AGENDA
Formal Session of the Board of Trustees
Michigan Technological University
9:00 a.m. – December 16, 2016
Ballroom B - Memorial Union Building

I. Approval of Agenda

II. Opening Remarks
   A. Chair’s Comments
   B. President’s Comments

III. Committee Reports
   A. Academic Affairs Committee
      - Provost Report - Dr. Jackie Huntoon, Provost & Vice President for Academic Affairs
      - Research and Sponsored Programs Report - Dr. David Reed, Vice President for Research
      - Student Affairs and Advancement Report – Dr. Les Cook, Vice President for Student Affairs and Advancement
   B. Audit and Finance Committee
      - Treasurer’s Report - Ms. Julie Seppala, Treasurer
   C. Leadership Committee

IV. Consent Agenda
   A. Approval of Minutes
   B. Gifts
   C. Resignations, Retirements and Off Payroll

V. Action/Discussion Items
   A. Emeritus Rank
   B. Honorary Degree
   C. 2017-2018 Room and Board and Apartment Rental Rates

VI. Reports
   A. University Senate Report – Dr. Martin Thompson, President
   B. Undergraduate Student Government Report – Mr. Samuel Casey, President
   C. Graduate Student Government Report – Mr. William Lytle, President

VII. Informational Items
   A. Analysis of Investments
   B. University Issued Bond Balances
   C. Research and Sponsored Programs Report
   D. Advancement and Alumni Relations Report
   E. Recent Media Coverage
   F. Employee Safety Statistics
VIII. Other Business

IX. Public Comments

X. Informal Closed Session for Review of Pending Litigation and a Periodic Personnel Evaluation of President Mroz

XI. Adjournment
I. APPROVAL OF AGENDA

RECOMMENDATION: That the Board of Trustees approves the agenda of the formal session of December 16, 2016 as distributed to the Board.
II. OPENING REMARKS

A. CHAIR’S COMMENTS

B. PRESIDENT’S COMMENTS
III. COMMITTEE REPORTS

A. ACADEMIC AFFAIRS COMMITTEE
   - Provost Report - Dr. Jackie Huntoon, Provost & Vice President for Academic Affairs
   - Research and Sponsored Programs Report – Dr. David, Reed, Vice President for Research
   - Student Affairs and Advancement Report – Dr. Les Cook, Vice President for Student Affairs and Advancement

B. AUDIT AND FINANCE COMMITTEE
   - Treasurer’s Report - Ms. Julie Seppala, Treasurer

C. LEADERSHIP COMMITTEE
Provost’s Report

Jackie Huntoon
December 16, 2016
Portrait of 2045 Data: Ratio Analysis

Department XXX
Ratio Analysis of Percent of University Average
2011-12, 2012-13 and 2013-14 (Average)
Comparing Michigan Tech to other Michigan publics and peers institutions.
Vertical axis values are based on enrollment by major.
Vertical axis values are based on undergraduate student credit hours delivered by each department.
Office of Partner Engagement

Current initiatives to address dual career needs at Michigan Tech

• Recruitment Improvements
  • Collective advertising
  • Invite a guest to on-campus interviews

• Efforts to Improve Retention
  • Community Interest Survey
  • Customized Recruitment Support meeting

• Improvements to Current Efforts
  • Cost-Share Agreement to support Academic Partner hires
  • Creative solutions such as split, shared or reduced FTE positions
  • Improved communication to the Michigan Tech community
Richelle Winkler gave the inaugural Michigan Tech Research Forum Distinguished Lecture: *Making Research Matter: Democratizing Science and Other Lofty Goals*

- Mark Rudnicki (SFRES)
- Selin Philip (CLS)
- Paul Sanders (MatSciEng)
- Yang Yang (Math)
- Steven Elmer (KIP)
- Andrew Barnard (MEEM)

- David Flashpohler (SFRES)
- Latha Poonamallee (SBE)
- Beth Veinott (CLS)
- Trisha Sain (MEEM)
- Darrell Robinette (MEEM)
- Chad Deering (GMES)
- Feng Zhao (Biomed)

- Laura Kasson Fiss (HU)
- Stefka Hristova (HU)
- Andrew Fiss (HU)

- Tarun Dam (Chem)
- Ye Sarah Sun (MEEM)
- Lynn Mazzoleni (Chem)
- Hector Moncada-Hernandez (Biomed)
- Nabanita Saikia (Physics)
- Kazuya Tajiri (MEEM)
- Loredana Valenzano (Chem)
Cosmic Rays May Reveal New Physics Just Out Of LHC's Reach

...particles of the secondary shower can be detected on Earth in large detector arrays like Pierre Auger, which is located in Argentina. Pierre Auger has two types of detectors: 1) detectors that directly collect the particles which make it to the ground, and 2) fluorescence detectors which captures the light emitted from the ionization...
Thank you
Sponsored Program Summary
1st Quarter FY17
December, 2016

David Reed
Vice President for Research
Outline

• Sponsored Awards, 1st Quarter FY17
• Research Expenditures, 1st Quarter FY17
• Intellectual Property/Commercialization, 1st Quarter FY17
• Corporate Sponsorship, 1st Quarter FY17
• Federal Funding Trends
• MTRI 10th Anniversary
Sponsored Awards, Unaudited FY16
# Sponsored Awards, 1st Quarter FY17

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Proposals Submitted</th>
<th>Awards Received</th>
<th>Awards Received ($)</th>
<th>Variance</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY '17 as of 09/30</td>
<td>FY '16 as of 09/30</td>
<td>FY '17 as of 09/30</td>
<td>FY '16 as of 09/30</td>
<td>FY '17 as of 09/30</td>
</tr>
<tr>
<td>NASA</td>
<td>13</td>
<td>2</td>
<td>14</td>
<td>4</td>
<td>1,083,828</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>33</td>
<td>43</td>
<td>23</td>
<td>31</td>
<td>4,341,502</td>
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<tr>
<td>US Department of Agriculture</td>
<td>35</td>
<td>25</td>
<td>22</td>
<td>10</td>
<td>1,996,085</td>
</tr>
<tr>
<td>US Department of Defense</td>
<td>25</td>
<td>17</td>
<td>27</td>
<td>17</td>
<td>2,961,704</td>
</tr>
<tr>
<td>US Department of Education</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>59,720</td>
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<td>US Department of Energy</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>9</td>
<td>1,314,156</td>
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<tr>
<td>US Department of HHS</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>1,168,077</td>
</tr>
<tr>
<td>US Department of Transportation</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>929,629</td>
</tr>
<tr>
<td>Other Federal Agencies*</td>
<td>12</td>
<td>20</td>
<td>10</td>
<td>8</td>
<td>961,216</td>
</tr>
<tr>
<td>Federal Agency Total</td>
<td>131</td>
<td>127</td>
<td>115</td>
<td>88</td>
<td>14,815,917</td>
</tr>
<tr>
<td>State of Michigan</td>
<td>12</td>
<td>11</td>
<td>6</td>
<td>6</td>
<td>441,099</td>
</tr>
<tr>
<td>Industrial</td>
<td>66</td>
<td>68</td>
<td>41</td>
<td>50</td>
<td>488,219</td>
</tr>
<tr>
<td>Foreign</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>585,296</td>
</tr>
<tr>
<td>All Other Sponsors</td>
<td>21</td>
<td>15</td>
<td>16</td>
<td>7</td>
<td>316,761</td>
</tr>
<tr>
<td>Subtotal</td>
<td>234</td>
<td>228</td>
<td>183</td>
<td>153</td>
<td>16,647,292</td>
</tr>
<tr>
<td>Gifts**</td>
<td>N/A</td>
<td>N/A</td>
<td>76</td>
<td>77</td>
<td>758,417</td>
</tr>
<tr>
<td>Crowd Funding</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td>7</td>
<td>2,210</td>
</tr>
<tr>
<td>Grand Total</td>
<td>234</td>
<td>228</td>
<td>259</td>
<td>237</td>
<td>17,407,919</td>
</tr>
</tbody>
</table>


**Gifts represent non-contractual funding from corporations, foundations, associations and societies in support of academic programs, scholarships/fellowships, student design & enterprise, research, youth programs and special programs.
Sponsored Awards, 1st Quarter FY17

1st Quarter Awards by FY

FY13
FY14
FY15
FY16
FY17
## Research Expenditures, 1st Quarter FY17

**Michigan Technological University**

**Total Research Expenditures by College/School/Division**

**Fiscal Year 2017 & 2016**

**As of September 30, 2016 and September 30, 2015**

<table>
<thead>
<tr>
<th>College/School/Division</th>
<th>FY2017</th>
<th>FY2016</th>
<th>Variance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration*</td>
<td>1,269,691</td>
<td>2,285,243</td>
<td>(1,015,552)</td>
<td>-44.4%</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>5,103,130</td>
<td>4,679,646</td>
<td>423,484</td>
<td>9.0%</td>
</tr>
<tr>
<td>College of Science &amp; Arts</td>
<td>3,133,304</td>
<td>2,762,858</td>
<td>370,446</td>
<td>13.4%</td>
</tr>
<tr>
<td>Great Lakes Research Center</td>
<td>24,541</td>
<td>-</td>
<td>24,541</td>
<td>-</td>
</tr>
<tr>
<td>Pavlis Honors College</td>
<td>46,513</td>
<td>49,352</td>
<td>(2,839)</td>
<td>-5.8%</td>
</tr>
<tr>
<td>Keweenaw Research Center (KRC)</td>
<td>1,362,642</td>
<td>1,392,772</td>
<td>(30,130)</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Michigan Tech Research Institute (MTRI)</td>
<td>1,882,565</td>
<td>1,956,154</td>
<td>(73,589)</td>
<td>-3.8%</td>
</tr>
<tr>
<td>School of Business &amp; Economics</td>
<td>245,940</td>
<td>173,151</td>
<td>72,789</td>
<td>42.0%</td>
</tr>
<tr>
<td>School of Forest Resources &amp; Environmental Science</td>
<td>1,259,145</td>
<td>956,705</td>
<td>302,440</td>
<td>31.6%</td>
</tr>
<tr>
<td>School of Technology</td>
<td>133,658</td>
<td>132,988</td>
<td>670</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14,461,129</strong></td>
<td><strong>14,388,869</strong></td>
<td><strong>72,260</strong></td>
<td><strong>0.5%</strong></td>
</tr>
</tbody>
</table>

