CAMPUS FORUM

February 26, 2008
Michigan Tech: A Partial Environmental Scan

- State Funding
- FY09 Budget Priority
- Student Recruiting
- Enrollment: A Balancing Act
- Rankings
- Research, Scholarship, Development
- Endowment
- Campaign Report
STATE FUNDING
## Fund Comparison

<table>
<thead>
<tr>
<th></th>
<th>FY2005</th>
<th>FY2006</th>
<th>FY2007</th>
<th>FY2008 (Est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>1.9M</td>
<td>$.6M</td>
<td>$.3M</td>
<td>($ .3M)</td>
</tr>
<tr>
<td>Balance</td>
<td>($10.0M)</td>
<td>($9.4M)</td>
<td>($9.1M)</td>
<td>($9.4M)</td>
</tr>
<tr>
<td><strong>Current Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>$3.3M</td>
<td>$1.2M</td>
<td>$1.5M</td>
<td>$1.4M</td>
</tr>
<tr>
<td>Balance</td>
<td>$13.4M</td>
<td>$14.6M</td>
<td>$16.1M</td>
<td>$17.5M</td>
</tr>
</tbody>
</table>
State Operation Appropriations to Michigan Technological University
FY1965 through FY2007

*FY 2007 Estimated
Adjusted to FY1984 Dollars
FY2009 State of Michigan Funding Formula

- **35%** Participation Component
  - Based on percentage of undergraduate students receiving Pell Grants and Native American Tuition Waiver

- **15%** Research Component
  - Federal Research Expenditures

- **50%** Degree Completion Component
  - STEM and Health 4x Non-STEM

*Floor funding of 2.3%*
<table>
<thead>
<tr>
<th></th>
<th>Michigan State</th>
<th>Michigan</th>
<th>Wayne State</th>
<th>Michigan Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation ($M)</td>
<td>1.54</td>
<td>1.00</td>
<td>3.70</td>
<td>0.39</td>
</tr>
<tr>
<td>Research/Commercializing ($M)</td>
<td>1.55</td>
<td>3.84</td>
<td>0.85</td>
<td>1.12</td>
</tr>
<tr>
<td>Degree Completion ($M)</td>
<td>4.75</td>
<td>5.35</td>
<td>2.38</td>
<td>0.67</td>
</tr>
<tr>
<td>APPROPRIATION</td>
<td>298.0</td>
<td>333.6</td>
<td>226.0</td>
<td>51.2</td>
</tr>
</tbody>
</table>
## FY2009 State of Michigan Funding Formula

<table>
<thead>
<tr>
<th>% Increase</th>
<th>Michigan State</th>
<th>Michigan State</th>
<th>Wayne State</th>
<th>Michigan Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.71</td>
<td>3.15</td>
<td>3.17</td>
<td>4.39</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Funding/FYES</th>
<th>6936</th>
<th>8272</th>
<th>8869</th>
<th>8518</th>
</tr>
</thead>
</table>
FY07
Current Fund Revenue
$197.91M

- Tuition and Fees, $66.79
- State Approps, $48.13
- Grants and Contracts, $42.43
- Auxiliary Activities, $24.91
- Miscellaneous Revenue, $15.65
FY09 BUDGET PRIORITY
Competitive Compensation
STUDENT RECRUITING
1987-2007 Total Enrollment

Distance Learning
Non-Distance Learning
Michigan ACT Test Takers – Interest in Engineering and/or Science
National ACT Test Takers – Interest in Engineering and/or Science

Engineering (US)
Science (US)
### Undergraduate Applicants
(week 25)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5223</td>
<td>+16.6%</td>
</tr>
<tr>
<td>Domestic Minority</td>
<td>703</td>
<td>+40.9%</td>
</tr>
<tr>
<td>Female</td>
<td>1432</td>
<td>+30.3%</td>
</tr>
</tbody>
</table>
## Undergraduate Active Deposits

