and Deans	0 hires	Complementary faculty associated with the endowed chair
<b>2.1.6:</b> Identify and pursue companies, foundations and individual donors to fund startup packages	FY14	7/1/13	1 year	Vice Chancellor for University Advancement, Department Chairs, Vice Provost and Deans	No report currently exists	Report on potential funding for startup packages
<b>2.1.8:</b> Identify and pursue companies, foundations, and individual donors for charitable gifts to hire two national academy stature faculty in endowed chair positions in strategic areas #3 and #4	FY14	7/1/14	6 years	Vice Chancellor for University Advancement, Department Chairs, Vice Provost and Deans	0 endowed chairs for signature areas	Number of national academy stature faculty hired; Target year four: 1; Target year seven: 2
<b>2.1.9:</b> Hire four faculty to complement each endowed chair hired under Action 2.1.8	FY14	7/1/16	4 years	Provost, Vice Provost and Deans	0 endowed chairs for signature areas	Complementary faculty associated with the endowed chair

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.2: Leverage S&T as Missouri's technological research university**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.2.1:</b> Increase Missouri S&T's undergraduate enrollment by 500 by 2020	FY14	7/1/13	7 years	Vice Provost and Dean for Enrollment Management	5,843	Undergraduate enrollments; Target year seven: 500
<b>2.2.2:</b> Increase Missouri S&T's Ph.D. enrollment by 200-400 by 2020	FY14	7/1/13	7 years	Vice Provost for Graduate Studies, Assistant Vice Chancellor of International and Cultural Affairs	517	Number of PhD's; Target year seven: 200-400
<b>2.2.3:</b> Increase the number of T/TT and (NTT) faculty members by 67 (33) (12 T/TT faculty in conjunction with Lever 2.1 focused areas in Phase 1 hiring)	FY14	7/1/13	7 years	Provost, Vice Provost for Research, Department Chairs, Vice Provost and Deans	T/TT- 285 (ranked) NTT- 41	Number of T/TT and NTT faculty; Target year seven: increase by 100
<b>2.2.4:</b> Transparently allocate as defined in Action 2.1.2 all open and new faculty positions to impact strategic plan and progress on unit performance measures	FY14	7/1/13	7 years	Chancellor, Provost, Vice Provost and Deans	0 hires	Number of positions filled in line with strategic plan and progress on unit performance measures; Target year seven: all open positions filled strategically

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 2.2: Leverage S&T as Missouri's technological research university

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
2.2.5: Increase the number of technical/specialized staff members to support strategic program activities	FY14	7/1/13	7 years	Vice Provost and Deans, Vice Chancellor for Human Resources, Equity and Inclusion	Technical/Para professional- 96; Professional- 187	Number of full-time tech and specialized staff members; Target year seven: number of staff
2.2.6: Missouri S&T will develop specific agreements with UM campuses, other academic institutions, or external partners to collaborate in delivering courses and degrees that enhance current portfolios	FY14	9/1/14	5 years	Provost, Assistant Vice Chancellor for Global Learning, Executive Director of Corporate Relations	0 agreements	Agreements between campuses; Target year seven: 3 new agreements

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.3: Develop a culture of excellence in research, scholarship and creative activity among faculty, staff, and students**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.3.1:</b> Develop and implement performance-based resource allocation models commensurate with degree offerings, including productivity in research, scholarship and creative works	FY14	7/1/13	2 years	Provost, Vice Provost and Deans	No resource allocation model currently exists	Inter-department general revenue appropriations distribution models; Target year five: distribution model implemented
<b>2.3.2:</b> Identify and take actions to improve the metrics that contribute to increasing the national ranking of five graduate programs (See Action 3.1.2)	FY14	7/1/14	5 years	Provost, Vice Provost for Graduate Studies, Department Chairs, Vice Provost and Deans	Latest values of measures	Select five departments and measures used in graduate rankings; Target year five: improvements in measures equivalent to schools in next tier
<b>2.3.3:</b> Be selected to lead a National Science Foundation Engineering Research Center-type center	FY14	7/1/14	5 years	Vice Provost for Research	0 centers	Number of NSF ERC-type centers; Target year five: 1 proposal
<b>2.3.4:</b> Establish new sustainable industry-funded research consortia	FY14	7/1/13	Ongoing	Vice Provost for Research	0 industry funded consortia	Number of new industry-funded research consortia; Target year five: 2



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.3: Develop a culture of excellence in research, scholarship and creative activity among faculty, staff, and students**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.3.5:</b> Establish programs and facilities to host visiting world-class faculty	FY14	7/1/14	5 years	Provost, Vice Provost and Deans	AY13/14: hosted 51 visiting faculty for a lecture/ seminar; 2 full-time visiting scholars	Number of world-class faculty hosted; Target year five: 8
<b>2.3.8:</b> Expand research and entrepreneurial opportunities for undergraduate students, including the Opportunities for Undergraduate Research Experiences program	FY14	7/1/14	4 years	Vice Provost for Undergraduate Studies, Vice Provost and Deans	AY12/13: 101	Number of UG students enrolled in course 390 and/or supported by external research funding; Target year two: 10% increase; Target year five: 50% increase
<b>2.3.9:</b> Balance teaching and research relative to comparator institutions by enforcing workload policy	FY14	7/1/14	3 years	Department Chair Council, Provost, Vice Provost and Deans	Current number of departments implementing workload policy	Number of departments with workload policy in place; Ongoing Target: all academic departments
<b>2.3.10:</b> Develop and implement a new program to instill a culture of excellence in research, scholarship, and creative works in early career faculty	FY14	7/1/14	3 years	Department Chairs, Provost, Vice Provost and Deans	Program does not currently exist	Improvement in annual department defined research, scholarship, and creative activity metrics; Ongoing Target: program implementation

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.3: Develop a culture of excellence in research, scholarship and creative activity among faculty, staff, and students**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.3.11:</b> Develop and implement a new program to instill a culture of excellence in research, scholarship, and creative works in doctoral students	FY14	7/1/14	2 years	Vice Provost for Graduate Studies, Department Chairs, Vice Provost and Deans	Program does not currently exist	Improvement in annual department defined research, scholarship and creative activity metrics
<b>2.3.12:</b> Develop and implement a cost share program which supports students who attend national conferences to present their research results	FY14	7/1/14	3 years	Vice Provost and Deans	Program does not currently exist	Development of program; Ongoing Target: number of students who present results

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**Lever 2.4: Create and implement a communication and marketing plan to raise the visibility of the campus and convey our return on investment**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.4.4:</b> The Marketing Leadership Team, in consultation with the Core Marketing Network, shall identify marketing staff who will be responsible for implementing the plan and shall create a professional development plan to help ensure those staff are trained to carry out their responsibilities	FY14	1/1/13	5 years	Executive Director of Marketing and Communications	No prior staff identified	Training needs identified and prioritized; professional development budget identified; professional development budget secured (recurring)
<b>2.4.8:</b> Require all communications and marketing materials (print, web, video, etc.) to be reviewed by a central marketing team to ensure consistency of messaging, appearance, and tone	FY14	1/1/14	5 years	Executive Director of Marketing and Communications	Historical decentralized process	Proposal approved; funding secured; Target year two: communication audit
<b>2.4.11:</b> Centralize all communications and marketing operations	FY14	9/1/13	5 years	Executive Director of Marketing and Communications	Historical decentralized process	Proposal to centralize approved; structure implemented; funding secured; Target year two: implement centralized marketing
<b>2.4.12:</b> Develop annual publications of Research Yearbooks to enhance the visibility of graduate education	FY15	7/1/14	Ongoing	Vice Provost for Graduate Studies	No publication currently exists	Publication distribution

