10 Keys to Thriving in the Current Economy

SEM XIX
November 9, 2009

Guilbert Brown
Director of Budget & Financial Planning
George Mason University

Jay W. Goff
Vice-Provost and Dean of Enrollment Management
Missouri University of Science & Technology
WHY ARE WE HERE TODAY?
The external environment colleges and universities operate in is changing quickly

1. Dramatic changes in student markets
2. Public expectations for a wide variety of high quality student services
3. Shrinking government funding
4. Greater needs for an institution-wide understanding of how to best react to the emerging student trends, needs and markets.
Leadership Concerns

What we asked higher education leaders and longtime observers in national media:

- What do recent economic upheavals mean to colleges and universities?
- What are the fundamental issues facing higher education in the coming decade?
- Do we face unprecedented long term economic circumstances and challenges?
- What must institutions be doing today to respond to issues and challenges?
What We Learned – Highest Level Summary:

- Our fundamental challenges remain unchanged, but the urgency to address those challenges will be accelerated by economic necessity.
- Higher education as an industry will undergo transformations similar to those experienced by other industries over the last 50 years.
- Changes in technology and the global economy point toward solutions to these issues.
Workshop Agenda

I. SEM Primer
II. Institutional Challenges
III. Environmental and Economic Scan
IV. 10 Keys to Thriving in the Future
V. Key Factors for Governing Boards and Executive Leadership
VI. Q&A
Core Enrollment Principles

- No Enrollment Effort is Successful without **QUALITY** Academic Programs to Promote
- Recruitment and Retention is an On-going, Multi-year **PROCESS** with Strong Access to Research and **DATA**
- +80% of Enrollments come from **REGIONAL** student markets for BS/BA degrees
- The Most Successful Recruitment Programs Clearly **DIFFERENTIATE** the Student Experience from Competitor’s Programs
- The Most Successful Retention Programs Clearly Address Students’ Needs and Regularly **ENGAGE** Students in Academic and Non-Academic Programs

*Jay W. Goff, AACRAO SEM 2007*
Integration of Core Mission Plans

**Academic program planning – answers “what”**
- Faculty composition/capabilities drive programs
- Permanent faculty: long term investments

**Facility planning – answers “where”**
- Master plans take 5/10/20+ year perspectives

**Enrollment planning – answers “who”**
- Driven by programs, demographics, economy
- Multi-year impacts on revenues and costs

**Budget planning – answers “how”**
- Operating: annual/biennial based on current revenues
- Capital: resource, opportunity, strategy-driven
I. SEM Primer
What is SEM?

Strategic Enrollment Management (SEM) is defined as “a comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students where ‘optimum’ is designed within the academic context of the institution. As such, SEM is an institution-wide process that embraces virtually every aspect of an institution’s function and culture.”

*Michael Dolence, AACRAO SEM 2001*

- Research
- Recruitment
- Retention
The Purposes of SEM are Achieved By…

1. Establishing **clear goals** for the number & types of students needed to fulfill the institutional mission
2. Promoting **students’ academic success** by improving access, transition, persistence, & graduation
3. Promoting institutional success by enabling effective **strategic & financial planning**
4. Creating a **data-rich environment** to inform decisions & evaluate strategies
5. Improving process, organizational & financial **efficiency** & outcomes
6. Strengthening **communications & collaboration** among departments across the campus to support the enrollment program

Don Hossler & Bob Bontrager, ACE 2007
Role of the Chief Enrollment Manager

Enrollment leaders serve many roles throughout the change management process, such as that of a visionary, encourager, storyteller, facilitator, arbitrator, problem solver, manager and coach.

Jim Black, AACRAO SEM 2003

CEMs are Systems Thinkers Adept at Influencing Change
What is Included in a SEM Plan?

1. Strategic Framework: Mission, Values, Vision
2. Overview of Strategic Plan Goals & Institutional Capacity
3. Environmental Scan: Market Trends & Competition Analysis
4. Evaluation and Assessment of Position in Market
5. Enrollment Goals, Objectives, & Assessment Criteria
6. Marketing and Communication Plan
7. Recruitment Plan
8. Retention Plan
9. Student Aid and Scholarship Funding
10. Staff Development and Training
11. Student/Customer Service Philosophy
12. Process Improvements and Technology System Enhancements
13. Internal Communication and Data Sharing Plan
14. Campus wide Coordination of Enrollment Activities
II. Institutional Challenges
Mason Locations
Mason Overview

- Public institution, one of 6 VA state doctoral institutions. Began as a branch of the University of Virginia, became a full-fledged university in 1972
- Current year (2009-10) annualized enrollments are projected to be 32,200 headcount and 24,500 FTE
- Offers 68 Undergraduate, 72 Master’s, 27 Doctoral and 1 Professional degree on 3 campuses (Fairfax, Arlington and Prince William County)
- Budgeted student-to-faculty ratio of 14.7:1
- Awarded approximately 7300 degrees in 2008-09
  - Most in VA when certificates are included
  - Most master’s degrees awarded in VA
Mason Enrollments F1999-F2009

10 yr incr: 33%

10 yr incr: 52%
Student Profile

Approximate distributions by level:
- 61% Undergraduate
- 36% Graduate
- 2% Law

Residency
- 70% Northern VA
- 13% Other VA
- 17% Out of State

Gender – 55% Female

Racial/Ethnic Diversity
- 32% Racial/ethnic Minority
- 8% International/Non-resident Alien
- 60% White
  - Of those reporting, 25% did not report their race/ethnicity
Distinctions – 2009

- USN&WR #1 “Up and Coming” institution
- Princeton Review top 100 “Best Value” colleges
- Kiplinger’s “Best Values in Public Colleges”
- Forbes / Center for College Affordability top 200 “Best Buys” colleges (#146)
- Top 100 North and Latin American Universities by the Academic Ranking of World Universities conducted by Shanghai Jiao Tong University’s Institute of Higher Education
- Ranked #86 in the world for impact and performance of Web presence by Spanish Cybermetrics Lab comparison of 4,000 world institutions
- AARP Best Places to Work (#10)
- Chronicle of Higher Education “Great Colleges to Work For” (recognized in 13 categories)
## Budget Overview

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>REVISED BUDGET FY 2007</th>
<th>REVISED BUDGET FY 2008</th>
<th>REVISED BUDGET FY 2009</th>
<th>ORIGINAL BUDGET FY 2010</th>
<th>FY09 TO FY10 % CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational &amp; General *</td>
<td>$325.8M</td>
<td>$357.9M</td>
<td>$370.1M</td>
<td>$382.0M</td>
<td>3.2%</td>
</tr>
<tr>
<td>Auxiliary Enterprises</td>
<td>130.9M</td>
<td>142.9M</td>
<td>162.6M</td>
<td>173.9M</td>
<td>7.0%</td>
</tr>
<tr>
<td>Sponsored Research</td>
<td>71.6M</td>
<td>76.7M</td>
<td>91.6M</td>
<td>100.7M</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>SUBTOTAL OPERATING</strong></td>
<td><strong>$528.3M</strong></td>
<td><strong>$577.5M</strong></td>
<td><strong>$624.2M</strong></td>
<td><strong>$656.6M</strong></td>
<td><strong>5.2%</strong></td>
</tr>
<tr>
<td>State Student Financial Assistance</td>
<td>11.2M</td>
<td>12.0M</td>
<td>13.0M</td>
<td>14.3M</td>
<td>9.6%</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>85.0M</td>
<td>120.0M</td>
<td>256.2M</td>
<td>216.2M</td>
<td>-15.6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$624.5M</strong></td>
<td><strong>$709.5M</strong></td>
<td><strong>$893.5M</strong></td>
<td><strong>$887.1M</strong></td>
<td><strong>-0.7%</strong></td>
</tr>
</tbody>
</table>

* FY2010 includes $21.0M in Private Funds and $10.9M in Federal ARRA funds.
Mason E&G Budget Per Student FTE

Educational & General Total Funding Per FTE Student
FY 2001 – FY 2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$10,750</td>
<td>$10,360</td>
<td>$10,000</td>
<td>$11,000</td>
<td>$12,100</td>
<td>$13,400</td>
<td>$14,500</td>
<td>$15,200</td>
<td>$15,375</td>
</tr>
</tbody>
</table>
General Fund Operating Support History
## General Fund Budget Reduction History

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>GF Reduction</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>$6.8M</td>
<td>5%</td>
</tr>
<tr>
<td>FY09</td>
<td>$9.7M</td>
<td>7%</td>
</tr>
<tr>
<td>FY10</td>
<td>$11.2M</td>
<td>8%</td>
</tr>
<tr>
<td>FY 10 September 2009</td>
<td>$17.6M</td>
<td>15%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$45.3M</td>
<td>35%</td>
</tr>
</tbody>
</table>
Capital Projects in Progress: $850M+
Fairfax Campus – Capital Projects in Progress
# Total Assignable Space

<table>
<thead>
<tr>
<th>Year</th>
<th>FTE</th>
<th>E&amp;G</th>
<th>AUX ENT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>17,257</td>
<td>1,085,000</td>
<td>1,048,000</td>
<td>2,134,000</td>
</tr>
<tr>
<td>2003</td>
<td>20,223</td>
<td>1,350,000</td>
<td>1,360,000</td>
<td>2,710,000</td>
</tr>
<tr>
<td>2007</td>
<td>22,705</td>
<td>1,539,000</td>
<td>1,862,000</td>
<td>3,401,000</td>
</tr>
<tr>
<td>2009</td>
<td>22,348</td>
<td>1,705,000</td>
<td>2,798,000</td>
<td>4,503,000</td>
</tr>
<tr>
<td>2012</td>
<td>24,419</td>
<td>2,157,000</td>
<td>4,808,000</td>
<td>6,965,000</td>
</tr>
</tbody>
</table>

+226%  
+358%  
+99%  
+???%
Achieving Excellence

PROBABLE FUTURE:

✓ STATE (G/F) = Declining % of support
✓ NEW BUILDINGS = No state support to operate/maintain
✓ PRIVATE FUNDS = Probably improving, but often very specifically restricted/designated
✓ ENROLLMENT GROWTH = Trend from state is not to fund
Building Excellence
Balancing Priorities

- **Maintain Access**
- **Improve Resource (Private/Public) Base**
- **Build/Maintain Academic Spires of Excellence**
- **Manage Dynamic Capital Program**

---

**Improve Student Quality**

**Improve Faculty Salaries**

**Keep Price Affordable**
Missouri University of Science and Technology
S&T Miners Aren’t Your “Average Joe”

- 52 National Merit Scholars
- 80% ranked in the top 30% of their high school class
- 71 Valedictorians & Salutatorians
- Average ACT of 27.7 (upper 10% in nation)
- +70% have over 13 hours college credit
- 895 Bright Flight Scholars*
- 1,426 Access Missouri Scholars*
- Mid-range ACT score of 26-31*

*All students
What is Missouri S&T?

- A Top 50 Technological Research University
- 6800 students: 5200 Undergrad, 1600 Graduate
- 90% majoring in Engineering, Science, Comp. Sci.
- Ave. Student ACT/SAT: upper 10% in nation
- +70% of Freshmen from upper 20% of HS class
- 23% Out-of-State Enrollment
- +90% 5-Year Average Placement Rate at Graduation
- Ave. Starting Salary in 2009: +$57,300
- Highest Starting Salaries of all Midwestern Universities (#5 among US public universities)
S&T Affordability

**Current Undergraduate Students**
- Average parent income: $78,250
- Family incomes below $50,000: +35%
- First generation college students: 29%
- Pell Grant eligible students: 22%

**Graduation Statistics**
- Approximate indebtedness: $23,000
- Average 2009 starting salary: $57,521
What is Missouri S&T?

A Top Public University
Missouri S&T ranked 64th among the nation’s top public universities (U.S. News & World Report, 2010 America’s Best Colleges, September 2009).

Top 5 Starting Salaries among Public Universities
Missouri S&T named in payscale.com’s list of highest average starting salaries for graduates (www.payscale.com, Aug. 2009)

Top 15 Public Colleges for Getting Rich #1 in the Midwest!

Top 20 STEM Research University
Missouri S&T named in Academic Analytics’ “Top 20 Specialized Research Universities - STEM” (www.academicanalytics.com, Jan. 2008)

Top 25 Entrepreneurial Campus

Top 25 Connected Campus

Top 30 Safest College Campuses
Missouri S&T ranked #27 in Reader’s Digest’s “Campus Safety Survey” (www.rd.com, 2008).