(week 25)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1163</td>
<td>+11.6%</td>
</tr>
<tr>
<td>Domestic Minority</td>
<td>67</td>
<td>+36.7%</td>
</tr>
<tr>
<td>Female</td>
<td>283</td>
<td>+29.8%</td>
</tr>
</tbody>
</table>
Our Key Competitors For Students

University of Michigan
Michigan State University
Grand Valley State University
Central Michigan University
Purdue University

Source: Michigan Tech Cancellation Survey
ENROLLMENT
A BALANCING ACT
Full Time Graduates vs. FTE Undergraduates
Michigan Public Universities and Michigan Tech Benchmark Universities
Fall 2006

NOTE: First-professional students and medical faculty are excluded from these figures.
Figure for MTU is for 2007 only. All other figures are for 2006.

OIA: 2-3-08
J:\temp\Benchmarking 2005 Students-TT Faculty Reed upd 2007.xlsx

SOURCE: IPEDS Data
Full Time Graduates vs. FTE Undergraduates
Fall 2005

MTU
2.1

UofCal-Berkeley
6.2

UofVirginia
4.9

UofM-Ann Arbor
5.5

Cal Tech
4.6

UofChicago
6.9

Columbia
9.0

Duke
6.8

Brown
2.9

Cornell
3.5

Georgetown
5.3

Emory
5.0

Carnegie
5.2

Northwestern
6.3

Princeton
2.9

Rice
4.0

Yale
5.9

Harvard
7.1

Carnegie
5.2

Duke
6.8

Dartmouth
3.0

Notre Dame
3.2

Vanderbilt
5.7

Northwestern
6.3

WashU-St. Louis
5.7

UofPenn
6.8

Michigan
5.5

WashU-St. Louis
5.7

UofPenn
6.8

Yale
5.9

Stanford
6.0

Harvard
7.1

Columbia
9.0

Cornell
3.5

Carnegie
5.2

Duke
6.8

Emory
5.0

Carnegie
5.2

Northwestern
6.3

Brown
2.9

Cornell
3.5

Georgetown
5.3

Emory
5.0

Carnegie
5.2

Northwestern
6.3

Princeton
2.9

Rice
4.0

Yale
5.9

Harvard
7.1

Columbia
9.0

Full Time Graduates/FTE T-TT Faculty

FTE Undergraduates/FTE T-TT Faculty
Percent of Graduate Students at Michigan Universities

Source: Presidents Council
### Graduate Applications & Accepts

(week 25)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Applicants</td>
<td>1379</td>
<td>1558</td>
</tr>
<tr>
<td>All Accepts</td>
<td>187</td>
<td>248</td>
</tr>
<tr>
<td>Michigan Tech Applicants</td>
<td>70</td>
<td>22</td>
</tr>
<tr>
<td>Michigan Tech Accepts</td>
<td>31</td>
<td>10</td>
</tr>
</tbody>
</table>
RANKINGS
University Peer Scores for Top-ranked Graduate Schools (Engineering)

Source: U.S. News & World Report
For Michigan Tech to become a Top 50 public.....

• .3 increase in reputational score (5.0 scale)
• We’re top 50 by virtually all other measures
• Reputational score = “peer assessment”
• The key is faculty achievement and reputation
U.S. News & World Report
Best Graduate Schools

- Environmental Engineering 25
- Materials 42
- Civil Engineering 49
- Mechanical Engineering 54

*Other disciplines are not evaluated
U.S. News and World Report Rankings - Selected Universities

22. Carnegie Mellon
35. Georgia Tech
44. Rensselaer (RPI)
71. Michigan State
75. Colorado School of Mines
96. Illinois Institute of Technology
118. Missouri University of Science and Technology
124. Michigan Tech and Clarkson (tie)
Michigan Tech Select Partnerships

Ford

Cargill

GE
RESEARCH, SCHOLARSHIP, DEVELOPMENT
Role of a University

A living system where:

- Knowledge is transmitted from one generation to the next.

