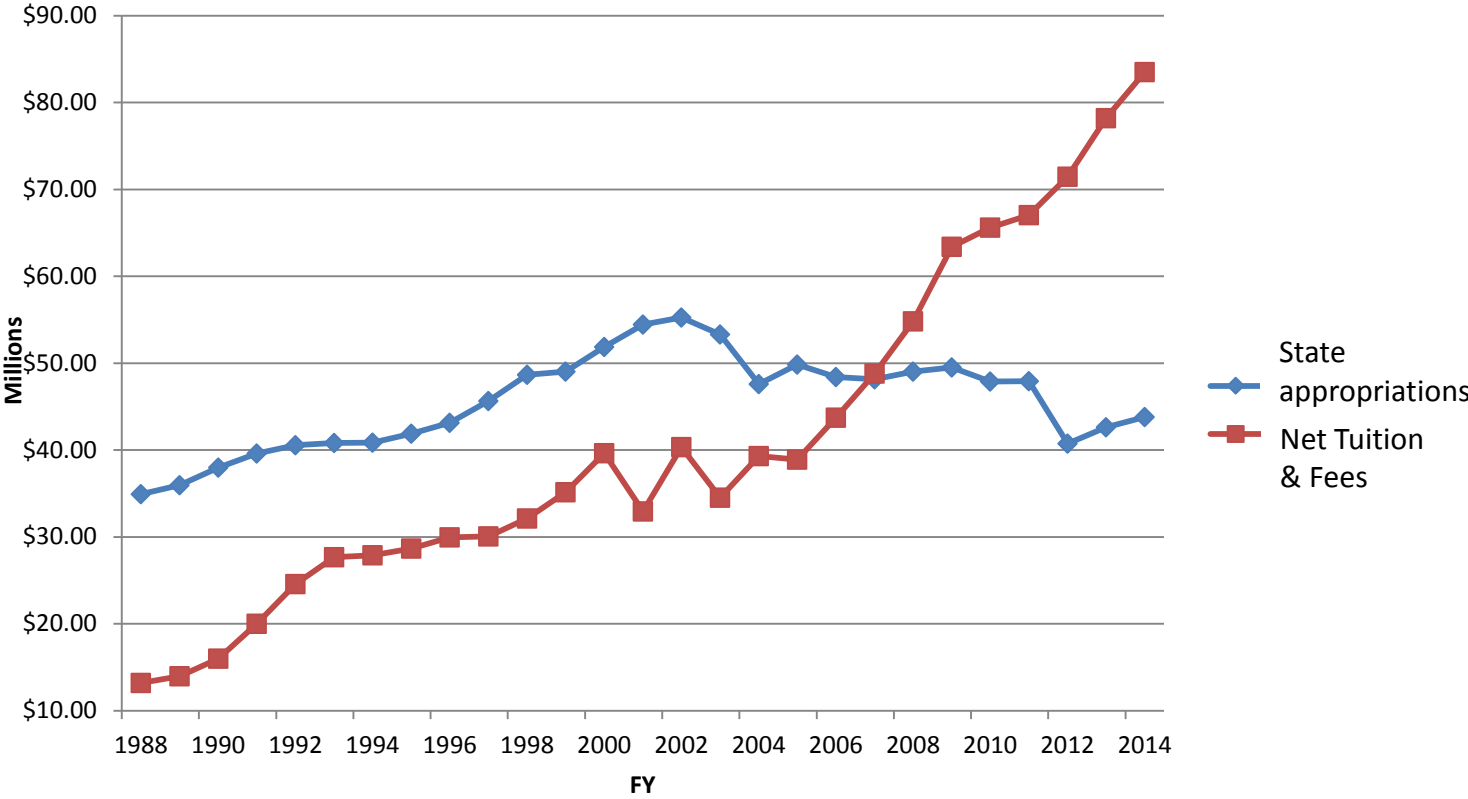


Michigan Tech Financial Overview

**Presented to the University Senate
by Senate Finance and Institutional Planning Committee
Chair Dr. Michael Mullins
April 1, 2015**

In the face of declining state appropriations, tuition and fees have been increasing rapidly since 2003. FY2013 reported for adjusted basis.*



*Net tuition and fee revenues have been readjusted starting in FY2013 in the audited financial statements. (e.g. FY2012 adjusted from \$71M to \$77M with the difference in auxiliaries.)

