CAMPUS FORUM

September 21, 2010
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/
Vision for 2035:

World Class Research University
Number of PhDs Awarded, Goal: 69

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of PhDs Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>44</td>
</tr>
<tr>
<td>2005-06</td>
<td>41</td>
</tr>
<tr>
<td>2006-07</td>
<td>65</td>
</tr>
<tr>
<td>2007-08</td>
<td>54</td>
</tr>
<tr>
<td>2008-09</td>
<td>57</td>
</tr>
<tr>
<td>2009-10</td>
<td>56</td>
</tr>
</tbody>
</table>
Endowment Balance in Millions, Goal: $200M

- 2004-05: $58.65M
- 2005-06: $64.8M
- 2006-07: $78.5M
- 2007-08: $78.61M
- 2008-09: $63.77M
- 2009-10*: $69.71M

Fiscal Year
AQIP
(Academic Quality Improvement Program)

Higher Learning Commission
University Accreditation
### Summary of Action Projects

<table>
<thead>
<tr>
<th>Title</th>
<th>Michigan Tech</th>
<th>Title</th>
<th>AQIP</th>
<th>Kickoff Date</th>
<th>Expected Completion Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving the Diversity of the Faculty</td>
<td>Improving the Diversity of the Faculty</td>
<td>June 1, 2006</td>
<td>Sept 18, 2008</td>
<td>Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Space Enhancement</td>
<td>Classroom and Facilities Upgrade Plan</td>
<td>June 1, 2006</td>
<td>Sept 24, 2008</td>
<td>Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive University Space Inventory Process</td>
<td>Comprehensive University Space Inventory Process</td>
<td>June 1, 2006</td>
<td>Oct 3, 2008</td>
<td>Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Neutral</td>
<td>Carbon Counting</td>
<td>June 1, 2007</td>
<td>Sept 14, 2010</td>
<td>Completed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Summary of Action Projects

<table>
<thead>
<tr>
<th>Title Michigan Tech</th>
<th>Title AQIP</th>
<th>Kickoff Date</th>
<th>Expected Completion Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Advising Enhancement</td>
<td>Academic Advising Enhancement</td>
<td>April 3, 2009</td>
<td>June 2011</td>
<td>Active</td>
</tr>
<tr>
<td>International Experience</td>
<td>Improving the Processes Associate with International Experience</td>
<td>April 6, 2009</td>
<td>June 2011</td>
<td>Active</td>
</tr>
<tr>
<td>Gender Diversity</td>
<td>Increase Gender Diversity of Faculty &amp; Students</td>
<td>Sept 20, 2010</td>
<td>Sept 20, 2012</td>
<td>Active</td>
</tr>
</tbody>
</table>
AQIP Project: Increasing Gender Diversity of Faculty & Students

The goal of this project is to develop processes and practices that will increase the gender diversity of faculty and students in order to

– “prepare students to create the future” (mission) and
– “attract, retain, and support a world-class and diverse faculty, staff, and student population” (goal).

It will improve processes for students and faculty, and communicate the value of gender diversity to our stakeholders.
AQIP Project: Increasing Gender Diversity of Faculty & Students

This project builds on the following:

1. Completed Action Project to increase faculty diversity,
2. Current NSF ADVANCE grant to improve recruiting and mentoring of female faculty, and
3. Current Action Project to enhance academic advising. The project will improve processes for students and faculty and communicate the value of gender diversity to all university stakeholders.
AQIP Project: Increasing Gender Diversity of Faculty & Students

Five interrelated projects:

1. Communication campaign: Develop and communicate gender/diversity goals to all stakeholders.
2. Improve brand awareness of Michigan Tech among females in external environment.
3. Improve processes for recruiting and mentoring female faculty (ADVANCE)
4. Improve processes for recruiting female students.
5. Improve processes for advising and mentoring female students.
FINANCES
State Appropriations
Fiscal Years 2002-03 to 2009-10

Dollars (In Millions)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Dollars (In Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>54.0</td>
</tr>
<tr>
<td>2003-04</td>
<td>45.0</td>
</tr>
<tr>
<td>2004-05</td>
<td>50.0</td>
</tr>
<tr>
<td>2005-06</td>
<td>49.0</td>
</tr>
<tr>
<td>2006-07</td>
<td>48.0</td>
</tr>
<tr>
<td>2007-08</td>
<td>49.0</td>
</tr>
<tr>
<td>2008-09</td>
<td>52.0</td>
</tr>
<tr>
<td>2009-10</td>
<td>48.0</td>
</tr>
</tbody>
</table>

Michigan Tech
Create the Future
Resident Freshmen Tuition & Fee Rates
Academic Years 2003-04 to 2009-10