Top 50 Best Values among National Universities
Missouri S&T ranked 5th among the nation’s national public universities and 37th overall (U.S. News & World Report, 2010 America’s Best Colleges Guidebook, September 2009).
Distribution by Academic Groupings
Fall 2009

- 76% Engineering
- 10% Business & Computing
- 8% Math & Natural Sciences
- 3% Liberal Arts
- 2% Social Sciences
- 1% Undecided & Non-Degree
- 1% Undecided & Non-Degree
Life as a National Outlier

Average enrollment is 5,615

- 75% Average enrollment is 6,457
- 65%
- 70%
- 55%
- 60%
- 45%
- 50%
- 35%
- 40%
- 25%
- 50% 55% 60% 65% 70% 75% 80% 85% 90% 95%

% Engineering, Business, Science & Math Enrollment

- South Dakota School of Mines and Technology
- Colorado School of Mines
- Michigan Technological University
- Worcester Polytechnic Institute
- Rensselaer Polytechnic Institute
- Clarkson University
- New Jersey Institute of Technology
- New Mexico Institute of Mining & Technology
- Illinois Institute of Technology
- Massachusetts Institute of Technology
- Stevens Institute of Technology
- Florida Institute of Technology
- California Institute of Technology

Engineering, Business, Science & Math Enrollment
Strategic Enrollment Management Plan
2007-2011

Increase Success of Students
- Retention Rates
- Graduation Rates

Increase College Going Rate & Access
1. Access & Affordability
2. Pipeline of College Ready Students
3. Strategic Partnerships
4. Outreach/Education
5. Scholarships

Expanding Current Markets & Capturing New Markets
1. Out-of-state students
2. Transfer Students
3. Female Students
4. Underrepresented Minority Students
5. International Students
6. Graduate Students
7. Nontraditional Students
Total Enrollment Fall 2000-Fall 2009

47% Enrollment Growth: 2,189 Additional Students
2001-2009 Enrollment Change

- 41% Increase in Undergraduates (1507)
- 41% Increase in Female Students (+435)
- 73% Increase in Graduate Students (+682)
- 91% Increase in Minority Students (+342)
- 40% Increase in Non-Engineering Majors

- Since 2005, 60% of Growth due to Increased Retention Rates
- 87% to 88% Retention Rate Achieved and Sustained
- 62% Graduation Rate Achieved. 65% possible by 2010

- Lower discount rate from +38% to 27%
- Generated over $21 M in additional gross revenues
Growth by Academic Fields
2000 to 2009

- **Engineering**
- **Business, Computing & Information Sciences**
- **Liberal Arts**
- **Math & Natural Sciences**
- **Social Sciences**
- **Undecided**
Enrollment Diversity

35% increase in Female Students
86% increase in Minority Students
# Diversity of Enrollments

## Undergraduate

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>3698</td>
<td>3756</td>
<td>3849</td>
<td>4089</td>
<td>4120</td>
<td>4313</td>
<td>4515</td>
<td>4753</td>
<td>4912</td>
<td>5205</td>
<td>41%</td>
</tr>
<tr>
<td>Graduate</td>
<td>928</td>
<td>1127</td>
<td>1391</td>
<td>1370</td>
<td>1287</td>
<td>1289</td>
<td>1343</td>
<td>1414</td>
<td>1459</td>
<td><strong>1610</strong></td>
<td>73%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4626</td>
<td>4883</td>
<td>5240</td>
<td>5459</td>
<td>5407</td>
<td>5602</td>
<td>5858</td>
<td>6167</td>
<td>6371</td>
<td><strong>6815</strong></td>
<td>47%</td>
</tr>
</tbody>
</table>

## Enrollment By Location

<table>
<thead>
<tr>
<th>Location</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Campus</td>
<td>4393</td>
<td>4575</td>
<td>4848</td>
<td>4983</td>
<td>4936</td>
<td>5101</td>
<td>5389</td>
<td>5649</td>
<td>5764</td>
<td>6154</td>
<td>40%</td>
</tr>
<tr>
<td>Distance or On-Line</td>
<td>233</td>
<td>308</td>
<td>392</td>
<td>476</td>
<td>471</td>
<td>501</td>
<td>469</td>
<td>518</td>
<td>607</td>
<td>661</td>
<td>184%</td>
</tr>
</tbody>
</table>

## Enrollment By Ethnic Group

<table>
<thead>
<tr>
<th>Group</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaskan Native</td>
<td>24</td>
<td>26</td>
<td>23</td>
<td>27</td>
<td>23</td>
<td>21</td>
<td>20</td>
<td>33</td>
<td>33</td>
<td><strong>44</strong></td>
<td>83%</td>
</tr>
<tr>
<td>Asian-American/Native Hawaiian</td>
<td>127</td>
<td>128</td>
<td>137</td>
<td>151</td>
<td>142</td>
<td>158</td>
<td>198</td>
<td><strong>198</strong></td>
<td>191</td>
<td><strong>174</strong></td>
<td>37%</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>168</td>
<td>197</td>
<td>213</td>
<td>230</td>
<td>218</td>
<td>237</td>
<td>245</td>
<td>271</td>
<td>299</td>
<td><strong>352</strong></td>
<td>110%</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>58</td>
<td>63</td>
<td>83</td>
<td>100</td>
<td>100</td>
<td>126</td>
<td>137</td>
<td>139</td>
<td>132</td>
<td><strong>149</strong></td>
<td>157%</td>
</tr>
<tr>
<td>Non-Resident, International</td>
<td>590</td>
<td>723</td>
<td><strong>819</strong></td>
<td>749</td>
<td>600</td>
<td>565</td>
<td>585</td>
<td>619</td>
<td>674</td>
<td><strong>819</strong></td>
<td>39%</td>
</tr>
<tr>
<td>Ethnicity Not Specified</td>
<td>171</td>
<td>179</td>
<td>209</td>
<td>253</td>
<td><strong>298</strong></td>
<td>253</td>
<td>250</td>
<td>242</td>
<td>248</td>
<td>291</td>
<td>70%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>3,488</td>
<td>3,567</td>
<td>3,756</td>
<td>3,949</td>
<td>4,026</td>
<td>4,242</td>
<td>4,423</td>
<td>4,665</td>
<td>4,794</td>
<td><strong>4,986</strong></td>
<td>43%</td>
</tr>
<tr>
<td>Total</td>
<td>4,626</td>
<td>4,883</td>
<td>5,240</td>
<td>5,459</td>
<td>5,407</td>
<td>5,602</td>
<td>5,858</td>
<td>6,167</td>
<td>6,371</td>
<td><strong>6,815</strong></td>
<td>47%</td>
</tr>
</tbody>
</table>

## Enrollment By Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1,050</td>
<td>1,097</td>
<td>1,133</td>
<td>1,248</td>
<td>1,209</td>
<td>1,224</td>
<td>1,326</td>
<td>1,391</td>
<td>1,419</td>
<td>1,485</td>
<td>41%</td>
</tr>
<tr>
<td>Male</td>
<td>3576</td>
<td>3786</td>
<td>4107</td>
<td>4211</td>
<td>4198</td>
<td>4378</td>
<td>4532</td>
<td>4776</td>
<td>4952</td>
<td><strong>5330</strong></td>
<td>49%</td>
</tr>
</tbody>
</table>

## Total Minorities, Non-Caucasian US Citizens

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Minorities, Non-Caucasian US Citizens</td>
<td>377</td>
<td>414</td>
<td>456</td>
<td>508</td>
<td>483</td>
<td>542</td>
<td>600</td>
<td>641</td>
<td>655</td>
<td><strong>719</strong></td>
<td>91%</td>
</tr>
<tr>
<td>% of Total</td>
<td>8%</td>
<td>8%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Under-Represented Minority US Citizens</td>
<td>250</td>
<td>286</td>
<td>319</td>
<td>357</td>
<td>341</td>
<td>384</td>
<td>402</td>
<td>443</td>
<td>464</td>
<td><strong>545</strong></td>
<td>118%</td>
</tr>
<tr>
<td>% of Total</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
<td>7%</td>
<td>6%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Non-Resident, International</td>
<td>590</td>
<td>723</td>
<td><strong>819</strong></td>
<td>749</td>
<td>600</td>
<td>565</td>
<td>585</td>
<td>619</td>
<td>674</td>
<td><strong>819</strong></td>
<td>39%</td>
</tr>
<tr>
<td>% of Total</td>
<td>13%</td>
<td>15%</td>
<td>16%</td>
<td>14%</td>
<td>11%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>

## Enrollment By Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1,050</td>
<td>1,097</td>
<td>1,133</td>
<td>1,248</td>
<td>1,209</td>
<td>1,224</td>
<td>1,326</td>
<td>1,391</td>
<td>1,419</td>
<td>1,485</td>
</tr>
<tr>
<td>Male</td>
<td>3576</td>
<td>3786</td>
<td>4107</td>
<td>4211</td>
<td>4198</td>
<td>4378</td>
<td>4532</td>
<td>4776</td>
<td>4952</td>
<td>5330</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1,050</td>
<td>1,097</td>
<td>1,133</td>
<td>1,248</td>
<td>1,209</td>
<td>1,224</td>
<td>1,326</td>
<td>1,391</td>
<td>1,419</td>
<td>1,485</td>
</tr>
<tr>
<td>Male</td>
<td>3576</td>
<td>3786</td>
<td>4107</td>
<td>4211</td>
<td>4198</td>
<td>4378</td>
<td>4532</td>
<td>4776</td>
<td>4952</td>
<td>5330</td>
</tr>
</tbody>
</table>
% State Support vs % Student Fees

Percent of Budget

FY90 FY00 FY01 FY02 FY03 FY04 FY05 FY06 FY07 FY08

State Appropriations

Tuition & Fees
FY08 Current Fund Revenue

- State Appropriations: 27%
- Tuition & Fees: 35%
- Grants & Contracts: 21%
- Gifts: 7%
- Auxiliary Enterprises: 5%
- Endowment Income: 3%
- Contracts & Grants: 2%
## FY10 Budget

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Fall '00</th>
<th>Fall '09 PROJECTED</th>
<th>Change Amount</th>
<th>Change Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total On-Campus</td>
<td>4,393</td>
<td>5,866</td>
<td>1,473</td>
<td>34%</td>
</tr>
<tr>
<td>Other Programs</td>
<td>233</td>
<td>645</td>
<td>412</td>
<td>177%</td>
</tr>
<tr>
<td>Total</td>
<td>4,626</td>
<td>6,511</td>
<td>1,885</td>
<td>41%</td>
</tr>
</tbody>
</table>
## FY10 Budget

<table>
<thead>
<tr>
<th>REVENUE</th>
<th>Original Budget</th>
<th>Change</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 01</td>
<td>FY 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fee Revenue</td>
<td>29,458,500</td>
<td>60,086,000</td>
<td>30,627,500</td>
<td>104%</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>(11,459,000)</td>
<td>(17,899,300)</td>
<td>(6,440,300)</td>
<td>56%</td>
</tr>
<tr>
<td>Offset Aid</td>
<td>310,000</td>
<td>310,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Fee Revenue</td>
<td>17,999,500</td>
<td>42,496,700</td>
<td>24,497,200</td>
<td>136%</td>
</tr>
<tr>
<td>Dist/Cont Ed Recovery</td>
<td>150,000</td>
<td>700,000</td>
<td>550,000</td>
<td>367%</td>
</tr>
<tr>
<td>State Appropriations</td>
<td>50,474,819</td>
<td>50,355,560</td>
<td>(119,259)</td>
<td>0%</td>
</tr>
<tr>
<td>Recovery of Indirect</td>
<td>2,946,000</td>
<td>6,650,000</td>
<td>3,704,000</td>
<td>126%</td>
</tr>
<tr>
<td>Gift/Endowment Assessment</td>
<td>-</td>
<td>350,000</td>
<td>350,000</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Revenue</td>
<td>287,298</td>
<td>150,000</td>
<td>(137,298)</td>
<td>-48%</td>
</tr>
<tr>
<td><strong>NET General Revenue</strong></td>
<td><strong>71,857,617</strong></td>
<td><strong>100,702,260</strong></td>
<td><strong>28,844,643</strong></td>
<td><strong>40%</strong></td>
</tr>
</tbody>
</table>
## FY10 Budget