Full time in-state undergraduate tuition at Michigan Tech

2011-2012	\$12,615	(Fact book)
2012-2013	\$13,095	(Fact book)
2013-2014	\$13,470	(Fact book)
2014-2015	\$14,040	(office of financial aid)

Average annual net price to undergraduate students, 2012–2013*

(Including financial aid, discounting, etc. – source: National Center for Education Statistics)

Midwestern Public Universities

Michigan Tech	\$15,434
University of Michigan – Ann Arbor	\$15,939
Michigan State	\$14,526
Western Michigan	\$15,796
Northern Michigan	\$12,550
University of Wisconsin	\$16,536
University of Illinois –Urbana - Champaign	\$16,490
University of Minnesota – Twin Cities	\$15,531

* Full-time beginning undergraduate students who paid the in-state or in-district tuition rate and were awarded grant or scholarship aid from federal, state or local governments, or the institution.

**Non-resident graduate tuition rates are among the *lowest* of all STEM schools
(source financial aid office)**

Current Graduate tuition \$15,016/2 semesters. (resident or non-resident)
 Undergraduate in-state 2014-15 \$14,030/2 semesters.
 Undergraduate out-of-state 2014-15 \$29,520/2 semesters.

Raising non-resident graduate tuition to peer average \$1100/credit yields approximately +\$2.4M/year.

Graduate School	Non-resident cost per credit* (AY13)	Graduate School	Non-resident cost per credit (2012)
<i>Michigan Tech</i>	\$820	University of Wisconsin	\$1400
University of Michigan	\$2430	Georgia Tech	\$1372
Wayne State	\$1371	Virginia Tech	\$1445
Michigan State	\$1269	Minnesota -Duluth	\$1316
Western Michigan	\$1089	University of Minnesota – Twin Cities	\$1316
Texas A&M	\$830	Purdue	\$1600
University of Illinois	\$1447	Louisiana Tech	\$645 ‡ per quarter basis

* Masters in engineering where applicable.

How much do employee/faculty costs drive the tuition increase?

Michigan Tech's retirement obligations – MPSERS (<10 percent of payroll) obligation is close to TIAA-CREF. Currently it is over 45% of the total retirement obligation.
(audited financial statements)

2009 MPSER obligation	\$4.87 million	2009 TIAA-CREF/Fidelity	\$7.92 million
2010 MPSER obligation	\$4.67 million	2010 TIAA-CREF/Fidelity	\$7.17 million
2011 MPSER obligation	\$5.14 million	2011 TIAA-CREF/Fidelity	\$5.96 million
2012 MPSER obligation	\$5.76 million	2012 TIAA-CREF/Fidelity	\$6.15 million
2013 MPSER obligation	\$5.72 million	2013 TIAA-CREF/Fidelity	\$5.56 million
2014 MPSER obligation	\$5.34 million	2014 TIAA-CREF/Fidelity	\$5.74 million

Medical benefit claims paid by Michigan Tech since 2006.

Since 2012 there has been 21% decrease (25% CPI adjusted). All of the actual increase in healthcare costs have been paid by those covered. (FY basis - audited financial statements)

2006	\$10,984,366	
2007	\$12,041,986	
2008	\$13,875,743	
2009	\$13,980,633	
2010	\$14,310,670	
2011	\$14,748,919	
2012	\$15,735,827	
2013	\$14,377,991	
2014	\$12,498,807	(4% less than 2006, CPI adjusted)

Total employee benefit costs to Michigan Tech are flat since 2006.

Up 0.0% (CPI adjusted) since 2006, the non-student employee headcount is up by 21% over same period.

2006	\$28,901,300
2007	\$31,010,000
2008	\$35,802,819
2009	\$35,859,251
2010	\$34,709,950
2011	\$35,124,359
2012	\$37,803,478
2013	\$34,740,933
2014	\$33,889,868

Average total compensation and benefits per instructor.

Increased 10% (actual dollars) since FY2006 (-10% CPI adjusted), due to small raises, benefit cuts, and lower cost structure (more junior faculty, lecturers, etc.) Current fund expenditures are up 48% (28% CPI adjusted) over the same period. (sources: audited financial statements & compendium)

<i>FY</i>	<i>Instructional Compensation & Benefits</i>	General Fund Instructional Expenditures	Unrestricted current fund expenditures	Tenure/Tenure track faculty	Non-tenure track faculty
2006	\$38,559,398	\$44,317,174	\$140,827,244	312	11
2007	\$39,975,030	\$45,879,482	\$151,679,361	317	10
2008	\$43,292,487	\$49,316,020	\$166,313,946	310	48
2009	\$46,729,720	\$53,425,533	\$179,326,092	312	55
2010	\$47,987,133	\$54,767,561	\$187,242,616	329	57
2011	\$47,812,865	\$54,713,867	\$191,434,074	342	58
2012	\$47,866,389	\$55,128,119	\$198,550,847	354	56
2013	\$50,538,540	\$57,426,523	\$199,634,657	348	56
2014	\$52,005,389	\$58,577,540	\$208,232,321	336	57

From FY2007-2009 to FY2014-2015 the entire executive team (as listed on the MTU webpage) had an aggregate increase of 44% actual dollars (from a total of \$1.115M to \$1.608m), which works out to an average annual increase of 4.5%/year. Not over-the-top, but substantial.

