

Formal Session of the Board of Trustees October 7, 2022 9:00 a.m. – 11:00 a.m. Location: MUB Ballroom B Public Meeting

- I. Call to Order Jeffrey Littmann, Chair
- II. Roll Call Sarah Schulte, Secretary
- III. Confirm Agenda Jeffrey Littmann, Chair

IV. Opening Remarks

- A. Opening Remarks of the Board Chair Jeffrey Littmann, Chair
- B. Opening Remarks of the University President Richard Koubek, President
- V. Public Comment Period

VI. Committee Reports

- A. Academic Affairs Committee John Bacon, Committee Chair
- B. Audit and Finance Committee Andrea Dickson, Committee Chair
- C. Leadership Committee Steve Tomaszewski, Committee Chair

VII. Consent Agenda

- A. Approval of Minutes
- **B.** Degrees in Course
- C. Resignations, Retirements, and Off Payroll
- D. Fundraising Productivity Report

E. 2023 Meeting Dates

VIII. Action and Discussion Items

- A. Employee Recognition Rick Koubek, President
- B. Emeritus Rank Andrew Storer, Interim Provost
- C. Update to Board Policy Chapter 9 John Lehman, Vice President for University Relations and Enrollment
- **D. Resolution to Accept the FY22 Audited Financial Statements** David Reed, Interim CFO & VP for Research
 - a. External Auditor's Report Brian Greko, Plante Moran
- E. H-STEM Resolution Pertaining to State Building Authority Approvals David Reed, Interim CFO & VP for Research
- F. Adoption of Campus Master Plan David Reed, Interim CFO & VP for Research
- G. Bonding Approval David Reed, Interim CFO & VP for Research
- H. Five-Year State Capital Outlay Plan and Request David Reed, Interim CFO & VP for Research
- I. Approval of Risk Tolerance Statement Sarah Schulte, Secretary for the Board of Trustees

IX. Reports

- A. Rediscovering Red Wolf Ancestry Kristin Brzeski, Assistant Professor, College of Forest Resources & Environmental Science
- **B.** Recruiting and Enrollment Update John Lehman, Vice President for University Relations and Enrollment
- C. Undergraduate Student Government Cheyenne Scott, President
- D. Graduate Student Government Ranit Karmakar, President
- E. University Senate Mike Mullins, President

- X. Informational Items
 - A. Analysis of Investments
 - B. Research & Sponsored Programs
 - C. Advancement & Alumni Relations
 - D. Media Coverage
 - E. Employee Safety Statistics
 - F. Disposal of Surplus Property
- XI. Other Business
- XII. Date for Next Formal Meeting: December 16, 2022
- XIII. Adjourn

VII. 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. Degrees in Course
- C. Resignations, Retirements, and Off Payroll
- D. Fundraising Productivity Report
- E. 2023 Meeting Dates

VII-A. APPROVAL OF MINUTES

RECOMMENDATION: That the Board of Trustees approves the minutes of the formal session on August 4, 2022, as distributed to the Board.

VII-B. DEGREES IN COURSE

Included herein are candidate who have been recommended by their respective faculties and have been certified by the Registrar as having fulfilled all the requirements of their degrees as specified.

RECOMMENDATION: That the Board of Trustees approves the awarding of the degrees as specified, to each of the candidates listed, and offer congratulations.



MEMORANDUM

To:	Dr. Richard J. Koubek Office of the President
From:	Theresa Jacques Registrar's Office

Date: September 13, 2022

Subject: Candidates for Degrees – Conferral Term 202205

The attached list of candidates for degrees, beginning with Cynthia Marie Perkins and ending with Veena Namboodri-Schioppa is submitted for the granting of the appropriate degrees by the Board of Trustees. I certify that these candidates meet all requirements for their respective degrees and that the names have been submitted to and have received the approval of the faculty from their major department.

acques Registrar

TJ/sw

130 Administration Building | 1400 Townsend Drive, Houghton, Michigan 49931-1295 906-487-2319 | f. 906-487-3343 | registrar@mtu.edu | **mtu.edu/registrar** 5

Michigan Technological University Degrees Awarded for Conferral Term 202205

Michigan Technological University Registrar's Office September 13, 2022

Bachelor of Arts in Communication, Culture, and Media

- Cynthia Marie Perkins Cum Laude
- Kady Elise Gehrke Cum Laude

Bachelor of Arts in English

• Grace Madison Champion - Magna Cum Laude

Bachelor of Arts in Physics

• Oliver-Hobbes William Jensen

Bachelor of Science in Accounting

• Charles Vincent Weiss

Bachelor of Science in Applied Ecology and Environmental Sciences

• Wabanungoquay Molly Alakayak

Bachelor of Science in Biomedical Engineering

• Anthony David Noe

Bachelor of Science in Civil Engineering

- Brendan M Varga
- Derek A Mahoski
- Jordan P Wheeler
- Victor Yousof

Bachelor of Science in Computer Engineering

- Harris Martin Neill
- Patrick Gordon Mccommons Cum Laude

Bachelor of Science in Computer Network and System Administration

• Jacob Francis Cherney - Cum Laude

Bachelor of Science in Computer Science

- Christopher Paul Norton
- Conner J Antczak
- Ethan James Robinson
- Evan R Cochrun
- Meagan Elizabeth Pothoven
- Sarah Kong-Joo Whittaker

