Introduction

We are here today to...

- Engage student leadership on strategic planning progress.
- Ask, “What are we missing?”
- Provide Board of Trustees with student input.

Strategic Planning: Why now?

- Simple answer: Old plan was for 10 years and 10 years is up.
- Complete answer: World is changing. Do we have right strategies to move the institution forward through strong external forces?
- Alignment around a vision and goals provide the institutional focus necessary to be successful in a dynamic and competitive environment.
Technological and market forces are pushing higher education to the precipice of dramatic change. Consider:

- Consumer interest in measurable outcomes and other accountability standards has driven a proliferation of ratings and surveys.
- Intersection of technology, pedagogical change, and demographical shifts threaten traditional higher education delivery models.
- Federal government is looming as a key stakeholder in evaluating performance, accountability, and affordability of higher education.
- Growing volatility in the availability of governmental funding (state and federal).
- High tuition rates are driving private investment for possible substitution products that leverage use of technology in delivery.
- Job-market volatility has made life-long learning a necessity rather than a luxury.
Strategic Plan: Timeline and Input

Key Dates:

- Strategic Plan Working Group charged – April
- Initial draft Mission, Vision, Values, Goals, Strategies – May
- Board Retreat – Oct 25
- Target completion and adoption of Board – December 12, 2013.

Input and Feedback:

- Evaluation of 2004 Strategic Plan
- NSSE Surveys
- ABET Recent Alumni Surveys
- Campus forums – Mar/April 2013
- External stakeholder survey – Summer 2013
- Comments on draft Mission, Vision, Values, Goals, Strategies – Summer / Fall 2013
- Campus forums / Meetings with student leadership – October 2013
Mission: Science and engineering education and research focused on solving the world’s challenges related to earth, energy and the environment.

Vision: Mines will be the premier institution, based on the impact of its graduates and research programs, in science and engineering related to the Earth, Energy and Environment.

Values: A student-centered institution focused on education that promotes integrity, passion for their chosen-field, life-long learning, tenacity and perseverance, and responsibility for developing a better world.
As Mines develops its next strategic plan, we are committed to these critical guiding principles:

- Mines will remain a small, specialized science and engineering research university.

- Emphasis on quality and excellence must be paramount. (“We are proud of everything we do.”)

- Mines must operate with the entrepreneurial mindset of a private institution.

- Attention to delivering quality customer service must be embedded throughout every aspect of the institution.

- Mines education promotes excellence, passion for a chosen field, resourcefulness, tenacity and perseverance.
Aspirations

- **Recognition:** Top 30 engineering program in the nation, and at least 10 research areas best-in-class.

- **Student Success:** 4-year graduation rate of 70% and 6-year rate of 82% while still maintaining Mines’ hallmark commitment to quality, rigor and excellence.

- **Innovation:** Over $100M in research awards.

- **Satisfaction:** 95% of graduates (undergraduate and graduate) would have chosen Mines again if they could re-do their decision.

- **Financial:** Mines will continue to be financially self-sufficient.
Barriers

- Resource limitations – capital and human
- Limited market identity and reputation
- Historically siloed units, functions, processes and practices
- Tradition and resistance to change
- Aligning staffing to meet new expectations and opportunities
- Competing demands between teaching and research
- Alignment of campus goals with high quality student and faculty interactions.
Mines 2024: How do we get there?

- **GOAL 1:** Enhance the distinctive identity and reputation of Mines

- **GOAL 2:** Build upon a student-centered campus culture of excellence, inclusion, diversity and community.

- **GOAL 3:** Build and diversify revenue streams and auxiliary enterprises.

- **GOAL 4:** Develop and support campus infrastructure and processes such that they match Mines' aspirations to become a top-tier S&T institution
What’s next?

- Further define the specific elements of the metrics
- Socialize the draft plan with campus through forums and other means – October and November
- Draft plan to be posted on USG website.
- Student feedback to: planning@mines.edu
- Gather additional Board of Trustee input – October Board retreat
- Board of Trustees adoption – December 2013
- Development of priorities and supporting initiatives
Appendix: Strategic Plan Details
Mines 2024: How do we get there?

**GOAL 1: Enhance the distinctive identity and reputation of Mines.**

Critical if Mines is to advance its unique market position for the continued benefit of the institution, and its graduates, employers and partners.

- **Risks:**
  - Engineering education and research is highly competitive and expensive,
  - Mines must compete with better resourced institutions,
  - Other institutions are actively moving into our areas of intellectual activity, and
  - While Mines research portfolio is unique, other institutions will emulate. We must be able to compete.
## Goal 1: Enhance the distinctive identity and reputation of Mines

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Metrics</th>
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<tbody>
<tr>
<td>1. Expand active-learning instructional practices to enhance student learning.</td>
<td>• Over 50% of courses delivered in each department will employ active-learning instruction.</td>
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<td>2. Embrace and expand practice-oriented experiences in each degree program embedded throughout all four years.</td>
<td>• Percentage of degree programs with practice-oriented experiences in all years of UG education.</td>
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<tr>
<td></td>
<td>• Experiences are evaluated to ensure relevance, value and efficiency.</td>
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<td>• Percentage of UG involved in research projects, study-abroad programs, internships, co-ops.</td>
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<td>3. Expand and enhance support of graduate education through non-research activities and curricular excellence.</td>
<td>• Successful implementation of initiatives focused on professional education certification, teaching assistant academy, etc.</td>
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<td>4. Further develop our brand recognition and reputation throughout the world.</td>
<td>• Depth of non-resident admissions profile</td>
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<td>• Membership in academies and society fellows.</td>
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<td>• Prestigious national student awards (e.g., Marshall, Rhodes, Fulbright, National Merit).</td>
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<td>• Integrated nat’l marketing plan developed by CY14.</td>
</tr>
<tr>
<td>5. Assess and (address) academic and research programs for excellence, weaknesses, and opportunities.</td>
<td>• Examine competitiveness of all degree requirements by 2015.</td>
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<td>• Create 5 new large research initiatives focusing on the grand challenges related to earth, energy, environment.</td>
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Mines 2024: How do we get there?