Average Faculty Salaries – Michigan and Regional Universities

Oklahoma State Faculty Salary Survey (2013-2014) and AAUP Faculty Salary Survey (2012-2013)

Institution	Professor	Assoc. Professor	Asst. Professor
Michigan Tech	111 (4 th)*	87 (3 rd)*	77 (3 rd)*
U. of Michigan	157	104	90
Michigan State	135	93	72
Wayne State	121	90	77
U. of Wisconsin	124	93	82
Ohio State	139	94	85
Colorado School of Mines	132	94	82
Missouri Univ. of S & T	122	83	73
U. of Minnesota	136	92	83
U. of Illinois	145	96	91
Purdue	131	92	81
National Engineering avg.	143	99	85
Midwest Engineering avg.	147	103	87

* National quintile – AAUP Faculty salary survey

How about institutional costs?

Total Debt

Total debt increased over \$32M over last decade (Audited financial statements). This is a chiefly a result of bonded debt that has been issued since 2003. *Debt outstanding as of June 30, 2014 is \$82M, and the combined principal and interest are approximately \$131M.* We now spend \$6M/year on debt service; a portion of which may be associated with revenue lines (e.g. residence halls).

2002	\$ 11,396,000
2003	\$ 17,198,000
2004	\$ 51,023,286
2005	\$ 50,274,702
2006	\$ 49,517,956
2007	\$ 51,131,794
2008	\$ 50,904,532
2009	\$ 56,112,688
2010	\$ 73,113,673
2011	\$ 82,496,244
2012	\$ 84,516,392
2013	\$ 85,711,936
2014	\$ 81,818,215

Costs of expanding and maintaining our physical plant.

Increase of over 900,000sq. ft. over last 20 years (@\$5 to \$7/sq ft per year maintenance).
Approximately 100 sq. ft. added per person (students, staff, faculty) on campus.

M&M	217,200
Dow	167,000
Rosza	80,000
Little Huskies	4,400
Forestry expansion	48,000
Lakeshore Center	50,000
Mineral Museum	9,000
Rehki building	51,000
Opie Library	54,000
Hillside Place	75,000
ATDC	27,500
Great Lakes Research Center	49,500
Blizzard building	55,000
Alternative energy center	4,000
KRC, Engineering design center	11,000
Miscellaneous (Gundlach, etc.)	14,600
Total additional space	907,000 square feet

Academic support is up over the past few years

(\$10.7M in FY2006 to \$18.4 M in FY2014)

Academic support includes: (1) Library operations, (2) Academic IT, (3) CTLF, (4) marketing and communications, (5) corporate relations and intellectual property, (6) research services, (7) the graduate school, (8) learning centers.

Institutional support *

(Audited financial statements)

Institutional support includes (1) central executive-level activities concerned with management and long-range planning of the entire institution, such as the governing board, planning and programming, and legal services; (2) fiscal operations, including the investment office; (3) administrative data processing; (4) space management; (5) employee personnel and records; (6) logistical activities that provide procurement, storerooms, safety, security, printing, and transportation services to the institution; (7) support services to faculty and staff that are not operated as auxiliary enterprises; and (8) activities concerned with community and alumni relations, including development and fund raising.

2006	\$18,027,340
2007	\$20,858,727
2008	\$24,364,292
2009	\$28,393,021
2010	\$27,429,468
2011	\$29,045,690
2012	\$32,570,634
2013	\$16,022,546
2014	\$17,450,450

*As of FY2013 there was a major re-categorizing of some expenditures (e.g.- as academic support, student services, or operations instead of institutional support). The combined growth is in excess of 50% over this period (18% CPI adjusted).

Academic plus Institutional support alone was up over \$4.5M in the last year.

Can Research Dollars Help MTU's Finances?