Bachelor of Science in Construction Management

• Jack Mitchell Lacy

Bachelor of Science in Electrical Engineering

- Austin A Payne
- Jacob P Kuca

Bachelor of Science in Electrical Engineering Technology

- Daren U Giuchin Cum Laude
- Lawrence Khemis Okuka

Bachelor of Science in Engineering

Cora Jarman

Bachelor of Science in Engineering Management

- John Peter Horn
- Thomas J Pietila

Bachelor of Science in Environmental Engineering

• Jemel Elliott Thompson

Bachelor of Science in Finance

Trenton Beck Bliss

Bachelor of Science in Forestry

• Matthew Allen Penrose

Bachelor of Science in Geological Engineering

- Justin Andrew Ketola
- Lila Shanti Carden

Bachelor of Science in Geology

- Cooper Andrew Osgood
- Steven James Suhonen

Bachelor of Science in Management

• Hannah Jane Byers

Bachelor of Science in Management Information Systems

- Brendon Andrew Cook Magna Cum Laude
- Rylee James Gorman

Bachelor of Science in Mathematics

• Hadley Jane Wells - Magna Cum Laude

Bachelor of Science in Mechanical Engineering

- Allison Gabrielle Calder
- Andrew Joseph Gunnett
- Connor William McCliment
- Fisher Shaw Solberg
- Hunter William Nelson
- Jafet Pinto Reveggino
- Joaquin Ganoza
- Joshua Steven Lamphere
- Nicholas D Sand
- Noemi Nicole Heydrich
- Oliver David Hazewinkel

- Parker Jordan Renn
- Timothy Carl Gerst Cum Laude
- Trenton Ryan Giem
- Tyler Michael Fogg
- Zora Marque McPhail

Bachelor of Science in Mechanical Engineering Technology

• Brittney Lynn Phillips

Bachelor of Science in Medical Laboratory Science

• Eleia Beth Kozminski

Bachelor of Science in Physics

• Daniel Robert Koshar

Bachelor of Science in Psychology

- Catherine Jane Madish
- Emily Octavia Grant

Bachelor of Science in Scientific and Technical Communication

• Julia Lynne Barnes - Magna Cum Laude

Bachelor of Science in Social Sciences

• Katherine Grace Dvorak

Bachelor of Science in Sustainability Science and Society

• Madeline Elizabeth Dilisi - Magna Cum Laude

Doctor of Philosophy in Applied Cognitive Science and Human Factors

- Lamia Alam
- Warat Khaewratana

Doctor of Philosophy in Biochemistry and Molecular Biology

• Arslan Amer

Doctor of Philosophy in Biological Sciences

- Angela Marie Walczyk
- Tahiyat Abdulaziz A Alothaim
- Zhihong Wang

Doctor of Philosophy in Chemical Engineering

• Daniel Gregory Kulas

Doctor of Philosophy in Chemistry

• Chathura De Alwis Adambarage

Doctor of Philosophy in Civil Engineering

- Behnam Azmoon
- Nabhajit Goswami
- Reihaneh Samsami

Doctor of Philosophy in Computer Science

• Jiban Krishna Adhikary

Doctor of Philosophy in Electrical Engineering

- Steven Joseph Whitaker
- Zhouquan Wu

Doctor of Philosophy in Forest Science

- Chinmoyee Das
- Samuel Lopes Oliveira
- Zhongming An

Doctor of Philosophy in Geology

• Rachel Maria Rulison

Doctor of Philosophy in Industrial Heritage and Archaeology

• Talva Tammy Jennifer Jacobson

Doctor of Philosophy in Integrative Physiology

• Steven Philip Stelly

Doctor of Philosophy in Materials Science and Engineering

• Morteza Shaker Ardakani

Doctor of Philosophy in Mechanical Engineering - Engineering Mechanics

- Fnu Ankith Ullal
- Karrar Takleef Abdul Zahra Alofari
- Prathamesh Prashant Deshpande
- Sagar Umesh Patil
- Upendra Yadav

Doctor of Philosophy in Rhetoric, Theory and Culture

• Ann Marie Kitalong-Will

Doctor of Philosophy in Statistics

• Hongjing Xie

Master of Business Administr. in Business Administration

- Christopher Matthew Bryan
- Daniel A Yoder
- Erik Lawrence Crowley
- Maxx David James Fredrickson
- Michael Robert Karow

Master of Engineering Mgmt in Engineering Management

• Nathan W Lajoie

Master of Science in Accounting

• Sarah Y Anderson

Master of Science in Applied Ecology

- Olivia Marie Bailey
- Rachael Marie Wilber
- Sean Westley

Master of Science in Applied Statistics

- Alycia Jenkins
- Brandon James Coates
- David Parry
- Javier Leon Taylor
- Matthew Alan Mars