<table>
<thead>
<tr>
<th>EXPENSE</th>
<th>Original Budget</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 01</td>
<td>FY 10</td>
</tr>
<tr>
<td>Chancellor's Office</td>
<td>492,601</td>
<td>662,036</td>
</tr>
<tr>
<td>Administrative Services</td>
<td>9,623,632</td>
<td>12,030,886</td>
</tr>
<tr>
<td>Student Affairs</td>
<td>2,243,645</td>
<td>3,014,671</td>
</tr>
<tr>
<td>University Advancement</td>
<td>1,779,468</td>
<td>2,960,542</td>
</tr>
<tr>
<td>Campus Accounts</td>
<td>4,336,202</td>
<td>6,823,977</td>
</tr>
<tr>
<td>Academic &amp; Instruction Departments</td>
<td>28,288,070</td>
<td>37,738,541</td>
</tr>
<tr>
<td>S&amp;T MSU Co Op Engr Program</td>
<td>504,400</td>
<td>504,400</td>
</tr>
<tr>
<td>Dedicated Indirect (SRI &amp; Res Spt)</td>
<td>883,800</td>
<td>1,662,500</td>
</tr>
<tr>
<td>Deans</td>
<td>2,994,646</td>
<td>(2,994,646)</td>
</tr>
<tr>
<td>Provost Departments</td>
<td>3,349,625</td>
<td>4,477,101</td>
</tr>
<tr>
<td>Enrollment Management</td>
<td>1,652,334</td>
<td>3,099,315</td>
</tr>
<tr>
<td>Graduate Studies</td>
<td>344,999</td>
<td>344,999</td>
</tr>
<tr>
<td>Info Access &amp; Tech Services</td>
<td>4,116,391</td>
<td>5,979,121</td>
</tr>
<tr>
<td>Sponsored Programs</td>
<td>2,277,616</td>
<td>2,667,916</td>
</tr>
<tr>
<td>Undergraduate Studies</td>
<td>360,745</td>
<td>1,889,056</td>
</tr>
<tr>
<td>Global Learning</td>
<td>677,729</td>
<td>1,195,444</td>
</tr>
<tr>
<td>Staff Benefits</td>
<td>8,781,113</td>
<td>15,651,755</td>
</tr>
<tr>
<td><strong>Total Expense Budget</strong></td>
<td><strong>71,857,617</strong></td>
<td><strong>100,702,260</strong></td>
</tr>
</tbody>
</table>
20,000 fewer potential engineering majors

College Bound ACT Tested Students Interested in Any Engineering Field

SOURCE: ACT EIS 2008
Missouri’s 2008
Student Funnel for ALL Engineering Fields

- High School Seniors: 72,467
- High School Graduates: 61,752
- ACT Testers/College Bound: 47,240
- Any Engineering Interest (all testers): 1,768
- Any Engineering Interest, (+21 testers): 1,256
  (21 = MO average score / 50%)
- Engineering Interest, +24 comp. score: 961
  (24 = UM minimum for auto admission)
- Missouri S&T Freshmen Engineering Enrollees: 681 71% S&T market share

SOURCES: MODESE 2009, ACT EIS 2008, PeopleSoft
Increase Enrollment and Manage the Academic Portfolio:

- Missouri S&T will increase its enrollment by improving access, expanding diversity, increasing retention, expanding extended learning activities, controlling tuition, and providing more endowed scholarships.

- Missouri S&T will balance the academic portfolio and the student experience by increasing market share in areas such as life sciences and biotechnology, energy, business and management, communication, the liberal arts, and education in science, technology, engineering and mathematics.
### Strategic Plan Goals

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Original Goal</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Enrollment</td>
<td>4,626</td>
<td>5,858</td>
<td>6,167</td>
</tr>
<tr>
<td>Undergraduate Students</td>
<td>3,698</td>
<td>4,515</td>
<td>4,753</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>928</td>
<td>1,343</td>
<td>1,414</td>
</tr>
<tr>
<td>Freshmen Class</td>
<td>696</td>
<td>977</td>
<td>1,051</td>
</tr>
<tr>
<td>Transfer Class</td>
<td>210</td>
<td>266</td>
<td>276</td>
</tr>
<tr>
<td>American Indian/ Alaskan Native</td>
<td>24</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>Asian-American</td>
<td>117</td>
<td>198</td>
<td>198</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>159</td>
<td>245</td>
<td>271</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>53</td>
<td>137</td>
<td>139</td>
</tr>
<tr>
<td>Total Female</td>
<td>1,071</td>
<td>1,326</td>
<td>1,391</td>
</tr>
<tr>
<td>Undergraduate Female</td>
<td>860</td>
<td>1,016</td>
<td>1,052</td>
</tr>
<tr>
<td>Graduate Female</td>
<td>211</td>
<td>310</td>
<td>339</td>
</tr>
<tr>
<td>Freshman Female</td>
<td>196</td>
<td>221</td>
<td>255</td>
</tr>
<tr>
<td>Transfer Female</td>
<td>45</td>
<td>70</td>
<td>74</td>
</tr>
<tr>
<td>On-campus</td>
<td>4,393</td>
<td>5,389</td>
<td>5,649</td>
</tr>
<tr>
<td>Distance Education</td>
<td>233</td>
<td>469</td>
<td>518</td>
</tr>
</tbody>
</table>
#1 Question: How Did it Happen...?
silver bullet

or

strike of lightening?
the truth is.........

silver buckshot:
+92 strategic institutional, policy, market, facility, partnership and program changes
III. Environmental and Economic Scan
Resources

- [www.act.org](http://www.act.org) (retention study and tracking charts, education policy/trends)
- [www.ama.com](http://www.ama.com) (marketing trends and applications)
- [www.collegeboard.org](http://www.collegeboard.org) (student psychographics)
- [www.collegeresults.org](http://www.collegeresults.org) (four-year retention benchmarking)
- [www.educationalpolicy.org](http://www.educationalpolicy.org) (retention calculator)
- [www.nces.gov](http://www.nces.gov) (Digest of Education Statistics)
- [www.higheredinfo.org](http://www.higheredinfo.org) (college participation rates)
- [www.noellevitz.com](http://www.noellevitz.com) (funnel analysis)
- [www.stamats.com](http://www.stamats.com) (teen and parent trend analysis)
- [www.wiche.org](http://www.wiche.org) (student projections)
- [www.educationtrust.org](http://www.educationtrust.org) (k-18 environmental scans and best practices)
- [www.lumina.org](http://www.lumina.org) (research underserved and adult student groups)
- [www.greentreegazette.com](http://www.greentreegazette.com)
- [www.pewinternet.org](http://www.pewinternet.org) (communication and internet trends)
- [www.postsecondary.org](http://www.postsecondary.org) (education trends and issues reports)
- [www.communicationbriefings.com](http://www.communicationbriefings.com) (tactics and analysis)
- Chronicle of Higher Education August Almanac
- Recruitment and Retention in Higher Education
Understanding the Impact of a New generation of students: Millennial Enrollments

- About 30% of students want more, not less, parental involvement

- Majority of students take nomadic paths to degree completion:
  - almost 60% of students graduating from college attend more than one institution, a number that has steadily risen
  - 35% of students attend three or more colleges/universities before they graduate

Heavy Competition for Students
Number of Colleges and Universities, 2005-06

Employment
Percent change from year ago

Source: St. Louis Federal Reserve
46%: The Economy Has Changed Which College Students will Attend

76% indicated they would be “somewhat” or “very likely” to consider a more expensive institution if it could deliver greater value.

<table>
<thead>
<tr>
<th>Likelihood of Reconsidering a College Initially Perceived As Too Expensive</th>
<th>Nationally</th>
<th>Middle States</th>
<th>Midwest</th>
<th>New England</th>
<th>South</th>
<th>Southwest</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely</td>
<td>33%</td>
<td>31%</td>
<td>32%</td>
<td>16%</td>
<td>38%</td>
<td>43%</td>
<td>31%</td>
</tr>
<tr>
<td>Somewhat likely</td>
<td>43%</td>
<td>44%</td>
<td>45%</td>
<td>48%</td>
<td>41%</td>
<td>38%</td>
<td>44%</td>
</tr>
<tr>
<td>Not very likely</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>29%</td>
<td>19%</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Not at all likely</td>
<td>4%</td>
<td>6%</td>
<td>4%</td>
<td>7%</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Challenge: Changes in the College-Bound Student Markets

- The Midwest and Northeast will experience a 4% to 10% decline in high school graduates between 2009 – 2014 (WICHE)
- The profile of college-bound students is rapidly becoming more ethnically diverse and female dominant (NCES, WICHE, ACT, College Board)
- The number of students interested in engineering, computer science, and natural science degrees has declined to record lows (ACT, CIRP)
- More full-time college freshmen are choosing to start at two-year colleges (IPED, MODHE)
- More students are enrolling in more than one college at a time (National Student Clearinghouse)
- Future student market growth will include more students requiring financial aid and loans to complete a degree (WICHE)
Percent Change in Population for Counties and Puerto Rico Municipios: April 1, 2000 to July 1, 2008

The Trends are Diverse: Regions within Regions
The NEW National Picture

Figure 1. Percent Change in Graduates from Public and Nonpublic High Schools Between 2004-05 and 2014-15

SOURCE: WICHE, 2008
National vs. Regional Trends

Figure 2.7. Public and Nonpublic High School Graduates by Region
1996-97 to 2004-05 (Estimated), 2005-06 to 2021-22 (Projected)

Note: Nonpublic school graduates are projected beginning with the 2005-06 academic year.

SOURCE: WICHE, 2008
Female Enrollments Exceed 57% of All College Students

Births in the U.S. by Race/Ethnicity

SOURCE: National Center for Health Statistics, Centers for Disease Control and Prevention
Changes in Race/Ethnicity: US

Figure 3.4. Cumulative Percent Change in U.S. Public High School Graduates Relative to 2004-05 by Race/Ethnicity
Changes in Race/Ethnicity: SOUTH

Figure 3.15. Public High School Graduates in the South by Race/Ethnicity 1993-94 to 2004-05 (Actual), 2005-06 to 2021-22 (Projected)
Changes in Race/Ethnicity: WEST

Figure 3.9. Public High School Graduates in the West by Race/Ethnicity 1993-94 to 2004-05 (Actual), 2005-06 to 2021-22 (Projected)
Changes in Race/Ethnicity: MIDWEST

Figure 3.11. Public High School Graduates in the Midwest by Race/Ethnicity 1993-94 to 2004-05 (Actual), 2005-06 to 2021-22 (Projected)
Changes in Race/Ethnicity: NORTHEAST

Figure 3.13. Public High School Graduates in the Northeast by Race/Ethnicity 1993-94 to 2004-05 (Actual), 2005-06 to 2021-22 (Projected)
## Change in Public High School Graduates by Ethnicity 2005-2015

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Cumulative Growth over Ten Years</th>
<th>Percentage Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>+ 12,000</td>
<td>+ 3%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>+ 2,000</td>
<td>+ 7%</td>
</tr>
<tr>
<td>Asian-American/Pacific Islander</td>
<td>+ 46,000</td>
<td>+ 32%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>+ 207,000</td>
<td>+ 54%</td>
</tr>
<tr>
<td>White</td>
<td>- 197,000</td>
<td>- 11%</td>
</tr>
</tbody>
</table>

*Source: College Board 2008 “Achieving the Dream of America”*
## Anticipated Changes by State

<table>
<thead>
<tr>
<th>Definition</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable Production</td>
<td>Alaska, California, Connecticut, Hawaii, Illinois, Iowa, Kentucky, Maine, Maryland, Mississippi, Missouri, New Mexico, Oklahoma, Oregon, South Carolina, Tennessee and Washington (17 states)</td>
</tr>
<tr>
<td>Slowing Production</td>
<td>Massachusetts, Michigan, Minnesota, Nebraska, New York, Ohio, Pennsylvania, Rhode Island, West Virginia and Wisconsin (10 states)</td>
</tr>
<tr>
<td>Dwindling Production</td>
<td>Kansas, Louisiana, Montana, New Hampshire, North Dakota, South Dakota, Vermont and Wyoming (8 states)</td>
</tr>
<tr>
<td>Manageable Expansion</td>
<td>Alabama, Colorado, Delaware, District of Columbia, New Jersey and Virginia (5 states and D.C.)</td>
</tr>
<tr>
<td>Rapid Expansion</td>
<td>Arkansas, Idaho, Indiana and North Carolina (4 states)</td>
</tr>
<tr>
<td>Explosive Growth</td>
<td>Arizona, Florida, Georgia, Nevada, Texas and Utah (6 states)</td>
</tr>
</tbody>
</table>

SOURCE: College Board 2008 “Achieving the Dream of America”
College-Going Rates of High School Graduates Aged 18 to 24 by Ethnic Group, 1999-2006