*Includes the Vice Presidents, Provost, CIO, Exec Director Financial Services & Operations and others who report to a VP, Provost or the President. Except for the research institutes that report to the VPR.
## Intellectual Property, 1st Quarter FY17

<table>
<thead>
<tr>
<th>Category</th>
<th>2017</th>
<th>2016</th>
<th>+/- %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosures Received</td>
<td>5</td>
<td>4</td>
<td>25 %</td>
</tr>
<tr>
<td>Nondisclosure Agreements</td>
<td>27</td>
<td>32</td>
<td>-16 %</td>
</tr>
<tr>
<td>Patents Filed or Issued</td>
<td>2</td>
<td>2</td>
<td>0 %</td>
</tr>
<tr>
<td>License Agreements</td>
<td>5</td>
<td>4</td>
<td>25 %</td>
</tr>
<tr>
<td>Gross Royalties</td>
<td>143,342</td>
<td>95,481</td>
<td>50 %</td>
</tr>
</tbody>
</table>
Corporate Sponsorship, 1st Quarter FY17

Sponsored Awards - Industry - COMBINED
Fiscal Year 2017
1st Quarter
Ended Sept 30, 2016

TOTAL: $2,375,545

- Energy: 82,135
- Environmental: 25,855
- Health: 63,300
- Industrial Engineering: 80,335
- IT Services: 91,630
- Mining & Metals: 170,675
- Other: 18,800
- Technology: 66,288
- Automotive: 558,302
- Business & Economics: 286,651
- Chemical: 54,461
- Civil: 147,099
- Consumer Products: 123,607
- Defense & Space: 606,407

Michigan Technological University
National R&D Expenditures
(Source: National Science Foundation)
National R&D Expenditures
(Source: National Science Foundation)

• Federal funding dropped from 62.5% of total higher ed R&D in FY11 to 55.2% in FY15

• Only 3 federal agencies reported increases – Defense, NASA, and USDA; all others reported decreases.

• Medical science ($21.3 B), biological science ($11.7 B), and engineering ($11.1 B) together account for 64.3 % of total higher ed R&D
Research Expenditures, Unaudited
FY16

$ (Millions)

Fiscal Year

$ 72.5 MM
+ 4.2 %
National Research Rankings FY15

• FY16 was an all time high for research expenditures at $72.5 MM and our total research expenditures increased to $69.6 MM in FY15 from $68.5 MM in FY14, with an overall ranking of 164th among all institutions and 116th among public institutions.

• NSF reports research expenditures by discipline, so MTRI, KRC, and GLRC are combined with appropriate academic units for reporting purposes, and some academic units are split depending on disciplinary nature of the work.
National Research Rankings FY15

• One highlight – Michigan Tech is the number 1 ranked Environmental Science research institution in the state with a national ranking of 53rd, followed by UMich at 57th, GVSU at 135th, and MSU at 146th

• Michigan Tech is number 1 in the state in both Atmospheric Science (39th nationally) and Oceanography (53rd nationally)
MTRI 10th Anniversary

• MTRI joined Michigan Tech on October 1, 2006
• At that time they had 24 regular employees; today there are 60
• Cumulatively, over the 10 years MTRI has had over $80 million in research expenditures
MTRI 10th Anniversary
MTRI 10th Anniversary
Student Affairs and Advancement
Board of Trustees

December 16, 2016
FY 17 Funds Raised by Category
As of 10/31/16

- **Total Actual**: $33.2 million
- **Total Goal**: $35.0 million

**Planned Gifts**
- Actual: $25 million
- Goal: $25 million

**Corporations**
- Actual: $1 million
- Goal: $1 million

**Foundations**
- Actual: $1 million
- Goal: $1 million

**Gifts-in-kind**
- Actual: $1 million
- Goal: $1 million

**Annual Giving**
- Actual: $5 million
- Goal: $5 million

**Corp Sponsored Research**
- Actual: $4 million
- Goal: $4 million

**Major Gifts**
- Actual: $1 million
- Goal: $1 million

**Total Actual**: $33.2 million
**Total Goal**: $35.0 million
Total Funds Raised FY 2009 - 2017
As of 10/31/16

(IN MILLIONS)

2009 2010 2011 2012 2013 2014 2015 2016 2017 to date
Planned Giving Registry Historical Total
1985 to 2017

(IN MILLIONS)
0
20,000,000
40,000,000
60,000,000
80,000,000
100,000,000
120,000,000
140,000,000
160,000,000
180,000,000
200,000,000
$173MM through
October 31
Thank you!
Overview

- Condensed Statement of Net Position
- Condensed Statement of Revenues, Expenses & Changes in Net Position
- Current Fund Projected Revenues & Expenses
- Cash Balances Chart
## Balance Sheet

### Condensed Statement of Net Position

**as of September 30, 2016**

(in thousands)

<table>
<thead>
<tr>
<th></th>
<th>University</th>
<th>Tech Fund</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td>$ 50,747</td>
<td>$ 3,290</td>
<td>$ 54,037</td>
</tr>
<tr>
<td>Noncurrent Assets:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Assets, net</td>
<td>236,666</td>
<td>-</td>
<td>236,666</td>
</tr>
<tr>
<td>Other Noncurrent Assets</td>
<td>68,079</td>
<td>134,797</td>
<td>202,876</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$ 355,492</td>
<td>$ 138,087</td>
<td>$ 493,579</td>
</tr>
<tr>
<td><strong>Deferred Outflows of Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred Pension Amounts</td>
<td>$ 4,643</td>
<td>$ -</td>
<td>$ 4,643</td>
</tr>
<tr>
<td><strong>Total Deferred Outflows of Resources</strong></td>
<td>$ 4,643</td>
<td>$ -</td>
<td>$ 4,643</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>$ 20,952</td>
<td>$ 378</td>
<td>$ 21,330</td>
</tr>
<tr>
<td>Noncurrent Liabilities</td>
<td>151,403</td>
<td>5,100</td>
<td>156,503</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>$ 172,355</td>
<td>$ 5,478</td>
<td>$ 177,833</td>
</tr>
<tr>
<td><strong>Deferred Inflows of Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred Pension Amounts</td>
<td>$ 350</td>
<td>$ -</td>
<td>$ 350</td>
</tr>
<tr>
<td><strong>Total Deferred Inflows of Resources</strong></td>
<td>$ 350</td>
<td>$ -</td>
<td>$ 350</td>
</tr>
<tr>
<td><strong>Net Position</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments in capital assets, net of related debt</td>
<td>$ 155,459</td>
<td>$ -</td>
<td>$ 155,459</td>
</tr>
<tr>
<td>Other net position, restricted and unrestricted</td>
<td>31,971</td>
<td>132,609</td>
<td>164,580</td>
</tr>
<tr>
<td><strong>Total Net Position</strong></td>
<td>$ 187,430</td>
<td>$ 132,609</td>
<td>$ 320,039</td>
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</table>
## Income Statement

Condensed Statement of Revenues, Expenses and Changes In Net Position  
As of September 30, 2016  
(in thousands)

<table>
<thead>
<tr>
<th></th>
<th>FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenues</strong></td>
<td></td>
</tr>
<tr>
<td>Student Tuition and fees</td>
<td>$ 65,460</td>
</tr>
<tr>
<td>Grants and contracts</td>
<td>9,851</td>
</tr>
<tr>
<td>Educational Activities</td>
<td>1,522</td>
</tr>
<tr>
<td>Department Activities</td>
<td>3,328</td>
</tr>
<tr>
<td>Student Residence fees</td>
<td>13,683</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td><strong>$ 93,844</strong></td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Salaries &amp; Wages</td>
<td>$ 29,292</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>9,462</td>
</tr>
<tr>
<td>Student financial support</td>
<td>25,335</td>
</tr>
<tr>
<td>Supplies, Services &amp; other</td>
<td>15,014</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td><strong>$ 79,103</strong></td>
</tr>
<tr>
<td><strong>Non Operating Revenues</strong></td>
<td>$ 7,945</td>
</tr>
<tr>
<td><strong>Other Revenues</strong></td>
<td>$ 835</td>
</tr>
<tr>
<td><strong>Change in Net Position</strong></td>
<td><strong>$ 23,521</strong></td>
</tr>
<tr>
<td><strong>Net Position, Beginning</strong></td>
<td><strong>$ 296,519</strong></td>
</tr>
<tr>
<td><strong>Net Position, End</strong></td>
<td><strong>$ 320,040</strong></td>
</tr>
</tbody>
</table>
## FY2017 Current Funds

### Projected Revenues, Expenses & Change in Net Assets

*(in thousands)*

<table>
<thead>
<tr>
<th></th>
<th>Original Projection</th>
<th>1st Quarter Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td>$293,483</td>
<td>$288,654</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>$(292,490)</td>
<td>$(284,047)</td>
</tr>
<tr>
<td><strong>Change in Net Assets</strong></td>
<td>$993</td>
<td>$4,607</td>
</tr>
</tbody>
</table>

**Note:** Current Fund includes General, Designated, Auxiliary, Retirement and Insurance, and Expendable Restricted Funds.
Cash Balance by Month for Fiscal Years 2015-2017

Formal Session of the Board of Trustees - III. Committee Reports
Questions
IV. CONSENT AGENDA

These are routine matters that generally do not require discussion or debate. Any Board member can remove any consent item from the agenda by request. They will be considered as one resolution.

A. Approval of Minutes
B. Gifts
C. Resignations, Retirements and Off Payroll
IV-A. APPROVAL OF MINUTES

RECOMMENDATION: That the Board of Trustees approves the minutes of the formal session of October 14, 2016, as distributed to the Board.
IV-B. GIFTS

Attached is a fiscal year to date comparative report of gifts to Michigan Technological University and the Michigan Tech Fund.

