CAMPUS FORUM

July 20, 2009
Strategic Plan

• Approved by Board of Control on July 16, 2009

✓ Major Goals Remain Same
  ➢ People
  ➢ Distinctive Education
  ➢ Research/Scholarship/Creativity

• http://www.mtu.edu/stratplan/
Quality & Value
RISING ABOVE THE GATHERING STORM

Energizing and Employing America for a Brighter Economic Future

NATIONAL ACADEMY OF SCIENCES,
NATIONAL ACADEMY OF ENGINEERING, AND
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMS
Natural Science/Engineering Degrees

South Korea 38%
France 47%
China 50%
Singapore 67%
U.S. 15%

Source: AAU 2006 (Based on 2004 NSF Data)
For the second year in a row, engineer is the hardest job to fill in America.

Why are engineers so hard to find?
Pentagon fears technology edge may be eroding

Defense officials cite shortage of scientists

By Bryan Bender
Globe Staff / June 13, 2009
Enrollment
## Undergraduate Applicants (week 46)

<table>
<thead>
<tr>
<th>Category</th>
<th>2009</th>
<th>2008</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5504</td>
<td>5843</td>
<td>-5.8%</td>
</tr>
<tr>
<td>Domestic Minority</td>
<td>784</td>
<td>797</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Female</td>
<td>1531</td>
<td>1602</td>
<td>-4.4%</td>
</tr>
</tbody>
</table>
Actual and projected graduating high school seniors - Michigan

- American Indian/Alaska Native
- Asian/Pacific Islander
- Black non-Hispanic
- Hispanic
- White non-Hispanic

Year:
- 1991-92
- 1992-93
- 1993-94
- 1994-95
- 1995-96
- 1996-97
- 1997-98
- 1998-99
- 1999-00
- 2000-01
- 2001-02
- 2002-03
- 2003-04
- 2004-05
- 2005-06
- 2006-07
- 2007-08
- 2008-09
- 2009-10
- 2010-11
- 2011-12
- 2012-13
- 2013-14
- 2014-15
- 2015-16
- 2016-17
- 2017-18
- 2018-19
- 2019-20
- 2020-21
- 2021-22
College Enrollment Increases 2006-2017

• White 5%
• Black 26%
• Asian 26%
• American Indian 30%
• Hispanic 39%

Source: National Center for Educational Statistics
Population in 2030

1. **Overall for U.S.**
   - 5M More 18-24 year olds

2. **Midwest Region**
   - 100k Fewer 18-24 year olds
Enrollment Plan

The past year...

• Largest enrollment in 25 years
• Plan called for 6,772 – total enrolled 7,018
• 12% increase at Michigan Tech—4% overall increase in MI
Enrollment Projection for Fall 2009

Total Students: 6912

New Students -
   (High): 1608
   ( Likely): 1438
   (Low): 1375
Michigan Tech Fall Enrollment History 1970-2008

*final preliminary
June 2009 National Unemployment by Educational Attainment Level in Percentages

- Less than High School Diploma: 15.5%
- High School Graduate-No College: 9.8%
- Some College or Associate’s Degree: 8.0%
- Bachelor’s Degree and Higher: 4.7%
- Michigan Unemployment Average: 14.1%
- National Unemployment Average: 9.5%

Financial Position
<table>
<thead>
<tr>
<th></th>
<th>Original Projection</th>
<th>Projected Year End (As of 6/30/09)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$ 232,008</td>
<td>$ 227,040</td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td>(231,536)</td>
<td>(225,527)</td>
</tr>
<tr>
<td><strong>Investment Gains (losses)</strong></td>
<td>550</td>
<td>(1,225)</td>
</tr>
<tr>
<td><strong>Net</strong></td>
<td>$ 1,022</td>
<td>$ 288</td>
</tr>
</tbody>
</table>
CASH FLOW
2007, 2008 & 2009 YTD
(dollars in millions)
Appropriations (in Thousands)

State Operation Appropriations to Michigan Technological University
FY1965 through FY2009

Unadjusted
Adjusted with CPI
Adjusted with HEPI

*FY 2007 Estimated
Adjusted to FY1984 Dollars
1999 Revenue Sources

- **Tuition and Fees**: 35%
- **State Appropriations**: 27%
- **Research Grants and Contracts**: 18%
- **Auxiliary Activities**: 14%
- **Miscellaneous Revenue**: 6%
2004 Revenue Sources

