MINUTES
of the
Board of Control
Michigan Technological University
Houghton, Michigan

Meeting of
December 9, 2011
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VIII. Other Business

IX. Public Comments

X. Closed Session for a Periodic Personnel Evaluation of President Mroz
   - Presidential Contract Extension

XI. Adjournment
MINUTES OF THE FORMAL SESSION OF THE BOARD OF CONTROL OF MICHIGAN TECHNOLOGICAL UNIVERSITY held pursuant to due call in Ballroom B of the Memorial Union Building on the campus of Michigan Technological University in the City of Houghton, Michigan at eight thirty o’clock on the morning of December 9, 2011.

The Board of Control of Michigan Technological University met in formal session at the University's campus at Michigan Technological University in the City of Houghton, State of Michigan, at 8:30 a.m., on the 9th day of December, 2011, in Ballroom B of the Memorial Union Building. The place, hour, and date duly established and duly published for the holding of such a meeting.

The meeting was called to order by the Chair, M. Richardson, and a quorum was declared present.

The following members of the Board of Control were present:

    M. K. Richardson, Chair
    S. J. Hicks, Vice Chair (via telephone)
    L. D. Ashford
    T. L. Baldini
    K. I. Clark
    J. A. Frem
    P. G. Ollila
    T. J. Woychowski
    G. D. Mroz, ex officio

The following members were absent:

    None

Also present during part or all of the session were: Dale R. Tahtinen, Secretary of the Board and Vice President for Governmental Relations; Daniel D. Greenlee, Treasurer and Chief Financial Officer; George Butvilas, Chair of the Michigan Tech Fund; Max Seel, Provost and Vice President for Academic Affairs; David D. Reed, Vice President for Research; Shea McGrew, Vice President of Advancement and Marketing; Ellen Horsch, Vice President for Administration; Paul Tomasi, University Counsel; and various members of the faculty, administrative staff, student body, press and public.

Where item numbers are used, they refer to corresponding item numbers in the agenda, in the hands of the Board members.
I. APPROVAL OF AGENDA

Board Secretary Tahtinen recommended amending the agenda to add item V-H. Change in October 2012 Meeting Date.

It was moved by K. Clark, supported by L. Ashford, and passed by voice vote without dissent, that the agenda of the formal session of December 9, 2011, as distributed to the Board, be approved as amended.

II. OPENING REMARKS

Chair’s Comments

Chair Richardson asked the group for a moment of silence in memory of the Public Safety Officer who was killed at Virginia Tech. Our hearts go out to the University and we feel so badly when things like this happen and it really strikes close to home for us.

I would like to welcome everyone to today’s Board of Control meeting and to this Commencement weekend celebration of achievement and success. This is always a special and exciting time of the year, as we honor our graduates and their families. I would also like to welcome George Butvillas, Chairman of the Michigan Tech Fund and thank him for taking time from his schedule to attend our meeting.

Here are a few highlights of some of the awards and special activities that have taken place since our last meeting.

Michigan Technological University is one of several state universities and economic development agencies that will receive a combined $6.63 million in three different initiatives from the State of Michigan.

The Michigan Strategic Fund and the Michigan Economic Development Corporation have announced that they are investing in:

- university-industry partnerships
- technology commercialization
- innovation and entrepreneurship

Michigan Tech will receive $260,000 over two years. Participating universities, including Tech, will compete for additional funds from the total pool of dollars. These investments will enable Michigan Tech to help grow the state’s economy by connecting our resources of expertise and technology with established and start-up companies.

Several Michigan Tech researchers have already received funding under this program to move their technologies forward. In particular, funding from this program helped establish a
company focused on osteoporosis-fighting technology and another that is developing commercial applications for stamp sand.

The Sustainable Futures Institute at Michigan Technological University will receive $749,996 from the National Science Foundation to develop a research roadmap on biofuels and bioenergy sustainability in the Pan American region and a graduate course in biofuels/bioenergy sustainability, to be offered over the Internet to US and international partner universities.

The three-year grant is one of 11 nationwide totaling $8 million. It is part of NSF's Science, Engineering and Education for Sustainability efforts in its Research Coordination Networks program.

James and Dolores Trehewey have established a new endowed professorship in Michigan Technological University’s School of Business and Economics.

With a $1.16 million gift commitment, the couple is underwriting the James and Dolores Trehewey APMP Professorship. The inaugural recipient is Associate Professor Dean Johnson, founding director of the Applied Portfolio Management Program.

The gift supports the hands-on, real-life investment program that Johnson launched in 1998 with the Treheweys’ backing. Finance students manage an investment portfolio of approximately $1.2 million with funds provided by a number of donors through the Michigan Tech Fund.

The American Chemical Society has recognized the ACS Student Chapter at Michigan Technological University with a Commendable Chapter Award. The chapter was cited for its involvement in multiple activities, including judging the area science fair; conducting a lab inventory for the chemistry department; participating in National Chemistry Week and in Science Night, an event sponsored by the Western U. P. Center for Science, Mathematics and Environmental Education; and more.

“I’d like to thank the national chapter for this honor,” said chemistry senior Gregg Hasman, president of the group. “It’s been very exciting for us to get involved in outreach, not only on campus, but also in the elementary schools. It might even attract more students to Michigan Tech in about a decade.”