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.4: Create and implement a communication and marketing plan to raise the visibility of the campus and convey our return on investment**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.4.13:</b> Continue development of Scholars' Mine designed for increasing internal and external communication and globally promoting the intellectual work of the campus	FY15	7/1/14	Ongoing	Library Director	Development of Scholars' Mine	Scholars' Mine enhancements
<b>2.4.14:</b> Execute an integrated visual identity and consistent outreach for Student Affairs to convey return on investment	FY16	7/1/15	Ongoing	Vice Chancellor for Student Affairs, Executive Director of Marketing and Communications	Current outreach does not exist	Level of awareness
<b>2.4.15:</b> Develop a communication plan to increase awareness of campus internationalization efforts and international collaboration activities identified during the ACE Internationalization Lab	FY17	9/1/16	2 years	Vice Chancellor for Global and Strategic Partnerships, Campus Internationalization Committee, Executive Director of Marketing and Communications	Communication plan does not currently exist	Communication plan created and implemented

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 2.5: Modify our conventional methods of teaching and research to accommodate current and new technology that will enhance student learning and increase faculty productivity**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>2.5.2:</b> Enhance resources for distance and blended learning, particularly with respect to the management and distribution of multimedia objects (Aid professors use in classroom instead of taking a field trip)	FY14	7/1/14	3 years	Vice Provost and Deans, Assistant Vice Chancellor for Global Learning	Current level of multimedia objects	Number of multimedia objects
<b>2.5.6:</b> Create and implement a stipend program to reward faculty who incorporate Blended Learning techniques into their courses	FY14	7/1/13	Ongoing	Provost, Vice Provost and Deans, Assistant Vice Chancellor for Global Learning	AY13/14: 4 new blended courses	Increase number of blended courses; Increase number of faculty involved
<b>2.5.8:</b> Redesign high-volume courses through integration of new technology and modified teaching methods to enhance student learning	FY14	7/1/13	5 years	Vice Provost and Deans	1 course	Number of courses redesigned; Target year four: increase calculus success by 7%

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 2.7: Address administrative structural changes to facilitate strategy and enhance national visibility

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
2.7.1: Implement the organizational structure appropriate to strategic plan	FY14	7/1/13	3 years	Chancellor	2012 campus structure	Implement the organizational structure changes appropriate to strategic plan

## Implementation | Actions and Metrics

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### Theme 3

#### Achieve sustainable growth to ensure best return on investment

##### Theme Metrics

**Metric 1:**

Undergraduate student enrollment (Fall 2012 Baseline: 5,843; Fall 2020 Target: 6,343)

**Metric 2:**

Ph.D. enrollment (Fall Semester 2012 Baseline: 517; Fall Semester 2020 Target: 717)

In fall 2015:  
FTE enrollment  
was 7,489;  
Ph.D. enrollment  
was 593



##### Key Lever Targets

**Target 1:**

10% increase in department determined productivity measures (external measures for comparator group comparison)

**Target 2:**

Increase the number of underrepresented minority/female faculty, staff and students (2020 Target: +16 faculty and +80 students)

**Target 3:**

A significant increase in graduating students maintaining a continued relationship with Missouri S&T

**Target 4:**

A significant increase in the number of donors and the amount of money raised (2020 Target: 1% annual growth, 66% renewal rate for all donors, 75% renewal rate for alumni donors)

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.1: Evaluate current academic programs and create, modify, eliminate or combine in order to ensure a relevant portfolio that supports Missouri S&T's Carnegie classification as a national research university**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.1.1:</b> Continue performing comparisons of academic department productivity to peer institutions	FY14	7/1/14	Ongoing	Provost, Department Chairs, Vice Provost and Deans	Department productivity measures	Academic departments complete comparison of productivity measures; Target year five: 10% improvement in department productivity measures
<b>3.1.2:</b> Identify and take actions to improve the metrics that contribute to increasing the national ranking of all graduate programs	FY14	7/1/14	5 years	Provost, Department Chairs, Vice Provost and Deans, Vice Provost for Graduate Studies	Latest values of measures	Select measures used in graduate rankings and acquire values and departmental specific metrics for improvement; Target year three: select measures used in graduate rankings, acquire values and identify actions for improvement
<b>3.1.3:</b> Evaluate the need for new or elimination of existing degree programs	FY14	10/1/13	Ongoing	Provost, Vice Provost and Deans	Current degree programs	Recommendations ongoing



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.2: Centralize corporate relations to improve service to existing corporate partners and to identify and establish new partnerships for the purpose of increasing/enhancing research, economic development, credit and non-credit education, philanthropy, and the hiring of our graduates**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.2.6:</b> Broadly identify needs of external constituents that could be met by Missouri S&T	FY14	7/1/15	5 years	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations	Needs have not been determined	Needs of external constituents identified
<b>3.2.7:</b> Determine mechanisms to develop reciprocal partnerships	FY14	7/1/15	5 years	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations	Mechanisms not developed	Number of corporate partners; development of mechanism
<b>3.2.8:</b> Develop a method for evaluating the relative strength and breadth of the partnerships with external constituents (research, student hiring, giving, distance courses, board memberships, etc.)	FY14	7/1/15	1 year	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations	Method for evaluation does not currently exist	Acceptance of tiered approach evaluation method
<b>3.2.9:</b> Develop a matrix that reflects multiple results and provides an overall indication of the strength of the relationship and helps identify paths to maintain, strengthen, or expand the partnership	FY14	7/1/15	1 year	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations	Matrix does not currently exist	Acceptance of results by both S&T and corporate community

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.2: Centralize corporate relations to improve service to existing corporate partners and to identify and establish new partnerships for the purpose of increasing/enhancing research, economic development, credit and non-credit education, philanthropy, and the hiring of our graduates**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.2.10:</b> Create a concierge approach to corporate relations including a web presence that supports the mission of the office	FY14	7/1/15	5 years	Executive Director of Corporate Relations	Webpage does not currently exist	Development of a web page; number of corporate partnerships, corporate research and contract revenue
<b>3.2.11:</b> Develop a marketing plan to communicate the benefits of the office to key customers (See Lever 2.4)	FY14	7/1/15	5 years	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations, Assistant Vice Chancellor for Global Learning, Executive Director of Marketing and Communications	Marketing plan does not currently exist	Number of corporate partnerships, corporate students, corporate research, contract revenue, gifts, and students hired
<b>3.2.12:</b> Work with Information Technology to create a “customer relations” management database that provides easy access to usable and actionable information	FY14	7/1/15	5 years	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations	Database does not currently exist	Number of corporate partnerships
<b>3.2.13:</b> Create a metric that can be used to record corporate relations success in enhancing "customer relations" or industrial donations, funded research, distance learning, non-credit courses, or other partnerships	FY16	7/1/15	5 years	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations	No metric currently exists	Metrics developed

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.3: Improve facilities to enhance research and student learning, and expand experiential learning**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.3.1:</b> Leverage strategic funds for instructional laboratories with matching funding from non-appropriated sources	FY14	7/1/13	Ongoing	Provost, Vice Provost and Deans	\$0 funds	Instructional lab match funding acquired and allocated; number of courses and students impacted; number of remote collaborations supported
<b>3.3.2:</b> Continue exploring plans and processes for acquiring research equipment in areas that have high return on investment to be matched with non-appropriated funds	FY14	7/1/13	Ongoing	Vice Chancellor for University Advancement, Vice Provost and Deans	Current plan	Devise a development plan and determine feasibility
<b>3.3.4:</b> Continue evaluating all campus facilities for their readiness for sustainable growth and return on investment	FY14	7/1/13	Ongoing	Physical Facilities, Vice Chancellor for Finance and Administration	Campus Master Plan	Continue facility evaluation
<b>3.3.5:</b> Develop and disseminate a research infrastructure database to help departments share equipment	FY14	7/1/14	5 years	Vice Provost for Research, Vice Provost and Deans	Current process and structure	Database developed; Target year three: database accessible by departments