RECOMMENDATION: That the Board of Trustees acknowledges the gifts to Michigan Technological University.
Michigan Technological University
Michigan Tech Fund
Fundraising Productivity Report
July 1, 2016 through October 31, 2016
Compared to Prior Year

<table>
<thead>
<tr>
<th>Source</th>
<th>FY17 YTD Total</th>
<th>FY16 YTD Total</th>
<th>FY16 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals - Major Gifts (25K and up)</td>
<td>831,826</td>
<td>5,158,000</td>
<td>10,872,520</td>
</tr>
<tr>
<td>Realized Planned Gifts (Unanticipated)</td>
<td>25</td>
<td>-7,085</td>
<td>287,439</td>
</tr>
<tr>
<td>Individuals - non-Major Gifts</td>
<td>545,780</td>
<td>515,166</td>
<td>1,766,674</td>
</tr>
<tr>
<td>Full Value New Planned Gift Commitments</td>
<td>27,573,000</td>
<td>9,877,631</td>
<td>11,821,099</td>
</tr>
<tr>
<td>Annual Fund</td>
<td>317,347</td>
<td>337,839</td>
<td>1,491,595</td>
</tr>
<tr>
<td>Corporate Sponsored Research</td>
<td>3,025,560</td>
<td>460,485</td>
<td>3,025,560</td>
</tr>
<tr>
<td>Corporations</td>
<td>754,049</td>
<td>539,318</td>
<td>1,606,009</td>
</tr>
<tr>
<td>Foundations &amp; Other Organizations</td>
<td>126,388</td>
<td>124,676</td>
<td>325,300</td>
</tr>
<tr>
<td>Gifts-in-Kind</td>
<td>6,347</td>
<td>344,560</td>
<td>2,512,825</td>
</tr>
<tr>
<td>Grand Total</td>
<td><strong>33,180,323</strong></td>
<td><strong>17,350,589</strong></td>
<td><strong>33,709,021</strong></td>
</tr>
</tbody>
</table>

-- A planned gift of $25 million was documented on September 19, 2016 from a donor who has requested to remain anonymous.
-- Except for the Annual Fund, all totals include outright gifts and the full amount of new pledge commitments
-- Annual Fund includes cash from prior year pledges in addition to outright current year gifts and new pledge commitments due current year
-- An individual's gifts given through another source (i.e. family foundation or closely held business) are credited to the individual

11/18/2016  15:11
IV-C. RESIGNATIONS, RETIREMENTS AND OFF PAYROLL

Attached is a report of resignations, retirements and off payroll which have been approved by the President and are included for his convenience in recommending acceptance by the Board.

RECOMMENDATION: That the Board of Trustees accepts the resignations, retirements and confirms the off payroll determinations.
# BOARD OF TRUSTEES OFF-PAYROLL REPORT

**(September 18, 2016 – November 26, 2016)**

## RETIRED

<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggerding, Philip J.</td>
<td>Staff</td>
<td>Geological &amp; Mining Engineering &amp; Sciences</td>
<td>Mine Safety Trainer</td>
<td>10/04/96</td>
<td>11/04/16</td>
</tr>
<tr>
<td>Hilss, Judy A.</td>
<td>Staff</td>
<td>Cognitive &amp; Learning Sciences</td>
<td>Certification Officer</td>
<td>07/01/82</td>
<td>09/28/16</td>
</tr>
</tbody>
</table>

## OFF-PAYROLL

<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amani, Sara</td>
<td>Faculty</td>
<td>Provost and VP for Academic Affairs</td>
<td>Lecturer</td>
<td>08/18/14</td>
<td>10/06/16</td>
</tr>
<tr>
<td>Ahnen, Megan F.</td>
<td>Staff</td>
<td>Facilities Management</td>
<td>Auto Cad Technician</td>
<td>05/23/16</td>
<td>11/19/16</td>
</tr>
<tr>
<td>Barnett, Audrey B.</td>
<td>Staff</td>
<td>Geological &amp; Mining Engineering &amp; Sciences</td>
<td>Research Associate</td>
<td>04/22/13</td>
<td>10/22/16</td>
</tr>
<tr>
<td>Elkowitz, Steven M.</td>
<td>Staff</td>
<td>Dining Services</td>
<td>Catering Manager</td>
<td>05/09/16</td>
<td>10/04/16</td>
</tr>
<tr>
<td>Hagenbuch, Kate A.</td>
<td>Staff</td>
<td>General Athletics</td>
<td>Director, NCAA Compliance, Student-Athlete Services/SWA</td>
<td>10/31/16</td>
<td>10/08/16</td>
</tr>
<tr>
<td>Hendrick, Evan R.</td>
<td>Staff</td>
<td>Information Technology</td>
<td>System Administrator</td>
<td>01/09/09</td>
<td>11/25/16</td>
</tr>
<tr>
<td>Kent, Sandra J.</td>
<td>Staff</td>
<td>Office of Advancement</td>
<td>Office Assistant 5</td>
<td>06/05/06</td>
<td>10/07/16</td>
</tr>
<tr>
<td>Lucchesi, Sarah</td>
<td>Staff</td>
<td>Van Pelt and Opie Library</td>
<td>Associate Director for Education &amp; Research</td>
<td>08/06/12</td>
<td>10/20/16</td>
</tr>
<tr>
<td>Pichette, Brian M.</td>
<td>Staff</td>
<td>Facilities Management</td>
<td>Equipment Operator I</td>
<td>01/04/16</td>
<td>09/19/16</td>
</tr>
<tr>
<td>Servis, Ashley J.</td>
<td>Staff</td>
<td>Van Pelt and Opie Library</td>
<td>Library Assistant 6</td>
<td>06/18/15</td>
<td>10/28/16</td>
</tr>
<tr>
<td>Stander, Anne C.</td>
<td>Faculty</td>
<td>Provost and VP for Academic Affairs</td>
<td>Instructor</td>
<td>08/15/16</td>
<td>10/06/16</td>
</tr>
<tr>
<td>Taber, Todd M.</td>
<td>Staff</td>
<td>Dining Services</td>
<td>Food Service Helper</td>
<td>08/01/16</td>
<td>11/11/16</td>
</tr>
</tbody>
</table>
V. ACTION/DISCUSSION ITEMS

A. Emeritus Rank
B. Honorary Degree
C. 2017-2018 Room and Board and Apartment Rental Rates
V-A. EMERITUS RANK

Recommendation for the granting of faculty emeritus status originates within the retiree’s academic department and proceeds through the respective college and school. Once approved, the recommendation is presented to the Provost, and if successful, to the President of the University for presentation to the Board of Trustees.

RECOMMENDATION: That the Board of Trustees approves the following emeritus appointments:

- Dr. Gopal Jayaraman, Professor Emeritus, Department of Mechanical Engineering-Engineering Mechanics
- Dr. Madhukar Vable, Professor Emeritus, Department of Mechanical Engineering-Engineering Mechanics
- Dr. Carl Vilmann, Professor Emeritus, Department of Mechanical Engineering-Engineering Mechanics
OFFICE MEMO

TO: Michigan Technological University Board of Trustees

FROM: William W. Predebon, Ph.D.
J.S. Endowed Department Chair

DATE: 09/16/2016

SUBJECT: Recommendation for Emeritus Status

The faculty of the Department of the Department of Mechanical Engineering – Engineering Mechanics voted on September 6, 2016 to request that the following recommendation be presented to the Michigan Technological University Board of Control for action to name Dr. Gopal Jayaraman to Professor Emeritus upon his retirement on August 19, 2016.

Dr. Gopal Jayaraman began his employment with Michigan Technological University as a visiting associate professor on September 2, 1980. On March 5, 1982 he was appointed as a visiting professor of biomechanics and on August 28, 1989 he was appointed to the rank of professor with tenure.

During his tenure at Michigan Tech, Dr. Jayaraman has earned several honors including the American Orthopedic Society of Sport Medicine O'Donaghue Award, the Scoliosis Research Society Russell S Hibbs Award and the Arthroscopic Association of North America, Richard O'Connor Research Award.

Dr. Jayaraman has been active in service to the Department having served on a number of department committees including having chaired the Faculty Development Committee. He is active in national and international service organizations including the American Academy of Mechanics, American Society for Engineering Education, American Society of Mechanical Engineers, Biomedical Engineering Society and the Orthopaedic Research Society.

Approved

[Signatures]

Department Chair/School Dean

[Signature]

College Dean

Provost and Vice President for Academic Affairs

President

11/3/2016

3Nov.2016

Nov. 7, 2016

11/9/16

Revised 9/21/16
TO: Michigan Tech Board of Trustees  
DATE: 11/04/2016  
FROM: William W. Predebon,  
J. S. Endowed Department Chair  
SUBJECT: Recommendation for Emeritus Status

The faculty of the Department of Mechanical Engineering – Engineering Mechanics voted on September 6, 2016 to request that the following recommendation be presented to the Michigan Technological University Board of Trustees for action to name Dr. Madhukar Vahle Professor Emeritus upon his retirement on August 1, 2016.

Dr. Vahle began his employment with Michigan Technological University as a tenure track assistant professor on November 19, 1984. On August 27, 1990 he was appointed to the rank of associate professor with tenure.

During his tenure at Michigan Tech, Dr. Vahle has earned several honors including being named to the Michigan Tech Academy of Teaching Excellence (1998), was a finalist for Teacher of the Year in the ME-EM Department (2015), the Distinguished Faculty Member Award from Michigan Association of Governing Boards of State Universities, State of Michigan Legislature (1999), Distinguished Teacher Award, Michigan Technological University (1998), and the most valuable research project award 1994/95 year, Michigan Materials and Processing Institute (1995). He is also a Fellow of Wessex Institute of Great Britain, Wessex Institute of Great Britain and has authored numerous textbooks.

Dr. Vahle has been active in service to the University and the Department having served on a number of committees. University service includes serving on the University Senate, where he sat on numerous committees and chaired the Administrative Policy Committee, he served on the Dean of the College of Science and Arts Evaluation and Reappointment Committee, and was a member of the Academic Quality Improvement Program committee. He served the Department as an Area Director, was a member of the Charter Oversight Committee, and chaired the Committee for Improvement of Teaching in ME-EM.