Paul Charlesworth, an associate professor of chemistry, is the chapter advisor. “Gregg has been a dynamic leader, and the entire group has been very enthusiastic,” he said. “This is the first year they participated in orientation, and a huge number of people were at their demonstrations. They are doing really well.”

The chapter was also recognized for its recruitment efforts. A majority of chemistry majors, including most first-year students, are now members. The chapter will be recognized in the November/December issue of the magazine In Chemistry and at the ACS Student Chapter Award Ceremony to be held at the 243rd ACS National Meeting, in San Diego.
A team from Michigan Technological University has finished among the top 10 in its region following the first round of the ACM International Collegiate Programming Contest. Based on preliminary results, Team Magenta now has a chance to go to the world finals, said David Poplawski, associate professor of computer science and the team coach.

The IBM-sponsored contest, also dubbed "The Battle of the Brains," brings together tens of thousands of students and hundreds of colleges and universities on six continents. Teams of three students apply their programming skills to solve complex, real-world problems within five hours.

The worldwide contest kicked off Saturday with regional competitions. Based on the results, one hundred teams will be selected to compete in the world finals, set for May in Warsaw, Poland.

Seventeen teams from four universities converged on Michigan Tech, which was one of 16 contest sites for the North Central North America Region. Overall, the regional competition drew more than 200 teams from the Midwest and Canada.

The University's Team Magenta finished first among the teams competing at Michigan Tech and seventh overall in the region. Team members are all undergraduates, including software engineering majors Tom Holmes and Tim Weerakoon and Zach Malinowski, who is studying electrical and computer engineering. Other schools that competed at Michigan Tech were Northern Michigan University, Lake Superior State University and Algoma University.

Researchers from Michigan Tech's Multiscale Institute gained tremendous attention at the 2011 Materials Research Society Meeting held on Nov. 27 to Dec. 2 in Boston.

Professor Yoke Kin Yap of Physics was the lead organizer of the "Symposium AA: Carbon Nanotubes, Graphene, and Related Nanostructures". This symposium attracted some 450 contributed papers and 22 invited lecturers.

Professors Yap and Craig Friedrich of Mechanical Engineering-Engineering Mechanics served as chairpersons of multiple technical sessions, and their groups presented six papers in the symposium. Professor Yap and Assistant Professor Reza Yassar of Mechanical Engineering-Engineering Mechanics and their students also co-authored another four papers in other symposia.

Nearly 6,000 attendees were presented at this international meeting.

**President's Comments**

Thank you all for being here and welcome to our last meeting of the calendar year. As we progress in to the coming election year, you can be sure that we'll continue to hear a lot about the cost and value of education.

A few numbers here might be illustrative and of value. Our recent career fair included 720 recruiters representing 245 organizations, and 4,200 interview slots. As you well know, we
are not on the way to any place else, so you really have to make an effort to be here for these events. It shows the value that recruiters place on our students.

Our most recent placement data for last year’s class was 94.6%. Starting salaries for Bachelor’s graduates topped out at $103,000 on the high end and a median of $55,000 with 70% of our recent graduates reporting. Which in itself is an amazing number to have that kind of response from our students.

This is comforting news for all of us at Michigan Tech because it’s a validation of the work of the students, faculty, staff and community that supports them. Not to mention parents, and personally, there are a lot of college presidents that would love to be in the position of presenting statistics like this in the current economy.

This student and faculty success story, is also a story of our nation’s demand and the world demand for graduates and it runs deep. As one 3M executive recently told a group of our graduates, it is not a competition for talent, it is a war for talent.

As we meet today, policy makers from the White House to the various State houses are gearing up for a national debate on how in the world we can increase the number of credentialed graduates of higher education while spending less money on education.

There is also an emerging debate on the cost, or value if you will, that we have already begun talking about here. Eventually, I think that debate will mature to the point where people will realize that access and affordability mean nothing if students do not graduate with confidence and competence to move on to what’s next professionally for them, and that the quality of today’s degree, also reinforces the value of the degrees our alumni have earned in the past.

While superficial discussions around higher education will continue to some degree, as a nation we are likely to get to the more substantive public debate on what a degree actually means.

The current price of a college degree is not just the balance of 128 credits of work and tuition; it’s about what a graduate can do with what they’ve learned after they graduate or while they are in school for that matter.

Having been out on the road with the student recruitment team this fall, it is pretty clear that this discussion is taking place over kitchen tables around the region that we visited, and it now focuses on what students coming out of an institution measurably know and the parents concern for what that is.

From the placement data alone, our graduates and the respect paid to them by employers and graduate schools shine in this discussion, and there are interesting forces at work in the economy that bode well for Michigan Tech grads.

It used to be that graduates with core competencies in communication skills, math, science and the broad suite of skills we call management filled science, math, technology and engineering jobs in the marketplace. Even then there was debate that there were not enough graduates to fill the available positions in science and technology alone.
A recent study out of Georgetown University made the case that this is only part of the story. The study was quoted last week by our Governor in his “talent” address to the legislature describing the hardest jobs to fill in Michigan.

The Georgetown groups results nationally, immediately after graduation, 43% of STEM (science, technology, engineering and math) graduates do not work in stem occupations. And 10 years out, 46% of graduates with STEM Bachelor’s degrees do not work in traditional stem roles. This is NOT because there aren’t enough positions, but because they have talents that make them adept in so many positions in organizations, particularly as product technology advances.