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.3: Improve facilities to enhance research and student learning, and expand experiential learning**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.3.6:</b> Investigate the feasibility of establishing a \$20 million endowment for the maintenance of (teaching, research, and co-curricular) equipment (See Lever 3.9)	FY14	7/1/13	3 years	Development, Vice Chancellor for University Advancement	No maintenance endowment	Feasibility determined
<b>3.3.10:</b> Implement Learning Space Design Guidelines based on standard practices to guide the design of all learning spaces on campus	FY15	7/1/14	3 years	Library Director, Development, Design and Construction, Vice Provost and Deans	0 spaces designed	Number of spaces designed
<b>3.3.11:</b> Assess effectiveness of collaborative learning spaces (e.g., learning commons) that can be used for experiential learning opportunities and undergraduate research	FY15	3/1/15	2 years	Vice Provost for Undergraduate Studies, Vice Provost and Deans	0 collaborative learning spaces	Number of collaborative learning spaces
<b>3.3.12:</b> Provide innovative student support facilities to meet customer needs	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	0 facility enhancements	Number of facility enhancements

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 3.3: Improve facilities to enhance research and student learning, and expand experiential learning

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
3.3.13: Develop a plan to increase Gender Neutral/Family Restrooms	FY16	3/1/16	3 years	Vice Chancellor for Finance and Administration, Director Institutional Diversity, Equity and Inclusion	12	Number of gender neutral and family friendly facilities
3.3.14: Develop a plan to increase lactation rooms	FY16	3/1/16	3 years	Vice Chancellor for Finance and Administration, Director Institutional Diversity, Equity and Inclusion	1	Number of lactation rooms

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.4: Promote inclusion and increase diversity of faculty, staff, students, and administrators to remain relevant and competitive in a global environment**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.4.1:</b> To increase diversity of faculty and staff, provide incentives to the hiring departments that select qualified underrepresented minorities	FY14	9/1/13	5 years	Chancellor	Number of under-represented T/TT faculty: 15; number of women T/TT faculty: 56; number of under-represented NTT faculty: 2; number of NTT women faculty: 16	Underrepresented faculty, female faculty, professional/administrative staff
<b>3.4.2:</b> To increase diversity of students, explore scholarship funding to be more competitive with underrepresented minorities/female/student recruitment (See Lever 3.9)	FY14	9/1/13	5 years	Vice Chancellor for University Advancement	AY13/14 scholarship funding sources-9	Plan developed to expand scholarship and grant funding for female and underrepresented minority students
<b>3.4.3:</b> Set up transfer articulation agreements with two-year institutions with large underrepresented minority populations	FY14	9/1/13	5 years	Vice Provost and Dean for Enrollment Management	0 articulation agreements	Number of articulation agreements

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.4: Promote inclusion and increase diversity of faculty, staff, students, and administrators to remain relevant and competitive in a global environment**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.4.5:</b> Develop and provide professional development and training for staff, faculty, and students that provides awareness of diversity and inclusion issues and encourages them to develop skills that will make our campus a warm and welcoming environment	FY14	9/1/13	Ongoing	Vice Chancellor for Human Resources, Equity and Inclusion	0 trainings	Number of trainings
<b>3.4.7:</b> Bring to campus underrepresented faculty as visiting scholars	FY14	9/1/13	5 years	Provost, Vice Provost and Deans, Vice Chancellor for Human Resources, Equity and Inclusion	Historical	One per semester
<b>3.4.9:</b> Review, revise, and create policies that support work-life balance	FY14	9/1/13	3 years	Chancellor, Vice Chancellor for Human Resources, Equity and Inclusion	Current policies	Policies created/revised
<b>3.4.10:</b> Evaluate and enhance faculty recruitment process and practice	FY14	9/1/13	Ongoing	Department Chair Council, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Provost and Deans, Provost	Current recruitment process	Processes reviewed, recommendations made

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.4: Promote inclusion and increase diversity of faculty, staff, students, and administrators to remain relevant and competitive in a global environment**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.4.11:</b> Explore collaborative partnerships for early childhood education, child development programs, and facilities to enhance faculty recruitment and retention. Evaluate opportunities through campus master planning process (See Action 3.3.4)	FY14	9/1/13	2 years	Vice Chancellor for Finance and Administration	0 programs for childhood education	Opportunities and programs identified and evaluated
<b>3.4.12:</b> Develop and deliver regular workshop training sessions for faculty and staff on compliance, Equal Employment Opportunity and recruitment practices	FY15	7/1/14	Ongoing	Vice Chancellor for Human Resources, Equity and Inclusion	0 workshops	Number of workshops
<b>3.4.13:</b> Design, launch, and maintain a Diversity and Inclusion website to promote inclusion and diversity	FY15	7/1/14	Ongoing	Vice Chancellor for Human Resources, Equity and Inclusion	Website does not currently exist	Website maintained
<b>3.4.14:</b> Enrich campus commitment to diversity and inclusion through recruitment of student-athletes	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	71% male; 29% female; 74% white/non-Hispanic; 26% minority; 28 states; 7 countries	Student athlete enrollment statistics



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.4: Promote inclusion and increase diversity of faculty, staff, students, and administrators to remain relevant and competitive in a global environment**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.4.15:</b> Enhance collaborations and opportunities to promote an inclusive campus community and develop cultural competence	FY17	7/1/16	Ongoing	Vice Chancellor for Student Affairs, Vice Chancellor for Human Resources, Equity and Inclusion, Provost	Current level of collaborations	Enhanced collaborations
<b>3.4.16:</b> Develop a diversity training workshop for recognized student organizations as part of a leadership training program	FY16	3/1/16	3 years	Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs	Leadership training program does not currently exist	Number of participants
<b>3.4.17:</b> Develop ongoing Diversity Speaker Series to highlight specific issues/topics and to bring exceptional talent and diversity to Missouri S&T	FY16	3/1/16	Ongoing	Vice Provost and Deans, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs, Chancellor	Diversity Speaker Series does not currently exist	Number of speakers
<b>3.4.18:</b> Explore creating a mini-grant program aimed at providing funding for programs and initiatives that promote diversity and inclusion	FY16	3/1/16	1 year	Vice Chancellor for Finance and Administration, Vice Chancellor for Human Resources, Equity and Inclusion	Grant program does not currently exist	Feasibility of mini-grant program

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.5: Create and implement a student and alumni lifetime engagement strategy**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.5.3:</b> Create a multifaceted engagement program that brings students through graduation and to the Academy levels	FY14	7/1/13	Ongoing	Vice Chancellor for University Advancement, Vice Chancellor for Student Affairs, Department Chairs, Vice Provost and Deans	Current levels of student and alumni involvement with campus sponsored or approved activities	Levels of volunteerism across campus by students and alumni, student participation, donor retention, alumni participation in alumni activities and programs, alumni giving; Target year three: observable increases in levels of volunteerism across campus by students and alumni; alumni giving
<b>3.5.7:</b> Improve tracking measures of employment data and related feedback to enhance lifelong career development	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs, Career Opportunities and Employer Relations	82% with post graduation plans	Employment data and feedback
<b>3.5.8:</b> Promote "Miner for Life" strategies with student-athletes and extend this concept to encourage lifetime engagement	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	Current "Miner for Life" strategy for student-athletes	Number of strategies implemented

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.5: Create and implement a student and alumni lifetime engagement strategy**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.5.9:</b> Strengthen residential living communities to develop life-long leaders	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	Second year experience does not currently exist	Residential second year experience
<b>3.5.10:</b> Explore, identify and establish alumni engagement metrics and goals for the comprehensive campaign	FY16	4/1/16	3 years	Vice Chancellor for University Advancement	Metrics do not currently exist	Upon completion of metric identification, goals will be developed