- Tuition and Fees: 34%
- State Appropriations: 29%
- Research Grants and Contracts: 18%
- Auxiliary Activities: 13%
- Miscellaneous Revenue: 6%
2009 Revenue Sources

- Tuition and Fees: 38%
- State Appropriations: 21%
- Research Grants and Contracts: 21%
- Auxiliary Activities: 21%
- Miscellaneous Revenue: 7%
CPI Adjusted Revenue Streams 1994-2012

- **Student Tuition**
- **Grant and Contract Revenue**
- **Auxiliary Revenue**
- **State appropriations, Operating**
- **Other Income**

Figure 3
University of Michigan: Relative Changes in Share of Core Revenues, 1975 to 1996

FY10 BUDGET PRIORITY
People
Budgets

- Revenue Cut from State: 3%
- One-Time Stimulus: $1.2M
- Tuition Increase (undergraduate): 5.45%
  (graduate): 5.00%
- Increase in Financial Aid: $2M
- Compensation (across the board): 1.75%
# Engineering Tuition and Fees

<table>
<thead>
<tr>
<th></th>
<th>University of MI</th>
<th>Michigan Tech</th>
<th>Michigan State</th>
<th>Kettering</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>$12,284</td>
<td>$11,465</td>
<td>$11,382</td>
<td>$27,584</td>
</tr>
<tr>
<td>2nd Year</td>
<td>$12,284</td>
<td>$12,705</td>
<td>$11,382</td>
<td>$27,584</td>
</tr>
<tr>
<td>3rd Year</td>
<td>$15,926</td>
<td>$12,705</td>
<td>$13,430</td>
<td>$27,584</td>
</tr>
<tr>
<td>4th Year</td>
<td>$15,926</td>
<td>$12,704</td>
<td>$13,430</td>
<td>$27,584</td>
</tr>
<tr>
<td>Total</td>
<td>$56,420</td>
<td>$49,579</td>
<td>$49,624</td>
<td>$110,336</td>
</tr>
</tbody>
</table>
2008/09 Faculty Hires

• 52 Tenured/Tenure Track Hires

✓ 36.5% Female (19)

✓ 3 out of 4 research professors/scientists were female
Tenured/Tenured-Track Faculty
(does not include administrative faculty, i.e. deans, chairs)

Number of Faculty

Years - Age of Faculty

- Assistant Professor
- Associate Professor
- Professor
STRATEGIC FACULTY HIRING INITIATIVE

Sustainability
  – Six Hires
  – Three Endowed Robbins Chairs

Computational Design & Innovation
  – Six Hires
  – One in Negotiations
  – Two Endowed Professorships – Search Continues
2010 Strategic Faculty Hiring Initiative

THEMES: Health and Energy
Academic Quality Improvement Projects (AQIP)

– Carbon Neutral (Peg Gale, Chair)
– Academic Advising Enhancement (Kerri Sleeman, Chair)
– International Experience (Andrew Storer, Chair)
Administrative Quality Improvement Projects (LEAN)

- 12 Projects (Completed/Ongoing)
  - Dining Services
  - Sponsored Programs
  - Accounting Services
  - Human Resources
Our Three Jobs

• The work

• Problem Solving

• Improvement
Results of Lean

- Stabilize process
- Create a standardized, efficient and effective process
- Shorter time from start to finish
- Value added for customer
- Involvement of ‘experts’ in the process
CAPITAL PROJECTS
Highway 41 Project

Lot 14
Library Café

Rozsa Art Gallery
Memorial Union
Student Offices
RESIDENTIAL APARTMENTS - Preliminary Design
MTEC SmartZone

• 16 Companies with approximately 200 Employees

– GE Aviation
– 3D Consulting
– Consistacom
– Extreme Tool
– Hawk Technology
– Plastic Flow
– UP & Running
– Xmatic
– MI Dept. of Community Health UP Regional Lab

– FORD
– Aero Physics
– Endres Machining
– GS Engineering
– LaSalle Tech
– U.P. Steel
– Xeratec
Campaign Progress Summary
as of June 30, 2009

Alumni & Friends  $70,474,794
Corporations  25,195,123
Private Foundations  2,017,146
Gifts-in-Kind  4,270,159
Grand Total  $101,957,222
2004
Our Choices for Michigan Tech

• Decline
• Maintain
• Improve
• Transform