Put another way, the talents in demand, which are a core set of cognitive competencies (knowledge, skills, abilities) that are associated with STEM are increasingly in demand for what were previously considered non-STEM jobs.

These include the things we usually think of, the ability to apply math, science and management principles in reasoning and problem solving and so on. But the authors note that there are also other work values in play – things like recognizing the importance of teamwork, working cooperatively rather than competitively, and these seem to be influencing demand and placement -- something that reflects the culture of Michigan Tech.

This will only increase as technology continues to drive job creation and the authors of the study were led to the conclusion:

"Our education system is not producing enough STEM capable students to keep up with demand in both the traditional STEM occupations and other sectors across the economy that demand similar competencies in the new economy”.

To put it in perspective, the authors point out that of 100 Bachelor’s graduates in the U.S., 19% graduate with a STEM degree (the degrees most in demand); 10 are working in a STEM field after college; and 8 are working in STEM 10 years after graduation. Not because there are not jobs, but because the competencies are so transferrable to other jobs within the organizations.

At Michigan Tech, with 83% STEM graduates, and many others STEM related by association, placement would suggest that what we do is valued, is in the sweet spot of the economy going forward, and that we’re poised to continue to make a substantial contribution to the needs of the State as this political debate moves on in the coming year.

III. COMMITTEE REPORTS

Academic Affairs Committee Report

Ms. Ashford provided the Board with the following report.
On Thursday afternoon, the Academic Affairs Committee met with all members of the committee in attendance.

First on the agenda was the discussion of five new degree programs which the Provost has brought forward to the Board of Control for approval.

The first one is a non-departmental PhD program in Biochemistry and Molecular Biology. This program builds on existing faculty and existing courses in the departments of Biology, Chemistry, and the School of Forest Resources and Environmental Science. It consolidates and focuses dispersed resources and expertise and provides a more appropriate degree program for some of our current and future graduate students in a field with growing worldwide demand. We recommend support.

The next two proposed programs are masters degrees that address the advancement of technology in the medical field, accompanied by the requirement to track and analyze a vast amount of data and keep sensitive data confidential.

The masters in biomedical engineering is a spin-off from the existing PhD program in biomedical engineering and does not require new resources.

The masters degree in medical informatics emphasizes the use of computer technology to help organize, analyze, and manage information to improve health care. With a recent hire through the strategic faculty initiative the faculty expertise is in place. We believe that both proposed programs reflect Michigan Tech’s commitment to provide the kind of education that industry is seeking. We recommend support.

Finally, the department of physics proposes the addition of a BA in physics and a BA in physics with a concentration in secondary education. The department follows a recommendation of the American Physical Society to “Make it easier to enter a physics program after the first year to allow for late starters or those with lower initial preparation in mathematics” and to “Create flexible tracks for physics majors to allow interdisciplinary studies or to pursue an education degree."

We fully support these new degrees. The more flexible pathways we have the more we also help to address the national concern regarding the science credentials of many high school teachers. And if students don't have good science teachers in K-12, they will not be prepared to pursue degrees in college that have emphasis in math and science, that have the highest demand for jobs.

Next, we followed our road map agreed upon at the beginning of the year to devote one meeting to a principle highlighted in the AGB Statement on Board Responsibility for the Oversight of Educational Quality. Yesterday’s discussion centered about the assessment of student learning and the gathering of data about learning outcomes.

Associate Provost Christa Waleck gave an in-depth overview of the state of assessment at Michigan Tech. We are confident that the ongoing activities with the focus on continuing improvement will enable us to track progress on university student learning goals and will help to identify areas for university-wide improvements.
Finally, we had a spirited discussion about the data the provost provided as follow up to our last meeting, measures regarding the quality of input and of output. The data were broken down by gender, some by colleges and schools and revealed many interesting insights.

Provost Max Seel presented the following report:

**Provost Report**
Board of Control Meeting
December 9, 2011

**Why MS degrees**

**Portrait of Michigan Tech**
2035

1. World Class faculty – 40% in endowed positions
2. Student body of 8750
   - 5750 Undergraduates
   - 3000 Graduate
   - 40-50% Female Enrollment
3. Global literacy and communication skills in a variety of media will be a prominent part of education
4. High tech/high touch, residential based transformational education
5. Recognized nationally and internationally as a catalyst for research development and innovation at all levels of learning
6. Sustainable financial model with less reliance on state funding
7. University culture is entrepreneurial not bureaucratic with high quality services that are efficient, responsive and sustainable
8. Year-round Calendar
Enrollment targets

National numbers in Engineering Graduates:
60% BS, 33% MS, 7% PhD
i.e. 40% have graduate degrees (2009)!

Michigan Tech Numbers:
82% BS, 14% MS, 4% PhDs

Vision 2030
Mechanical Engineering Education

Why MS degrees??

ASME Center for Education
ASCE Articulated Professionalism Perspective

A broader 4-year baccalaureate ME with a 5th year professional Master's degree

Respondents were more in agreement that a broader 4-year baccalaureate ME with a 5th year professional Master’s degree will prepare a student for entry-level engineering practice (64% agree versus 36% disagree)

25% of industry currently prefers MS Hires versus 41% BS, 27% feel that more MS Hires will be needed in the future.
Q. In the foreseeable future, in order to accomplish their assignments and for your company to prosper, do you think mechanical engineers will need a greater amount of post-BSME coursework or training than is currently customary?

