

Salary Comparison Report

Financial and Institutional Planning Committee

Aim:

- Provide realistic and objective data on salaries that can be used in discussions with respect to compensation (salary and benefits).
- Discover sore points that would need attention

Acknowledgements:

- Thanks to Rachel Martin for bringing together all this data in a coordinated fashion
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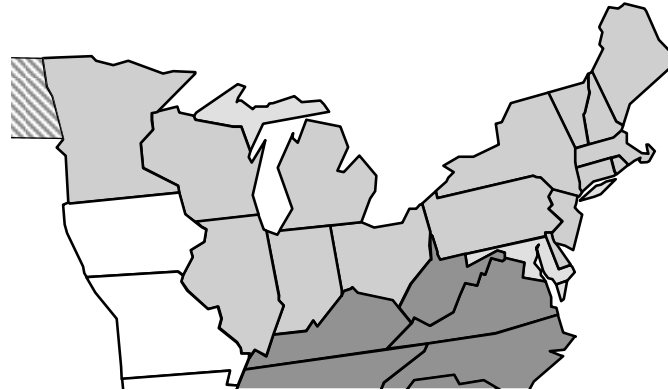
Background

- Last year the FIPC started a review of the overall compensation (salary + benefits) of MTU employees.
- Retirement benefits (excluding MPERS) were reviewed last year by the FIPC showing poor comparison compared to research peers and other regional universities. This sparked the (vetoed) proposal 41-15
- The steady decline in healthcare benefits at MTU has been well documented by the FBC, however, no detailed comparison to what happened at other institutions was made yet.
- The current study: detailed salary comparison.

Methodology

- Comparison of 9 month regular tenured and tenure-track faculty salaries at MTU with salaries at other universities in the region and national research peers.
- MTU salaries taken from the MTU salary book as available on <http://www.mtu.edu/hr/docs/salaries.pdf>
- Average regional and national salaries taken from *Faculty Salary Survey by Discipline*, published by the *Office of Institutional Research and Information Management, Oklahoma State University*. (Information submitted voluntarily by participating universities)

- Our region:



REGION 3

- | | |
|--|---|
| Ball State University (IN)* | University of Illinois at Chicago |
| Bowling Green State University (OH)* | University of Illinois at Urbana /Champaign |
| Indiana University at Bloomington* | University of Maine |
| Indiana University of Pennsylvania (PA)* | University of Maryland, Baltimore County* |
| Kent State University (OH)* | University of Maryland at College Park* |
| Miami University (OH)* | University of Massachusetts* |
| Michigan State University* | University of Massachusetts at Boston* |
| Ohio State University* | University of Michigan* |
| Ohio University* | University of Minnesota – Twin Cities* |
| Pennsylvania State University * | University of New Hampshire |
| Purdue University (IN)* | University of Pittsburgh (PA)* |
| Southern Illinois University at Carbondale | University of Rhode Island* |
| State University of New York at Binghamton | University of Vermont* |
| State University of New York at Buffalo | * University of Wisconsin at Madison* |
| University of Connecticut* | University of Wisconsin at Milwaukee* |
| University of Delaware* | Wayne State University (MI)* |

• Our research peers

CARNEGIE CLASS: RESEARCH UNIVERSITY/HIGH RESEARCH ACTIVITY

Auburn University (AL)	University of Idaho*
Ball State University (IN)*	University of Maine
Baylor University (TX)*	University of Maryland, Baltimore County*
Bowling Green State University (OH)*	University of Massachusetts at Boston*
Clemson University (SC)*	University of Mississippi*
Colorado School of Mines*	University of Missouri at Kansas City
Florida Atlantic University*	University of Missouri at St. Louis
Idaho State University	University of Montana*
Kansas State University*	University of Nevada at Las Vegas*
Kent State University (OH)*	University of Nevada at Reno*
Miami University (OH)*	University of New Hampshire
New Mexico State University*	University of North Carolina at Greensboro*
Ohio University*	University of North Dakota
Oklahoma State University*	University of North Texas*
Old Dominion University (VA)*	University of Rhode Island*
South Dakota State University*	University of South Dakota*
Southern Illinois University at Carbondale	University of Southern Mississippi
State University of New York at Binghamton*	University of Vermont*
Texas Tech University*	University of Wisconsin at Milwaukee*
University of Alabama*	University of Wyoming*
University of Alaska at Fairbanks*	Utah State University*
University of Colorado at Denver*	West Virginia University