He is active in national and international service organizations including the International Conference on Advanced Computational Engineering and Experimenting and member of Editorial Board of The International Journal of Boundary Element Methods Communications.

Approved

William W. Predebon  
Department Chair/School Dean  
Nov 15, 2016  
Date

R. L. Smith Building | 1400 Townsend Drive, Houghton, MI 49931-1295  
906.487.2551 | F. 906.487.2822 | mtu.edu/mechanical

Michigan Tech is an EOE which includes protected veterans and individuals with disabilities.
TO: Michigan Tech Board of Trustees
DATE: 11/04/2016
FROM: William W. Predebon, Chair
Department of Mechanical Engineering -
Engineering Mechanics
SUBJECT: Recommendation for Emeritus Status

The faculty of the Department of Mechanical Engineering - Engineering Mechanics voted on September 6, 2016 to request that the following recommendation be presented to the Michigan Technological University Board of Trustees for action to name Dr. Carl Vilmann Professor Emeritus upon his retirement on August 12, 2016.

Dr. Vilmann began his employment with Michigan Technological University as a tenure track assistant professor on August 28, 1979. On August 27, 1984 he was appointed to the rank of associate professor with tenure.

During his tenure at Michigan Tech, Dr. Vilmann has earned several honors including the General Motors TEP Outstanding Distance Learning Award, he was named the ME-EM Teacher of the year twice (2009 and 2010) and was a finalist for Teacher of the Year in the ME-EM Department (2016).

Dr. Vilmann has been active in service to the Department having served on the Curriculum Committee.

He is active in national and international service organizations including member of the American Society for Engineering Education and the American Society of Mechanical Engineers.

Approved

William W. Predebon
Department Chair/School Dean

[Signature]

[Signature]

[Signature]

[Signature]

President

R. L. Smith Building | 1400 Townsend Drive, Houghton, MI 49931-1295
906-487-2551 | 906-487-2822 | mtu.edu/mechanical

Michigan Tech is an EOE which includes protected veterans and individuals with disabilities.
V-B. HONORARY DEGREE

The Administration is recommending the Ms. Paula Wittbrodt be awarded an Honorary Doctorate of Philosophy degree.

Paula Wittbrodt is Vice President for Global Packaging and Global Supplier Relations for the Estee Lauder Companies Inc. Ms. Wittbrodt began her career as a process development engineer with Amway; from there she became a manager of the Consumer Products & Retail Practice division for AT Kearney in New York. Before becoming a Vice President with Estee Lauder Companies, she was Director, New Product Engineering and Development-Asia Pacific for Avon Products in Shanghai, China.

Paula Wittbrodt has a bachelor of science degree in chemical engineering from Michigan Tech and an MBA from Columbia Business School in New York. She has been an active Alumni Volunteer and serves on the Presidential Council of Alumnae.

Ms. Wittbrodt will be the Spring Commencement speaker.

RECOMMENDATION: That the Board of Trustees approves the awarding of an Honorary Doctorate of Philosophy degree to Ms. Paula Wittbrodt.
Michigan Tech Housing & Residential Life, Facilities Management, and Dinning Service are committed to providing exceptional facilities and an aesthetically pleasing on-campus community that values academic success and friendship. Our on-campus community includes high quality and diversified dining services and housing alternatives that offer opportunities for learning and personal growth in a safe and comfortable environment.

The recommended schedule of residence hall room and board rates, Hillside Place Apartments rates and Daniell Heights Apartments rates for 2017-2018 are included herein.

Housing & Residential Life, Facilities Management and Dining Services are recommending approval of these rates, with the confidence our staff will continue to provide the type of innovative management and student development that has permitted Michigan Tech to attract, retain and support a world-class student population.

RECOMMENDATION: That the Board of Trustees approves the recommended residence hall housing and meal, as well as apartment rental rates for 2017-2018.
Douglass Houghton Hall, McNair Hall, Wadsworth Hall
Occancy Dates: August 26, 2017 - December 23, 2017 and January 13, 2018 - May 5, 2018

<table>
<thead>
<tr>
<th>Residence Hall Room &amp; Meal Rate</th>
<th>2016-2017 Room &amp; Gold Meal Plan</th>
<th>Proposed Increase</th>
<th>2017-2018 Room &amp; Gold Meal Plan</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglass Houghton Hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular Occupancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Occupancy (Double and Quad)</td>
<td>$10,075</td>
<td>$186</td>
<td>$10,261</td>
<td>1.85%</td>
</tr>
<tr>
<td>Single Occupancy</td>
<td>$11,718</td>
<td>$186</td>
<td>$11,904</td>
<td>1.59%</td>
</tr>
<tr>
<td>Wadsworth Hall and McNair Hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Standard Occupancy (Double)</td>
<td>$10,261</td>
<td>$186</td>
<td>$10,447</td>
<td>1.81%</td>
</tr>
<tr>
<td>Single Occupancy</td>
<td>$11,718</td>
<td>$186</td>
<td>$11,904</td>
<td>1.59%</td>
</tr>
<tr>
<td>Triple/Quad Occupancy</td>
<td>$10,075</td>
<td>$186</td>
<td>$10,261</td>
<td>1.85%</td>
</tr>
<tr>
<td>Temporary/Converted Occupancy</td>
<td>$8,556</td>
<td>$155</td>
<td>$8,711</td>
<td>1.81%</td>
</tr>
<tr>
<td>Wadsworth Hall w/ private bath</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Occupancy (Double)</td>
<td>$11,005</td>
<td>$186</td>
<td>$11,191</td>
<td>1.69%</td>
</tr>
<tr>
<td>Single Occupancy</td>
<td>$12,803</td>
<td>$186</td>
<td>$12,989</td>
<td>1.45%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residence Hall Room &amp; Meal Rate</th>
<th>2016-2017 Room &amp; 50 Block</th>
<th>Proposed Increase</th>
<th>2017-2018 Room &amp; 50 Block</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced Occupancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quad to 2</td>
<td>$10,571</td>
<td>$186</td>
<td>$10,757</td>
<td>1.76%</td>
</tr>
<tr>
<td>Quad to 3/Triple to 2</td>
<td>$10,199</td>
<td>$186</td>
<td>$10,385</td>
<td>1.82%</td>
</tr>
<tr>
<td>Triple to 1</td>
<td>$11,718</td>
<td>$186</td>
<td>$11,904</td>
<td>1.59%</td>
</tr>
<tr>
<td>Wads Quad to 2</td>
<td>$10,664</td>
<td>$186</td>
<td>$10,850</td>
<td>1.74%</td>
</tr>
<tr>
<td>Wads Quad to 3</td>
<td>$10,478</td>
<td>$186</td>
<td>$10,664</td>
<td>1.78%</td>
</tr>
<tr>
<td>Triple Suite to 2</td>
<td>$11,408</td>
<td>$186</td>
<td>$11,594</td>
<td>1.63%</td>
</tr>
<tr>
<td>DHH Quad Suite to 3</td>
<td>$11,408</td>
<td>$186</td>
<td>$11,594</td>
<td>1.63%</td>
</tr>
</tbody>
</table>

Meal Plans are Unlimited Access with Dining Dollars
Platinum Meal Plan ($300 Dining Dollars per semester) option, rates as recommended above, plus $155.00
Gold Meal Plan ($150 Dining Dollars per semester) costs are shown above in Room and Board Rates
Silver Meal Plan ($100 Dining Dollars) option, rates as recommended above, less $93.00
* Rate reported to US Department of Education Integrated Post-secondary Education Data System

Hillside Place Residence Hall
Occancy Dates: August 26, 2017 - December 23, 2017 and January 13, 2018 - May 5, 2018

<table>
<thead>
<tr>
<th>Single Bedroom and Meal Rate</th>
<th>2016-2017 Room &amp; 50 Block</th>
<th>Proposed Increase</th>
<th>2017-2018 Room &amp; 50 Block</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Bedroom in Shared Apartment</td>
<td>$9,558</td>
<td>$186</td>
<td>$9,744</td>
<td>1.95%</td>
</tr>
<tr>
<td>Single Bedroom Apartment</td>
<td>$10,228</td>
<td>$186</td>
<td>$10,414</td>
<td>1.82%</td>
</tr>
</tbody>
</table>

50 Meal Block per semester - meals expire at the end of each semester
75 Meal Block per semester - meals expire at the end of each semester, rate as recommended above, plus $324
150 Meal Block per semester - meals expire at the end of each semester, rate as recommended above, plus $1300
Traditional residence hall meal plan is also available
Block meal plans are only available for the Hillside Place

Daniell Heights Apartments
Lease Agreement Dates: July 1, 2017 to June 30, 2018 or August 15, 2017 to June 30, 2018

<table>
<thead>
<tr>
<th>Monthly Rental Rate</th>
<th>2016-2017 $ Increase Proposed</th>
<th>2017-2018 % Increase Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Rates PRE-renovation (rates are per apartment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Bedroom</td>
<td>$660</td>
<td>$5</td>
</tr>
<tr>
<td>Two Bedroom</td>
<td>$745</td>
<td>$10</td>
</tr>
<tr>
<td>Three Bedroom</td>
<td>$955</td>
<td>$15</td>
</tr>
<tr>
<td>Student Rates POST-renovation (rates are per apartment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Bedroom</td>
<td>$700</td>
<td>$5</td>
</tr>
<tr>
<td>Two Bedroom</td>
<td>$950</td>
<td>$10</td>
</tr>
<tr>
<td>Three Bedroom</td>
<td>$1,200</td>
<td>$15</td>
</tr>
<tr>
<td>Staff and Faculty Rates (rates are per apartment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Bedroom</td>
<td>$850</td>
<td>$10</td>
</tr>
<tr>
<td>Two Bedroom</td>
<td>$1,000</td>
<td>$15</td>
</tr>
<tr>
<td>Three Bedroom</td>
<td>$1,300</td>
<td>$20</td>
</tr>
</tbody>
</table>
VI. REPORTS