Master of Science in Biological Sciences

- Isaac Steven Bigcraft
- Kylee Marie Hackman
- Luke Moore

Master of Science in Chemistry

• Jessica Claire Krycia

Master of Science in Civil Engineering

• Alexander Michael Baker

Master of Science in Computer Science

- Colin Jeffrey Arkens
- Justin Michael Martin

Master of Science in Electrical and Computer Engineering

- Jonathan Patrick Winegar
- Tarun Potluri

Master of Science in Environmental and Energy Policy

• Jordan Wilkes Kelley

Master of Science in Forest Ecology and Management

Breanna Rae Gusick

Master of Science in Geological Engineering

Brock Owen Howell

Master of Science in Geology

• Nelmary Rodriguez Sepulveda

Master of Science in Mechanical Engineering

- Aditya Kalidas Nair
- Ajinkya Janardan Pathare
- Carter Allen Paprocki
- Christiana Tenia Strong
- Joshua Dan Kemppainen
- Matthew David Ilenich
- Robb M Mrozinski
- Sai Anish Reddy Jupalli
- Shreyas Suhas Gadekar
- Zachary John Stanchina

Master of Science in Mechatronics

Sravan Kumar Turaga

Master of Science in Rhetoric, Theory and Culture

• Veena Namboodri-Schioppa

VII-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 off payroll determinations.

BOARD OF TRUSTEES OFF-PAYROLL REPORT

(July 1, 2022 – September 15, 2022)

RETIRED

Name	Class	Department	Title	Most Recent Hire Date	Term Date
Norma Veurink	FC	Civil, Environmental & Geospatial Engineering	Teaching Professor	08/17/2003	08/22/2022
Surendra Kawatra	FF	Chemical Engineering	Professor	09/12/1977	09/04/2022

OFF-PAYROLL

Name	Class	Department	Title	Most Recent Hire Date	Term Date	
Sinan Ayad Abood Itraija	PF	College of Forest Resources & Environmental Science	Research Scientist	02/18/2019	08/31/2022	
Zhaohua Dai	RP	College of Forest Resources & Environmental Science	Research Assistant Professor	08/29/2016	09/02/2022	
Kyle Bolden	FC	Kinesiology & Integrative Physiology	Senior Lecturer	08/20/2018	07/01/2022	
Pamela Givens	UF	Electrical & Computer Engineering	Administrative Aide	05/13/2019	07/01/2022	
Bryan Koppana	AF	Facilities Management	Building Mechanic	09/09/2013	07/22/2022	
Mayra Morgan	PF	Center for Diversity & Inclusion	Multi Student Success Coordinator	11/01/2021	07/22/2022	
Mark Holmgren	PF	Student Leadership & Involvement	Coordinator	10/18/2021	07/24/2022	
Junqiao Qiu	FF	Computer Science	Assistant Professor	08/17/2020	08/05/2022	
Melissa Harris	AF	Facilities Management	Custodian	07/11/2022	08/07/2022	
Renee Hiller	PF	Human Resources	Director	01/28/2008	08/07/2022	
Clayton Whitley	PF	Keweenaw Research Center	Assistant Research Engineer	06/14/2021	08/07/2022	
Ellen Holmstrom	AP	Wadsworth Hall Food Service	Food Service Helper	08/23/2021	08/12/2022	
Kristen Schmitt	PF	College of Forest Resources & Environmental Science	Research Scientist	10/05/2009	08/12/2022	
Nancy Barr	FC	Mechanical Engineering-Engineering Mechanics	Professor of Practice	03/12/2007	08/13/2022	
Michael Monette	AF	Facilities Management	Equipment Operator	09/20/2021	08/17/2022	
Abraham Romney	FF	Humanities	Associate Professor	08/19/2013	08/20/2022	
Joseph Kennedy	PF	Michigan Tech Research Institute (MTRI)	Assistant Research Engineer- Software Developer	05/02/2022	08/25/2022	
Justus Gau	DF	Public Safety & Police Services	Patrol Sergeant	07/22/2014	08/26/2022	
Todd Ontl	PF	College of Forest Resources & Environmental Science	Climate Adaptation Specialist	01/20/2020	08/26/2022	
Kari Pietrzyk	PF	Auxiliary Services	Facilities & Events Coordinator	02/07/2022	08/26/2022	
Ann Folcik	UF	Biological Sciences	Office Assistant	02/07/2022	09/02/2022	
Brenda Randell	NP	Associate Vice President for Administration	Executive Assistant	08/17/2015	09/02/2022	
Dayna Browning	PF	Center for Technology & Training	Training Specialist	10/18/2021	09/03/2022	
Naomi Ojala	AF	McNair Hall Food Service	Food Service Helper	08/12/2019	09/03/2022	
Dale Kero	PF	Office of Advancement	Director of Advancement	02/12/2006	09/09/2022	
Cornelius Agah	PF	Information Technology	Programmer/Analyst	08/08/2022	09/12/2022	

VII-D. FUNDRAISING PRODUCTIVITY REPORT

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, 2022 through August 31, 2022 Compared to Prior Fiscal Year