External dollar expenditures are up 23% since 2002, or about 2%/year CPI adjusted

Internal and external research expenditures per FY (source: compendium & NSF)

2002	External	\$22.79 M
	Internal	\$7.21 M
2004	External	\$23.88 M
	Internal	\$11.79 M
2006	External	\$24.25 M
	Internal	\$19.95 M
2008	External	\$36.16 M
	Internal	\$24.20 M
2010	External	\$34.49 M
	Internal	\$28.98 M
2012	External	\$39.07 M
	Internal	\$32.92 M
2013	External	\$37.94 M
	Internal	\$32.75 M
2014	External	\$37.35 M
	Internal	\$31.18 M

Actual internal research expenditures are up >400% since 2002, now 46% of total.

Internal research expenditures include: REF, IRAD, general fund salaries charged to research, start-up funds, cost share, Graduate Assistant Cost Share (GACS), Indirect costs (Facilities & Administrative F&A) on cost share and waivers of indirects (F&A) on sponsor funds, research related gifts, use charges & SURF Fellowships.

HLC composite financial index (CFI)

The Higher Learning Commission (HLC) accredits degree granting colleges and universities. A CFI of 1.1 or higher = adequate financial health and no HLC review. A CFI below 1.1 = possible HLC review.

Accreditation criteria include whether “resources are sufficient to fulfill its mission, and respond to future challenges and opportunities”. An annual Composite Financial Index (CFI) is calculated annually to evaluate the sufficiency of institutional resources.

Combination of 4 financial ratios, each weighted as follows:

- Primary Reserve Ratio (35%) – Net assets/operating and non-operating expenses.
- Viability Ratio (35%) – Net assets/Long term debt.
- Return on Net Assets Ratio (20%) – Change in net assets/total assets.
- Net Operating Revenues Ratio (10%) – Net operating income (loss)/total revenues.

Higher Learning Commission – Composite Financial Index

	FY14	FY2013	FY2012	FY2011
Primary reserve ratio	0.40	0.36	0.30	0.35
Viability ratio	1.11	0.98	0.81	0.94
Return on Net assets ratio	2.41%	0.94%	0.50%	5.68%
Net operating revenues ratio	1.03%	-1.21%	-7.70%	0.35%
Composite financial index	2.3	1.8	1.1	2.3

What are the options and tradeoffs?

Increase Revenues ?

More undergraduate tuition increases?

- Market price elasticity uncertain by program, non-STEM degrees are under increasing pressure.
 - Separate upper and lower division tuition.
 - Set tuition by program.
- State restrictions on tuition increases, and decreased good will.
- Student debt crisis. Average MTU student graduates with >\$30K in debt.

Reduce both tuition and tuition discounting?

- Discounting currently very high (40%), reduce discounting to peer and regional levels (30%).
- Attract more students with lower “sticker” price.
- Good publicity with public.
- Generate good will with state legislature. Leverage into associated appropriations.

Match market prices for graduate education?

- Increasing graduate tuition to market price nets additional \$2-3M/year.
- Now need up to 3 non-resident grad students to generate tuition of 1 non-resident undergrad.
- Do we want to be the low-price provider for STEM graduate education?
- Since we are already among the lowest, small increases should not affect competitiveness in grants.

Increase Endowment to levels similar to peers? (much work to be done)

External Research Funding has grown at a moderate rate. (much work to be done)

Decrease expenses?

Adjustments in compensation?

- We are continuously being presented with a completely disingenuous choice between salary *or* benefits. There are innumerable choices in making a budget (i.e. higher grad tuition vs benefits, new buildings vs salary, administrative salaries vs underfed students, etc.)
- Competitive compensation consistent with strategic plan? We are becoming less competitive in most categories, but we are falling *far* behind in senior faculty ranks.
- Benefits have been cut more than any component of the budget, and the effects are being acutely felt. Cuts in benefits are especially regressive with lower paid employees hit hardest.
- MPSER obligation relief. (We send almost 13% of state appropriation back.)

Restrict new debt and/or refinance current debt?

- Recent board actions have repackaged the majority of bond issues, but added some costs (e.g. >\$1M for SDC upgrades), and extended payback periods well into the future.
- Postpone additional new buildings. New capital outlays from state for FY2016?
- Deferred maintenance is approaching***

Redesign academic programs?

- Seriously evaluate finances of new programs, and reassess finances of programs added in recent years. Ten new programs claiming no new costs add up to significant new costs!
- Pursue collaborative opportunities and continue work to eliminate “silos”. (e.g. co-list more courses across curriculum, more collaborative Ph.D. programs, etc.)
- Further enhance center approach to research, and promote regional partnerships initiatives similar to Physical Therapy Ph.D.

Increase University Endowment to Level of Peers

Michigan Tech Fund
Endowment Market Value By Fiscal Year