A. University Senate Report – Dr. Martin Thompson, President
B. Undergraduate Student Government Report –
    Mr. Samuel Casey, President
C. Graduate Student Government Report – Mr. William Lytle, President
University Senate Report

Presented to the Board of Trustees

December 16, 2016

Marty Thompson, President
University Senate
Results of University Senate Evaluation

- Senate Effectiveness
  - Staff average 4.0 – 4.25; Faculty average ~4.0 (out of 5)

- Senate oversees academic programs
  - Program development
  - Ensuring quality, Assessment requirements are met

- Staff and Faculty diverge in some areas of concern...
  - Staff more worried about pay and healthcare issues.
  - Faculty are concerned about the (lack of) shared governance

- ...and converge on others
  - Use of University Resources*
  - Both faculty and staff sought priority in this area
1. Parental Leave Policy/Senate Proposal

2. Summary of Results of Benefits Survey of Employees
   a. ~70% of employees are [very] concerned about the progressive and persistent erosion of benefits
   b. ~55% of employees are [very] concerned about salaries
   c. Employees do not hold a benefits vs. salary mindset
   d. ~55% of employees say they have delayed healthcare due to costs
   e. ~50% of employees have considered/actively sought positions elsewhere due to dissatisfaction with salary and benefits

3. Analysis of the past 10+ years of fringe benefits
Actions

1. Revised processes for evaluation, reappointment and other features associated with reviewing department chairs and school deans (Proposals 1-17, 2-17, 3-17, 4-17 and 5-17) Administrative Policy Committee

2. Established Assessment Liaisons to Units Participating in the Assessment Process (Proposal 29-16) General Education and Assessment Committee
Projects in Development

3. Dual Career Program
   *Professional Staff Policy Committee*

4. Research Computing Facilities
   *IT Committee, Research Policy Committee*

5. Journal and textbook costs
   *Research Policy Committee, Library*

6. SARA (National Council for State Authorization Reciprocity Agreements) for online/distance education programs. *Academic and Instructional Policy Committee, Center for Teaching and Learning*
Thanks to Judi Smigowski
Assistant to the University Senate of Michigan Tech
2007-2016
USG Update

December 16, 2016
Samuel Casey, USG President
Agenda

- Campus Improvement Initiative
- Tuition Discussion
- Strategic Goal Feedback
- Board of Trustees Representation
- Student Activity Fee Research
Campus Improvement Initiative

- Goal: Empower students to improve campus
- Pilot project
  - Now accepting submissions until January 9th
- Will pursue expansion if pilot is successful
- Examples of student led projects:
  - Maker’s Space
  - MUB 106 Renovation
  - MUB Basement Renovation
Tuition Discussion Requests

- Availability of tuition data
- Written explanation of tuition structure
- Strategic plan outlining end goals
- Solution for AP & dual-enrollment credits
- Student representative to Audit and Finance Committee
Strategic Goal Feedback

Student recommendations:

1. Link all strategic goals and plans in a central location
   a. See Stanford Engineering’s example
   b. This will create a cohesive story and improve understanding

2. Create an implementation plan for Strategic Plan/Portrait 2045
   a. See University of Michigan’s example (p. 71)
   b. Shows that goals are more than just words
   c. Creates transparency
   d. Lays out specific actions

3. Address specific goals with Portrait 2045
   a. Examples provided
Recommended Additions to Portrait 2045

● Environmental sustainability
  ○ Utilize X% renewable energy on campus
  ○ Send X% less material to landfill
  ○ Utilize recycling in all buildings on campus
  ○ Reduce emissions on campus by X%

● Tuition Structure/Cost of Attendance
  ○ Use innovative methods to make a University education more affordable for students

● Diversity (See Stanford's example)
  ○ Increase underrepresented student retention by X%
  ○ Increase the enrollment of underrepresented students by X%
  ○ Or as recommended by Diversity Council
Recommended Additions to Portrait 2045

- **Infrastructure**
  - Have an on-campus housing capacity of X beds
  - Increase public transportation capacity by X%
  - Add X on-campus parking spots

- **Student involvement in the University**
  - Promote and expand shared governance of the University with students

- **Educate for the future** (See Stanford’s)
  - Develop innovative teaching methods for the future
  - Cultivate world class instructor development

- **Student Life**
  - This is where we can really paint a picture (See Georgetown’s example)

- **Athletics**
  - Recruit top athletic talent to be nationally competitive
Student Association of Michigan

• SAM is pursuing initiative to change state constitution

• Would require voting student representatives to boards across the state

• Campaign has been initiated

• The goal is to introduce a bill in the spring
Statistics

• 11 states have no student representation

• 78% of states have boards with student representation

• 61% of states have boards with student vote

• Michigan has no boards with student representation

*Includes public higher education boards (system, coordinating, & institution) in states and D.C. (Source: Association of Governing Boards)
Formal Session of the Board of Trustees - VI. Reports

Higher Education Boards in the State
- Green: Majority of boards have voting student members
- Red: No student representation to boards
- Pale yellow: Majority of boards have non-voting student members
- Blue: Some student representation
Rationale

- Students are a customer of the University
  - We are a large shareholder
  - We want to be equal partners
  - We want to be empowered to improve our University
- There are few options after starting
  - Transferring after the first year leads to significant setbacks
  - We would rather improve Tech than leave it
- This is an opportunity to strengthen the team
  - Current BOT members have strong qualifications and excellent experience
  - Students offer alternative perspective
- Michigan Tech could be a leader in the state
Resolution

USG Resolution 2016-2017 #1

“The Undergraduate Student Government fully supports amending Section 390.352 to add voting student members to the Board of Trustees.”
Student Activity Fee

- Research on the SAF is being performed
- USG plans to request an increase
  - Portion to go to student organizations
    - Would account for inflation and increase in organizations
  - Portion for a new initiative
- Recommend performing reassessment every 3 years
  - ETF uses a similar cycle
  - This would help account for inflation and increase in organizations
  - Would prevent long spans without an increase
SAF Increase Based on Inflation

<table>
<thead>
<tr>
<th>Year</th>
<th>SAF</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$60</td>
<td>229.6</td>
</tr>
<tr>
<td>2016</td>
<td>$62.65*</td>
<td>239.7**</td>
</tr>
<tr>
<td>2017</td>
<td>$63***</td>
<td>-</td>
</tr>
</tbody>
</table>

*Scaled from 2012 based on CPI  
**Estimated based on January-October  
***Potential increase for 2017-18 school year
Other Initiatives

• Campus Improvement Initiative
• Student Union
• Waterfront Reclamation
• Emergency Loan Program
• Other
Questions
GSG Initiatives

Increased program attendance
- Social committee has requested to double its budget

Student Financial Relief
- Emergency student loan
- Auxiliary service areas
  - Alternative textbook strategies
  - Compensation for Dining Service Employees
Graduate Student Concerns

- Housing
  - Private Developers
- Transportation
  - Graduate School, LWV
- Sustainability
  - Student Sustainability Council
Graduate Student Concerns

Proposed Amendment to GSG Bylaws:

The Graduate Student Government is apolitical- meaning that we will not take a political stance. GSG and the E-board members welcome individual discussions and anonymous feedback from graduate students on any topic that concerns them. Information on events that take place on campus, with a political bias, may be distributed through GSG's network. However GSG will not host or sponsor such events. GSG will represent every graduate student regardless of their affiliations. (Reference University Policies).
Residential Project

Douglas Houghton Hall

Goals
• Serve communication needs of community
• Build ESL Program
• Diversity and Inclusion
• Optimize DHH

Partners
• Pavlis Honors College
• ESL
• Alumni Relations
• Administration
• USG and GSG

Activities
• Learning communities
• Language, research and service
• Cultural events
• Culinary representation

Outputs
• Improved student experience
• Affinity groups
• Professional, academic and social development
• Engaged Alumni
Residential Project

Global Scholars Community

Pilot program:

- Offering 14 students housing
- In MTU owned residence
- Undergraduate and Graduate
- International and Domestic
- Language, culture, research and service opportunities

- As soon as Fall 2017
The winner of MTU’s 3MT Competition:

Divya Kamath

Will advance to the regional competition in Indiana.

- Predicting the fate of Organic Compounds in water treatment by Aqueous Phase Advanced Oxidation Processes
Predicting the fate of Organic Compounds in water treatment by Aqueous Phase Advanced Oxidation Processes


Image source: http://alcerbizkaia.blogspot.com/2013/09/hipercalcemia.html

VII. INFORMATIONAL ITEMS

A. Analysis of Investments
B. University Issued Bond Balances
C. Research and Sponsored Programs Report
D. Advancement and Alumni Relations Report
E. Recent Media Coverage
F. Employee Safety Statistics
VII-A. ANALYSIS OF INVESTMENTS

Attached are analyses of investments as of June 30, 2016 to September 30, 2016.
# MICHIGAN TECH UNIVERSITY INVESTMENT PORTFOLIO

**JUNE 30, 2016 THROUGH SEPTEMBER 30, 2016**

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>Market Value 6/30/2016</th>
<th>Market Value 9/30/2016</th>
<th>Change</th>
<th>Fiscal-Year Investment Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Market Fund</td>
<td>$234,115</td>
<td>$347,408</td>
<td>$113,293</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Equity Funds:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware Value Fund</td>
<td>1,480,858</td>
<td>1,579,997</td>
<td>99,139</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Vanguard Extended Market Index Fund</td>
<td>2,278,142</td>
<td>2,435,364</td>
<td>157,222</td>
<td>7.3%</td>
</tr>
<tr>
<td>Vanguard 500 Index Fund</td>
<td>8,575,705</td>
<td>8,865,754</td>
<td>290,049</td>
<td>3.8%</td>
</tr>
<tr>
<td>Total Equity Funds</td>
<td>12,334,705</td>
<td>12,881,115</td>
<td>546,410</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed Income Funds:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lord Abbett Bond Debenture Fund</td>
<td>7,527,635</td>
<td>7,792,969</td>
<td>265,334</td>
<td>4.7%</td>
</tr>
<tr>
<td>Lord Abbett Short Duration Income Fund</td>
<td>7,523,781</td>
<td>7,523,781</td>
<td>-</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total Fixed Income Funds</td>
<td>15,051,416</td>
<td>15,316,750</td>
<td>265,334</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$27,620,236</td>
<td>$28,545,273</td>
<td>$925,037</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