Implementing 5xME: Two NSF funded Workshops

Workshop Recommendations (BS)

4. The bachelor’s degree should introduce engineering as a discipline, and should be viewed as an extension of the traditional liberal arts degree where education in natural sciences, social sciences, and humanities is supplemented by education in the discipline of engineering for an increasingly technological world.

5. This bachelor’s degree in the discipline of engineering can be viewed as the foundational stem upon which several extensions can be grafted: (1) continued professional depth through a professional master’s degree in engineering, and (2) transition to non-engineering career paths such as medicine, law, and business administration.

6. The master’s degree should introduce engineering as a profession, and become the requirement for professional practice. This is where educational institutions and professional societies can build an awareness of the profession, as opposed to producing graduates who view themselves merely as employees.

A. Galip UlKay
C.D. Mote Jr. Distinguished University Professor and the William Clay Ford Professor of Manufacturing, Department of Mechanical Engineering,
University of Michigan, Ann Arbor, MI 48109-2125 USA 3/25/10

Is There Room?
ASCE Articulated Professionalism Perspective

For the most part these professions have meaningful continuing education REQUIREMENTS.
ASCE Policy 465
(Refined by the BOD on April 25, 2007)

Fulfillment of this BOK will include --

1. a baccalaureate degree in CE
2. a master’s degree, or approximately 30 coordinated graduate or upper level . . .
3. appropriate experience . . .

Fall 2010 Support Types

<table>
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<tr>
<th></th>
<th>MS</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>103</td>
<td>215</td>
</tr>
<tr>
<td>Externals</td>
<td>57</td>
<td>158</td>
</tr>
<tr>
<td>Self-Supported</td>
<td>504</td>
<td>127</td>
</tr>
<tr>
<td>Total</td>
<td>664</td>
<td>500</td>
</tr>
</tbody>
</table>

Accelerated MS programs

flexible policy framework that allows individual departments/programs to offer integrated bachelor’s/master’s degree programs that meet the needs of their students, faculty, and academic discipline.

- Allow students to apply a limited number of credits towards both the bachelor’s and master’s degrees (6).
- Attract outstanding Michigan Tech bachelor’s students into our master’s programs.
- Accelerated master’s programs must require students to complete a minimum of 150 total credits for the bachelor’s and master’s combined.
MS programs activities

Accelerated BS/MS degrees for Plan A (thesis) in MEEM and Plan B (report) students.

Accelerated Master’s Program in Biomedical Engineering (after MS is approved)

MS in Medical Informatics

Finance and Audit Committee Report

Mr. Baldini provided the Board with the following report.

The Finance and Audit Committee has met 3 times, since the last board meeting. It’s been a busy time with preparations already being made for the fiscal year 2013’s budget approval, next spring:

1. We’ve reviewed the 1st quarter projections of FY12, which show results in the General Fund and Current Fund being positive as $1.8M and $1.5M, respectively. Dan Greenlee, our CFO will present a high-level review of these after this report.

2. We also discussed some of the other aspects of the current fiscal year (FY12), based upon the first quarter results (9/30), and they appear to be positive; enrollment, tuition revenue and housing occupancy and housing revenue. We recognize that with the current state appropriation reductions, careful monitoring of the current year is critical.

3. We recognize that some need for changes in health care and Sick Leave/Short Term Disability were instituted in order to keep the fringe benefits rate/cost at a reasonable level. However, we are pleased to report that even with the current challenging economic times, a raise was able to be planned for and given. The Committee commended President Mroz and his team for their ability to make this happen.

4. The Finance Committee has also reviewed some preliminary FY13 budget targets, the facilities assessment and the current status of the state-wide MPSERS review process.

5. The Facilities Assessment has been completed which focused on the general conditions of the buildings only. Each observed issue was given a priority number, from 1–5, to record how critical it is and to group into time frames. The University is reviewing the Priority 1 Projects and ranking projects.
a. For FY12, the Priority 1 Projects will be within the SDC addressing the roof and the ice plant. The funds needed for these projects are estimated to be $2.35M. The Administration will bid out the project starting this month, with formal Board approval in February.

b. Other strategic projects (i.e. Visitor Center) were identified and will be discussed further in February.

c. The next step is to develop a long term plan for Maintenance that will support the strategic plan and the budgeting process.

These have been challenging times. We are expected to educate more graduates, but we are not seeing the finances on the other side to support that goal. The faculty and staff have to be commended because they began to look at where we could save and what we could do more efficiently. These are lean tough times, but our students are graduating and they are being placed, and the team is working to confront the challenges ahead.

Mr. Greenlee provided the Board with the following report.