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.8: Exercise leadership in sustainability on campus and in the community by modeling sustainability practices in daily operations and practicing environmental stewardship**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.8.1:</b> Stabilize long-term funding for the Office of Sustainable Energy and Environmental Engagement	FY14	7/1/13	5 years	Office of Sustainable Energy and Environmental Engagement, Vice Chancellor for Finance and Administration, Executive Director of Corporate Relations	Current funding level	Funding for Office of Sustainable Energy and Environmental Engagement
<b>3.8.2:</b> Create a culture of sustainability on the Missouri S&T campus and within the community by delivering programs that increase sustainability awareness	FY14	7/1/13	Ongoing	Office of Sustainable Energy and Environmental Engagement, Provost, Executive Director of Corporate Relations	Number of events: 3	Number of campus/community outreach events annually
<b>3.8.5:</b> Create and promote an alternative transportation culture focused around simple transportation methods, including pedestrian, cycling, and energy efficient busing to improve alternative transportation infrastructure over the next five years	FY14	7/1/13	5 years	Office of Sustainable Energy and Environmental Engagement, Vice Chancellor for Finance and Administration, Executive Director of Corporate Relations	2012 transportation plan	Projects identified and funded; Target year five: projects identified and funded

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.8: Exercise leadership in sustainability on campus and in the community by modeling sustainability practices in daily operations and practicing environmental stewardship**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.8.6:</b> Investigate existing and new courses for sustainability awareness for faculty, staff and students (targeting: freshmen engineering, new faculty orientation and employee orientation)	FY14	7/1/13	4 years	Office of Sustainable Energy and Environmental Engagement, Vice Provost and Deans, Executive Director of Corporate Relations	Existing course catalog	Course development and implementation
<b>3.8.7:</b> Identify additional sources of funding to enhance sustainability programs	FY16	4/1/16	Ongoing	Vice Chancellor for Finance and Administration, Office of Sustainable Energy and Environmental Engagement, Executive Director of Corporate Relations	Funds currently do not exist	Amount of funds established to enhance sustainability programs
<b>3.8.8:</b> Track energy, environmental, and sustainability research on campus	FY14	7/1/13	5 years	Office of Sustainable Energy and Environmental Engagement, Vice Provost for Research, Executive Director of Corporate Relations	Current expenditure report	Expenditure report

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.8: Exercise leadership in sustainability on campus and in the community by modeling sustainability practices in daily operations and practicing environmental stewardship**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.8.13:</b> Analyze new construction with U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) principles, and pursue LEED certification when appropriate	FY14	7/1/13	Ongoing	Vice Chancellor for Finance and Administration, Office of Sustainable Energy and Environmental Engagement, Executive Director of Corporate Relations	Climate commitment plan	Decision implemented
<b>3.8.15:</b> Model sustainable practices to promote environmentally responsive residential living communities	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	Current sustainable practices	Number of efforts designed for sustainable practices
<b>3.8.16:</b> Apply sustainability measures to ensure effective recycling and waste management initiatives	FY16	7/1/15	Ongoing	Vice Chancellor for Student Affairs, Office of Sustainable Energy and Environmental Engagement	2,815 gallons of food waste reduction	Waste reduction measures

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.8: Exercise leadership in sustainability on campus and in the community by modeling sustainability practices in daily operations and practicing environmental stewardship**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.8.17:</b> Increase the visibility of Missouri S&T in the areas of energy, environment and sustainability	FY16	4/1/16	Ongoing	Office of Sustainable Energy and Environmental Engagement, Vice Provost and Deans, Executive Director of Corporate Relations	Member of Governor's Steering Committee	Number of board memberships and conferences hosted
<b>3.8.18:</b> Increase the Association for the Advancement of Sustainability in Higher Education (AASHE) rating for the campus self-assessment program in Sustainability Tracking, Assessment and Rating System (STARS)	FY16	4/1/16	Ongoing	Office of Sustainable Energy and Environmental Engagement, Vice Provost and Deans, Executive Director of Corporate Relations	Silver rating	Achieve AASHE STARS Gold rating

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.9: Conduct a comprehensive fundraising campaign to secure private support for identified campus priorities**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.9.13:</b> Identify prospects for campaign cabinet and recruit cabinet	FY15	7/1/14	2 years	Vice Chancellor for University Advancement	Campaign cabinet does not currently exist	Prospects identified
<b>3.9.13 a.:</b> Develop roles and responsibilities for cabinet	FY15	7/1/14	2.5 years	Vice Chancellor for University Advancement	Roles do not currently exist	Cabinet meetings launched
<b>3.9.14:</b> Develop and publish campaign collateral materials for leadership, major gifts, and participatory gifts	FY15	7/1/14	7 years	Vice Chancellor for University Advancement	Campaign collateral does not currently exist	Materials developed
<b>3.9.15:</b> Develop campaign proposal templates	FY15	7/1/14	2 years	Vice Chancellor for University Advancement	Campaign proposal templates do not currently exist	Proposal developed
<b>3.9.16:</b> Solicit leadership, major, and participatory gifts	FY15	7/1/14	7 years	Vice Chancellor for University Advancement	Leadership gifts - \$0; major gifts - \$0; participatory gifts - \$0	Leadership, major and participatory gifts closed
<b>3.9.23:</b> Explore the feasibility and resources required to create for donors an online repository of personal giving records	FY15	7/1/14	2 years	Vice Chancellor for University Advancement	Online repository of giving does not currently exist	Feasibility determined



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 3.9: Conduct a comprehensive fundraising campaign to secure private support for identified campus priorities**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>3.9.24:</b> Plan and host recognition events for lab upgrade donors	FY15	7/1/14	Ongoing	Vice Chancellor for University Advancement	Prior lab dedication events	Events completed
<b>3.9.25:</b> Ensure major prospects are visited face to face annually	FY15	7/1/14	Ongoing	Vice Chancellor for University Advancement	1,800 prospects	900 visits annually
<b>3.9.32:</b> Launch an Advanced Construction and Materials Lab campaign and track results	FY16	4/1/16	4 years	Vice Chancellor for University Advancement	Campaign did not exist	Results of campaign
<b>3.9.33:</b> Launch a Student Design Experiential Learning Center campaign and track results	FY16	4/1/16	4 years	Vice Chancellor for University Advancement	Campaign did not exist	Results of campaign
<b>3.9.34:</b> Take campaign case statement on the road and make it a feature point of discussion	FY16	7/1/15	4 years	Vice Chancellor for University Advancement	Case statement did not exist	Percentage of prospect visitation
<b>3.9.35:</b> Pilot a staff sustainability program and assess effectiveness	FY16	7/1/15	3 years	Vice Chancellor for University Advancement	Staff sustainability program did not exist	Results of staff sustainability program
<b>3.9.36:</b> Develop and implement a comprehensive planned giving program	FY16	7/1/15	4 years	Vice Chancellor for University Advancement	Program did not exist	Results of planned giving program

Implementation | Actions and Metrics

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**Theme 4**

**Increase and facilitate meaningful access to and interaction with renowned faculty, staff and services**

**Theme Metrics**

**Metric 1:**

First-to-second year undergraduate student retention rate (Baseline: 85%, 2020 Target: 88%)

**Metric 2:**

Total graduate student support per funded graduate student (Baseline \$14,753; 2020 Target \$17,500)

**The Chancellor's Distinguished Fellowship for doctoral students provides: full tuition and fees, \$28,000 stipend, and \$1,250 for conference travel**

**Key Lever Targets**

**Target 1:**

Increase the number of distance/online courses (Baseline: 320 per year; 2020 Target: 375 per year)