## Current Asset Allocation

- **Money Market, 1.2%**
- **Fixed Income, 53.7%**
- **Equities, 45.1%**
VII-B. UNIVERSITY ISSUED BOND BALANCES

Attached is an analysis of net revenues, debt retirement, and trustee reserve funds for University Bonded Operations for the period ended September 30, 2016.
<table>
<thead>
<tr>
<th>Bonds Outstanding</th>
<th>Long-Term Outstanding Amount</th>
<th>Current Outstanding Amount</th>
<th>Total Outstanding</th>
<th>Original Issue Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 2008 Bond Issue (maturity 2038)</td>
<td>$ 5,090,000</td>
<td>-</td>
<td>$ 5,090,000</td>
<td>$ 15,880,000</td>
</tr>
<tr>
<td>Purchase of UPPCO Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial Funding of KRC Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUB Ballroom Renovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Series 2008 Bond Issue</strong></td>
<td><strong>15,180,000</strong></td>
<td><strong>420,000</strong></td>
<td><strong>$ 15,600,000</strong></td>
<td><strong>18,235,000</strong></td>
</tr>
<tr>
<td>Series 2009A Bond Issue (maturity 2039)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Student Apartment Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial Funding of KRC Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Series 2009 Bond Issue</strong></td>
<td><strong>8,120,000</strong></td>
<td><strong>220,000</strong></td>
<td><strong>$ 8,340,000</strong></td>
<td><strong>10,975,000</strong></td>
</tr>
<tr>
<td>Series 2010A Bond Issue (maturity 2040)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great Lakes Research Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.E. Seaman Mineral Museum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRC Building Purchase (Blizzard Building)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Safety Improvements on Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Series 2010 Bond Issue</strong></td>
<td><strong>27,660,000</strong></td>
<td><strong>1,255,000</strong></td>
<td><strong>$ 28,915,000</strong></td>
<td><strong>33,070,000</strong></td>
</tr>
<tr>
<td>Series 2012A Bond Issue (maturity 2034)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refunding of 2003 &amp; 2004 Fixed Rate Bond Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDC Ice Plant and Partial Roof of SDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Series 2012 Bond Issue</strong></td>
<td><strong>12,025,000</strong></td>
<td><strong>765,000</strong></td>
<td><strong>$ 12,790,000</strong></td>
<td><strong>14,265,000</strong></td>
</tr>
<tr>
<td>Series 2013A Bond Issue (maturity 2036)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refunding 2006 Bond Issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refunding partial 2008 Bond Issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Series 2013 Bond Issue</strong></td>
<td><strong>23,435,000</strong></td>
<td><strong>435,000</strong></td>
<td><strong>$ 23,870,000</strong></td>
<td><strong>24,295,000</strong></td>
</tr>
<tr>
<td>Series 2015A Bond Issue (maturity 2046)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daniell Heights Renovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Dining Renovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Storage Tank Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Storage Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry Labs Renovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT and Safety Systems Upgrades</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNair Hall Bathrooms Renovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Series 2015 Bond Issue</strong></td>
<td><strong>$ 91,510,000</strong></td>
<td><strong>3,095,000</strong></td>
<td><strong>$ 94,605,000</strong></td>
<td><strong>$ 116,720,000</strong></td>
</tr>
</tbody>
</table>

**Total - All Bond Issues**

$ 91,510,000 $ 3,095,000 $ 94,605,000 $ 116,720,000
VII-C. RESEARCH AND SPONSORED PROGRAMS REPORT

A report of contracts and grants is attached hereto.

This is for the Board's information.
### Sponsored Awards
**Fiscal Year 2017**
1st Quarter
**Ended September 30, 2016**
**TOTAL:** $17,407,919

#### Pre-Proposals Submitted
*(excluded from Proposals Submitted figures below)*

- **FYTD 2016:** 13
- **FYTD 2017:** 8

#### FY '17  FY '16  FY '17  FY '16  FY '17  FY '16 Variance Variance
Sponsor  as of 09/30  as of 09/30  as of 09/30  as of 09/30  as of 09/30  as of 09/30 $ %

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>FY '17 as of 09/30</th>
<th>FY '16 as of 09/30</th>
<th>FY '17 as of 09/30</th>
<th>FY '16 as of 09/30</th>
<th>FY '17 as of 09/30</th>
<th>FY '16 as of 09/30</th>
<th>Variance</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA</td>
<td>13</td>
<td>2</td>
<td>14</td>
<td>4</td>
<td>1,083,828</td>
<td>339,117</td>
<td>744,711</td>
<td>219.6%</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>33</td>
<td>43</td>
<td>23</td>
<td>31</td>
<td>4,341,502</td>
<td>4,121,183</td>
<td>220,319</td>
<td>5.3%</td>
</tr>
<tr>
<td>US Department of Agriculture</td>
<td>35</td>
<td>25</td>
<td>22</td>
<td>10</td>
<td>1,996,085</td>
<td>989,427</td>
<td>1,006,658</td>
<td>101.7%</td>
</tr>
<tr>
<td>US Department of Defense</td>
<td>25</td>
<td>17</td>
<td>27</td>
<td>17</td>
<td>2,961,704</td>
<td>2,657,682</td>
<td>304,022</td>
<td>11.4%</td>
</tr>
<tr>
<td>US Department of Education</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>59,720</td>
<td>92,155</td>
<td>-32,435</td>
<td>-35.2%</td>
</tr>
<tr>
<td>US Department of Energy</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>9</td>
<td>1,314,156</td>
<td>540,689</td>
<td>773,467</td>
<td>143.1%</td>
</tr>
<tr>
<td>US Department of HHS</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>1,168,077</td>
<td>1,015,049</td>
<td>153,028</td>
<td>15.1%</td>
</tr>
<tr>
<td>US Department of Transportation</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>929,629</td>
<td>273,535</td>
<td>656,094</td>
<td>239.9%</td>
</tr>
<tr>
<td>Other Federal Agencies*</td>
<td>12</td>
<td>20</td>
<td>10</td>
<td>8</td>
<td>961,216</td>
<td>552,301</td>
<td>408,915</td>
<td>74.0%</td>
</tr>
<tr>
<td>Federal Agency Total</td>
<td>131</td>
<td>127</td>
<td>115</td>
<td>88</td>
<td>14,815,917</td>
<td>10,581,138</td>
<td>4,234,779</td>
<td>40.0%</td>
</tr>
<tr>
<td>State of Michigan</td>
<td>12</td>
<td>11</td>
<td>6</td>
<td>3</td>
<td>441,099</td>
<td>459,673</td>
<td>-18,574</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Industrial</td>
<td>66</td>
<td>68</td>
<td>41</td>
<td>50</td>
<td>488,219</td>
<td>1,454,598</td>
<td>-966,379</td>
<td>-66.4%</td>
</tr>
<tr>
<td>Foreign</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>585,296</td>
<td>184,516</td>
<td>400,780</td>
<td>217.2%</td>
</tr>
<tr>
<td>All Other Sponsors</td>
<td>21</td>
<td>15</td>
<td>16</td>
<td>7</td>
<td>316,761</td>
<td>189,152</td>
<td>127,609</td>
<td>67.5%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>234</td>
<td>228</td>
<td>183</td>
<td>153</td>
<td>16,647,292</td>
<td>12,869,077</td>
<td>3,778,215</td>
<td>29.4%</td>
</tr>
<tr>
<td><strong>Gifts</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>76</td>
<td>77</td>
<td>758,417</td>
<td>637,343</td>
<td>121,074</td>
<td>19.0%</td>
</tr>
<tr>
<td><strong>Crowd Funding</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td>7</td>
<td>2,210</td>
<td>6,378</td>
<td>-4,168</td>
<td>-65.4%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>234</td>
<td>228</td>
<td>259</td>
<td>237</td>
<td>17,407,919</td>
<td>13,512,798</td>
<td>3,895,121</td>
<td>28.8%</td>
</tr>
</tbody>
</table>