![Financial Report](image)

**Balance Sheet**

<table>
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<th>Condensed Statement of Net Assets as of September 30, 2011</th>
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<tr>
<td><strong>ASSETS</strong></td>
</tr>
<tr>
<td>Current Assets</td>
</tr>
<tr>
<td>Noncurrent Assets:</td>
</tr>
<tr>
<td>Capital Assets, net</td>
</tr>
<tr>
<td>Other Noncurrent Assets</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
</tr>
<tr>
<td><strong>LIABILITIES</strong></td>
</tr>
<tr>
<td>Current Liabilities</td>
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<tr>
<td>Noncurrent Liabilities</td>
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<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
</tr>
<tr>
<td><strong>NET ASSETS</strong></td>
</tr>
<tr>
<td>Investments in capital assets, net of related debt</td>
</tr>
<tr>
<td>Other net assets, restricted and unrestricted</td>
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<tr>
<td><strong>TOTAL NET ASSETS</strong></td>
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**Current Fund FY12**

<table>
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<tr>
<th></th>
<th>Original Projection</th>
<th>1st Qtr Projection</th>
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<tr>
<td>Revenue</td>
<td>$250,867</td>
<td>$252,241</td>
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<td>Expense</td>
<td>($250,825)</td>
<td>($250,722)</td>
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<tr>
<td>Net Income</td>
<td>$42</td>
<td>$1,916</td>
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<tr>
<td>Current Fund Balance</td>
<td>$18,122</td>
<td>$17,596</td>
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Note: Current Fund includes General Fund, Designated Fund, Auxiliaries, Retirement and insurance, and the Expendable Restricted Funds.

**Current Fund Balances**

<table>
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<tr>
<th></th>
<th>Balance 06/30/10</th>
<th>Balance 06/30/11</th>
<th>Projected Balance 06/30/12</th>
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<tbody>
<tr>
<td>TOTAL CURRENT FUND BALANCE</td>
<td>$15,713</td>
<td>$16,080</td>
<td>$17,599</td>
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<tr>
<td>LEGALLY RESTRICTED FUNDS</td>
<td>(2,452)</td>
<td>(2,609)</td>
<td>(1,129)</td>
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<tr>
<td>UNRESTRICTED CURRENT FUND BALANCE</td>
<td>$12,261</td>
<td>$13,271</td>
<td>$14,470</td>
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</tbody>
</table>

**CASH FLOW**

Calendar Years

2010 & 2011 YTD

(dollars in millions)

$14.5MM
Mr. Butvilas, Chair of the Michigan Tech Fund Board of Directors provided the Board with the following report.
Michigan Tech Fund Update to the Board of Control
December 9, 2011

George Butvilas

MICHIGAN TECHNOLOGICAL UNIVERSITY
Generations of Discovery
Campaign Progress Summary
as of November 30, 2011

Alumni & Friends $104,865,904
Corporations 44,512,121
Private Foundations 2,596,230
Gifts-in-Kind 5,095,614
Grand Total $157,069,868

Michigan Tech Fund
Total Assets Value by Fiscal Year

9502
12/09/11
**Michigan Tech Fund**

**Endowment Value by Fiscal Year**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Endowment Value (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>$84.3</td>
</tr>
<tr>
<td>2002</td>
<td>$85.3</td>
</tr>
<tr>
<td>2003</td>
<td>$83.3</td>
</tr>
<tr>
<td>2004</td>
<td>$86.7</td>
</tr>
<tr>
<td>2005</td>
<td>$92.3</td>
</tr>
<tr>
<td>2006</td>
<td>$71.5</td>
</tr>
<tr>
<td>2007</td>
<td>$77.5</td>
</tr>
<tr>
<td>2008</td>
<td>$80.1</td>
</tr>
<tr>
<td>2009</td>
<td>$80.0</td>
</tr>
<tr>
<td>2010</td>
<td>$87.7</td>
</tr>
<tr>
<td>2011</td>
<td>$97.5</td>
</tr>
</tbody>
</table>

---

**Campaign Totals by Source**

as of November 30, 2011

- **Total $157,069,868**
- **Corps Sponsored Research** $34,917,331
- **Corporations** $9,594,790
- **Foundations & Other Orgs** $2,596,230
- **Gifts-in-Kind** $5,095,614
- **Major & Restricted Gifts/Pledges** $40,055,049
- **Realized Planned Gifts** $3,429,221
- **Discounted Planned Gift Commitments** $53,527,466

---

**Notable Recent Gifts/Pledges**

- **Richard '50 and Nancy Witte**
  - $1,000,000 - MSE Professorship (PG)
- **Roy '57 and Carol Johnsen**
  - $542,000 - Class of 1957 Scholarship Fund (PG)
- **David Brule '72**
  - $125,000 - Class of 1972 Challenge
- **John '59 and Barbara Kelly**
  - $100,000 - Athletics
- **Arcelor Mittal USA**
  - $60,000 - Various Designations
Campaign Activities

- $10 million in new solicitations will be made between October 1 - December 31
- Scholarship initiative is attracting gifts.
- Annual Fund initiative seeking first campaign-period gifts from alumnae seeing early success.