SOURCE: U.S. Census Bureau
ACT’s Reading Between the Lines:
2005 ACT-tested High School Graduates Meeting College Readiness Benchmark for Reading

College-Going Rate of Recent U.S. High School Graduates 1992-2004

## College Progression Rates

<table>
<thead>
<tr>
<th>NCHEMS 2006</th>
<th>For every 100 Ninth Graders</th>
<th># Graduate from High School</th>
<th># Enter College</th>
<th># Are Still Enrolled Their Sophomore Year</th>
<th>% of 9th graders who graduate from HS on time, go directly to college, return for their second year, and graduate within 150% of program time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missouri</td>
<td>100</td>
<td>77.2</td>
<td>44.1</td>
<td>28.8</td>
<td>20.9</td>
</tr>
<tr>
<td>Nation</td>
<td>100</td>
<td>68.6</td>
<td>42.3</td>
<td>28.4</td>
<td>19.7</td>
</tr>
</tbody>
</table>
# Fastest-Growing Occupations 2006-2016

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Job growth in decade</th>
<th>% Increase over decade</th>
<th>Education required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network systems/data analysts</td>
<td>140,000</td>
<td>53.4</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Computer software engineers/applications</td>
<td>226,000</td>
<td>44.6</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Personal financial advisors</td>
<td>72,000</td>
<td>41.0</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>22,000</td>
<td>35.0</td>
<td>First Professional</td>
</tr>
<tr>
<td>Financial analysts</td>
<td>75,000</td>
<td>33.8</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Computer systems analysts</td>
<td>146,000</td>
<td>29.0</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Database administrators</td>
<td>34,000</td>
<td>28.6</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Computer software engineers/software</td>
<td>99,000</td>
<td>28.2</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Physical therapists</td>
<td>47,000</td>
<td>27.1</td>
<td>Master’s</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>18,000</td>
<td>27.0</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td><strong>Total Job Growth in 10 years</strong></td>
<td><strong>879,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** Bureau of Labor Statistics
Change in Intended Major 1976-77 to 2006-07

College Board, 2007

Source: CIRP
Do not discount the value of funnel management and analysis.
27% Planning to Submit Fewer Applications

Impact of the Economy on Volume of Applications Submitted

- More applications will be submitted, 12%
- Fewer applications will be submitted, 27%
- Volume of applications won't be influenced, 61%

% of 1st Year Students at Four-Year College Who Return for 2nd Year

Source: Compiled from ACT Institutional Data Files.

SOURCE: ACT 2009
Retention Trends  1983-2009
Freshman to Sophomore Year

<table>
<thead>
<tr>
<th></th>
<th>Highest</th>
<th>Lowest</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Two-year public</td>
<td>53.7 (’08)</td>
<td>51.3 (’04)</td>
<td>53.7</td>
</tr>
<tr>
<td>BA/BS public</td>
<td>70.0 (’04)</td>
<td>66.4 (’96, ’05)</td>
<td>67.6</td>
</tr>
<tr>
<td>MA public</td>
<td>71.6 (’06)</td>
<td>68.1 (’89)</td>
<td>69.8</td>
</tr>
<tr>
<td>PhD public</td>
<td>78.1 (’04)</td>
<td>72.9 (’08)</td>
<td>74.4</td>
</tr>
<tr>
<td>Two-year private</td>
<td>72.6 (’92)</td>
<td>55.5 (’08, ’09)</td>
<td>55.5</td>
</tr>
<tr>
<td>BA/BS private</td>
<td>74.0 (’89)</td>
<td>69.6 (’08)</td>
<td>69.9</td>
</tr>
<tr>
<td>MA private</td>
<td>78.0 (’85)</td>
<td>72.3 (’08)</td>
<td>72.0</td>
</tr>
<tr>
<td>PhD private</td>
<td>85.0 (’85)</td>
<td>80.4 (’08)</td>
<td>80.6</td>
</tr>
<tr>
<td>National</td>
<td>68.7 (’07)</td>
<td>65.7 (’08)</td>
<td>65.9</td>
</tr>
</tbody>
</table>

SOURCE: ACT, 2009
# Completion Rates 1983-2009

Two-Year College (Associates Degree in 3 years or less)

<table>
<thead>
<tr>
<th></th>
<th>Highest</th>
<th>Lowest</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>38.8 ('89)</td>
<td>27.1 ('07)</td>
<td>28.3</td>
</tr>
<tr>
<td>Private</td>
<td>66.4 ('90)</td>
<td>50.2 ('08)</td>
<td>51.6</td>
</tr>
<tr>
<td>All</td>
<td>44.0 ('89)</td>
<td>28.9 ('07)</td>
<td>30.8</td>
</tr>
</tbody>
</table>

* Completion of associate’s degree in 3 years or less

SOURCE: ACT, 2009
## Completion Rates 1983-2009
### Four-Year Colleges

<table>
<thead>
<tr>
<th>Degree Level</th>
<th>Highest Year</th>
<th>Lowest Year</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA/BS public</td>
<td>52.8 ('86)</td>
<td>39.6 ('06)</td>
<td>43.0</td>
</tr>
<tr>
<td>MA/MS public</td>
<td>46.7 ('86)</td>
<td>37.0 ('00)</td>
<td>38.4</td>
</tr>
<tr>
<td>PhD public</td>
<td>50.6 ('89, '90)</td>
<td>45.0 ('01)</td>
<td>48.7</td>
</tr>
<tr>
<td>BA/BS private</td>
<td>57.5 ('06)</td>
<td>53.3 ('01)</td>
<td>55.9</td>
</tr>
<tr>
<td>MA/MS private</td>
<td>58.4 ('88)</td>
<td>53.5 ('01)</td>
<td>54.8</td>
</tr>
<tr>
<td>PhD private</td>
<td>68.8 ('86)</td>
<td>63.1 ('05)</td>
<td>65.1</td>
</tr>
<tr>
<td>National</td>
<td>54.6 ('90)</td>
<td>50.9 ('01)</td>
<td>52.6</td>
</tr>
</tbody>
</table>

* Completion of bachelor’s degree in 5 years or less

SOURCE: ACT, 2009
Financial Considerations the Most Common Reason for Leaving College

Figure 2.9: Education Level of Individuals Ages 25 and Older, 1940–2006

Note: Percentages may not add up to 100 due to rounding.
Source: U.S. Census Bureau, 2006a, Table A-1.
Need for Bachelorette Degrees

Assuming current rates of college attendance, persistence and “off shoring” do not change, analyst Anthony P. Carnevale concludes that by 2012, the U.S. will face a cumulative 10-year shortage of:

- 850,000 associate degrees
- 3.2 million bachelor’s degrees
- 2.9 million graduate degrees

The National Center for Higher Education Management Systems estimates:

- 55% of the population will need college degrees by 2025 in order to equal degree attainment in top-performing countries, a potential “degree gap” of 15.6 million

SOURCE: College Board 2008 “Achieving the Dream of America”
U.S: 3rd Out of 30 OECD Countries in Overall Postsecondary Attainment in 2005

U.S. Tied for 17th Out of 22 OECD Nations in High School Graduation Rates

As college prices have escalated while family income growth has stalled, student debt has increased dramatically in recent years.

SOURCE: College Board 2008 “Achieving the Dream of America”
MOVE BACK HOME?!... KIDS TODAY ARE SO LAZY AND IRRESPONSIBLE! YOUR MOTHER AND I STARTED OUT WITH NOTHING!...

FIVE-Figure STUDENT LOAN DEBT

TRUST ME, I WOULD'VE LOVED STARTING OUT WITH NOTHING!...
Percentage of Full-time, Full-year Undergrads Who Received Any Student Loans, by Institution Type

IV. 10 Keys to Thriving in the Future

Moving Back to a Buyers Market
10 Keys to Thriving in the Current Economy: Moving Back to a Buyers’ Market

1. Focus Communications on the Value and Outcomes of the Student Experience
2. Be Transparent about the Budget Process
3. Manage in a Business Like Fashion
4. Push Retention efforts to Implement Fundamentals
5. Beef up Financial Aid Staff and Support
6. Be Prepared for Increased Competition: Focus on Core Markets and Institutional Competencies
7. Support the new Majority: a Transfer Student Friendly Programs
8. Make Pre K-20 planning and programs a Fundamental Business Practice
9. Embrace Academic Program Restructuring
10. Plan for a Healthy Faculty Mix
10 Keys to Thriving in the Current Economy

SEM XIX
November 9, 2009

Guilbert Brown
Director of Budget & Financial Planning
George Mason University

Jay Goff
Vice-Provost and Dean of Enrollment Management
Missouri University of Science & Technology
IV. 10 Keys to Thriving in the Future

Moving Back to a Buyers Market
1. Focus Communications on the Value and Outcomes of the Student Experience

Be able to demonstrate Quality related to Institutional Mission and, ultimately, the Public’s Return on Investment (ROI)
Keys to Attracting and Enrolling Students

1. Sending the right message to the right students, at the right time, in the right format.

2. The development and management of a multi-level prospective student communication plans.

3. Consistently sending our messages through well-trained, committed, caring individuals across the campus.

4. Having the appropriate resources to implement the plans.
Highest Yielding Enrollment Activities

Campus Visit/Summer Camps
- Over 70% of the students who visit campus or attend a camp apply.
- About 61% of these applicants enroll, so about 42% of our high school level camp attendees end up enrolling.
- 2009’s freshmen report that around 26% of the students attending at least one summer program

Telecounseling
- Increases students attendance at HS/CC visit, receptions & campus visitation

Regular Communication/Relationship Development
- Current communication plans provide contacts every 2 to 4 weeks from the end of the Junior Year to the April of Senior Year
  - General Plan: 14 to 18 contacts/communications
  - Minority or Women: 21 to 27 contacts/communications
  - Minority Women: 28 to 36 contact/communications
*Now that I have a college education, maybe I'll be able to earn enough money to pay for my college education.*
“The public does not believe that colleges need to choose among maintaining quality, expanding access, and holding down costs”


“Governing boards and institutional leaders must move beyond the ‘iron triangle’ of seemingly conflicting choices – improving quality, increasing access, and yet constraining costs – toward a ‘culture of accountability.’”

What Does the Public Think?

2007 National Center for Higher Education and Public Policy Study found:

- 87% believe higher education improves job prospects
- 67% believe higher education is worth the investment
- 78% believe students have to borrow too much to attend
- 62% believe many qualified and motivated students don’t get the opportunity to attend
- 86% believe those who really want a college education can obtain one if they’re willing to make sacrifices
- 71% believe students at two-year community colleges can learn as much as during their 1st two years at a four-year college or university
- 76% of high school student parents are worried about how to pay for their children’s higher education
- 52% agree “colleges are like a business” and care more about the bottom line than educational values
- 44% say waste and mismanagement are “very important” factors in driving up costs (an additional 37% say they are “somewhat important” factors in cost)
What Does the Public Think?

2007 National Center for Higher Education and Public Policy Study found (continued):

- 48% believe their state’s public college and university systems need to be fundamentally overhauled
- 56% say colleges could spend a lot less and still maintain excellence
- 68% believe community colleges should be used to hold down college costs
- 67% believe college facilities should be used nights and weekends and more Internet courses should be used to increase efficiency
- 30% support reducing the number of courses required for a degree so people can graduate in fewer than four years
- 31% support consolidating programs even though students may need to travel further to study in their chosen field

Benefits

Educational Achievement
Adults with Associate’s Degree or Higher
Adults with Bachelor’s Degree or Higher

Economic Benefits
Increased Income from Some College
Increased Income from Bachelor’s Degree

Civic Benefits
Population Voting
Charitable Contributions
Volunteering

Adult Skill Levels
Quantitative Literacy
Prose Literacy
Document Literacy

State Grades
- A
- B
- C
- D
- F


Maryland is the top-performing state in benefits.
Education, Earnings, and Tax Payments

Figure 1.1: Median Earnings and Tax Payments of Full-Time Year-Round Workers Ages 25 and Older, by Education Level, 2005

Note: Taxes paid include federal income, Social Security, and Medicare taxes, and state and local income, sales, and property taxes. Sources: U.S. Census Bureau, 2006, PINC-03; Internal Revenue Service, 2006; McIntyre et al., 2003; calculations by the authors.