<table>
<thead>
<tr>
<th>Year</th>
<th>Tuition &amp; Fee Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>7,440</td>
</tr>
<tr>
<td>2004-05</td>
<td>7,610</td>
</tr>
<tr>
<td>2005-06</td>
<td>8,194</td>
</tr>
<tr>
<td>2006-07</td>
<td>8,910</td>
</tr>
<tr>
<td>2007-08</td>
<td>9,829</td>
</tr>
<tr>
<td>2008-09</td>
<td>10,761</td>
</tr>
<tr>
<td>2009-10</td>
<td>11,348</td>
</tr>
<tr>
<td>2010-11</td>
<td>12,017</td>
</tr>
</tbody>
</table>
Undergraduate Financial Aid
Fiscal Years 2002-03 to 2009-10

Source: HEIDI Data
Financial & Bond Ratings

• Aa3 – Financial Rating by Moody’s Investors Services

• AAA – Bond Rating
## 2010-11 General Fund Budget Comparison by Department Unit (w/o fringes)

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPSA</td>
<td>5,429,749</td>
<td>5,527,423</td>
<td>1.8</td>
</tr>
<tr>
<td>CFO</td>
<td>1,259,290</td>
<td>1,297,308</td>
<td>3.0</td>
</tr>
<tr>
<td>BOC/Gov.</td>
<td>850,772</td>
<td>877,529</td>
<td>3.2</td>
</tr>
<tr>
<td>VPA</td>
<td>9,864,264</td>
<td>10,187,772</td>
<td>3.3</td>
</tr>
<tr>
<td>Provost</td>
<td>16,210,828</td>
<td>17,372,244</td>
<td>7.2</td>
</tr>
<tr>
<td>President</td>
<td>770,383</td>
<td>790,730</td>
<td>2.6</td>
</tr>
<tr>
<td>CIO</td>
<td>4,410,812</td>
<td>4,379,356</td>
<td>-0.7</td>
</tr>
<tr>
<td>VPAdv</td>
<td>2,624,725</td>
<td>2,710,883</td>
<td>3.3</td>
</tr>
<tr>
<td>VPR</td>
<td>2,468,059</td>
<td>2,697,868</td>
<td>9.3</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>20,528,471</td>
<td>22,479,800*</td>
<td>9.5</td>
</tr>
</tbody>
</table>

*estimate
## 2010-11 General Fund Budget Comparison by Academic Unit (w/o fringes)

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>COE</td>
<td>17,392,200</td>
<td>18,170,531</td>
<td>4.5</td>
</tr>
<tr>
<td>CSA</td>
<td>16,364,170</td>
<td>16,973,206</td>
<td>3.7</td>
</tr>
<tr>
<td>SBE</td>
<td>3,249,570</td>
<td>3,601,586</td>
<td>10.8</td>
</tr>
<tr>
<td>SFRES</td>
<td>2,482,206</td>
<td>2,649,606</td>
<td>6.7</td>
</tr>
<tr>
<td>SOT</td>
<td>2,403,116</td>
<td>2,462,970</td>
<td>2.5</td>
</tr>
</tbody>
</table>
ENROLLMENT
Michigan Tech Fall Enrollment History 1970-2010

*2010 figures are final preliminary

- Standard Learning
- On-Line Learning
- ESD/DOE Students

1970: 4,500
1971: 5,000
1972: 5,500
1973: 6,000
1974: 6,500
1975: 7,000
1976: 7,500
1977: 8,000
1978: 8,500
1979: 7,132
1980: 6,957

2000: 7,132
2001: 6,957
Michigan Technological University
Enrollment Projections
2002-03 to 2014-15

Note: Enrollments for 2010-11 through 2014-15 are projected
NOTE: First-professional students and medical faculty are excluded from these figures.

SOURCE: IPEDS Data

OIA: 5-5-2010
FACULTY
New Faculty Hires

24 tenured/tenure track
• 7 female (29.2%)
• 17 male (70.8%)

6 lecturer/professor of practice
• 1 female (16.7%)
• 5 male (83.3%)
Strategic Faculty Hiring Initiative

- Sustainability (7)
- Computational Design & Innovation (6)
- Energy (2)
- Health (3)
- Water
- Transportation
STRATEGIC FACULTY
HIRING INITIATIVE PRODUCTIVITY

Sustainability and Computational Design & Innovation (13 hires)

Graduate Students Advised 40
PhD Committee 13
MS Committee 13
Undergraduate Courses 32
Graduate Courses 32
PI Submitted 58
CoPI Submitted 26
Funded $2.1M
RESEARCH
FY08 NSF Research Rankings

• 163rd Nationally
• 118th Among Public Institutions
• 66th Among Institutions without Medical Schools
Michigan Tech
Sponsored Research Awards
Fiscal Years 2005 - 2010
Michigan Tech Entrepreneurial Support Corporation

• MTESC will enhance opportunities for faculty, staff, and students to commercialize their discoveries.