MTF Board of Directors Update

- Northern Trust selected as Investment Advisor/Manager.
- Transition of $63 million of endowment assets from Mercer to Northern Trust should be completed in January.
- Amended MTF Bylaws to establish separate Investment and Finance & Audit Committees.
Board of Directors Composition

Chair of MTF (George Butvillas)
MTU Board of Trustees Appointments
(Steve Hicks) (David Brule) (Russ Gronevelt)
MTF Trustees
(George Carlson) (John Drake) (David Rowe)
MTU/MTF Management
(Glenn Mroz) (Shea McGrew)
Supernumerary Director
(Dale Elliott)

Investment Committee Composition

Chair of MTF Board of Directors
(George Butvillas)
Chair of BOC Finance & Audit Committee
(Steve Hicks)
Additional MTF Director
(John Drake)
MTF Advisory Trustees
(Jim Trethewey and Sheryl Wright)

Investment Committee’s Meeting

- Review committee charge
- Meet with Northern Trust representatives
- Review amended Investment Policy
- Approval and Recommendation to MTF BOD
IV. CONSENT AGENDA

It was moved by K. Clark, supported by P. Ollila, and passed by voice vote without dissent, that the Board of Control approve and adopt the items contained in the Consent Agenda.

IV-A. Approval of Minutes

It was moved by K. Clark, supported by P. Ollila, and passed by voice vote without dissent, that the minutes of the formal session of October 6, 2011, as distributed to the Board, be approved.
IV-B. Gifts

It was moved by K. Clark, supported by P. Ollila, and passed by voice vote without dissent, that the Board of Control acknowledges the gifts to Michigan Technological University.

Michigan Technological University
Michigan Tech Fund
Fundraising Productivity Report
July 1, 2011 through October 31, 2011
Compared to Prior Year

<table>
<thead>
<tr>
<th>Source</th>
<th>Goal</th>
<th>FY12 YTD Total</th>
<th>% YTD</th>
<th>FY11 YTD Total</th>
<th>FY11 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals - Major Gifts (25K and up)</td>
<td>7,000,000</td>
<td>489,495</td>
<td>7%</td>
<td>2,215,126</td>
<td>5,363,641</td>
</tr>
<tr>
<td>Realized Planned Gifts (Unanticipated - 25K and up)</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>391,554</td>
<td></td>
</tr>
<tr>
<td>Individuals - non-Major Gifts</td>
<td>1,920,000</td>
<td>370,830</td>
<td>19%</td>
<td>388,774</td>
<td>1,487,136</td>
</tr>
<tr>
<td>Full Value New Planned Gift Commitments</td>
<td>11,800,000</td>
<td>6,033,432</td>
<td>52%</td>
<td>2,853,973</td>
<td>13,620,508</td>
</tr>
<tr>
<td>Annual Fund</td>
<td>1,480,000</td>
<td>425,727</td>
<td>29%</td>
<td>285,426</td>
<td>1,442,562</td>
</tr>
<tr>
<td>Corporations</td>
<td>3,000,000</td>
<td>851,984</td>
<td>28%</td>
<td>875,001</td>
<td>1,552,277</td>
</tr>
<tr>
<td>Foundations &amp; Other Organizations</td>
<td>550,000</td>
<td>28,927</td>
<td>5%</td>
<td>30,735</td>
<td>461,937</td>
</tr>
<tr>
<td>Gifts-in-Kind</td>
<td>950,000</td>
<td>14,985</td>
<td>2%</td>
<td>489,096</td>
<td>701,841</td>
</tr>
<tr>
<td>Grand Total</td>
<td>27,000,000</td>
<td>8,214,980</td>
<td>30%</td>
<td>7,139,652</td>
<td>25,321,165</td>
</tr>
</tbody>
</table>

- 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.

Michigan Technological University
Michigan Tech Fund
Gift Activity Cash Report
July 1, 2011 through October 31, 2011
Compared to Prior Year

<table>
<thead>
<tr>
<th>Gift Type</th>
<th>FY12 YTD Total</th>
<th>FY11 YTD Total</th>
<th>$ Change from Previous Fiscal Year</th>
<th>% Change from Previous Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (current year)</td>
<td>1,685,787</td>
<td>2,119,820</td>
<td>-434,034</td>
<td>-20.5%</td>
</tr>
<tr>
<td>Realized Planned Gifts (current year)</td>
<td>1,243</td>
<td>10,283</td>
<td>-9,040</td>
<td>-87.9%</td>
</tr>
<tr>
<td>Current Year Subtotal</td>
<td>1,687,030</td>
<td>2,128,103</td>
<td>-440,637</td>
<td>-20.8%</td>
</tr>
<tr>
<td>Cash (receipts from prior year pledges)</td>
<td>1,610,157</td>
<td>185,433</td>
<td>1,300,724</td>
<td>697.9%</td>
</tr>
<tr>
<td>Realized Planned Gifts (previously recorded)</td>
<td>3,432</td>
<td>293,073</td>
<td>-260,642</td>
<td>-88.8%</td>
</tr>
<tr>
<td>Receipts from Previous Year Subtotal</td>
<td>1,819,588</td>
<td>479,466</td>
<td>1,340,122</td>
<td>279.5%</td>
</tr>
<tr>
<td>Total</td>
<td>3,566,616</td>
<td>2,667,599</td>
<td>897,104</td>
<td>34.4%</td>
</tr>
</tbody>
</table>
IV-C. Resignations, Retirements & Off Payroll

It was moved by K. Clark, supported by P. Ollila, and passed by voice vote without dissent, that the Board of Control accepts the resignations and confirms the off payroll determinations.