- Knowledge is created.
Michigan Tech’s Special Role

• Educated People – People who can develop, understand, apply, manage and communicate science and technology (STEM).

• Create new knowledge – Transform it to benefit people.
Research and Development Maintains Quality Hands-on Undergrad Learning

- $x$ Directly Subsidize equipment and faculty
- $-0$
- No Subsidy

research contracts → lab equipment → hands-on learning

faculty recognition, ranking → industry exposure, hiring

unranked, price competition → fewer hands-on labs, students
FY06 National Rankings

• Michigan Tech now **173**\textsuperscript{rd}, up from **179**\textsuperscript{th} among 600 research universities

• Now **125**\textsuperscript{th}, up from **127**\textsuperscript{th}, among public universities, and **75**\textsuperscript{th}, up from **79**\textsuperscript{th}, in universities without medical schools

• Our highest ranked discipline: **Mechanical Engineering**, now **21**\textsuperscript{st}

• **Mathematical Sciences**: first appearance in the rankings at **79**\textsuperscript{th}

FY2006 NSF Survey of Academic Research Expenditures
NSF NATIONAL RANK

![Graph showing research expenditure ($ Millions) vs Fiscal Year]

- **Expenditures**
- **All-Rank**
- **Public-Rank**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Expenditures</th>
<th>All-Rank</th>
<th>Public-Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FY07
Current Fund Revenue
$197.91M

- Tuition and Fees, $66.79
- State Approps, $48.13
- Grants and Contracts, $42.43
- Auxiliary Activities, $24.91
- Miscellaneous Revenue, $15.65
ENDOWMENT
Endowment Per Student - Michigan

- U. of Michigan: $177,229
- Michigan State: 29,619
- Kettering: 24,402
- Michigan Tech: 11,715
- Wayne State: 10,031
- Western Michigan: 8,386
- Saginaw Valley State: 3,949

Source: Princeton Review; America’s Best Colleges (as of 6/30/07)
## Endowment Per Student - National

<table>
<thead>
<tr>
<th>Institution</th>
<th>Endowment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carnegie Mellon</td>
<td>$165,249</td>
</tr>
<tr>
<td>Rensselaer Polytechnic</td>
<td>129,212</td>
</tr>
<tr>
<td>Clarkson University</td>
<td>60,705</td>
</tr>
<tr>
<td>Colorado School of Mines</td>
<td>48,114</td>
</tr>
<tr>
<td>Missouri – Rolla</td>
<td>22,643</td>
</tr>
<tr>
<td>Milwaukee School of Eng.</td>
<td>19,943</td>
</tr>
<tr>
<td><strong>Michigan Tech</strong></td>
<td><strong>11,715</strong></td>
</tr>
</tbody>
</table>

Source: Princeton Review; America’s Best Colleges (as of 6/30/07)
CAMPAIGN REPORT
**Campaign Total To Date**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 08 gifts</td>
<td>$13.03 million</td>
</tr>
<tr>
<td>FY07 gifts</td>
<td>28.35</td>
</tr>
<tr>
<td>FY 08 corporate research</td>
<td>3.61</td>
</tr>
<tr>
<td>FY 07 corporate research</td>
<td>6.21</td>
</tr>
<tr>
<td>Selected FY 06 gifts</td>
<td>+ 11.80</td>
</tr>
<tr>
<td>(discounts of planned gifts)</td>
<td>- 3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$60.0 million</strong></td>
</tr>
</tbody>
</table>
OUR GOAL:

TECHNOLOGICAL RESEARCH UNIVERSITY FOR THE WORLD
Michigan Tech: A Partial Environmental Scan

- State Funding
- FY09 Budget Priority
- Student Recruiting
- Enrollment: A Balancing Act
- Rankings
- Research, Scholarship, Development
- Endowment
- Campaign Report
What Can You Do?

- Continue to promote Michigan Tech
- Do what you do best
- Help me to learn to make things better
- Fill out the evaluation of the President