	FY23					FY22				
Source	YTD Total	Adjustment	FY Goal (in millions)	% of Goal	Source	YTD Total	Adjustment	FY Goal (in millions)	% of Goal	FY22 Total
Individual Giving	6,393,101		21.27	30%	Individual Giving	3,170,670		20.75	5 15%	18,911,223
Corporate Giving	883,154		2.05	43%	Corporate Giving	373,106		2	19%	2,345,521
Foundation & Other Org Giving	200,181		5.13	4%	Foundation & Other Org Giving	134,917		5	5 3%	10,657,856
Corporate Sponsored Research	1,552,718		13.33	12%	Corporate Sponsored Research	3,522,509		13	3 27%	15,092,172
FUNDRAISING TOTAL	. 9,029,154	-	41.77	22%	FUNDRAISING TOTAL	7,201,202	() 40.75	5 18%	47,006,772
Amt of TOTAL from Gifts-in-Kind	647,604	(included in the so	urce totals above)							
Amt of Gifts/Pledges earmarked										
for the endowment	4,854,503	(included in the so	urce totals above)							
Amt of Gifts/Pledges earmarked										
for unrestricted funds	23,389	(included in the so	urce totals above)							
TOTAL PROGRESS TOWARD	S FY GOAL	\$ 9,029,153.7	FY Goal 4 41.77	% of Goal 22%						
Realized Planned Gifts - All	161,123	(NOT included in th	he source totals al	bove)	7					
Amt of Realized Planned Gifts earmarked for the endowment	18,123									
Realized Pledges	160,094	(NOT included in th	he source totals al	bove)	7					
* <u></u>					—					

Notes:

The Adjustment totals include changes to gift records (eg. gift received date, amount, or other donor driven gift modifications)

The FUNDRAISING TOTAL includes outright gifts, as well as new pledge and planned gift commitments, made in the specified date range.

Realized planned gifts and realized pledges are not included in the FUNDRAISING TOTAL.

An individual's gifts made through a donor-advised fund are counted under the individual.

An individual's gifts made through another source (i.e. family foundation or closely held business) are counted under the source entity.

The FUNDRAISING TOTAL for fiscal years 2020 and later include gifts-in-kind under other sources (Major Gifts, Annual Giving, etc).

VII-E. 2023 BOARD OF TRUSTEES MEETING DATES

The following dates are presented for approval

Retreat

Wednesday, February 22, 2023 (half day) Thursday, February 23, 2023

Formal Session

Friday, February 24, 2023

Friday, April 28, 2023

Thursday, August 3, 2023

Friday, October 6, 2023

Friday, December 15, 2023

RECOMMENDATION: That the Board of Trustees approves the 2023 meeting dates as presented.

VIII. ACTION AND DISCUSSION ITEMS

- A. Employee Recognition
- B. Emeritus Rank
- C. Update to Board Policy Chapter 9
- D. Resolution to Accept the FY22 Audited Financial Statements
 - a. External Auditor's Report Brian Greko, Plante Moran
- E. H-STEM Resolution Pertaining to State Building Authority Approvals
- F. Adoption of Campus Master Plan
- G. Bonding Approval
- H. Five-Year State Capital Outlay Plan and Request
- I. Approval of Risk Appetite Statement

VIII-A. EMPLOYEE RECOGNITION

For our employees that have worked for Michigan Tech for 35 or more years and in recognition of their distinguished service and outstanding contributions to Michigan Tech, the Board would like to honor them with a resolution of appreciation.

RECOMMENDATION: That the Board of Trustees adopts the Resolution of Appreciation for the following individual:

1. Surendra Kawatra, Professor, Chemical Engineering – 45 years of service

VIII.B. EMERITUS RANK

Recommendation for the granting of faculty emerita/emeritus status originates within the retiree's academic department and proceeds through the respective college. 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: It is recommended that the Board of Trustees approves the following emerita/emeritus appointments.

Dr. Ronald Strickland, Professor Emeritus Department of Humanities

Dr. Lawrence L. Sutter, Professor Emeritus Department of Materials Science and Engineering

VIII-C. REVISIONS TO BOARD POLICIES - CHAPTER 9

- 1. Revisions to Board Policy 9.4 Michigan Technological University Leading Scholar Award
- 2. Revisions to Board Policy 9.5 Board of Trustees Scholarship
- 3. Revisions to Board Policy 9.7 Michigan Alumni Legacy Award (MALA)
- 4. Revisions to Board Policy 9.11 Academic Excellence Award (AEA)
- 5. Revisions to Board Policy 9.19 Sponsored Scholarships
- 6. Revisions to Board Policy 9.21 Leadership Scholarships
- 7. Revisions to Board Policy 9.22 Military Family Education Award (MFEA)

1. Revisions to Board Policy 9.4 - Michigan Technological University Leading Scholar Award

It is recommended that Board Policy 9.4 - Michigan Technological University Leading Scholar Award, be revised to reflect the increase in the academic caliber of our incoming student body and allow the University to more strategically leverage the award to recruit and yield prospective students.

RECOMMENDATION: That the Board of Trustees revises Board Policy 9.4 - Michigan Technological University Leading Scholar Award.

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.4 PURPLE= ADD STRIKETHROUGH = DELETE

9.4 - Michigan Technological University Leading Scholar Award

Open to first-time domestic freshmen displaying outstanding academic achievement, leadership, creative abilities and high potential for success at Michigan Technological University, for a four year period (8 semesters).