• It will focus on an unaddressed link in the chain from invention to commercial enterprise, the activities between technology discovery and formation of a startup enterprise.
Michigan Tech Entrepreneurial Support Corporation

• MTESC will function as a proof-of-concept center to support technology commercialization from laboratory discovery to formation of a startup enterprise

• MTESC is complimentary to, and not a replacement for, current economic development activities in the community.
Michigan Tech Entrepreneurial Support Corporation

- MTESC will be a 501 (c) (3) non-profit corporation and is expected to have one or more for-profit subsidiary corporations.
- One of these will be an umbrella corporation, tentatively titled Superior Innovations, Inc.
Michigan Tech Entrepreneurial Support Corporation

Michigan Tech

License/Royalty

Start-up

Angel/VC
Michigan Tech

MTESC 501c3

Superior Innovations, Inc

Subcorp

Angel /VC

License/Royalty

License/Royalty

Start-up

Michigan Tech Fund

License/Royalty
Michigan Tech Entrepreneurial Support Corporation

• Proof-of-Concept Center

• Deshpande Center, MIT
  http://web.mit.edu/deshpandecenter/

• Von Liebig Center, UCSD
  http://www.vonliebig.ucsd.edu/
CAPITAL CAMPAIGN
<table>
<thead>
<tr>
<th>Category</th>
<th>Donations to Date</th>
<th>Goal</th>
<th>% of Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major &amp; Restricted Gifts/Pledges</td>
<td>$32,077,611</td>
<td>$65,000,000</td>
<td>49.4%</td>
</tr>
<tr>
<td>Realized Planned Gifts</td>
<td>3,884,842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned Gift Commitments</td>
<td>47,390,486</td>
<td>$60,000,000</td>
<td>79.0%</td>
</tr>
<tr>
<td>Annual Fund</td>
<td>6,121,079</td>
<td>$10,000,000</td>
<td>61.2%</td>
</tr>
<tr>
<td>Corp Sponsored Research</td>
<td>26,590,438</td>
<td>$36,000,000</td>
<td>73.9%</td>
</tr>
<tr>
<td>Corporations</td>
<td>7,183,878</td>
<td>$15,000,000</td>
<td>47.9%</td>
</tr>
<tr>
<td>Foundations &amp; Other Orgs</td>
<td>2,094,661</td>
<td>$6,000,000</td>
<td>34.9%</td>
</tr>
<tr>
<td>Gifts-in-Kind</td>
<td>4,727,893</td>
<td>$8,000,000</td>
<td>59.1%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>130,070,888</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Discount of Planned Gifts)</em></td>
<td><em>(7,678,647)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$122,392,241</strong></td>
<td><strong>$200,000,000</strong></td>
<td><strong>61.2%</strong></td>
</tr>
</tbody>
</table>
Philanthropy – Since 2007

• $120M +
• Increase from 4 to 17 named positions
• $9.2M Scholarships
• $1.7M Fellowships
• Rath Graduate Student/Advisor Award
Gifts at work

Enterprises

MacInnes Student Ice Arena Skyboxes

Women’s Soccer

Scholarships

Pavlis Institute for Global Technological Leadership
Increase in Endowed Faculty Positions

Dr Ching-An Peng
James and Lorna Mack Endowed Chair
Chemical Engineering

Dr Dave Shonnard
Robbins Chair
Chemical Engineering

Dr Rolf Peterson
Robbins Chair
School of Forest Resources and
Environmental Sciences

Dr Shuanglin Zhang
Henes Endowed Math Professorship
Mathematical Sciences

Dr Tim Schulz
Dave House Endowed Professorship
Electrical and Computer Engineering

Dr Craig Friedrich
Robbins Chair
Mechanical Engineering - Engineering Mechanics

Dr Gordon Parker
John and Cathy Drake Endowed Professorship
Mechanical Engineering – Engineering Mechanics
CAPITAL PROJECTS
CAPITAL PROJECTS
(State and Federal Investments)

• Rekhi/Opie - $35M (State Share=$26.25M)
• ATDC - $3.5M (Federal=$2.5M; Corporate=$1M)
• Lakeshore Center - $3.5M (Federal)
• GLRC - $25M (State Share=$18.75M)
• Renovation Funds - $10M (State Share=$7.5M)
Student Apartments
Old Academic Offices Building
Meese Center
Administration & Student Services Building
Keweenaw Research Center
Blizzard Building
Electrical Energy Resource Center
- A. E. Seaman Mineral Museum
Humanities Digital Media Zone
Building Site – Great Lakes Research Center