BOARD OF CONTROL OFF-PAYROLL REPORT
September 4, 2011 – October 29, 2011

<table>
<thead>
<tr>
<th>Staff</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXEMPT</td>
<td>Camps, Steven</td>
<td>IT Services &amp; Security Sr Systems Analyst</td>
<td>05/06/02</td>
<td>10/01/11</td>
</tr>
<tr>
<td></td>
<td>Turuc Jessica</td>
<td>Student Activities Asst Dir Student Activity Greek Life Lead</td>
<td>08/30/04</td>
<td>10/07/11</td>
</tr>
<tr>
<td></td>
<td>Wilmers, Michael</td>
<td>Facilities Management Engineer Construction</td>
<td>08/02/98</td>
<td>09/09/11</td>
</tr>
<tr>
<td>NON-EXEMPT</td>
<td>Osthoff, Linda</td>
<td>Dining Services Cook</td>
<td>09/11/92</td>
<td>09/10/11</td>
</tr>
</tbody>
</table>

V. ACTION/DISCUSSION ITEMS

V-A. Emeritus Rank

It was moved by L. Ashford, supported by K. Clark, and passed by voice vote without dissent, that the Board of Control approves the following emeritus appointment:

1.) Dr. Sheryl A. Sorby, Professor Emerita, Department of Mechanical Engineering-Engineering Mechanics

V-B. Proposal for an Inter-Departmental Ph.D. in Biochemistry & Molecular Biology

It was moved by K. Clark, supported by J. Fream, and passed by voice vote without dissent, that the Board of Control approves the Ph.D. in Biochemistry & Molecular Biology degree program.

V-C. Proposal for a Master of Science in Biomedical Engineering

It was moved by P. Ollila, supported by K. Clark, and passed by voice vote without dissent, that the Board of Control approves the Master of Science in Biomedical Engineering degree program.
V-D. Proposal for a Master of Science in Medical Informatics

It was moved by K. Clark, supported by L. Ashford, and passed by voice vote without dissent, that the Board of Control approves the Master of Science in Medical Informatics degree program.

Ms. Ashford commented that ethics must be a part of any program that is dealing with confidential information. Dr. Seel pointed out that it is a part of the degree program and responsible conduct for research is a requirement for every graduate student at Michigan Tech. Dr. Woychowski noted that cyber security is also a focal area. Dr. Seel agreed and commented that it is a very important aspect of this degree program.

V-E. Proposal for a Bachelor of Arts in Physics

It was moved by J. Fream, supported by P. Ollila, and passed by voice vote without dissent, that the Board of Control approves the Bachelor of Arts in Physics degree program.

It was noted that the Senate did pass this proposal at their December 7th meeting.

Dr. Woychowski commended Provost Seel for the strategic alignment of the degree proposals.

Provost Seel acknowledged and thanked Helene Hiner as she is instrumental in moving the degree proposals through the various departments, groups and channels within the university and then to the Presidents Council for approval.

V-F. Proposal for a Bachelor of Arts in Physics with a Concentration in Secondary Education

It was moved by T. Woychowski, supported by K. Clark, and passed by voice vote without dissent, that the Board of Control approves the Bachelor of Arts in Physics with a Concentration in Secondary Education degree program.

It was noted that the Senate did pass this proposal at their December 7th meeting.

V-G. Exclusion Resolution for the Department of Defense

It was moved by T. Baldini, supported by J. Fream, and passed by voice vote without dissent, that the Board of Control adopts the Exclusion Resolution as presented herein.
EXCLUSION RESOLUTION

WHEREAS, current Department of Defense Regulations contain a provision making it mandatory that the Secretary of the Board, Senior Management Official and Facility Security Officer meet the personnel clearance requirements established for a contractor facility security clearance; and

WHEREAS, said Department of Defense Regulations permit the exclusion from the personnel clearance requirements of certain members of the Board of Control and other officers, provided that this action is recorded in the corporate minutes.

NOW THEREFORE BE IT DECLARED that the Secretary of the Board of Control, President of the University, and Facility Security Officer at the present time do possess, or will be processed for, the required security clearance; and

BE IT RESOLVED that in the future, when any individual enters upon any duties as Secretary of the Board of Control, President of the University and Facility Security Officer, such individual shall immediately make application for the required security clearance; and

BE IT RESOLVED AND DIRECTED that the following members of the Board of Control shall not require, shall not have, and can be effectively excluded from access to all CLASSIFIED information in the possession of the corporation and shall not affect adversely corporate policies or practices in the performance of classified contracts for the Department of Defense or the government contracting activities (User Agencies) of the National Industrial Security Program.

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas L. Baldini</td>
<td>Board of Control Member</td>
</tr>
<tr>
<td>Julie A. Fream</td>
<td>Board of Control Member</td>
</tr>
<tr>
<td>Stephen J. Hacks</td>
<td>Board of Control Member</td>
</tr>
<tr>
<td>Lenora D. Ashford</td>
<td>Board of Control Member</td>
</tr>
<tr>
<td>Terry J. Woychowski</td>
<td>Board of Control Member</td>
</tr>
<tr>
<td>Martha K. Richardson</td>
<td>Board of Control Member</td>
</tr>
</tbody>
</table>

V-H. Change in October 2012 Meeting Date

It was moved by L. Ashford, supported by K. Clark, and passed by voice vote without dissent, that the Board of Control change the meeting date from October 4, 2012 to October 11, 2012.