**GOAL 2:** Build upon a student-centered campus culture of excellence, inclusion, diversity and community.

To recruit, attract and prepare the best students for success within a highly competitive market place requires Mines to actively promote individual intellectual curiosity within a diverse, open and inclusive community.

*Risks:*

- Engineering education and research is highly competitive.
  - Being left behind in the quality of education it delivers.
  - Not being able to compete for high-quality students, faculty and staff.
- Not meeting student expectations in the quality of educational experiences.
- Reputation and perceptions are very difficult to change externally or modify once established.
## Goal 2: Build upon a student-centered campus culture of excellence, inclusion, diversity and community.

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| 1. Expand development of residential campus components and programs that extend learning opportunities beyond the classroom and promote leadership and citizenship. | • Percentage of undergraduates living on campus  
• Percentage of graduate students living on campus  
• Number of service-learning opportunities available to students; % of students participating  
• Number of student activities that directly engage students with faculty |
| 2. Advance academic culture that promotes student success. | • Graduation rates (4 yr / 6 yr)  
• NSEE’s supportive environment question: Mean score exceeds 75th percentile of national average.  
• Increased faculty involvement in student societies. |
| 3. Increase the diversity of Mines’ faculty, student and staff. | • Percentage of women, UR-minority among respective student and faculty metrics.  
• Competitive on net tuition basis with peers. |
| 4. Enhance experience of freshman and sophomore. | • Retention rates (freshman and sophomore)  
• Utilization of CASA for early intervention for at-risk students. |
| 5. Improve mentoring and other support of faculty with the goal to enhance the overall quality of the student experience. | • Proactive engagement through Center for Professional Education / Center for Engineering Education. |
**GOAL 3: Build and diversify revenue streams and auxiliary enterprises.**

Delivering high-quality S&T education and research is expensive. Mines must diversify its revenue streams beyond tuition revenue and state support to continue to operate as a small, elite S&T institution. This is a critical underlying need for the success of the other goals in this plan.

**Risks:**

- Opportunities for institutional advancement continue to be limited by its undiversified revenue stream.
- Mines lags behind in its professional offerings, playing catch up.
**Goal 3: Build and diversify revenue streams and auxiliary enterprises.**

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<td>1. Build upon advancements in board authorities and establish new relationship with the state</td>
<td>• Additional authorities, flexibilities, and/or newly defined relationship</td>
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| 2. Expand institutional support and infrastructure development through Foundation initiatives | • # of Endowed chairs (double) by 2024.  
• Humanitarian Engineering, the McBride Program, and Undergraduate Research are endowed by 2024.  
• Philanthropy funds $xx in capital by 2024 (to tie to campaign #s). |
| 3. Devote significant resources to establish new or expand continuing education and executive education enterprises that enhance the reputation, global reach, and financial security of Mines. | • Develop a targeted business model for continuing education and executive programs by FY2014 that produces significant net revenue for the institution. |
| 4. Support the innovation and financial interests of faculty and the institution by enhancing existing technology transfer program | • Evaluate existing tech transfer activity by CY2014.  
• If appropriate target xx patents, yy income, zz start-ups. |
GOAL 4: Develop and support campus infrastructure and processes such that they match Mines' aspirations to become a top-tier S&T institution.

Infrastructure, practices, processes and procedures have not kept pace with growth in students, faculty or research activities. Mines is limited in its ability to leverage existing infrastructure and people, or expand its overall mission by business processes and practices.

- **Risks:**
  - Inability to respond to challenges and opportunities.
  - Continued inefficiencies in business operations and processes waste valuable financial and human resources.
  - Degradation in core academic functions (teaching and research) due to critical infrastructure deficiencies.
Goal 4: Develop and support campus infrastructure and processes such that they match Mines' aspirations to become a top-tier S&T institution.

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<td>1. Develop a financial strategy that sustains capital infrastructure needs for the future.</td>
<td>• Additional $xx million annual revenues devoted to support capital infrastructure plan.</td>
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<tr>
<td>2. Develop and support administrative processes that promote institutional efficiency, effectiveness, communication, and ease of access to information.</td>
<td>• Review of critical issues and gaps for business related services and information deployment by CY14; comprehensive implementation plan by CY15</td>
</tr>
<tr>
<td>3. Upgrade and enhance instructional infrastructure and support services.</td>
<td>• An instructional improvement and innovation function is resourced and established by………</td>
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| 4. Upgrade and enhance research infrastructure utilizing best practices that ensure effectiveness and efficiency. | • Comprehensive research administration assessment FY14; implementation of outcomes by FY15. • Research space analysis done by CY14; actions taken by CY15. New research building built by 20??.
| 5. Develop infrastructure that supports enhancement of the overall student experience for both undergraduate and graduate students. | • Produce faculty workload guidelines that promote excellence and satisfaction in teaching and research. • Adjunct use is only incidental and opportunity based by 2016. |