**Gifts represent non-contractual funding from corporations, foundations, associations and societies in support of academic programs, scholarships/fellowships, student design & enterprise, research, youth programs and special programs.*
### SPO & IIE Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Administration</th>
<th>College of Engineering</th>
<th>College of Sciences &amp; Arts</th>
<th>Great Lakes Research Center</th>
<th>Keweenaw Research Center</th>
<th>Michigan Tech Research Institute</th>
<th>Pavlis Honors College</th>
<th>School of Business &amp; Economics</th>
<th>School of Forest Resources &amp; Env Science</th>
<th>School of Technology</th>
<th>Totals</th>
<th>Fiscal Comparison</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals Submitted</td>
<td>1</td>
<td>114</td>
<td>24</td>
<td>-</td>
<td>19</td>
<td>28</td>
<td>-</td>
<td>1</td>
<td>47</td>
<td>-</td>
<td>234</td>
<td>228</td>
<td>2.6%</td>
</tr>
<tr>
<td>Awards Received</td>
<td>50</td>
<td>94</td>
<td>28</td>
<td>2</td>
<td>14</td>
<td>20</td>
<td>11</td>
<td>2</td>
<td>35</td>
<td>3</td>
<td>259</td>
<td>237</td>
<td>9.3%</td>
</tr>
<tr>
<td>Federal Pass-Through</td>
<td>59,720</td>
<td>1,245,174</td>
<td>488,169</td>
<td>-</td>
<td>505,744</td>
<td>3,675</td>
<td>-</td>
<td>-</td>
<td>99,500</td>
<td>5,000</td>
<td>758,417</td>
<td>637,343</td>
<td>19.0%</td>
</tr>
<tr>
<td>Foreign</td>
<td>-</td>
<td>349,451</td>
<td>135,845</td>
<td>-</td>
<td>100,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>585,296</td>
<td>184,516</td>
<td>217.2%</td>
</tr>
<tr>
<td>Gifts</td>
<td>435,167</td>
<td>141,000</td>
<td>45,000</td>
<td>2,250</td>
<td>-</td>
<td>-</td>
<td>99,500</td>
<td>5,000</td>
<td>30,500</td>
<td>-</td>
<td>500</td>
<td>670</td>
<td>13.4%</td>
</tr>
<tr>
<td>Crowd Funding</td>
<td>555</td>
<td>-</td>
<td>1,655</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,210</td>
<td>6,378</td>
<td>-65.4%</td>
</tr>
<tr>
<td>Industry</td>
<td>-</td>
<td>352,243</td>
<td>-</td>
<td>93,140</td>
<td>5,246</td>
<td>17,500</td>
<td>20,090</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>488,219</td>
<td>1,454,598</td>
<td>-66.4%</td>
</tr>
<tr>
<td>Other</td>
<td>7,000</td>
<td>93,500</td>
<td>8,000</td>
<td>-</td>
<td>52,173</td>
<td>15,000</td>
<td>141,088</td>
<td>-</td>
<td>-</td>
<td>316,761</td>
<td>189,152</td>
<td>13.5%</td>
<td>67.5%</td>
</tr>
<tr>
<td>State of Mi</td>
<td>60,190</td>
<td>380,900</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>441,099</td>
<td>459,673</td>
<td>-4.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>637,626</strong></td>
<td><strong>6,836,034</strong></td>
<td><strong>4,155,027</strong></td>
<td><strong>2,250</strong></td>
<td><strong>1,330,125</strong></td>
<td><strong>1,595,998</strong></td>
<td><strong>92,085</strong></td>
<td><strong>40,000</strong></td>
<td><strong>1,565,526</strong></td>
<td><strong>13,512,798</strong></td>
<td><strong>17,407,919</strong></td>
<td><strong>13,512,798</strong></td>
<td><strong>28.8%</strong></td>
</tr>
</tbody>
</table>

### Percent Change

<table>
<thead>
<tr>
<th>Metric</th>
<th>Administration</th>
<th>College of Engineering</th>
<th>College of Sciences &amp; Arts</th>
<th>Great Lakes Research Center</th>
<th>Keweenaw Research Center</th>
<th>Michigan Tech Research Institute</th>
<th>Pavlis Honors College</th>
<th>School of Business &amp; Economics</th>
<th>School of Forest Resources &amp; Env Science</th>
<th>School of Technology</th>
<th>Totals</th>
<th>Fiscal Comparison</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosures Submitted</td>
<td>-</td>
<td>80.00%</td>
<td>-</td>
<td>-</td>
<td>20.00%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>25.0%</td>
</tr>
<tr>
<td>Non-disclosure Agreements</td>
<td>1</td>
<td>19</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>27</td>
<td>32</td>
<td>0.0%</td>
<td>-15.6%</td>
</tr>
<tr>
<td>Patents Filed or Issued</td>
<td>-</td>
<td>100.00%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>0.0%</td>
<td>-15.6%</td>
</tr>
<tr>
<td>License Agreements</td>
<td>-</td>
<td>100.00%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>25.0%</td>
<td>-25.0%</td>
</tr>
<tr>
<td>Gross Royalties</td>
<td>-</td>
<td>53.9%</td>
<td>30.7%</td>
<td>7.69%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7.69%</td>
<td>143,342</td>
<td>95,481</td>
<td>50.1%</td>
<td>-25.0%</td>
</tr>
</tbody>
</table>

1 Combined Metrics from both the Sponsored Programs Office (SPO) and Innovation & Industry Engagement (IIE)
2 Percentages reflect the proportional contribution from each Division (calculated by dividing the sum of the fractional contributions of all inventors for each unit by the total number of inventors).
<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>Proposals Submitted</th>
<th>Awards Received</th>
<th>Awards Received ($)</th>
<th>Variance</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY '17</td>
<td>FY '16</td>
<td>FY '17</td>
<td>FY '16</td>
<td>FY '17</td>
</tr>
<tr>
<td>Automotive</td>
<td>30</td>
<td>27</td>
<td>33</td>
<td>29</td>
<td>558,302</td>
</tr>
<tr>
<td>Business &amp; Economics</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>286,651</td>
</tr>
<tr>
<td>Chemical</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>15</td>
<td>54,461</td>
</tr>
<tr>
<td>Civil</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>147,099</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>7</td>
<td>12</td>
<td>10</td>
<td>19</td>
<td>123,607</td>
</tr>
<tr>
<td>Defense &amp; Space</td>
<td>11</td>
<td>7</td>
<td>13</td>
<td>5</td>
<td>606,407</td>
</tr>
<tr>
<td>Energy</td>
<td>7</td>
<td>2</td>
<td>12</td>
<td>15</td>
<td>82,135</td>
</tr>
<tr>
<td>Environmental</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>25,855</td>
</tr>
<tr>
<td>Health</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>63,300</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>80,335</td>
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<tr>
<td>IT Services</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>91,630</td>
</tr>
<tr>
<td>Mining &amp; Metals</td>
<td>5</td>
<td>7</td>
<td>15</td>
<td>17</td>
<td>170,675</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>18,800</td>
</tr>
<tr>
<td>Technology</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>66,288</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>89</strong></td>
<td><strong>80</strong></td>
<td><strong>126</strong></td>
<td><strong>133</strong></td>
<td><strong>2,375,545</strong></td>
</tr>
</tbody>
</table>

*Gifts represent non-contractual funding from corporations, foundations, associations and societies in support of academic programs, scholarships/fellowships, student design & enterprise, research, youth programs and special programs.

**Gift numbers include Industry gifts ONLY, not others including Association or Society gifts.
Michigan Technological University  
Total Research Expenditures by College/School/Division  
Fiscal Year 2017 & 2016  
As of September 30, 2016 and September 30, 2015

<table>
<thead>
<tr>
<th>College/School/Division</th>
<th>FY2017</th>
<th>FY2016</th>
<th>Variance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration*</td>
<td>1,269,691</td>
<td>2,285,243</td>
<td>(1,015,552)</td>
<td>-44.4%</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>5,103,130</td>
<td>4,679,646</td>
<td>423,484</td>
<td>9.0%</td>
</tr>
<tr>
<td>College of Science &amp; Arts</td>
<td>3,133,304</td>
<td>2,762,858</td>
<td>370,446</td>
<td>13.4%</td>
</tr>
<tr>
<td>Great Lakes Research Center</td>
<td>24,541</td>
<td>N/A</td>
<td>24,541</td>
<td>N/A</td>
</tr>
<tr>
<td>Pavlis Honors College</td>
<td>46,513</td>
<td>49,352</td>
<td>(2,839)</td>
<td>-5.8%</td>
</tr>
<tr>
<td>Keweenaw Research Center (KRC)</td>
<td>1,362,642</td>
<td>1,392,772</td>
<td>(30,130)</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Michigan Tech Research Institute (MTRI)</td>
<td>1,882,565</td>
<td>1,956,154</td>
<td>(73,589)</td>
<td>-3.8%</td>
</tr>
<tr>
<td>School of Business &amp; Economics</td>
<td>245,940</td>
<td>173,151</td>
<td>72,789</td>
<td>42.0%</td>
</tr>
<tr>
<td>School of Forest Resources &amp; Environmental Science</td>
<td>1,259,145</td>
<td>956,705</td>
<td>302,440</td>
<td>31.6%</td>
</tr>
<tr>
<td>School of Technology</td>
<td>133,658</td>
<td>132,988</td>
<td>670</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14,461,129</strong></td>
<td><strong>14,388,869</strong></td>
<td><strong>72,260</strong></td>
<td><strong>0.5%</strong></td>
</tr>
</tbody>
</table>

*Includes the Vice Presidents, Provost, CIO, Exec Director Financial Services & Operations and others who report to a VP, Provost or the President. Except for the research institutes that report to the VPR.
VII-D. ADVANCEMENT AND ALUMNI RELATIONS REPORT

Attached is a report from Dr. Les Cook, Vice President for Student Affairs and Advancement, on the university’s advancement and alumni relations activities.

This is for the Board’s information.
ADVANCEMENT AND ALUMNI ENGAGEMENT
BOARD OF TRUSTEES REPORT
December 2016

ADVANCEMENT

A total of $33.2 million was raised for Michigan Tech from July 1 through October 31—95% of the fundraising goal of $35.0 million for FY 2017.

Major/Planned Giving raised $28.6 million from July 1 through October 31—163% of its $17.5 million goal for FY 2017.

- Includes $25 million documented by a planned gift donor who wants to remain anonymous
- Remaining pending gift asks for this category total $44.7 million as of October 31, 2016

The Planned Giving Registry totals $172.5 million as of October 31, 2016.

- $114.3 million (66%) is for endowments
- $152.5 million (88%) is revocable
- $23.8 million is unrestricted/undesignated
- $1.4 million realized in FY to date; actuarial expectancy of $67.8 million for next 15 years
- $1.0 million pending realization from the estate of Thomas Shaffner

Hosted a record number of participants October 5-8 on Mackinac Island for the annual estate planning seminar for select alumni and friends.

Key alumni leaders were on campus October 24-27 to lead 14 Floors activities centered around innovation and entrepreneurship. Events included panel discussions, mentoring sessions, and business plan pitches.

The four-part Estate Planning Series co-hosted with the Benefits Office in October and November had over 84 attendees, requests for more sessions, and an estate gift intention from a staff member.

A significantly enhanced and personalized endowed scholarship impact report was mailed to over 600 donors in November.