**Target 2:**

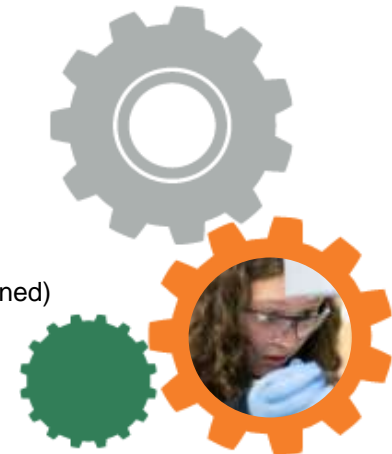
Increase the number of distance/online students enrolled per year (Fall Baseline: 1,513; Fall 2020 Target: 2,013)

**Target 3:**

Increase the institution partners and redesigned lab courses (Baseline: 0; 2020 Target: 2 partners and 5 labs redesigned)

**Target 4:**

Increase the publications per research-based graduate degree awarded (Baseline: 9; 2020 Target: 15)



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.1: Create a comprehensive distance and online education strategy**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.1.3:</b> Create a uniform marketing strategy to raise visibility of distance and online programs	FY16	7/1/15	5 years	Assistant Vice Chancellor for Global Learning, Vice Chancellor for Global and Strategic Partnerships	No prior study completed	Marketing strategy implemented
<b>4.1.4:</b> Increase our focus on the professional non-credit distance education portfolio	FY14	7/1/13	5 years	Vice Chancellor for Global and Strategic Partnerships, Executive Director of Corporate Relations, Assistant Vice Chancellor for Global Learning	Current non-credit courses	Size of portfolio, enrollment, and revenue
<b>4.1.6:</b> Create an incentive program to encourage departments and faculty to offer more online, blended, and distance courses (See Lever 2.5)	FY14	7/1/13	5 years	Assistant Vice Chancellor for Global Learning, Provost, Vice Chancellor for Global and Strategic Partnerships	320 distance/online courses; 27 blended	Number of course and program offerings

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Level 4.1: Create a comprehensive distance and online education strategy

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.1.7:</b> Leverage existing success and resources from Distance Ed program to expand into more online or asynchronous course offering	FY14	7/1/13	5 years	Vice Chancellor for Global and Strategic Partnerships, Assistant Vice Chancellor for Global Learning, Provost	0 hours per month	Use of Video Communications Center facilities for online and asynchronous course production; Target year five: 10 hours per month
<b>4.1.8:</b> Hire more NTT and adjunct professors to cover online teaching needs	FY16	7/1/15	5 years	Assistant Vice Chancellor for Global Learning, Vice Chancellor for Global and Strategic Partnerships, Provost	NTT - 68; Adjunct - 34	Number of NTT and adjunct faculty
<b>4.1.9:</b> Create more online capability in classrooms	FY16	7/1/15	Ongoing	Assistant Vice Chancellor for Global Learning, Vice Chancellor for Global and Strategic Partnerships, Provost	2 completed	Number of classrooms. Goal of 10 additional classrooms in 2016
<b>4.1.10:</b> Explore strategies to engage online learners in campus life	FY16	7/1/15	Ongoing	Vice Chancellor for Student Affairs, Vice Chancellor for Global and Strategic Partnerships	Strategies do not currently exist	Online engagement

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 4.2: Enhance instructional labs and methods of developing lab experiences

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
4.2.1: Explore how to partner with other universities, community colleges, high schools or extension to deliver lab experiences	FY14	7/1/13	3 years	Provost, Vice Provost and Deans, Department Chairs	1 partnership	Number of partner institutions; Target year five: at least 2 institutions
4.2.2: Develop model frameworks and strategies for evaluating and redesigning instructional lab courses for blended/online delivery	FY14	7/1/13	3 years	Provost, Vice Provost and Deans, Department Chairs	No model framework currently exists	Develop model framework and strategy; Target year three: model framework and strategy developed and piloted on one instructional lab; Target year five: framework and strategy implemented on five instructional labs

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.5: Engage in transformative doctoral student recruiting/retention and placement**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.5.3:</b> (Recruit) Develop memoranda of understanding and articulation agreements with reputed national and international schools to recruit high quality doctoral students	FY14	7/1/13	5 years	Vice Provost for Graduate Studies, Vice Chancellor for Global and Strategic Partnerships	0 active agreements	Number of active/inactive memoranda of understanding, articulation agreements; Target year five: 10 new agreements
<b>4.5.4:</b> (Recruit) Develop a marketing plan to promote comprehensive Missouri S&T graduate leadership and excellence	FY14	7/1/13	3 years	Vice Provost for Graduate Studies	No comprehensive marketing plan currently exists	Heightened awareness of Missouri S&T's leadership and excellence in graduate education, as measured by surveys and focus groups
<b>4.5.7:</b> (Retain) Develop a plan for a Graduate Resource/Success Center/Graduate Learning Commons to help students in the timely completion of their degrees, and to facilitate greater student/faculty/staff interaction	FY14	7/1/14	5 years	Vice Provost for Graduate Studies	Graduate Resource Center does not currently exist	Complete study and provide recommendations; Target year three: 75% of on-campus students use services
<b>4.5.8:</b> (Retain) Develop a year-long Graduate Research Scholars Program for all newly admitted doctoral students	FY17	7/1/16	4 years	Vice Provost for Graduate Studies	Program does not currently exist	Graduate Research Scholars Program
<b>4.5.10:</b> (Placement) Provide mentorship and networking opportunities for students by connecting them to experts in academia/industry/research labs; provide resources to present their research work at national/international conferences	FY16	2/1/16	4 years	Vice Provost for Graduate Studies	Current number of students presenting	Number of students presenting at conferences

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.5: Engage in transformative doctoral student recruiting/retention and placement**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.5.11:</b> (Recruit) Provide funds to encourage prospective domestic doctoral students to visit the campus for one day and/or a few weeks to work closely with a professor	FY15	7/1/14	2 years	Vice Provost for Graduate Studies	\$0 funds	Number of doctoral student visits
<b>4.5.13:</b> (Recruit) Enhance implementation efforts for high quality international doctoral students	FY16	7/1/15	Ongoing	Vice Provost for Graduate Studies	469 international doctoral students	Number of international doctoral students
<b>4.5.14:</b> (Recruit/retain) Implement customized mechanisms to recruit and retain underrepresented and minority (URM) doctoral students at Missouri S&T	FY17	7/1/16	2 years	Vice Provost for Graduate Studies	Current mechanisms	Number of underrepresented doctoral students; type and number mechanisms
<b>4.5.15:</b> (Retain) Examine graduate programs and reduce time-to-degree, where appropriate	FY16	7/1/15	Ongoing	Vice Provost for Graduate Studies	Current time-to-degree	Time-to-degree improvement
<b>4.5.17:</b> Promote workshops/seminars/social events to encourage more camaraderie and exchange of research ideas among doctoral students from various disciplines	FY15	7/1/14	Ongoing	Vice Provost for Graduate Studies	AY13/14 amount of attendees: Thesis Formatting- 110; Writing a Thesis-27; Stress Management- 10; Smart Social Networking- 8; Learning to use LaTeX-40	Number of attendees at workshops and number of workshops