Awards are renewable for second, third, and fourth year students who maintain a cumulative grade point average of 3.25 as of the end of spring semester, acceptable social behavior, and continuous regular full-time undergraduate enrollment.

No replacements are made for students who withdraw.

Scholarship Committee considers requests for extensions of scholarships, but in no case would they be extended beyond 9 semesters. The 9 semesters would apply to those students required to attend a summer semester or who demonstrate extenuating circumstances.

Number available: Variable not to exceed 20 between resident and non-resident awards.

Michigan Residents:

Value: amount equivalent to commonly accepted educational expenses (i.e. regular full-time tuition charges, room, board, plus a \$1,000 annual stipend stipend not to exceed 10% of resident lower division tuition).

Number available: 3 for each incoming freshman class. Variable not to exceed 20 between resident and non-resident awards

Students who are selected are not eligible for the Presidential Scholar Award. Applicants must be residents of the State of Michigan.

Non-Michigan Residents:

Value: Up to regular non-resident full time tuition charges.

Number available: 3 for each incoming freshman class. Variable not to exceed 20 between resident and non-resident awards.

For non-resident students who are out of state residents will not be eligible for University scholarship programs (Alumni Legacy Award, National Scholar Award, Military Family Education Award, etc.) that reduces their out of state tuition charges in addition to the Leading Scholar Award.

For non-resident students eligible for the Military Family Education Award or the Alumni Legacy Award, the value is equal to in-state tuition. Students who are selected will not be eligible for the National Scholar Award.

THE AMENDED POLICY 9.4 SHALL READ AS FOLLOWS:

9.4 - Michigan Technological University Leading Scholar Award

Open to first-time domestic freshmen displaying outstanding academic achievement, leadership, creative abilities and high potential for success at Michigan Technological University, for a fouryear period (8 semesters).

Awards are renewable for second, third, and fourth year students who maintain a cumulative grade point average of 3.25 as of the end of spring semester, acceptable social behavior, and continuous regular full-time undergraduate enrollment.

No replacements are made for students who withdraw.

Scholarship Committee considers requests for extensions of scholarships, but in no case would they be extended beyond 9 semesters. The 9 semesters would apply to those students required to attend a summer semester or who demonstrate extenuating circumstances.

Number available: Variable not to exceed 20 between resident and non-resident awards.

Michigan Residents:

Value: amount equivalent to commonly accepted educational expenses (i.e. regular full-time tuition charges, room, board, plus a stipend not to exceed 10% of resident lower division tuition).

Students who are selected are not eligible for the Presidential Scholar Award.

Non-Michigan Residents:

Value: Up to regular non-resident full time tuition charges.

For non-resident students eligible for the Military Family Education Award or the Alumni Legacy Award, the value is equal to in-state tuition. Students who are selected will not be eligible for the National Scholar Award.

2. 9.5 Board of Trustees Scholarships

It is recommended that Board Policy 9.5 - Board of Trustees Scholarship, be rescinded. This scholarship is no longer offered. Deleting this award from the Board of Trustees policy manual will eliminate and reduce confusion that the awards are still available.

RECOMMENDATION: That the Board of Trustees rescind Board Policy 9.5 - Board of Trustees Scholarships.

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.5 PURPLE= ADD STRIKETHROUGH = DELETE

9.5 Board of Trustees Scholarships

Value: variable (\$1,000 minimum to amount equivalent to regular full-time tuition charges).

Number available: equivalent to 120 regular full-time tuition awards for each incoming freshman class.

Applicants must be residents of Michigan and members of the current year's graduating classes of Michigan high schools, except for those dependents of parents who are required to travel extensively or who remain out-of-state or abroad, such as those temporarily transferred by an employer and those in the ministry or military service, may be considered residents if they maintain Michigan as their place of permanent residency.

Awarded, based on academic achievement, for a four-year period (8 semesters) for those students working on a bachelor's degree, and for a two-year period (4 semesters), for those students working on an associate degree.

Scholarship Committee considers requests for extensions of scholarships, but in no case would 4year awards be extended beyond 10 semesters. The 10 semesters would apply to those students required to attend a summer semester or who demonstrate extenuating circumstances.

Renewable for second, third, and fourth year students who maintain a cumulative grade point average of 2.50 as of the end of spring semester, acceptable social behavior and continuous full-time undergraduate enrollment.

Scholarship Committee considers requests for reinstatement of scholarships from students returning after a withdrawal, depending upon the circumstances of the withdrawal, provided the student had an acceptable grade point average on leaving.

Any student enrolling at Michigan Technological University, for the first time, after Summer 2006 is ineligible to receive the Board of Trustees Scholarship. Current or previously enrolled Michigan Tech students who qualified for the Board of Trustees Scholarship prior to Fall 2006, will be covered under Board of Trustees Policy 9.4. Current or previously enrolled Michigan Tech students who did not qualify for the Board of Trustees Scholarship under Board of Trustees Policy 9.4 will not be eligible for the Michigan Technological University Presidential Scholars

Program. Furthermore, the Board of Trustees Scholarship will be terminated at the end of Spring Semester 2011.