ALUMNI ENGAGEMENT

Huskies@Work Corporate Chapter Program

- Collaboration with Industry Partnerships, Career Services, Pavlis Honors College and Alumni Engagement
- 13 companies set to pilot: General Motors, Ford, IBM, Dow Chemical (incl former Dow Corning), Fiat Chrysler Automobiles (FCA), Caterpillar, 3M, Consumers Energy/CMS, Cummins, Kimberly-Clark, DTE Energy, Kohler and Continental
- Program goals include:
  o increasing alumni and corporate engagement
  o additional opportunities for sharing of information, networking and mutual support
  o increased employee retention at the company
  o enhanced job satisfaction
  o increased alumni engagement

My Michigan Tech Alumni Tab portal (HuskyLink replacement) currently in testing, launch planned for January.
Huskies Abroad: Alumni Engagement and International programs and services are connecting students who are studying abroad next semester with alumni and friends living in those 14 countries the students are visiting

### ANNUAL GIVING

<table>
<thead>
<tr>
<th>2016-17 Annual Fund current status (as of 11/27/16):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Overall Annual Giving - $1,141,246 ($2.75 million goal)</td>
</tr>
<tr>
<td>• Annual Fund gifts - $414,800 ($1.5 million goal)</td>
</tr>
<tr>
<td>(Includes unrestricted, academic unit unrestricted and Annual Fund scholarship gifts).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2016-2017 Campus Campaign (as of 11/27/16):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 274 (18.68%) faculty and staff donors as of November 30</td>
</tr>
</tbody>
</table>

#### Campus Culture of Philanthropy Programming
- “Giving Tuesday” *Pennies for Change* initiative raised $X (currently in progress) during the week of 11/28/16
- Patrons at campus merchant operations could round up their purchase price to support scholarship initiatives

#### TechLine
- $50,474 raised through 483 gifts and pledges by student callers (as of 11/30/16)
- 23 student callers reaching out to many alumni (including former athletes, retirees, and those employed with matching gift companies), parents and friends

#### 2016-17 Reunion Giving Chairs
- 60-year: 1957 - Tom Coleman
- 50-year: 1967 - John Calder
- 40-year: 1977 - Mark Mitchell
- 30-year: 1987 - Cindy Hodges and Carrie Schaller
- 25-year: 1992 - Lisa Wysocki
- 20-year: 1997 - Jen and Steve Maynard
- 10-year: 2007 - Gowtham Shankara
VII-E. RECENT MEDIA COVERAGE

Included herein are recent news items that have appeared throughout the country.

This is for the Board’s information.
News Media Report
University Marketing & Communications
September 24, 2016 – November 28, 2016

News by Category
Athletics 957
Alumni 329
Research 292
Student Life 226
Business/People 183
Events 501
Hometown News 511
Curricula/Programs 438
Other 729

___________________________________________________________
Total Traditional Media 4,166

Social Media
Michigan Tech’s social media followers have increased dramatically over the past year. Here are the numbers from September 23, 2016 through November 17, 2016.

Facebook 3,127,001 post impressions | 14,025 post clicks
Twitter 205,659 post impressions | 930 post clicks
Instagram 20,304 photo/video likes | 125 comments
LinkedIn 2,575 page views | 1,035 new followers
YouTube 19,192 video views | 43,113 minutes watched | 58 subscribers
Snapchat 777 followers (up from 200)
Pinterest 146 followers
A Few Examples

**Phys.org** featured Pengfei Xue, assistant professor of civil and environmental engineering and his computer modeling work through the Great Lakes Research Center, which led to a more comprehensive climate and hydrodynamics model for the whole Great Lakes region. His research was also reported in *Science Daily*, *Terra Daily* and *Supercomputing Online News*.

*The Detroit Free Press* published an article about Leah Vucetich, a research assistant professor in the School of Forest Resources and Environmental Science and her study of the scat of wolves in Isle Royale National Park.

*The Wall Street Journal* published an article about Handshake, career software developed by Michigan Tech students and alumni. Handshake has raised $20 million in capital and is now being used at 170 colleges and universities, including Michigan Tech.

**Chemical and Engineering News** featured the new mineral merelaniite as a chemistry photo of the day and in their latest print magazine. John Jaszczak, professor of physics, led a team that discovered the new mineral. The discovery also appeared as a front page story in *EOS*. Other media outlets covering the story of the new mineral include *United Press International*, *Australian Mining*, *Phys.org*, the German blog *Scinexx*, several geology blogs like *Geology In* and *Science Explorer*. Local coverage in Tanzania was extensive, including stories by the BBC and The Guardian in Swahili.

*Railway Track & Structures*, a magazine for the railroad industry, published a feature article in its November 2016 issue on railroad education, focusing on Michigan Tech’s Rail Transportation Program.

**NBC12** in Richmond, Virginia and TV stations all over the country ran stories about a new study of campus tour operations at 21 private and 13 public universities, including Michigan Tech.

GirlTalkHQ, a news web site focusing on women’s empowerment, published an article about Michigan Tech’s Summer Youth Program for women in automotive engineering, sponsored by Fiat Chrysler Automobiles.
GoodCall, an education news web site, quoted Dean Johnson, interim dean of the School of Business and Economics, in an article about a new MBA fellowship program at Stanford University that requires graduates to work in the Midwest for two years after graduation.

*The Guardian* reported on climate change research in Puerto Rico, focusing on a controlled heating experiment called TRACE that Molly Cavaleri, assistant professor in the School of Forest Resources and Environmental Science, co-leads.

Lucia Gauchia, an assistant professor in electrical and computer engineering and mechanical engineering-engineering mechanics, discussed graphene batteries in a Business Insider post about Henrik Fisker's new electric car model. A number of other business, tech and science news media outlets picked up the story, including Yahoo! News, the San Francisco Chronicle, seattlePI.com and Latest Nigerian News.

CNBC broadcast a story about a recent report on the 15 colleges and universities whose graduates earn the most, noting that Michigan Tech was number 11 on the list.

Channel 9 and 10 from downstate Cadillac aired a visit to the Michigan Tech campus as part of their "Michigan This Morning" program. Six three-minute segments recorded on campus September 27 featured interviews with University President Glenn Mroz, GLRC Director Guy Meadows, Career Services Director Steve Patchin, Rozsa Center Director Mary Muncil Jennings and Undergraduate Student Government President Sam Casey.

*The Smithsonian Magazine* referenced Simon Carn's (GMES) volcanology research, which seeks to incorporate emissions data into the Smithsonian database, in a feature along with an interactive map.

*US News & World Report* quoted Center for Pre-College Outreach Coordinator Liz Fujita in an article offering advice for high school students in choosing a college when they aren't sure what their major will be.
CHARTS and GRAPHS

News by Category Chart

9/24/2016 to 11/28/2016
News by Medium
Sample Clippings

Handshake, Now in 170 Colleges, Raises $20M for Student Job Search

By Tomo Geron
Nov. 13, 2016 7:32 am ET

College recruiting has been an inefficient process, with many schools
The 15 public colleges where students go on to earn the most money

Kathleen Elkins | @kathleen_ek | Friday, 7 Oct 2016 | 9:24 AM ET
Weather the storm: Improving Great Lakes modeling

November 21, 2016 by Allison Mills

Air and water interactions are a key component of Great Lakes weather and climate. A new supercomputer model better connects these processes to create more accurate forecasts. Credit: Michigan Tech, Sarah Bird

1. Heat Budget
2. Water Budget
VII-F. EMPLOYEE SAFETY STATISTICS

Included herein is a report from the Health and Safety Task Force and Human Resources.

This is for the Board’s information.
## Employee Safety Statistics Year-to-Date

### Employee Classification

<table>
<thead>
<tr>
<th>Years</th>
<th>AFSCME</th>
<th>Faculty</th>
<th>Non-Exempt</th>
<th>POA</th>
<th>Professional</th>
<th>Temporary</th>
<th>UAW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2016</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

### Number of Recordable Injuries

<table>
<thead>
<tr>
<th>Category</th>
<th>Years</th>
<th>AFSCME</th>
<th>Faculty</th>
<th>Non-Exempt</th>
<th>POA</th>
<th>Professional</th>
<th>Temporary</th>
<th>UAW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury Only w/Medical - No Loss Time</td>
<td>2015</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Lost Time Cases</td>
<td>2015</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Restricted Work Cases</td>
<td>2015</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Safety and Health Administration (OSHA) Recordable Injuries (Total of above)</td>
<td>2015</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>11</td>
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<tr>
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<td>2016</td>
<td>5</td>
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<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>10</td>
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### Number of Days

<table>
<thead>
<tr>
<th>Category</th>
<th>Years</th>
<th>AFSCME</th>
<th>Faculty</th>
<th>Non-Exempt</th>
<th>POA</th>
<th>Professional</th>
<th>Temporary</th>
<th>UAW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury Loss Time</td>
<td>2015</td>
<td>15</td>
<td>0</td>
<td>27</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>56</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>79</td>
</tr>
<tr>
<td>Restricted Work Days</td>
<td>2015</td>
<td>206</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>

### Hours Worked

<table>
<thead>
<tr>
<th>Category</th>
<th>Years</th>
<th>AFSCME</th>
<th>Faculty</th>
<th>Non-Exempt</th>
<th>POA</th>
<th>Professional</th>
<th>Temporary</th>
<th>UAW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Work Hours</td>
<td>2015</td>
<td>237,742</td>
<td>638,967</td>
<td>106,671</td>
<td>14,124</td>
<td>873,802</td>
<td>59,315</td>
<td>198,473</td>
<td>2,129,094</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>244,307</td>
<td>634,440</td>
<td>112,132</td>
<td>13,592</td>
<td>893,260</td>
<td>61,333</td>
<td>199,016</td>
<td>2,158,080</td>
</tr>
</tbody>
</table>

### Percentage of Work Hours

<table>
<thead>
<tr>
<th>Years</th>
<th>AFSCME</th>
<th>Faculty</th>
<th>Non-Exempt</th>
<th>POA</th>
<th>Professional</th>
<th>Temporary</th>
<th>UAW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
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<td>29.4%</td>
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<td>41.4%</td>
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<td>9.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
VIII. OTHER BUSINESS
IX. PUBLIC COMMENTS
X. INFORMAL CLOSED SESSION FOR REVIEW OF PENDING LITIGATION
AND A PERIODIC PERSONNEL EVALUATION OF PRESIDENT MROZ
XI. ADJOURNMENT