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.5: Engage in transformative doctoral student recruiting/retention and placement**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.5.18:</b> (Recruit) Provide mechanisms for faculty/student exchange with target "feeder" schools	FY16	7/1/15	Ongoing	Vice Provost for Graduate Studies	Current number of feeder schools	Number of feeder schools
<b>4.5.19:</b> (Recruit) Focus on attracting professional students to consider doctoral studies at Missouri S&T	FY16	7/1/15	Ongoing	Vice Provost for Graduate Studies, Vice Chancellor for Global and Strategic Partnerships	517 doctoral students	Number of doctoral students
<b>4.5.22:</b> (Recruit/retain/placement) Implement comprehensive graduate student/program data collection mechanisms, tracking mechanisms, (student inquiry thru placement), graduate learning outcomes rubrics, etc. to benchmark time-to-degree, doctoral retention, program improvement, timely response to student application/graduation status, and improve graduate student services	FY16	7/1/15	Ongoing	Vice Provost for Graduate Studies	No mechanism exists	Number of mechanisms implemented



IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 4.6: Improve student, faculty, staff, and administrator mentoring and advising

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.6.1:</b> Explore development of an online math assessment for incoming students	FY15	3/1/15	1 year	Vice Provost and Dean for Enrollment Management	Online math assessment does not exist currently	Feasibility for online assessment
<b>4.6.2:</b> Develop and implement a campus structure of staff advisors for undergraduate students	FY15	3/1/15	4 years	Provost, Vice Provost and Deans	Current number of advisors	Number of professional staff advisors
<b>4.6.3:</b> Complete feasibility study of upgrading degree audit software and implementing academic mapping planner	FY15	3/1/15	1 year	Vice Provost and Dean for Enrollment Management	Current audit software	Usage of academic mapping planner
<b>4.6.4:</b> Explore the feasibility of a Center for Teaching and Learning/Center for Faculty Excellence	FY15	3/1/15	1 year	Provost, Vice Provost and Deans, Assistant Vice Chancellor for Global Learning	No center currently exists	Feasibility determination
<b>4.6.5:</b> Implement best practices and promote widespread use by the faculty, students, and advising staff of the Missouri S&T Early Alert and Connect advising tools	FY15	3/1/15	1 year	Vice Provost for Undergraduate Studies	Current Early Alert practices	Increased usage of advising tools

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

Lever 4.6: Improve student, faculty, staff, and administrator mentoring and advising

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.6.6:</b> Explore creation of a "10 Before Tenure" program where untenured faculty can participate in 10 career development programs	FY15	3/1/15	2 years	Provost, Vice Provost and Deans	Program does not currently exist	Programs developed
<b>4.6.7:</b> Enhance the new faculty orientation program	FY15	3/1/15	2 years	Provost, Vice Provost and Deans, Assistant Vice Chancellor for Global Learning	Current new faculty mentoring program	Number of new faculty mentor sessions, retention of new faculty
<b>4.6.8:</b> Develop guidelines for faculty mentoring focusing on three core areas: teaching, research, and service	FY15	3/1/15	1 year	Provost, Vice Provost and Deans	Current process for faculty mentoring	Guidelines developed, usage of guidelines
<b>4.6.9:</b> Explore the feasibility of a comprehensive staff mentoring program	FY15	3/1/15	2 years	Vice Chancellor for Human Resource Services, Equity and Inclusion	Staff mentoring program does not currently exist	Feasibility determination
<b>4.6.10:</b> Explore and create additional programs to assist in professional development, leadership, and mentoring of graduate students	FY15	3/1/15	4 years	Vice Provost for Graduate Studies	Current number of programs	Number of quality programs created
<b>4.6.11:</b> Create and enhance resources for campus graduate staff and coordinators (e.g., Guidebooks, Staff Storm, Graduate Council meetings, etc.)	FY15	3/1/15	2 years	Vice Provost for Graduate Studies	Current number of resources	Number of improved resources

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.7: Identify and remove barriers to graduation and reduce time to degree for undergraduate and graduate students**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
4.7.1: Explore the feasibility of a required first-year success course	FY15	3/1/15	1 year	Vice Provost and Deans, Vice Provost for Undergraduate Studies, Provost	First-year success course does not exist currently	Feasibility determination
4.7.2: Identify the feasibility for restructuring freshman engineering	FY15	3/1/15	1 year	Vice Provost and Deans, Vice Provost for Undergraduate Studies	Current freshman advising process	Feasibility determination
4.7.3: Enhance student mentoring programs	FY15	3/1/15	2 years	Vice Provost and Deans, Vice Provost for Undergraduate Studies, Vice Provost and Dean for Enrollment Management, Vice Chancellor for Student Affairs	Number of current mentoring programs	Quality mentoring programs established
4.7.4: Generate a time-to-degree template and analyze baseline demographic data of graduate student cohorts for Ph.D. completion	FY15	3/1/15	1 year	Vice Provost for Graduate Studies, Institutional Research and Assessment	No template currently exists	Time-to-degree statistics

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.7: Identify and remove barriers to graduation and reduce time to degree for undergraduate and graduate students**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.7.5:</b> Explore and identify graduate policies and procedures that impact the doctoral plan of study and students' multiple career pathways (e.g., time limits, residency requirements, etc.)	FY15	3/1/15	1 year	Vice Provost for Graduate Studies	Current number of policies and procedures	Analysis of policies and procedures
<b>4.7.6:</b> Implement a pilot program to assist graduate students with theses/dissertation completion	FY15	3/1/15	2 years	Vice Provost for Graduate Studies	Current number of students assisted	Number of students assisted
<b>4.7.7:</b> Explore additional work study opportunities and other student engagement programs	FY15	3/1/15	4 years	Vice Provost and Dean for Enrollment Management	Institutional work study program for AY14/15	Number of engagement programs and work study opportunities
<b>4.7.8:</b> Explore the feasibility of spring, summer, and winter intersession courses	FY15	5/1/15	2 years	Provost, Vice Provost and Deans	Intersession courses do not currently exist	Feasibility determined
<b>4.7.9:</b> Identify measures to enhance course enrollment projections and implement adaptive instruction funding model	FY15	3/1/15	2 years	Vice Provost and Dean for Enrollment Management, Vice Provost and Deans	Registrar's office Freshmen course projection report	Outcomes from funding model implementation
<b>4.7.10:</b> Investigate offering courses in innovative modular format	FY15	6/1/15	2 years	Assistant Vice Chancellor for Global Learning	Modular format does not currently exist	Investigation completed

IMPLEMENTATION PLAN | PORTFOLIO MANAGEMENT OF ACTIONS

**Lever 4.7: Identify and remove barriers to graduation and reduce time to degree for undergraduate and graduate students**

Prioritized Actions	Incorporated Into Plan	Action Start Date	Duration	Owner(s)	Baseline	Key Metric to Track
<b>4.7.11:</b> Identify strategies and technologies promoting awareness of Disability Support Services to meet the needs of a diverse student population	FY16	7/1/2015	Ongoing	Vice Chancellor for Student Affairs	Current level of student awareness	Student awareness
<b>4.7.12:</b> Provide early intervention strategies that promote self-management and enhance resiliency for a diversified student body	FY15	7/1/14	Ongoing	Vice Chancellor for Student Affairs	40 parents engaged during PRO	Number of parents engaged during PRO
<b>4.7.13:</b> Explore creating a multicultural center on campus with designated spaces for affinity groups	FY16	3/1/16	2 years	Provost, Vice Chancellor for Finance and Administration, Vice Chancellor for Human Resources, Equity and Inclusion, Vice Chancellor for Student Affairs	Multicultural center does not exist	Feasibility of a multicultural center

STRATEGY

MISSOURI S&T STRATEGY METRICS

Metric	Source	Strategic Plan Baseline	Strategic Plan Baseline Date	Strategic Plan Target	Strategic Plan Target Date
Starting salary of undergraduate students	Career Opportunities and Employer Relations	\$59,504	Fall 2012	\$65,000	FY20
<i>U.S. News &amp; World Report</i> recruiter assessment score	<i>U.S. News &amp; World Report</i>	3.3	Fall 2012	3.5	FY20
Number of students enrolled via distance or online by year	Registrar	1,513	Fall 2012	2,013★	FY20
Number of invention disclosures per \$10M R&D expenditures	Office of Technology Transfer and Economic Development	8.9	FY11	10	FY20
Employer satisfaction with hires	Employer satisfaction survey	89%	Fall 2012	92%★	FY20
Donor satisfaction with the Missouri S&T giving experience	Annual donor satisfaction survey	88%	Summer 2014	90%	FY20