THE AMENDED POLICY 9.5 SHALL READ AS FOLLOWS:

9.5 Board of Trustees Scholarships

Policy rescinded.

3. Revisions to Board Policy 9.7 - Michigan Alumni Legacy Award (MALA)

It is recommended that Board Policy 9.7 - Michigan Alumni Legacy Award Scholarship, be revised in order to be more reflective of reasonable purchasing power in relation to today's tuition figures, and adjusting it to follow tuition as a percent, will bring it up to date with current cost structures and eliminate the need for amount adjustments in the years to come.

RECOMMENDATION: That the Board of Trustees revises Board Policy 9.7 - Michigan Alumni Legacy Award (MALA).

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.7 PURPLE= ADD STRIKETHROUGH = DELETE

9.7 Michigan Alumni Legacy Award (MALA)

Value: \$1,000 (\$250 per academic year for 4 years or \$125 per semester for 8 semesters) At least \$1,000 annually, not to exceed 10% of lower division tuition. Award is valid for four years or 8 semesters.

Eligibility: New undergraduate students who are Michigan resident children or grandchildren of Michigan Tech alumni.

Scholarship Committee considers requests for extensions of scholarships, but in no case would 4-year awards be extended beyond 10 semesters.

Exclusion: Students enrolled prior to summer 2000 are ineligible for the Michigan Alumni Legacy Award.

THE AMENDED POLICY 9.7 SHALL READ AS FOLLOWS:

9.7 Michigan Alumni Legacy Award (MALA)

Value: At least \$1,000 annually, not to exceed 10% of lower division tuition. Award is valid for four years or 8 semesters.

Eligibility: New undergraduate students who are Michigan resident children or grandchildren of Michigan Tech alumni.

Scholarship Committee considers requests for extensions of scholarships, but in no case would 4year awards be extended beyond 10 semesters.

4. 9.11 Academic Excellence Award (AEA)

It is recommended that Board Policy 9.11 - Academic Excellence Award (AEA), be rescinded. This scholarship is no longer offered. Deleting this award from the Board of Trustees policy manual will eliminate and reduce confusion that the awards are still available.

RECOMMENDATION: That the Board of Trustees rescinds Board Policy 9.11 - Academic Excellence Award (AEA).

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.11 PURPLE= ADD STRIKETHROUGH = DELETE

9.11 Academic Excellence Award (AEA)

Value: Full Value: Equal to the difference between nonresident and resident tuition.

Partial Value: \$4,000 per academic year (\$2,000 per semester). Student must be enrolled at least half time to receive partial value.

Eligibility: Undergraduate non-Michigan residents of the United States or its territories or Canada who (a) rank in the top 25% of their high school class or achieve a cumulative high school grade point average of 3.50 or higher (4.0 scale), or (b) who transfer from a post-secondary institution with a minimum 3.0 cumulative grade point average (4.0 scale) and who have been enrolled full-time for at least two semesters, or (c) who do not qualify for the AEA under provisions (a) or (b) but attain a minimum 3.0 cumulative grade point average (4.0 scale) after attending Michigan Tech full time for two semesters. Applicants, who do not rank in the top 25% of their high school class or achieve a cumulative high school grade point average of 3.50 or higher, but achieve a 3.00 or higher, will receive the partial value of this award.

Exclusion: Students enrolled at Michigan Tech prior to Summer 2000 are ineligible for theAEA. Students enrolled at Michigan Tech prior to Summer 2004 are ineligible for the partial value of theAEA. Any student enrolling at Michigan Technological University, for the first time, after Summer 2006 is ineligible to receive the Academic Excellence Award. Current or previously enrolled Michigan Tech students who qualified for the Academic Excellence Award prior to Fall 2006, will be covered under Board of Trustees Policy 9.19. Current or previously enrolled Michigan Tech students who did not qualify for the Academic Excellence Award under Board of Trustees Policy 9.12 will not be eligible for the Michigan Technological University National Scholars Program. Furthermore, the Academic Excellence Award Program will be terminated at the end of the Spring Semester 2011.

THE AMENDED POLICY 9.11 SHALL READ AS FOLLOWS:

9.11 Academic Excellence Award (AEA) Policy Rescinded

5. 9.19 Sponsored Scholarships

It is recommended that Board Policy 9.19 - Sponsored Scholarships, be revised by updating wording to note that a "catalog" in this context no longer exists given the shift to digital financial aid tracking. Also updating grammar and providing that the university would comply with its legal and Board policy obligations in the event of a conflict between them and the language included in sponsored scholarships.

RECOMMENDATION: That the Board of Trustees revises Board Policy 9.19 - Sponsored Scholarships.

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.19 PURPLE= ADD STRIKETHROUGH = DELETE

9.19 Sponsored Scholarships

Scholarships sponsored by individuals, companies, foundations, etc. are administered in compliance with the conditions of the sponsor to the extent consistent with applicable law and Board policy. These scholarships are listed in the catalog and financial aid brochure each year.