The bars in this graph show median earnings at each education level. The lighter segments represent the average federal, state, and local taxes paid at these income levels. The darker segments show after-tax income.
**Career Success for Grads**

3-year Averages

---

**Midwest’s Largest Career Fair**

- Over 660 Companies recruit on campus:
  - +4,250 on-campus interviews

- Average starting salary for graduates at commencement:
  - over $57,300

- Over 500 students completed a co-op or internship for
  +160 companies around the world
  - $2,650 average monthly co-op salary
  - $2,875 average monthly internship salary

- 90% of grads have secured firm plans at graduation

- Mid-career average salary for all graduates:
  - $95,200  *(Payscale.com, August 2009)*

- Many top corporations, such as Shell Oil, Caterpillar, Toyota and Boeing list Missouri S&T as a “Top 20 Key School” for finding their future leaders
Focus On Outcomes:
Career Success for Grads
Affordability

California is the top-performing state in affordability.
Net Tuition and Fees, Net Room and Board and Other Costs, and Total Grants in Constant 2007 Dollars by Income Group, Full-Time Dependent Students at Public Institutions

Net Tuition and Fees, Net Room and Board and Other Costs, and Total Grants in Constant 2007 Dollars by Income Group, Full-Time Dependent Students at Private NFP Institutions

Net Tuition and Fees, Net Room and Board and Other Costs, and Total Grants in Constant 2007 Dollars by Income Group, Full-Time Dependent Students at Private For-Profit Institutions

Iowa is the top-performing state in completion.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Actual 0708</th>
<th>Target 0708</th>
<th>Threshold</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State Enrollment</td>
<td></td>
<td>25,006</td>
<td>25,083</td>
<td>23,829</td>
<td>Passed</td>
</tr>
<tr>
<td>Under-represented</td>
<td></td>
<td>7,727</td>
<td>7,314</td>
<td>6,929</td>
<td>Achieved</td>
</tr>
<tr>
<td>Degree Awards</td>
<td></td>
<td>7,124</td>
<td>7,281</td>
<td>6,917</td>
<td>Passed</td>
</tr>
<tr>
<td>Affordability</td>
<td><em>No data at this time.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need-based borrowing $</td>
<td></td>
<td>$3,030</td>
<td>$4,128</td>
<td>$4,278</td>
<td>Achieved</td>
</tr>
<tr>
<td>Need-based borrowing %</td>
<td></td>
<td>71.9%</td>
<td>75.9%</td>
<td>78.5%</td>
<td>Achieved</td>
</tr>
<tr>
<td>Tuition Assessment</td>
<td><em>No data at this time.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-need Degrees</td>
<td></td>
<td>2,079</td>
<td>1,513</td>
<td>1,393</td>
<td>Achieved</td>
</tr>
<tr>
<td>SACS Program Review</td>
<td><em>Institution has provided a statement on current SACS program reviews.</em></td>
<td></td>
<td></td>
<td></td>
<td>Achieved</td>
</tr>
<tr>
<td>100-200 Courses</td>
<td><em>No data at this time.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees per FTE Faculty</td>
<td></td>
<td>5.2</td>
<td>4.8</td>
<td>4.7</td>
<td>Achieved</td>
</tr>
<tr>
<td>Retention Rate</td>
<td></td>
<td>82.6%</td>
<td>78.6%</td>
<td>77.6%</td>
<td>Achieved</td>
</tr>
<tr>
<td>Degrees per FTE Students</td>
<td></td>
<td>23.4%</td>
<td>22.3%</td>
<td>22.0%</td>
<td>Achieved</td>
</tr>
<tr>
<td>Transfer Agreements</td>
<td><em>Institution has provided evidence of increasing numbers of transfer agreements.</em></td>
<td></td>
<td></td>
<td></td>
<td>Achieved</td>
</tr>
<tr>
<td>Degree Transfers</td>
<td></td>
<td>1,063</td>
<td>332</td>
<td>0</td>
<td>Achieved</td>
</tr>
<tr>
<td>Dual Enrollments</td>
<td><em>Does not apply to four-year institutions.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Development</td>
<td><em>Institution received overall satisfactory scores from survey respondents.</em></td>
<td></td>
<td></td>
<td></td>
<td>Achieved</td>
</tr>
<tr>
<td>Research Expenditures</td>
<td></td>
<td>$46,361,561</td>
<td>$45,856,340</td>
<td>$45,847,303</td>
<td>Achieved</td>
</tr>
<tr>
<td>Patents &amp; Licenses</td>
<td></td>
<td>13</td>
<td>8</td>
<td>0</td>
<td>Achieved</td>
</tr>
<tr>
<td>K-12 Partnerships</td>
<td><em>Institution received overall satisfactory scores from survey respondents.</em></td>
<td></td>
<td></td>
<td></td>
<td>Achieved</td>
</tr>
</tbody>
</table>

Institution has been passed on the financial and administrative measures by the Secretaries of Finance, Administration, and Technology.

**Institution was certified as having fully met the performance standards of the Restructuring Act and Appropriation Act by action of the Council June 8, 2009.**
All states receive an "Incomplete" in Learning because there are not sufficient data to allow meaningful state-by-state comparisons.
Key Indicators Suggest

- The general public highly values the contributions our institutions make to individuals and society.
- Nevertheless we will be increasingly called upon to explain the value of our programs to individual and societal stakeholders.
- We have many successful stories to tell with regard to access, and affordability, and outcomes for individuals and society.
- The public is inclined to support costs associated with maintaining program quality and rigor when paired with sound management practices including appropriate efficiencies.
2. Manage in Business-like Fashion

Diversify Revenues by becoming More Imaginative About the Range of Income Sources - Manage and Explain Costs in the Context of an Institutional Business Model
The Business of Higher Education

Our missions in common: the public good
- Public payers (gov’t, students, donors)
- Public purposes (research, instruction, services)

Higher ed accounting discretely tracks diverse funding sources and uses
- Fund accounting maintains walls of separation to ensure legal and regulatory obligations are met
- Complexities arise when the same individuals and facilities serve multiple purposes and are funded from multiple revenue sources with differing restrictions on use
Business Model Challenges

Priorities are mission-driven
  - Multiple constituencies want a say, and can demand a say

Most costs are fixed, not variable
  - Tenure and shared governance define an academic *ethos* emphasizing long term views
  - Instructional programs are multi-year
  - Most institutional budgets are annual
Revenues Must be Tracked by Source and in Many Cases Categorical Use

- Tuition and fees
- Federal, State & Local appropriations
- Federal, State & Local grants & contracts
- Private gifts, grants and contracts
- Health care
- Endowment income
- Educational sales & services
- Auxiliary sales & services
- Other sources
Expenditures are Reported by Function and Many Revenues are Restricted to Specific Functional Uses

- Instruction
- Research
- Public Service
- Academic Support
- Student Services
- Health Care
- Institutional Support
- Plant Operation & Maintenance (O&M)
- Scholarships & Fellowships
The Current Paradigm

“Economically, a college is part church and part car dealer and can only be understood that way.”

Cost = Price + Subsidy

If Cost = Price + Subsidy, then

- Institutions will tend to spend all available funding (they do)
- Reductions to subsidies will tend to increase prices (they do)
- Except where excess capacity exists, increased enrollments create a need for increased subsidies and/or price increases (they do)
- “There is no pure cause and effect relationship between price (tuition) and cost (what institutions actually expend...)” (Middaugh, 2005)
How Do We Measure Quality?

**USN&WR Ranking Criteria and Weighting for National Universities and Liberal Arts Colleges**

- Peer Assessment: 25%
- Retention: 20%
- Faculty Resources: 20%
- Student Selectivity: 15%
- Financial Resources: 10%
- Graduation Rate Performance: 5%

Educational Costs and Total Enrollments

Source: Delta Cost Project, funding information from Delta Cost Project-IPEDS Database, 10-year matched set; enrollment from IPEDS enrollment database.
Paradigm Shift or Description?

“More resources should arguably go to those schools whose students can and will use them most productively but on behalf of society and not just their own individual gain – whether directly or indirectly, society should benefit from differences in allocation of educational resources among colleges and universities.”

Guiding Philosophy at Mason

“An institution of higher education should not be run like a business, but it should be run in a business-like fashion.”
- Alan Merten, President

“It is important to measure what you value; rather than value what is easily measured.”
- Maurice Scherrens, Senior Vice President
Academic Performance Indicators

1. Demand (student headcount)
2. Resources & Support (faculty and supporting staff)
3. Output & Productivity - Degrees granted and course FTES
4. Revenue & Expenditure
5. Operational Efficiency (Ratios-faculty and student, cost per FTE student taught, and research expenditure per FTE faculty)
6. Outcome (Effectiveness) - Graduating Senior Surveys, Post-graduate license pass rates, employer evaluations, graduate school acceptance rates
7. Space data
CURRENT STATUS:

- By all standards, the E&G resources per FTE student at George Mason lags far behind the resources per FTE at our peer group institutions, sister doctoral institutions in Virginia or other IHE that we reviewed during annual BOV planning sessions.

<table>
<thead>
<tr>
<th>Total Funds per FTE Student</th>
<th>FY 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston University</td>
<td>$30,649</td>
</tr>
<tr>
<td>George Washington University</td>
<td>27,468</td>
</tr>
<tr>
<td>SUNY – Buffalo</td>
<td>19,902</td>
</tr>
<tr>
<td>University of Maryland</td>
<td>23,219</td>
</tr>
<tr>
<td>GEORGE MASON UNIVERSITY</td>
<td>12,619</td>
</tr>
<tr>
<td>Peer Average</td>
<td>$20,132</td>
</tr>
<tr>
<td>GRADUATE PROGRAMS</td>
<td>RANK</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Biological Sciences*</td>
<td>152</td>
</tr>
<tr>
<td>Computer Science</td>
<td>65</td>
</tr>
<tr>
<td>Education</td>
<td>65</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>93</td>
</tr>
<tr>
<td>History**</td>
<td>51</td>
</tr>
<tr>
<td>Law</td>
<td>38</td>
</tr>
<tr>
<td>Intellectual Property Law</td>
<td>29</td>
</tr>
<tr>
<td>Nursing</td>
<td>63</td>
</tr>
<tr>
<td>Psychology**</td>
<td>151</td>
</tr>
<tr>
<td>Clinical</td>
<td>71</td>
</tr>
<tr>
<td>Industrial/Organizational**</td>
<td>6</td>
</tr>
<tr>
<td>Public Affairs</td>
<td>45</td>
</tr>
<tr>
<td>Nonprofit Management</td>
<td>15</td>
</tr>
<tr>
<td>Public Management Administration</td>
<td>26</td>
</tr>
<tr>
<td>Public-Policy Analysis</td>
<td>27</td>
</tr>
<tr>
<td>Social Work</td>
<td>82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNDERGRADUATE PROGRAM</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business*</td>
<td>99</td>
</tr>
</tbody>
</table>
We used to think having less funding per student was a bad thing, indicative of relative(ly less) quality, but if we’re delivering equal or better quality at less cost isn’t that a competitive advantage, and a good thing?

What if we measured quality based on educational outcomes?
Building Excellence Creatively

- Maintain access
- Improve resource (private/public) base
- Build/maintain academic spires of excellence
- Manage dynamic capital program

- Improve student quality
- Improve faculty salaries
- Keep price affordable
Fairfax Campus – Capital Projects in Progress
Masonvale Housing

Completion Date
5/10/2010
Masonvale Housing
Masonvale Housing

Approximate Delivery 11/17/09 - 32 units
- "A" units: 6 (1 BR stacked flats)
- "B" units: 6 (2 BR Apts.)
- "C" units: 7 (2 BR Urban TH)
- "D" units: 3 (3 BR Suburban TH)
- "E" units: 10 (3 BR Urban TH)

Intermediate Delivery 8/27/09 - 40 units
- "A" units: 8 (1 BR stacked flats)
- "B" units: 12 (2 BR Apts.)
- "C" units: 8 (2 BR Urban TH)
- "D" units: 7 (3 BR Suburban TH)
- "E" units: 5 (3 BR Urban TH)

Initial Delivery 7/03/09 - 10 units
- "A" units: 2 (1 BR stacked flats)
- "C" units: 2 (2 BR Urban TH)
- "D" units: 4 (3 BR Suburban TH)
- "E" units: 2 (3 BR Urban TH)

Final Delivery 05/03/10
- 36 units
- "A" units: 14 (1 BR stacked flats)
- "B" units: 6 (2 BR Apts.)
- "D" units: 16 (3 BR Suburban TH)

Approx. Delivery 03/06/10
- 39 units
- "A" units: 10 (1 BR stacked flats)
- "B" units: 12 (2 BR Apts.)
- "C" units: 7 (2 BR Urban TH)
- "D" units: 10 (3 BR Suburban TH)
Emerging Trends

- The same “follow the dollar” logic that FASB and GASB apply to restricted funds may ultimately be demanded by legislatures and the general public with regard to tuition revenue and public appropriations supporting instruction.