**AY14/15 Results:**  
Undergraduate starting salary  
**\$63,350**

**AY15/16 Results:**  
Number of students enrolled  
online/distance  
**2,500**

**AY14/15 Results:**  
U.S. News & World Report recruiter  
assessment score  
**3.2**

**AY14/15 Results:**  
Employer Satisfaction  
**99%**

**FY15 Results:**  
Number of invention disclosures per  
\$10M R&D expenditures  
**11**

**FY15 Results:**  
Donor Satisfaction  
**88%**

★ 2020 target achieved

BEST-IN-CLASS

MISSOURI S&T BEST-IN-CLASS METRICS

Metric	Source	Strategic Plan Baseline	Strategic Plan Baseline Date	Strategic Plan Target	Strategic Plan Target Date
Engineering doctoral students per tenured, tenure-track engineering faculty	ASEE	1.9	Fall 2011	3.1	FY20
National Science Foundation grant expenditures per tenured, tenure-track faculty	NSF	\$18,893	Fall 2011	\$40,000	FY20
Number of graduate engineering and science programs offered online or by distance	Registrar	13	Fall 2012	18	FY20

**AY14/15 Results:**

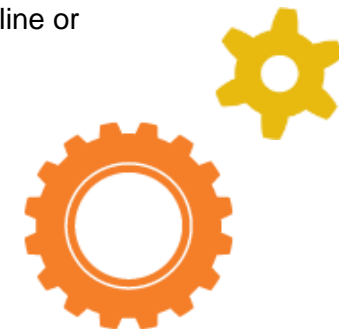
Engineering doctoral students per tenured, tenure-track engineering faculty  
**2.6**

**AY14/15 Results:**

National Science Foundation grant expenditures per tenured, tenure-track faculty  
**\$19,184**

**AY15/16 Results:**

Number of graduate engineering and science programs offered online or by distance  
**14**



## APPENDIX A | DELAYED ACTIONS

### Lever 1.1

Action 1.1.4 Research and adopt fund-raising models for supporting Pell-eligible students in experiential learning opportunities

### Lever 1.2

Action 1.2.11 Encourage regular use of faculty and staff of sabbatical or other off-site learning opportunities that contribute to the university's strategic initiatives, department objectives, and individual development of expertise

### Lever 2.3

Action 2.3.6 Increase SRI to PIs

### Lever 2.4

Action 2.4.6 Require researchers to include in their research proposals a request for a certain percentage of funding (to be determined by the Marketing Leadership Team in consultation with the Vice Provost for Research and Sponsored Programs) to support the research-related tactics of the integrated, campus wide marketing plan. (NSF, for example, allows funding requests for "publication/documentation/dissemination," which can be used to support public relations and marketing activities)

### Lever 2.5

Action 2.5.1 Redefine CERTI to become a more comprehensive resource for Teaching and Learning to attract more faculty participating

Action 2.5.4 Obtain funds to establish a Chancellor's eLearning Transformation Program

### Lever 3.1

Action 3.1.4 Examine how to share courses so that faculty time is preserved

Action 3.1.6 Investigate a module approach to instruction instead of 3-credit courses

### Lever 3.3

Action 3.3.3 Implement the development plan from Action 3.3.2

Action 3.3.9 Evaluate the possibility to use GRA funding for research facilities in areas that arguably have high return on investment to be used as a match to State initiatives such as HJR14



## APPENDIX A | DELAYED ACTIONS

### Lever 3.4

Action 3.4.8 Review the performance evaluation process and add a component that will encourage participation in programs and events that are connected to diversity and inclusion

### Lever 3.8

Action 3.8.4 Create a minimum of two technology pilot programs per year to reduce university's carbon footprint, e.g. electricity shedding, water protection, waste mitigation

Action 3.8.9 Led by OSE3 initiative in conjunction with University Advancement, create alumni awareness programs and associated funding vehicles to promote our sustainable research and campus initiatives. Funding vehicles: alumni donations and endorsements

Action 3.8.10 Make investment decisions that promote sustainability. Invest in companies and funds that provide a strong rate of return and that are socially and environmentally responsible. Create committee on investor responsibility

Action 3.8.11 Partner with local schools, hospitals, non-profits and other companies to provide consolidated recycling and waste management services by contract

Action 3.8.12 Increase carbon offset investment to aid to Missouri S&T's commitment to the ACUPCC climate neutrality goal of a 20% reduction in emissions by 2020 and a 40% reduction in emissions by 2035 relative to our 2010 emissions baseline

### Lever 4.2

Action 4.2.3 Return science and engineering fees to teaching departments

Action 4.2.4 Deploy Springfield (MSU) cooperative program model throughout the state

## APPENDIX A | DELAYED ACTIONS

### Lever 4.5

- Action 4.5.2 (Recruit) Competitive package-Provide healthcare/childcare benefits for students on appointments
- Action 4.5.5 (Recruit) Select top OURE students to enroll in graduate school by using senior year tuition coverage as incentive
- Action 4.5.20 (Placement) Provide internship/Preparing Future Faculty (PFF) program opportunities for doctoral students at places of potential future employment
- Action 4.5.21 (Placement) Enhance the GTA training workshop to include the GTA/GRAs to help future academicians fast track their career with knowledge of pedagogy and research

APPENDIX B | STRATEGIC ACTIONS COMPLETED

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Theme 1

**Lever 1.1**

- Action 1.1.1 Create a defining comprehensive list of activities that are supported by research as significant experiential activities
- Action 1.1.2 b Draft a statement describing degree requirements
- Action 1.1.2 c Department approval detailing ways students will be able to complete requirement
- Action 1.1.2 d Approval by degree-specific curriculum committees
- Action 1.1.2 e Faculty Senate approval
- Action 1.1.5 a Consult with the Director of Career Opportunities and Employer Relations to explore internship and externship opportunities in the summer and inter-sessions as well as during semesters

**Lever 1.2**

- Action 1.2.2 a Explore creating a Learning Commons with state-of-the-art collaborative technology, practice presentation rooms, experimental technology lab with video editing and 3D printing capability for teaching, learning, and research. Training on how to effectively use the commons would be included

**Lever 1.3**

- Action 1.3.1 Define meaningful interaction with students
- Action 1.3.2 Obtain data on number of faculty and other parameters
- Action 1.3.3 Obtain data on number of professional/exempt staff and other parameters
- Action 1.3.4 Create a hiring plan with Levers 2.1 and 2.2 for faculty and staff in line with established ratios and accepted definition of meaningful interaction

Theme 2

**Lever 2.1**

- Action 2.1.1 Identify two BIC areas for investment and initiate discussion on another two BIC areas
- Action 2.1.7 Finalize third and fourth BIC areas for investment beginning year 2

APPENDIX B | STRATEGIC ACTIONS COMPLETED

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Theme 2

**Lever 2.3**

Action 2.3.4 a Establish two new sustainable industry-funded research consortia

**Lever 2.4**

Action 2.4.1 Establish a Marketing Leadership Team to guide development of an integrated, campus wide communications and marketing plan

Action 2.4.2 Establish a Core Marketing Network to provide consultation to the Marketing Leadership Team to establish an integrated campus wide communications and marketing plan