THE AMENDED POLICY 9.19 SHALL READ AS FOLLOWS:

9.19 Sponsored Scholarships

Scholarships sponsored by individuals, companies, foundations, etc. are administered in compliance with the conditions of the sponsor to the extent consistent with applicable law and Board policy.

6. 9.21 Leadership Scholarships

It is recommended that Board Policy 9.21 - Leadership Scholarships, be rescinded. This scholarship is no longer offered. Deleting this award from the Board of Trustees policy manual will eliminate and reduce confusion that the awards are still available.

RECOMMENDATION: That the Board of Trustees rescind Board Policy 9.21 - Leadership Scholarships.

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.21 PURPLE= ADD STRIKETHROUGH = DELETE

9.21 Leadership Scholarships

A maximum of 20 leadership scholarships will be awarded to enrolled undergraduate students in the spring semester in recognition of outstanding campus service. A recipient must have a minimum of a 2.5 cumulative grade point average. Each recipient will receive a scholarship of \$500.

THE AMENDED POLICY 9.21 SHALL READ AS FOLLOWS:

9.21 Leadership Scholarships Policy Rescinded

7. 9.22 Military Family Education Award (MFEA)

It is recommended that Board Policy 9.22 - Military Family Education Award (MFEA), be revised as the current language restricts these students from competing for other merit-based competitive awards.

RECOMMENDATION: That the Board of Trustees revises Board Policy 9.22 - Military Family Education Award (MFEA).

PROPOSED REVISION TO BOARD OF TRUSTEES POLICY 9.22 PURPLE= ADD STRIKETHROUGH = DELETE

9.22 Military Family Education Award (MFEA)

Value: Equal to the difference between nonresident and resident tuition.

Eligibility: New undergraduate students who, at the time they apply to Michigan Tech, are considered nonresident students and are children under the age of 24 or the spouse of an active duty member of a Uniformed Service (as defined by Title 10 US code) including:

- Air Force
- Army
- Coast Guard
- Marines
- Navy National Oceanic and Atmospheric Administration Commissioned Corps (NOAA Corps)
- United States Public Health Service Commissioned Corps (PHSCC)
- National Guard & Reserve members activated for 365 days or greater
- Merchant Marine Academy

Currently enrolled undergraduate students with this Uniformed Services relationship may petition the University Scholarship Committee for MFEA consideration. Previously awarded assistance may be reduced or cancelled for enrolled MFEA recipients.

Duration: This award will remain with the student for the entirety of their undergraduate education so long as they remain in good academic and disciplinary standing.

Exclusion: Recipients of the MFEA are not eligible for other institutional general fund awards such as the National Scholars Program or Alumni Legacy Award.

Verification: Verification includes presenting Official Orders or Military ID cards to Michigan Tech's Admissions Office prior to the beginning of classes.

THE AMENDED POLICY 9.22 SHALL READ AS FOLLOWS:

9.22 Military Family Education Award (MFEA)

Value: Equal to the difference between nonresident and resident tuition.

Eligibility: New undergraduate students who, at the time they apply to Michigan Tech, are considered nonresident students and are children under the age of 24 or the spouse of an active duty member of a Uniformed Service (as defined by Title 10 US code) including:

- Air Force
- Army
- Coast Guard
- Marines
- Navy National Oceanic and Atmospheric Administration Commissioned Corps (NOAA Corps)
- United States Public Health Service Commissioned Corps (PHSCC)
- National Guard & Reserve members activated for 365 days or greater
- Merchant Marine Academy

Duration: This award will remain with the student for the entirety of their undergraduate education so long as they remain in good academic and disciplinary standing.

Exclusion: Recipients of the MFEA are not eligible for the National Scholars Program or Alumni Legacy Award.

Verification: Verification includes presenting Official Orders or Military ID cards to Michigan Tech's Admissions Office prior to the beginning of classes.

VIII-D. FY22 AUDITED FINANCIAL STATEMENTS

Plante & Moran, PLLC has provided audit services and presented their opinion regarding the 2022 Financial Report for Michigan Technological University. After review, the Board of Trustees resolves the following:

RECOMMENDATION: That the Board of Trustees accepts the FY22 audited financial statements, contained in the 2022 Financial Report, for the year ended June 30, 2022 as presented.

2022 FINANCIAL REPORT





TABLE OF CONTENTS

The Michigan Tech Strategic Plan	2
Letter from the President	3
Administrative Officers	5
University Update	6
Report of Independent Auditors	7
Management's Discussion and Analysis	10
Statements of Net Position	23
Statements of Revenues, Expenses, and Changes in Net Position	24
Statements of Cash Flows	25
Notes to the Financial Statements	27
Required Supplementary Information	64
Supplementary Information	66

THE MICHIGAN TECH STRATEGIC PLAN

VISION

Michigan Tech is a globally recognized technological university that educates students, advances knowledge, and innovates to improve the quality of life and to promote mutual respect and equity for all people within the state, the nation, and the global community.

MISSION

Create solutions for society's challenges by delivering action-based undergraduate and graduate education, discovering new knowledge through research, and launching new technologies though innovation.