- Understand your institutional business model and what activities specific revenue streams are supporting. Be prepared to explain how tuition and student fee revenues directly benefit activities with which students are engaged.

- Develop revenue sources other than tuition revenue to supplement research, public service and other non-instructional activities.
3. Be Transparent about Finances and Resource Allocation

Invite Everyone to be Involved and Drive the Initial Budget Planning with a Focus on Students’ Ability and Willingness to Pay
Financial Surprises in the Economy

Sacred cows slain in the past 18 months

1. Home prices won’t go down.
2. Wall Street rocket scientists have tamed risk.
3. A 401(k) account is going to pay for your retirement.
4. A house is a great way to save money for the long term.
5. Buy and hold stocks for the long term.
6. “Asset allocation” is a good defense against losses.
7. Financial regulators are there to protect homeowners and small investors like you.

Source: MSNBC.com, 9/15/09
“What we didn’t have but obviously needed was an alarmist.”
Annual Percentage Changes in State Tax Appropriations for Higher Education per Full-Time Equivalent (FTE) Student and in Tuition and Fees at Public Four-Year Institutions in Constant 2008 Dollars

Sources: The College Board, Annual Survey of Colleges; Illinois State University, Grapevine reports; NCES, Digest of Education Statistics 2008, Table 219.
Public Institutions: Increasingly Tuition Dependent

(in 2006 CPI adjusted dollars)

<table>
<thead>
<tr>
<th></th>
<th>1991</th>
<th>% of total</th>
<th>1998</th>
<th>% of total</th>
<th>2006</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Colleges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net tuition revenue</td>
<td>$1,445</td>
<td>21%</td>
<td>$1,930</td>
<td>26%</td>
<td>$2,539</td>
<td>31%</td>
</tr>
<tr>
<td>State/Local appropriations</td>
<td>5,346</td>
<td>79%</td>
<td>5,633</td>
<td>74%</td>
<td>5,585</td>
<td>69%</td>
</tr>
<tr>
<td>Total resources</td>
<td>6,791</td>
<td></td>
<td>7,563</td>
<td></td>
<td>8,124</td>
<td></td>
</tr>
<tr>
<td>Appropriations per $1 tuition</td>
<td>3.70</td>
<td></td>
<td>2.92</td>
<td></td>
<td>2.20</td>
<td></td>
</tr>
<tr>
<td>Masters' Institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net tuition revenue</td>
<td>$2,445</td>
<td>29%</td>
<td>$3,432</td>
<td>36%</td>
<td>$4,770</td>
<td>45%</td>
</tr>
<tr>
<td>State/Local appropriations</td>
<td>5,956</td>
<td>71%</td>
<td>6,210</td>
<td>64%</td>
<td>5,809</td>
<td>55%</td>
</tr>
<tr>
<td>Total resources</td>
<td>8,401</td>
<td></td>
<td>9,642</td>
<td></td>
<td>10,579</td>
<td></td>
</tr>
<tr>
<td>Appropriations per $1 tuition</td>
<td>2.44</td>
<td></td>
<td>1.81</td>
<td></td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>Research Universities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net tuition revenue</td>
<td>$3,293</td>
<td>27%</td>
<td>$4,521</td>
<td>34%</td>
<td>$6,410</td>
<td>44%</td>
</tr>
<tr>
<td>State/Local appropriations</td>
<td>8,714</td>
<td>73%</td>
<td>8,837</td>
<td>66%</td>
<td>8,113</td>
<td>56%</td>
</tr>
<tr>
<td>Total resources</td>
<td>12,007</td>
<td></td>
<td>13,358</td>
<td></td>
<td>14,523</td>
<td></td>
</tr>
<tr>
<td>Appropriations per $1 tuition</td>
<td>2.65</td>
<td></td>
<td>1.95</td>
<td></td>
<td>1.27</td>
<td></td>
</tr>
</tbody>
</table>

Source: Delta Cost Project, IPEDS Database, 20-year matched set. Median state and local appropriations per FTE student vs. net tuition revenue per FTE student.

Source: SHEEO SHEF Early Release
The Spectrum of Published T+F Rates

Distribution of Full-Time Undergraduates at Four-Year Institutions by Published Tuition and Fees, 2009-10

Ten-Year Trend in Student Aid and Nonfederal Loans per FTE Used to Finance Postsecondary Education Expenses in Constant (2008) Dollars, 1998-99 to 2008-09

Source: The College Board, 2009 Trends in Student Aid.
Grants and Loans as a Percentage of Funds from Total Aid and Nonfederal Loans, 1994-95 to 2008-09

Source: NCES, unpublished data provided by IPEDS staff.
Average Non-Need-Based and Need-Based Institutional Grants and Average Federal plus State Grants per Full-Time Dependent Student at Public Institutions by Parent Income, 2007-08

Distribution of Full-Time Dependent Students in Public Institutions by Income, 2007-08

<table>
<thead>
<tr>
<th>Parent Income</th>
<th>Public Four-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $32,500</td>
<td>18%</td>
</tr>
<tr>
<td>$32,500-$59,999</td>
<td>19%</td>
</tr>
<tr>
<td>$60,000-$99,999</td>
<td>30%</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>33%</td>
</tr>
</tbody>
</table>

Average Non-Need-Based and Need-Based Institutional Grants and Average Federal plus State Grants per Full-Time Dependent Student at Public Institutions by Parent Income, 2007-08

Distribution of Full-Time Dependent Students in Public Institutions by Income, 2007-08

<table>
<thead>
<tr>
<th>Parent Income</th>
<th>Public Four-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $32,500</td>
<td>18%</td>
</tr>
<tr>
<td>$32,500-$59,999</td>
<td>19%</td>
</tr>
<tr>
<td>$60,000-$99,999</td>
<td>30%</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>33%</td>
</tr>
</tbody>
</table>

Average Non-Need-Based and Need-Based Institutional Grants and Average Federal plus State Grants per Full-Time Dependent Student at Private Four-Year Institutions by Parent Income, 2007-08

Average Non-Need-Based and Need-Based Institutional Grants and Average Federal plus State Grants per Full-Time Dependent Student at Private Four-Year Institutions by Parent Income, 2007-08

Oregon State Strategy: 360° Transparency

Share complete information at every stage
- “Street level” understanding of budgetary incentives
- Year-round University Budget Committee
- Regular Cabinet, Provost Council, Faculty Senate reports
- Engagement with student leadership
- Inform the press, legislative and gubernatorial representatives
- Utilize public meetings and web tools to engage involvement

Budget role: honest brokerage
- No topics “off limits” to open inquiry and analysis
- Strategies open for discussion from inception to completion
- Data and analyses equally shared with all participants
Transparency Examples

- Monthly financials, quarterly management reports and annual budgets posted to web
  - Complete explanatory text, detailed financial schedules, trend and “special interest” analyses
  
  http://oregonstate.edu/budget/managementreports.htm

- Share analyses such as NACUBO cost of education study

- “Tuition plateau dialogue”
  - Budgetary analysis presented to student groups, faculty senate, student leadership
  - Web site established to solicit feedback, comments
  
  http://oregonstate.edu/leadership/president/tuitionPlateau.html
Transparency Examples (cont’d)

- Sources and Uses analysis
  - 100% of revenues and expenses allocated to mission-critical units using agreed upon cost accounting methodologies
  - Analysis based on transaction-level data
    http://oregonstate.edu/budget/Rebasing/budgetrebasing.htm

- Made transaction-level financial records available to everyone on campus (at OSU, every budget from FY96 to COB yesterday)
  http://oregonstate.edu/~dennisb/videos/nacubo/demo1.html
Tangible Outcomes

- Student leadership revised primary legislative agenda to increasing state support (rather than freezing tuition)

- Data-driven budget plans to eliminate E&G subsidies for non-E&G activities (auxiliaries, public service)

- Enhanced credibility with system board, governor and legislature (grounded in credibility with faculty, students and media)

- Enhanced culture of objective analysis throughout the institution ("what makes sense, can be accomplished")
Lessons: More Often Than Not...

- Faculty and students “rise to the occasion” when included in budget planning processes

- Cynics and critics are defused by free flows of information – and can become significant assets to planning efforts

- Expanded budget process involvement improves both the quality and efficacy of outcomes

- Risks of disclosing “sensitive information” < risks of concealing critical information
Practicing Transparency

- Explaining financial and policy linkages to diverse audiences (including faculty, legislators, students, parents and governing boards) are likely to be of increasing importance in the future.
- There will always be competing interests for limited resources – true transparency invites a public dialogue for resolving differences.
- On most campuses it is not possible to allocate budget funds to every worthwhile proposed activity – transparent processes and information flows garner support for allocation decisions.
4. Push Fundamental Retention Programs, especially for Students who Traditionally Fail

Implement Fundamental Structures, Eliminate Attrition from Processes and Improve Engagement from a Student/Family Perspective
Fundamental Student Retention Conclusions

1. Studies indicate that financial aid helps increase persistence for students who need and receive financial aid.

2. Studies indicate that certain student populations such as:
   - older students,
   - African Americans & Hispanics,
   - students who work more than 30 hours weekly, and
   - first generation college students have persistence problems.

3. Schools can improve retention rates by:
   - accurately determining when and why students withdraw
   - Up-to-date information helps administrators determine better strategies for increasing retention rates

SOURCE: DANA Center Retention Report, 1998
Financial considerations the most common reason for leaving college

Income Disparities: Median Family Income by Race/Ethnicity 2003

- All: 58.1
- White/Non-Hisp: 62.9
- Asian/PI: 59.8
- African American: 36.7
- Hispanic: 36.4

Source: US Census Data
Income and Attainment

Estimated Baccalaureate Degree Attainment by Age 24 by Family Income Quartile
2005

<table>
<thead>
<tr>
<th>Quartile</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Quartile</td>
<td>72.6</td>
</tr>
<tr>
<td>3rd Quartile</td>
<td>27.9</td>
</tr>
<tr>
<td>2nd Quartile</td>
<td>16.6</td>
</tr>
<tr>
<td>Bottom Quartile</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Postsecondary Educational Opportunity, 2006
Identifying Interests of Incoming Students

SOURCE: ACT’s AIM 2008
Incoming Students’ Self-Identified Interests and Needs

<table>
<thead>
<tr>
<th>Year</th>
<th>Help with Writing</th>
<th>Help with Math Skills</th>
<th>Help with Reading</th>
<th>Help with Study Skills</th>
<th>Want to Study Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1,232</td>
<td>977</td>
<td>908</td>
<td>839</td>
<td>771</td>
</tr>
<tr>
<td>2004</td>
<td>1,204</td>
<td>992</td>
<td>1,004</td>
<td>805</td>
<td>772</td>
</tr>
<tr>
<td>2005</td>
<td>1,259</td>
<td>910</td>
<td>992</td>
<td>857</td>
<td>771</td>
</tr>
<tr>
<td>2006</td>
<td>1,205</td>
<td>863</td>
<td>1,011</td>
<td>829</td>
<td>764</td>
</tr>
<tr>
<td>2007</td>
<td>1,233</td>
<td>879</td>
<td>988</td>
<td>880</td>
<td>738</td>
</tr>
<tr>
<td>2008</td>
<td>1,163</td>
<td>995</td>
<td>995</td>
<td>880</td>
<td>733</td>
</tr>
</tbody>
</table>

SOURCE: ACT’s AIM 2008
Fundamentals of Effective Retention Programs:

1. Designate a visible individual to coordinate a campus-wide planning team.
2. Conduct a systematic analysis of the characteristics of your students.
3. Focus on the nexus of student characteristics and institutional characteristics.
4. Carefully review the high impact strategies identified in through the survey.
5. Do not make first to second year retention strategies the sole focus of planning team efforts.
6. Establish realistic short-term and long-term retention, progression, and completion goals.
7. Orchestrate the change process.
8. Implement, measure, improve!
The Landline is Still a Lifeline for Teen Social Life.

- Phone conversations and face-to-face meetings are the most frequently chosen ways to communicate with friends outside of school.

- Multi-channel teens – those teens who use the internet, instant messaging, text messaging a cell phone, and social networking sites – are more likely to turn to cell phones and digital media when communicating with friends.