Action 2.4.3 a Through the Marketing Leadership Team and Core Marketing Network, develop a request for proposals for professional marketing consultation to a.) conduct a needs assessment regarding the desired outcome of an integrated, campus wide communications and marketing plan; b.) conduct a capabilities assessment to determine our ability and readiness to conduct such a campaign (the capabilities assessment will include a communications audit of all marketing materials and assessment of any marketing research)

Action 2.4.5 Fully commit to the Missouri S&T brand by removing references to "formerly the University of Missouri-Rolla" in all marketing materials targeting the key customer groups

Action 2.4.7 Seek matching commitments to fund a portion of campus wide communications and marketing efforts

Action 2.4.9 Obtain commitment from campus leadership to create a recurring budget for campus wide marketing

Action 2.4.10 The Marketing Leadership Team, in consultation with the Core Marketing Network, will identify no fewer than three higher education institutions who are considered best-in-class in terms of communicating return on investment and will examine these institutions' practices

**Lever 2.5**

Action 2.5.3 Increase instructional design support and online facilitators for teaching faculty

**Lever 2.7**

Action 2.7.2 Hire Strategic Planning Progress Manager (SPPM)

Theme 3

**Lever 3.1**

Action 3.1.1.a Perform a comparison of academic department productivity to peer institutions

**Lever 3.2**

Action 3.2.1 Determine the reporting structure of the office with S&T

APPENDIX B | STRATEGIC ACTIONS COMPLETED

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Theme 3

**Lever 3.2**

- Action 3.2.3 Develop a funding mechanism to support the office and its activities
- Action 3.2.4 Determine the internal organizational structure of the office (title of leadership, professional staff and support staff)
- Action 3.2.5 Develop a plan to create campus awareness of the role to be played by the office while clearly identifying responsibilities

**Lever 3.3**

- Action 3.3.2 a Explore a plan and process for acquiring matching funding for research equipment in areas that have high return on investment to be matched with non-appropriated funds
- Action 3.3.4 a Evaluate all campus facilities for their readiness for sustainable growth and return on investment by engaging a campus master planning consultant
- Action 3.3.6 a Investigate the feasibility of establishing \$20 million endowment for the maintenance of (teaching, research, and co-curricular) equipment
- Action 3.3.7 Investigate building a Learning Commons (e.g. in Library) to enhance student learning and research. This facility should allow for reconfiguration as needs change, technologies evolve, and the student population changes. It should include as much hands-on technology as possible, available to all, in an interdisciplinary environment
- Action 3.3.8 Investigate the feasibility of establishing a \$100 million endowment for the acquisition of (teaching, research, and co-curricular) equipment

**Lever 3.4**

- Action 3.4.6 Develop a comprehensive diversity and inclusion plan that would incorporate various action items

**Lever 3.5**

- Action 3.5.1 Utilize the library and archives in creating collaborative online areas where alumni can view yearbooks, the Miner, photos, and other memorabilia. As we digitize these collections, we can engage alumni in identifying people and events, and in telling stories online.
- Action 3.5.2 Create lifetime email addresses that support contact and engagement
- Action 3.5.4 Explore the feasibility of splitting the 1% Endowment Management Fee with departments that generate the funding. Earmark the funds to be used for development-related activities
- Action 3.5.5 Develop a Young Alumni Council and engage alumni through quarterly Young Alumni events

APPENDIX B | STRATEGIC ACTIONS COMPLETED

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Theme 3

**Lever 3.8**

- Action 3.8.3 Create, in conjunction with Physical Facilities and Environmental Health and Safety, a sustainable waste management plan for all university waste
- Action 3.8.14 Produce monthly programs designed to inform and educate sustainable practices

**Lever 3.9**

- Action 3.9.1 Conduct wealth screening and data validation
- Action 3.9.2 Initiate partnership with consulting/research firm
- Action 3.9.3 Review, update and approve gift acceptance policy
- Action 3.9.4 Review, update and approve naming policy
- Action 3.9.5 Develop campaign timeline with associated milestones
- Action 3.9.6 Develop plan and proposal for staffing requirements
- Action 3.9.7 Conduct feasibility study
- Action 3.9.8 Participate in process to update campus master plan to advise on fundraising opportunities and targets
- Action 3.9.9 Update gift officer portfolios based on wealth screening
- Action 3.9.10 Lead review and decision-making by senior campus leadership to identify and prioritize fundraising opportunities based on the strategic plan and updated master plan
- Action 3.9.11 Develop campaign case statement based on prioritized list of fundraising targets
- Action 3.9.12 Recruit, hire and train staff
- Action 3.9.13 Identify prospects for campaign cabinet and recruit cabinet
- Action 3.9.20 Implement Advizor data tool
- Action 3.9.21 Complete iModules installation
- Action 3.9.22 Begin planning and laying groundwork for an Arts, Sciences, and Business Academy
- Action 3.9.25 Determine donor satisfaction baselines, set goals for improvements
- Action 3.9.26 Implement RuffaloCody phone-a-thon

APPENDIX B | STRATEGIC ACTIONS COMPLETED

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Theme 4

**Lever 3.9**

- Action 3.9.28 Dedicate Bertelsmeyer Hall
- Action 3.9.32 Identify and appoint directors of development for each college
- Action 3.9.36 Evaluate inaugural Philanthropy Month and develop opportunities for expansion
- Action 3.9.39 Enhance content of annual endowment reports to communicate meaningful student/faculty interaction to donors

**Lever 4.1**

- Action 4.1.1 Conduct a focused market study analysis to serve as the foundation for a comprehensive distance and online education strategy
- Action 4.1.2 Bring together distance and online programs under one umbrella so as to leverage advantages of both, to pool resources, and to eliminate confusion
- Action 4.1.5 Involve library to work on storage, usage and copyright issues involving online resources including multimedia

**Lever 4.5**

- Action 4.5.1 Develop a plan to provide fully covered tuition for doctoral students on appointments and explore implementation
- Action 4.5.6 (Retain) Study GRA "bridge funding" between faculty grant funding and graduation
- Action 4.5.9 Develop and implement a plan for a comprehensive graduate student division of Career Opportunities and Employer Relations (COER)
- Action 4.5.12 (Recruit) Investigate creating a \$10 million endowment for recruiting high quality doctoral students
- Action 4.5.16 (Retain) Perform cost analysis on providing writing dissertation fellowships to doctoral students who have completed their comprehensive exams
- Action 4.5.24 Determine the feasibility of implementing a fully electronic graduate application management and review system

APPENDIX C | STRATEGIC ACTIONS CHANGED IN SCOPE

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**3.8.2:** Led by Office of Sustainable Energy and Environmental Engagement, initiate and create student awareness programs and associated funding vehicles to promote our sustainable research and campus initiatives (Original scope)

**3.8.7:** Create campus sustainability project revolving fund that will allow savings to be invested back into the fund to underwrite future projects (Original scope)



STRATEGIC PLANNING LEVER LEADERS

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**THEME 1**

- 1.1 Jeff Cawfield
- 1.2 Debra Robinson
- 1.4 Shenethia Manuel

**THEME 2**

- 2.1 Robert Marley
- 2.2 Robert Marley
- 2.3 Robert Marley
- 2.4 Andrew Careaga
- 2.5 Robert Marley and Kent Wray
- 2.7 Shenethia Manuel

**THEME 3**

- 3.1 John Myers and Stephen Roberts
- 3.2 John Eash
- 3.3 Ted Ruth
- 3.4 Laura Stoll and Shenethia Manuel
- 3.5 Joan Nesbitt and Jim Murphy
- 3.8 Walt Branson
- 3.9 Joan Nesbitt

**THEME 4**

- 4.1 Anthony Petroy
- 4.2 Klaus Woelk
- 4.5 Venkata Allada
- 4.6 Laura Stoll
- 4.7 Jeff Cawfield and Venkat Allada