- Comparison of the average salary at the ranks of Assistant, Associate and Full Professor
- Comparison in 16 specific research areas: e.g. Civil & Environmental Engineering, Chemistry, Chemical Engineering, Mathematical Sciences, ...
- We have data for two years: 2013 and 2014

Assistant Professors 2013

DEPARTMENT	Assistant Professor	Average salary	Difference with region	Difference with research peers
Civil & Environmental Engineering	8	84908	-0.62%	-11.80%
Chemistry	4	67464	-9.26%	5.63%
Chemical Engineering	4	90103	2.40%	4.49%
Mechanical Engrg-Engrg Mechanics	8	88172	0.58%	7.85%
Mathematical Sciences	6	63005	-10.81%	-3.33%
Biological Sciences	5	68483	-6.47%	9.35%
Biomedical Engineering	4	85733	2.86%	5.49%
Physics	2	69213	-11.56%	4.77%
Materials Science and Engineering	2	92882	4.31%	8.11%
Electrical & Computer Engineering	8	88662	14.85%	3.30%
Humanities	9	59790	-9.03%	14.48%
Social Sciences	8	58777	-31.60%	-10.69%
Computer Science	3	93622	-1.54%	6.54%
Geological & Mining Eng	6	83501	-0.37%	12.66%
School of Business & Economics	9	115327	-36.18%	3.09%
Sch Forest Resources & Env Sci	6	59140	-32.10%	-2.07%
MTU Average	92	79291	-9%	3%

Assistant Professors 2014

DEPARTMENT	Assistant Professor	Average salary	Difference with region	Difference with research peers
Civil & Environmental Engineering	7	86409	-1.90%	7.26%
Chemistry	5	59576	-7.65%	5.45%
Chemical Engineering	3	89078	1.12%	10.52%
Mechanical Engrg-Engrg Mechanics	9	91212	1.89%	8.18%
Mathematical Sciences	8	66601	-8.48%	0.24%
Biological Sciences	6	70108	-5.35%	9.41%
Biomedical Engineering	3	89475	4.23%	10.43%
Physics	1	68200	-18.80%	-0.64%
Materials Science and Engineering	0	0	0	0
Electrical & Computer Engineering	7	91000	10.87%	6.98%
Humanities	11	59063	-15.03%	14.31%
Social Sciences	8	60402	-30.65%	-10.91%
Computer Science	3	81532	-17.55%	-9.88%
Geological & Mining Eng	8	86130	-1.82%	8.45%
School of Business & Economics	9	115780	-38.80%	-27.06%
Sch Forest Resources & Env Sci	7	59271	-31.63%	6.71%
MTU Average	95	78331	-12%	2%

Associate Professors 2013

DEPARTMENT	Associate Professor	Average salary	Difference with region	Difference with research peers
Civil & Environmental Engineering	13	93113	-8.24%	-5.17%
Chemistry	6	73754	-23.03%	-2.62%
Chemical Engineering	4	91273	-9.96%	-6.63%
Mechanical Engrg-Engrg Mechanics	14	98297	-4.89%	4.58%
Mathematical Sciences	8	74137	-17.37%	-0.78%
Biological Sciences	5	80072	-8.69%	5.14%
Biomedical Engineering	3	95594	-8.32%	-6.15%
Physics	3	83175	-8.91%	6.34%
Materials Science and Engineering	4	97368	-3.01%	-4.02%
Electrical & Computer Engineering	8	95801	-7.34%	0.49%
Humanities	12	68053	-18.13%	-23.22%
Social Sciences	5	71649	-26.29%	-6.29%
Computer Science	7	98816	-13.84%	-4.28%
Geological & Mining Eng	3	102126	1.19%	4.96%
School of Business & Economics	6	112296	-57.46%	17.36%
Sch Forest Resources & Env Sci	5	81712	-4.45%	16.11%
MTU Average	106	88068	-13.85%	-1.68%

Associate Professors 2014

DEPARTMENT	Associate Professor	Average salary	Difference with region	Difference with research peers
Civil & Environmental Engineering	10	94236	-9.78%	0.30%
Chemistry	6	78270	-19.09%	0.21%
Chemical Engineering	4	93789	-10.10%	-0.45%
Mechanical Engrg-Engrg Mechanics	12	99461	-6.09%	4.28%
Mathematical Sciences	8	80052	-14.49%	5.67%
Biological Sciences	5	82801	-8.19%	6.88%
Biomedical Engineering	3	99132	-5.28%	-2.01%
Physics	4	85360	-11.66%	6.44%
Materials Science and Engineering	7	103685	-1.14%	8.04%
Electrical & Computer Engineering	8	98410	-7.02%	2.24%
Humanities	9	70412	-16.44%	-21.88%
Social Sciences	4	73060	-27.00%	-7.36%
Computer Science	7	101250	-10.97%	-3.56%
Geological & Mining Eng	3	105800	0.07%	9.74%
School of Business & Economics	7	121828	-52.42%	21.64%
Sch Forest Resources & Env Sci	6	90059	2.19%	18.84%
MTU Average	103	92546	-12.58%	2.62%