SOURCE: Teens and Technology, Pew Internet & American Life Project Summary of Findings
A Lot of Talking Going On

<table>
<thead>
<tr>
<th>Multi-Channel Teens Are Super Communicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>The percent of teens who communicate with their friends every day via these methods...</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Talk to friends on landline telephone</td>
</tr>
<tr>
<td>Talk on cell phone</td>
</tr>
<tr>
<td>Spend time with friends in person</td>
</tr>
<tr>
<td>Instant message</td>
</tr>
<tr>
<td>Send texts</td>
</tr>
<tr>
<td>Send messages over social network sites</td>
</tr>
<tr>
<td>Send email</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey of Teens and Parents, October-November 2006, n=935. Margin of error for teens is ±4%. *Multi channel teens are defined as teens who use the internet, have cell phones, use instant messaging, text messaging and use social network sites. * Indicates statistically significant differences between the percentages in the row.
The Role of Parents & Communications

- 90% choose their kids' colleges on the web
- 82% plan to play a pivotal role in helping their children make the final decision about college
- 17% entrust their child to make that decision independently

SOURCE: Circling Over Enrollment: The E-Expectations of the Parents of College-Bound Students, 2009
Emerging Trends

1. Have an executive level leader, clear goals based on benchmarks and designated funding for improving retention.
2. Building retention goals into the strategic plan and employee performance contracts.
3. Have a standing executive committee to examine retention issues
4. Following up with leaving students after the fourth week to reduce attrition rates and increasing the “stop-out” levels
5. Centralized unit to provide communications and support for students’ families. Parents are searching for clear demonstrations of academic excellence and campus safety.
5. Beef up Financial Aid Staff and Support:

Redefining the role of the Financial Aid Counselor
WE DON'T FEEL YOUR PARENTS ARE WORKING UP TO THEIR FULL POTENTIAL.
Factors Most Noted in Choosing a College

- Majors & Career Programs Offered
- Location/Campus Characteristics
- Cost/Affordability
- Campus Size/Safety
- Characteristics of Enrolled Students
- Selectivity
6% Increase in Total FAFSA Applications Over AY 2008-09

- 74% of schools saw an increase in their FAFSA applications

- Large differences among the various school types:
  - 7% of private colleges and 13% of public colleges saw their FAFSA filings rise by over 20%,
  - over 1/3 of proprietary schools saw a similar increase. One other point here is that overall,


Percent For Whom Financing was a Major Concern
1992-93 to 2006-07 (Selected Years)

Source: CIRP
Chart 3. Average Unmet Need Among Full-Time, Full-Year Dependent Undergraduates and Maximum Federal Loan Limit

*The maximum annual limit on Stafford loans for dependent undergraduates in their junior and senior years, including both subsidized and unsubsidized loans. Annual loan limits are lower for freshman and sophomore students. Historical data on federal loan limits can be found here: [http://www.finaid.org/loans/historicallimits.html](http://www.finaid.org/loans/historicallimits.html).

**The NPSAS 1995–96 dataset available through the Undergraduate Data Analysis System did not include a variable calculating total student budget minus expected family contribution and total grant aid.

Chart 4. Percentage of All Undergraduates Receiving Private Student Loans

Average Student Borrowing is on the Rise

US Averages:
2003: $3,344
2007: $4,608

Source: Measuring Up, 2004 and 2008 databases. Includes subsidized and unsubsidized Stafford and PLUS loans made to students and parents.
Chart 1. Ten-Year Default Rate Among 1992–93 Bachelor’s Degree Recipients, by Debt Level

Source: Susan P. Choy and Xiaojie Li, *Dealing With Debt: 1992-93 Bachelor’s Degree Recipients 10-years Later*, Table 18: Among 1992-93 bachelor’s degree recipients who had no additional degree enrollment and took out Stafford loans, percentage who ever defaulted, by selected student characteristics: 2003.
Chart 2. Ten-Year Default Rate Among 1992–93 Bachelor’s Degree Recipients, by Salary

Source: Susan P. Choy and Xiaojie Li, *Dealing With Debt: 1992-93 Bachelor’s Degree Recipients 10-years Later*. Table 18: Among 1992-93 bachelor’s degree recipients who had no additional degree enrollment and took out Stafford loans, percentage who ever defaulted, by selected student characteristics: 2003.
Chart 3. Ten-Year Default Rate Among 1992–93 Bachelor’s Degree Recipients, by Race/Ethnicity

Source: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03), Data Analysis System, calculations by author.
Emerging Trends

1. Expanded FA staff to handle large increases in aid requests (FAFSAs) and Special Circumstance Appeals

2. Creation of Student Loan Specialist positions

3. Dedicating 10% to 20% of fee increases toward Need-based aid

4. Extended training for admissions / recruitment staff to counsel families on financial planning and options

5. Capital campaigns solely focused on raising need-based aid
6. Prepare for Increased Competition

Focus on Core Markets and Institutional Competencies by Embracing the Institutional Footprint
Some Trends that have not Changed:

The Golden Circle for Recruitment

-70% enroll within 140 miles of home
-80% enroll in home state
Regional Focus
% change in Missouri population by county 2000-2008

Missouri Average = 5.6%

Source: USDA, Bureau of the Census
Published by: University of Missouri Extension, April 2 2009
FS2009 Missouri First Time College Freshman

The image cannot be displayed. Your computer may not have enough memory to open the image, or the image may have been corrupted. Restart your computer, and then open the file again. If the red x still appears, you may have to delete the image and then insert it again.
Territory Assignments: Balancing Service Regions by Interest Density
National Reach
Students’ Home States

Fall 2009

Total Enrollment
- 49 states & 51 nations
- 73% Missouri residents
- 11% minority students
- 12% international students
% Change in Enrollments
Fall 2006 - Fall 2009

- 25% or greater
- 10% – 24.9%
- 5% – 9.9%
- 4.9% – -4.9%
- -5.1% – -9.9%
- -10% – -24.9%
- -25% or greater
Fall 2009 Freshman Inquiries and Out of State Target Markets
Red Circles Mark Top 5 Out-of-state Interest Growth since 2005
Graphed by 3 Digit Zip Code Regions
National Service Regions
Global Focus
Distribution of Total Number of Student Visas Issued in 2006 by Country

- 5,000 or more
- 1000 to 4,999
- 200 to 999
- 100 to 199
- 1 to 99
Chart 1. Change in Total Number of Student Visas Issued to the Top Sending Countries, FY 1998–FY 2006†

Source: Chart data compiled from U.S. State Department NIV Detail Tables for FY 1998 through FY 2006.
†FY 2006 data is preliminary.
Blue = S&T Alumni
Green = Current Students
Red = MOA universities
Emerging Trends

1. Training staff to be more aware of competitor institutions and how to support students enrolling in multiple colleges

2. Normalization of in-state and out-of-state tuition gap – either through discounting or implementation of flat fee standardization

3. Thorough tracking of graduates and their achievements is expected vs traditional rankings

4. Merit aid focused on regional students with STEM and Research interests to build graduate student talent benches and funding opportunities
7. Support the new Majority: Transfer Students

A Transfer Student Friendly Program Aligns Institutions, Degrees and Processes
Isn't that your son roaring out in that brand-new sports car?!

Yep... we were going to enroll him in community college... the car was cheaper.
$12 Billion for Community Colleges 2010-2020

President Obama has charged all higher education institutions with a mission:

By 2020 the U.S. will have the highest proportion of college graduates in the world.

Funding is designed to modernize and renovate the community college campuses
Areas of Concern Along the P-12 Pipeline

- Only 2 of 10 eighth graders ready for college prep curriculum in high school (ACT 2008)
- College-Going Rate (%) - 2006 Fall First-Time Freshmen Directly out of High School
  
  **Missouri: 57.1**  
  **Nation: 61.6**
- A Larger Proportion of Missouri Students Starting at Community Colleges
- Freshmen Headcount Distribution at Missouri Colleges & Universities (DHE 2008)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Community College</td>
<td>31%</td>
<td>24%</td>
<td>31%</td>
<td>30%</td>
<td>36%</td>
<td>41%</td>
</tr>
<tr>
<td>Public College/University</td>
<td>51%</td>
<td>55%</td>
<td>47%</td>
<td>46%</td>
<td>42%</td>
<td>39%</td>
</tr>
<tr>
<td>Private College/University</td>
<td>18%</td>
<td>21%</td>
<td>22%</td>
<td>24%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>Total Freshmen</td>
<td>39,505</td>
<td>33,560</td>
<td>35,034</td>
<td>35,184</td>
<td>41,135</td>
<td>48,181</td>
</tr>
</tbody>
</table>
Emerging Trends

1. Designated staff to support transfer students and support programming
2. Advising staff training to properly place students with increasing amounts of transfer credit
3. Moving beyond program to program articulation: creation of sets of associate degrees designed for transfer in different fields. These would include general education and defined courses to meet major requirements.
4. Statewide general education curriculum for early transfer to a university
8. Make Pre K-20 planning and programs a Fundamental Business Practice

Key to Increasing the College Going and Matriculation Rates
“Room, board, books, and tuition—I draw the line at corkage fees.”
Increasing the college going rate is key
More than 30% of College Freshmen Need Remedial Courses

PARTICIPATION IN REMEDIAL EDUCATION: Percentage of entering freshmen at degree-granting institutions who enrolled in remedial courses, by type of institution and subject area:

![Bar chart showing participation in remedial education by type of institution and subject area for Fall 2000.](chart.png)

NOTE: Data reported for fall 2000 are based on Title IV degree-granting institutions that enrolled freshmen in 2000. The categories used for analyzing these data include public 2-year, private 2-year, public 4-year, and private 4-year institutions. Data from private not-for-profit and for-profit institutions are reported together because there are too few private for-profit institutions in the sample to report them separately. The estimates in this indicator differ from those in indicator 18 because the populations differ. This indicator deals with entering freshmen of all ages in 2000 while indicator 18 examines a cohort (1992 12th-graders who enrolled in postsecondary education).
The High Price that Colleges, Students, Families, and Taxpayers Pay to get Students “Up to Speed” for Postsecondary Education

SOURCE: Alliance for Excellent Education, 2006
Percentage of High School Graduates Enrolled in College by Ethnicity

Figure 13a: Percentage of Recent High School Graduates Enrolled in Postsecondary Education by Race/Ethnicity, 1973–2006

Note: Figures for blacks and Hispanics represent three-year moving averages because of the small sample size.
Source: NCES, Digest of Education Statistics 2007, Table 192.

SOURCE: College Board, TRENDS IN COLLEGE PRICING 2008
Who Does Not Graduate High School?

- Only about 58 percent of Hispanic students and 55 percent of black students will graduate on time with a regular diploma, compared to 81 percent of Asian students and 78 percent of white students (EPE, 2008).
- Among all races and ethnicities, females graduate at a higher rate than their male peers—75 percent versus 68 percent (EPE, 2008).
- Graduation rates are significantly lower in districts with higher percentages of students who are eligible for free or reduced-price lunches (a measure of poverty) (Swanson, 2004).
- High school students living in low-income families drop out of school at six times the rate of their peers from high-income families (U.S. Department of Education, National Center for Education Statistics, 2004).
- The lowest-achieving 25 percent of students are twenty times more likely to drop out of high school than students in the highest achievement quartile (Carnevale, 2001).
The Achievement Gap Remains a Challenge

National Assessment of Educational Progress (NAEP) Reading Scores for Missouri Eighth Graders

- Nation: 27% Below Basic, 43% Basic, 27% Proficient, 2% Advanced
- State: 25% Below Basic, 44% Basic, 29% Proficient, 3% Advanced
- White: 18% Below Basic, 45% Basic, 34% Proficient, 3% Advanced
- Black: 49% Below Basic, 40% Basic, 10% Proficient, <1% Advanced
- Hispanic: 42% Below Basic, 46% Basic, 11% Proficient, 1% Advanced
- Low Income: 37% Below Basic, 45% Basic, 17% Proficient, 1% Advanced

SOURCE: AEE, 2008
### Missouri High School Graduation Rates (Class of 2005)

<table>
<thead>
<tr>
<th></th>
<th>State-Reported</th>
<th>U.S. Department of Education-Reported</th>
<th>Independently Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>86%</td>
<td>81%</td>
<td>77%</td>
</tr>
</tbody>
</table>