VI. REPORTS

A. Strategic Plan Update – Dr. David Reed, Vice President for Research

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Strategic Planning Update

December 9, 2011

David Reed
Outline

• Strategic Planning Framework
• Timeline
• Current Status

Strategic Planning Framework

• Mission
  We prepare students to create the future.
• Vision
  Michigan Tech will grow as a premier technological research university of international stature, delivering education, new knowledge, and innovation for the needs of our world.

Strategic Planning Framework

• The Portrait gives more detail concerning the Vision, explaining the meaning of the Vision under a long-term planning horizon.
• The Plan gives the five-year roadmap for progressing towards achieving the Vision and making the Portrait a reality.
• The Budget is a one-year resource allocation plan for achieving the Plan.
Strategic Planning Framework

• Metrics provide measures of progress as well as identifying areas with greatest need to achieve the Vision.
• The Institutional Research Team has developed a crosswalk between the current plan and available data sources. The goal is for UMC to post so it is available to the campus community during the planning process this year.
Current Status

- The Provost and Deans have a draft of the Portrait and are revising that with the goal of posting on the Strategic Planning website in January, 2012.
- The preliminary draft revision of the Plan is completed and will be posted on the website in January for comment.
- Strategic Finance Workshops have been held for approximately 120 people across campus. This included a 2013 Budget Exercise.

Ms. Ashford asked Dr. Reed if he felt that the review of the strategic plan was held at an appropriate interval. Dr. Reed responded that the first time from 2006 to 2009 was probably the right interval, as we actually made some substantial changes in 2009 then it appears that we will do this time. In some ways lengthening that review interval might be a good thing to let things develop a little bit further. On the other hand, it might be right and just an indication, or consensus, that we are on the right path and we don’t need to change very much.

Dr. Woychowski asked that in preparation for the Board retreat could our legal counsel, Paul Tomasi, take the charter of the university and the laws written in our constitution relative to our responsibilities and see that the specificity that is in that is reflected in the overall descriptions of the plan. Dr. Woychowski believes that the plan has a little bit of ambiguity in it, which is probably appropriate, but at the same time the Board has some very specific reasons for being and he would like to make sure at the end of the day the Board can sit back and say it is consistent, and that the Board is executing their responsibilities.

Mr. Baldini suggested that it might be beneficial to have a longer term budget projection with the strategic plan so that the Finance Committee has that for future planning purposes. It is important that if we are going to make long range decisions we are aware of the implications of those decisions on the budget.

President Mroz stated that he has asked the Executive Team for the actions that need to happen in one, two and five years in order to make this real, and that we are not sitting here five years from now saying we missed something. He and Provost Seel also met with the Deans earlier this week, and are making the same requests with the goal of having concrete actions that are linked to the budget.

B. University Senate Report – Dr. Rudy Luck, President
C. Undergraduate Student Government Report – Mr. Beau Baldwin, President
D. Graduate Student Government Report – Ms. Margo Woller-Carter, President

Copies of these reports were included in the agenda book.
VII. INFORMATIONAL ITEMS
A. Analysis of Investments
B. University Issued Bond Balances
C. Research and Sponsored Programs
D. Advancement Report
E. Recent Media Coverage
F. Employee Safety Statistics

Employee Safety Statistics

Ms. Horsch asked the Board to keep in mind that Michigan Tech is in the infancy stage of putting this together and how best to change the climate and to make some significant progress going forward. She noted that the Bureau of Labor puts out standards that we should follow and they break it down by different groups and industries. In looking through those standards for universities and colleges, Michigan Tech’s lost time case rate and frequency rate are below the industry average. Michigan Tech is at .85 and the industry standard is 1.0 for lost time case rate, and at 2.0 and the industry standard is at 2.26 for frequency rate.

Dr. Woychowski applauded the efforts of Ms. Horsch and her team. The creation of the Health and Safety Task Force is an excellent example of leadership to create an infrastructure getting information that allows safety issues to be reported and addressed across the university and to share lessons learned and best practices through various departments. To that end, utilizing the Banner system and the application of Lean principles to measure and improve safety and health performance is outstanding.

VIII. OTHER BUSINESS

There was no other business at this time.

IX. PUBLIC COMMENTS

There were no public comments at this time.

X. CLOSED SESSION FOR A PERIODIC PERSONNEL EVALUATION OF PRESIDENT MROZ

It was moved by L. Ashford, supported by T. Woychowski, and passed by voice vote without dissent, that the Board of Control proceed into closed session for a periodic personnel evaluation of President Mroz. (A closed session for such a purpose is provided for in Section 8 (a) of P.A. 267 of 1976). (A roll call vote is required).
Roll Call Vote:  
Richardson - Yes  
Ashford - Yes  
Fream - Yes  
Baldini - Yes  
Hicks - Yes  
Ollila - Yes  
Clark - Yes  
Woychowski - Yes

The motion passed.

The Board of Control reconvened in open session with a quorum present.

**Presidential Contract Extension**

It was moved by J. Fream, supported by L. Ashford, and passed by voice vote without dissent, that the Board of Control approves a two year extension to June 2016 for President Mroz’s employment contract.

**XI. ADJOURNMENT**

It was moved by P. Ollila, supported by J. Fream, and passed by voice vote without dissent, that the meeting be adjourned.

______________________________
Secretary of the Board of Control

______________________________
Chair, Board of Control