Professors 2013

DEPARTMENT	Professor	Average salary	Difference with region	Difference with research peers
Civil & Environmental Engineering	9	116694	-20.6%	-19.32%
Chemistry	6	99978	-39.4%	-9.40%
Chemical Engineering	8	134320	-18.4%	-2.46%
Mechanical Engrg-Engrg Mechanics	15	128253	-12.5%	2.51%
Mathematical Sciences	11	101981	-21.1%	2.60%
Biological Sciences	4	107952	-15.2%	4.45%
Biomedical Engineering	2	160306	9.9%	10.10%
Physics	13	105397	-23.2%	-2.01%
Materials Science and Engineering	8	117824	-27.8%	-23.64%
Electrical & Computer Engineering	9	135964	-16.2%	8.45%
Humanities	4	101481	4.3%	0.99%
Social Sciences	6	96676	-43.2%	-6.34%
Computer Science	3	121352	-28.0%	21.66%
Geological & Mining Eng	2	141307	8.2%	12.45%
School of Business & Economics	6	121225	-82.5%	7.88%
Sch Forest Resources & Env Sci	7	98879	-12.7%	9.68%
MTU Average	113	116029	-22.93%	-1.01%

Professors 2014

DEPARTMENT	Professor	Average salary	Difference with region	Difference with research peers
Civil & Environmental Engineering	12	119695	-18.92%	-5.15%
Chemistry	5	103600	-38.74%	-8.90%
Chemical Engineering	8	138245	-2.60%	9.35%
Mechanical Engrg-Engrg Mechanics	16	134573	-10.84%	3.90%
Mathematical Sciences	11	104358	-24.44%	2.25%
Biological Sciences	4	110905	-16.73%	4.46%
Biomedical Engineering	2	164949	2.41%	6.44%
Physics	13	109068	-24.59%	0.98%
Materials Science and Engineering	8	126717	-16.78%	-1.96%
Electrical & Computer Engineering	8	144027	-13.26%	12.43%
Humanities	6	98089	0.31%	-5.33%
Social Sciences	7	96691	-48.05%	-10.25%
Computer Science	3	128272	-21.22%	0.16%
Geological & Mining Eng	2	153000	7.56%	18.95%
School of Business & Economics	5	131950	-77.53%	-13.78%
Sch Forest Resources & Env Sci	7	101553	-9.25%	9.68%
MTU Average	117	120048	-20.01%	0.99%

Conclusions

- Regionally MTU salaries are (very) low. What causes this regional discrepancy? The north-east coast being part of our region could be part of the reason. Nevertheless, such large difference could cause difficulties in attracting and retaining top faculty. This definitely warrants further study.
- We are roughly on par with our research peers. However, two points should be made. A) While attracting Assistant professors slightly above the average compared to our peers, this advantage is somewhat lost as people move up to Associate and Full professor (2013 and 2014 data contradict each other). Again this may cause retention issues. B) The 2035 vision calls for MTU to be “ a premier technological research university of international stature” which can be interpreted as moving to Carnegie class “Very High Research Activity”. In order to attract and retain the faculty necessary to achieve this, it seems that an extra effort should be undertaken in the middle to long run to increase the salaries more substantially than with the current merit increases.

Conclusions

- It is interesting to see that the average increase between Assistant and Associate Professors is only about the standard increase for promotion from Assistant to Associate Professor (the 2014 data are somewhat better than the 2013 data). This might indicate that several Associate Professors are still feeling negative effects from having been hired during the economic crisis; and/or that Associate Professors receive less merit increases (perhaps because they are considered less likely to move to another job); and/or the average Associate Professor is promoted quickly to Full Professor.
- The salaries in some units deserve a more close look in the short run: Humanities, Social Sciences, Chemistry (at the full professor level), Civil & Environmental Engineering (at the full professor level)

Conclusions

- The argument that reduction in fringe benefits has been compensated by salary increases does not seem to hold.
- It would be recommended that HR continues salary comparison on a yearly basis and reports back to the senate. This would allow us to discover trends and react to them in a timely manner, especially as the university is working to achieve the 2035 goals.