### Missouri High School Graduation Rates by Race (Class of 2005)

<table>
<thead>
<tr>
<th>Race</th>
<th>Missouri</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>77%</td>
<td>71%</td>
</tr>
<tr>
<td>White</td>
<td>79%</td>
<td>78%</td>
</tr>
<tr>
<td>Black</td>
<td>60%</td>
<td>55%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>59%</td>
<td>58%</td>
</tr>
<tr>
<td>Asian</td>
<td>81%</td>
<td>81%</td>
</tr>
<tr>
<td></td>
<td>Four-Year Institution*</td>
<td>National Average*</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>All Students</td>
<td>57%</td>
<td>56%</td>
</tr>
<tr>
<td>White</td>
<td>60%</td>
<td>59%</td>
</tr>
<tr>
<td>Black</td>
<td>38%</td>
<td>41%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Asian</td>
<td>67%</td>
<td>66%</td>
</tr>
<tr>
<td>Native American</td>
<td>38%</td>
<td>39%</td>
</tr>
</tbody>
</table>

*Graduation within six years of entrance (Cohort from 2000–2006)

**Graduation within three years of entrance (Cohort from 2003–2006)
Identify the Important Transition Barriers

1. Lack of Early Childhood Education
2. Quality of Teacher Preparation
3. Curriculum Alignment
4. Culture of K-12 Education: Low Expectations
5. Lack of Community and Industry Involvement in Schools
6. Effective Use and Integration of Technology
7. Proper Collection and Interpretation of Data
8. Lack of Understanding College Readiness
9. Proper Assessment Systems and Longitudinal Data
10. Capacity and Quality of Educational Leadership
11. Mental Health Issues
12. Math and Science Education
13. Literacy / Communication Skills
14. Guidance Counseling
15. Parental Involvement (Lack)
16. Money and Finances
17. General Information on Colleges
18. Lack of Role Models or Mentors
19. Physical Health Related Issues
Potent Key Points to Identify

- **Pre-Kindergarten:** 22% of US 4-year-olds are enrolled in preschool programs; only 3% of 3-year-olds are enrolled.
- **4th GRADE:** Math and Science reading needs to be at textbook level (8th grade)
- **8th GRADE:** Only 2 of 10 Eighth Graders Ready for a College Prep High School Curriculum
- **12th GRADE:** Only 57% graduate and go on to enroll in post-secondary education within one year of high school graduation
### Identify Existing Barriers and Support Along the Student Pipeline

<table>
<thead>
<tr>
<th>Barriers / Problems</th>
<th>Student Lifecycle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elementary School</td>
</tr>
<tr>
<td>Pre K</td>
<td>K 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Type of Support</td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE: S&T’s Pre-College Programs
by 2008, 26% of S&T’s freshman class attended an on-campus pre-college program

<table>
<thead>
<tr>
<th>Summer Programs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camp Invention (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerospace Camp (4 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robotics Camp (3 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missouri Academy for Youth Advancement (MAYA) (1 month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It’s A Girl Thing! (3 day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Solutions (girls) (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Research Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Research Academy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Transportation Instit. (1 month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Tech Week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackling Introduction to Engineering (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority Introduction to Technology &amp; Engineering (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Engineering Camps (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.H.I.P. Camp Computer Highly Interactive Program (4 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials Camp (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosives (1 week)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hit the Ground Running (3 weeks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Embracing a P-20 Philosophy

1. Produce an inventory of initiatives and their outcomes related to pre-college pipeline efforts (pre-kindergarten through 12th grade) that help prepare students to succeed in college and their careers.

2. State-wide P-12 initiatives to improve college readiness and going rates

3. Outreach activities that emphasize reading
9. Embrace Academic Program Restructuring
Chart 1. States with Virtual School Programs

Sources: Responses to Education Sector phone and e-mail correspondence and John Watson and Jennifer Ryan, *Keeping Pace with K-12 Online Learning: A Review of State-Level Policy and Practice*, Evergreen Consulting Associates, 2006. According to the Evergreen Consulting Associates report, 24 states have recognized state-led programs that were created by legislation or by a state-level agency, and/or administered by a state education agency, and/or directly funded by a state appropriation or grant. Education Sector includes another four states that have schools that act as de facto statewide programs or are currently launching pilots to serve a significant number of students in that state.
"There aren’t any icons to click. It’s a chalk board."
Percent of Population Enrolled in College by Age

SOURCE: College Board, TRENDS IN COLLEGE PRICING 2008
Distribution of Degrees Granted

SOURCE: College Board, TRENDS IN COLLEGE PRICING 2008
Map of 46 Bologna Process Participating Countries
Key principles of the Bologna Process

1. Creation of a Three-Cycle Degree System: Bachelors – Masters - Doctorate
2. Mobility of Students and Faculty
3. Quality Assurance
4. Employability
5. European Higher Education Area in the global context
6. Joint Degrees
7. Recognition of Qualifications
8. Equality of Opportunities
9. Lifelong Learning
Emerging Trends

1. **Blended Learning** to Expand Access and Capacity while Preparing Students for a Global Work Environment
2. **Compartmentalize / Deconstruct Degree Programs** by Learning Objectives: Re-make Traditional Programs to meet the Short-term learning needs of Adult Students and Employers
3. **Open learning** ("OpenCourseWare") options for credit
4. Review of policies regarding **three year degrees** acceptance for graduate programs.
5. **Required study abroad and cooperative learning** (Co-op) experiences
10. Plan for Healthy Faculty Mix:

Develop Solid plans for Attracting and Supporting Non-tenure Track and Adjunct Instructors
College cutbacks make it harder for students to earn degrees

Tuesday, October 13, 2009
By TERENCE CHEA and JUSTIN POPE ~ The Associated Press

Sherrie Canedo stands on the campus at the California State University East Bay in Hayward, Calif., Sept. 23. Canedo, a fifth-year senior at Cal State-East Bay, was recently told she must finish her degree through independent study because most of the courses she needs to finish her ethnic studies degree were cut completely. "I don't feel that's an acceptable way to learn," said Canedo, who's working two jobs and trying to string together enough financial aid to finish a degree that has become longer and more expensive than she bargained for. "I'm paying to be taught in a classroom with teachers who are willing to help me."

ERIC RISBERG ~ Associated Press

SAN FRANCISCO -- It isn't just tuition increases that are driving up the cost of college. Around the country, deep budget cuts are forcing colleges to lay off instructors and eliminate some classes, making it harder for students to get into the courses they need to earn their degree.

The likely result: more time in college.
American Federation of Teacher's FACE Campaign

- AFT's Faculty And College Excellence (FACE) initiative is a national campaign to reverse the crisis in instructional staffing at our nation's colleges and universities.

FACE is designed to achieve two goals:

1. Achieving full equity in compensation for contingent faculty members; and
2. Ensuring that 75 percent of undergraduate classes are taught by full-time tenure and tenure track faculty and that qualified contingent faculty have the opportunity to move into such positions as they become available.
Part-Time and Full-Time Faculty at 2-Year and 4-Year Institutions

Number of Instructional Staff: Fall 2005

- Part-time/Adjunct: 47%
- Full-time tenured/tenure-track: 35%
- Full-time nontenure-track: 18%

Source: 2005 Fall Staff Survey; National Survey of Postsecondary Faculty: U.S. Department of Education.
Figure 2. Percentage distribution of instructional staff by type: 1997 and 2007

1997:
- Graduate assistants: 19
- Part-time faculty: 34
- Full-time nontenured faculty: 14
- Full-time tenured/tenure-track faculty: 33

2007:
- Graduate assistants: 21
- Part-time faculty: 37
- Full-time nontenured faculty: 15
- Full-time tenured/tenure-track faculty: 27

Four Year Public Comprehensive Universities

Figure 4. Percentage distribution of instructional staff in public comprehensive institutions, by type: 1997 and 2007

- Graduate assistants: 6% in 1997, 6% in 2007
- Part-time faculty: 34% in 1997, 44% in 2007
- Full-time nontenured faculty: 9% in 1997, 11% in 2007
- Full-time tenured/tenure-track faculty: 52% in 1997, 39% in 2007

NOTE: Detail may not add up to 100 percent due to rounding.

Public Research Universities

Figure 5. Percentage distribution of instructional staff in public research/doctoral institutions, by type: 1997 and 2007

NOTE: Detail may not add up to 100 percent due to rounding.

Differentiating “Great” Faculty

- “Recruit for Skills and Hire for Fit” current corporate hiring mantra
- Faculty promotion programs emphasizing quality teaching, advising and mentoring abilities: research accomplishments are important to prospective students, but most market data suggest parents and high school students are more concerned with whether faculty facilitate learning and students’ professional development
V. Key Factors for Governing Boards and Executive Leadership
Questions for Boards to Consider

- **What is your institution’s comprehensive enrollment plan?** Is it attainable with planned levels of investment and institutional infrastructure?

- **How does your institution integrate enrollment, academic and financial planning?** Are these interdependent plans addressed in an integrated fashion at the board level?

- **What provisions does your multi-year financial plan include to address changing student demographics and other anticipated environmental changes and trends?**

- **What measurable outcomes can be used to determine SEM success in the context of your mission?**
Key Indicators for Board Review

- Establish and report performance in comparison to specific quantifiable outcomes that reflect institutional mission and enrollment goals

- Average discount rates (or net revenue) and retention characteristics by targeted student characteristics

- Total educational costs per student and portion of costs covered by tuition and fees by rate category

- Portion of student budget funded by grants, loans, work and family by income level for students receiving need-based aid
Best Practice Considerations

- Multi-year financial plans reflecting student retention characteristics, enrollment patterns, net revenue, instructional and student support investments
- Transparency in the allocation and use of financial resources from the classroom to the board room
- Clearly articulated relationships between institutional strategic goals and resource allocations
- Ongoing integrated multi-year planning between facility, academic, enrollment and financial leadership
VI. Q&A
10 Keys to Thriving in the Current Economy

SEM XIX
November 9, 2009

Guilbert Brown
Director of Budget & Financial Planning
George Mason University

Jay Goff
Vice-Provost and Dean of Enrollment Management
Missouri University of Science & Technology
Many thanks to those who contributed insights into the development of this workshop:

Goldie Blumenstyk, Senior Writer, Chronicle of Higher Education
Carrie Birckbichler, Director, Slippery Rock University
Diana Carlin, Professor, Communication Studies, University of Kansas
John Cavanaugh, Chancellor, Pennsylvania System of Higher Education
Larry Czarda, Vice President, George Mason University
Donna Kidd, Associate Vice President, George Mason University
Jason Lane, Asst. Professor, Education Policy, University of Albany
Doug Lederman, Editor, Inside Higher Ed
Mark McCambridge, Vice President, Oregon State University
George Pernsteiner, Chancellor, University of Oregon System
Edward Ray, President, Oregon State University
Maurice Scherrens, Senior Vice President, George Mason University
Robert Smith, President, Slippery Rock University
Brad Starbuck, Enrollment Communications, Missouri Univ of Science and Technology
Peter Stearns, Provost, George Mason University
Timothy White, Chancellor, University of California-Riverside
Brad Wolverton, Senior Editor, Chronicle of Higher Education
Guilbert Brown

- Guilbert Brown is the Director of Budget & Financial Planning at George Mason University. He is co-author of the book “SEM and Institutional Success: Integrating Enrollment, Finance and Student Access” (AACRAO Publishing, 2008). He has also served as the chief budget and planning officer at Rice University, Georgetown University and Oregon State University. From 1995-2000 he conducted workshops on strategic planning and budgeting for the National Association of College & University Business Officers (NACUBO), and has conducted workshops and annual meeting sessions for NACUBO, the Society for College & University Planning (SCUP), American Association of Collegiate Registrars and Admissions Officers (AACRAO) and Association of Governing Boards of Universities and Colleges (AGB). He has served as a consultant to private and public institutions on linking strategic enrollment management with financial planning, budget and planning processes, technology strategy, cost analysis and organizational change.

- Mr. Brown is a Phi Beta Kappa graduate of the University of Denver with degrees in political science and philosophy.

Think. Learn. Succeed.
Jay W. Goff

- Jay W. Goff is Vice-Provost and Dean of Enrollment Management at Missouri University of Science and Technology. Mr. Goff believes in building a team-oriented and data-driven workplace that stresses service-focused student success plans. His mission-centric approach achieved record enrollments, retention and graduation rates.

- Mr. Goff has been active in helping higher education professionals and students develop leadership skills and engage in strategic planning. He has written articles and presented many regional and national conferences, focusing on the values of team building and training, quality student-service systems and data-driven planning. He has worked with over 30 public and private institutions throughout the United States, Turkey, Canada, Mexico, China, Sri Lanka, Oman and Malaysia.

- Mr. Goff completed his undergraduate and graduate degrees in communication studies with a focus on organizational communication from Southeast Missouri State University and the University of Kansas, respectively.

Your future. Our Mission.