GOALS

- 1. Education: Provide a distinctive and rigorous action-based learning experience grounded in science, engineering, technology, business, sustainability, and an understanding of the social and cultural contexts of our contemporary world.
- 2. Scholarship: Enhance research, scholarship, entrepreneurship, innovation, and creative activities that promote sustainable economic prosperity, health and safety, ethical conduct, and responsible use of resources.
- 3. People: Foster and support an exceptional and diverse community of students, faculty, and staff.



LETTER FROM THE PRESIDENT

Over the past four years, Michigan Tech has pursued a path of excellence as a premier national university positioned to lead the US in the Fourth Industrial Revolution.

Evidence suggests we are on the right track. The University has experienced unprecedented demand from prospective students, federal research agencies, employers, and the community at large.

In fall 2022, our incoming first-year student class will be the second largest since 1983 and is on par for the most academically proficient on record (back to 1991) measured by high school GPA and SAT. And, thanks to the efforts of faculty researchers like Raymond Shaw, who received over \$3.5 million in grants from the National Science Foundation and the US Department of Energy, the University's research expenditures hit a historic high. Accomplishments like this punctuate the need to grow Michigan Tech's physical infrastructure.

The Vision 2035 Campus Plan, which was completed in early 2022, ensures that Michigan Tech remains equipped for the academic and research demands of tomorrow. In April, the University broke ground on our new H-STEM Complex, which will support integrated educational and research programs in health-related and human-centered technological innovations. Future capital projects include the Center for Convergence



and Innovation, renovations to the Memorial Union Building, and new on-campus residential housing.

And Michigan Tech's reach extends beyond teaching and research in the Keweenaw. In fall 2021, we met demand from our community partners by opening a satellite office in Traverse City. These efforts complement Michigan Tech's existing partnerships with Northwestern Michigan College and collaborations with Traverse City's K-12 educational system, to better meet the economic development needs of the region.

This is on top of employers' growing demand for Michigan Tech graduates. Job placement rates six months post-graduation average 94 percent. Payscale reports midcareer earnings of \$120,900 annually for Michigan Tech graduates. And hiring managers say many of their brightest engineers are from MTU.

Our graduates go on to become the world's leading CEOs and business leaders. And, as alumni, they see the potential in Tech. In 2021-22, our supporters graciously donated a near all-time high of \$47.01 million—6.87 percent more than last year's impressive total of \$43.98 million and the second-largest fundraising year in MTU history. Their vote of confidence in our programs, students, and research supports our move into an era of growth for Michigan Tech.

As a result, our community and state will enjoy innovations that make life better through our Tech Forward research. Our campus community will enjoy the modern conveniences of updated facilities, classrooms, and technologies. Our students and faculty will reap the benefits of donor support through scholarships, professorships, endowed chairs, and other forms of philanthropy. And finally, we will all be part of a more inclusive and diverse community by growing our student and teaching populations.

The state of Michigan, our region, and our country should demand nothing less.

Thank you,

Rick Koubek President
ADMINISTRATIVE OFFICERS

BOARD OF TRUSTEES

TERMS ENDING DECEMBER 31 OF YEAR SHOWN

- 2022 Matthew Johnson
- 2024 Derhun Sanders
- 2026 John Bacon
- 2028 Andrea Dickson

Brenda Ryan, Vice Chair Steven Tomaszewski Jeffrey Littmann, Chair Jon Jipping

EXECUTIVE AND BOARD OFFICERS

Richard Koubek President

Jacqueline Huntoon Provost and Senior Vice President for Academic Affairs

Susan Kerry Chief Financial Officer and Senior Vice President for Administration Treasurer of the Board of Trustees

Wayne Gersie Vice President for Diversity and Inclusion David Reed Vice President for Research

William Roberts Vice President for Advancement and Alumni Engagement

John Lehman Vice President for University Relations and Enrollment

Sarah Schulte Secretary of the Board of Trustees

Wallace Southerland, III Vice President for Student Affairs and Dean of Students



UNIVERSITY UPDATE

Michigan Tech will enter the 2022-23 academic year with one of the strongest long-term enrollment records seen among Michigan's public universities and many exciting projects underway, including construction of our H-STEM Engineering and Health Technologies Complex.

The University saw a surge in enrollment for the fall 2021 semester, welcoming 1,480 new undergraduate students—23 percent more than in fall 2020. The Class of 2025 was the University's largest incoming class since 1982. It was also the most diverse, with 162 students identifying as members of underrepresented racial and ethnic groups. These new Huskies drove the percentage of students identifying as women at Tech up to 29 percent, and total enrollment rose by 3 percent.

Michigan Tech's steady enrollment trends are drawing attention state- and nationwide. The University is one of only three public universities in Michigan where enrollment has increased since 2012. Prospective students demand flexibility and demonstrated return on investment, and Tech has proven that we can deliver both. And in October 2021, we launched Michigan Tech Global Campus to reach students seeking online graduate degrees and certificates, including working professionals and career changers.

MTU Flex remained in place throughout 2021-22, allowing the University to respond with flexibility to the COVID-19 pandemic in order to minimize disruption to students, faculty, and staff. Now, with vaccines and testing widely available in the local community and advances in public knowledge regarding the virus, this healthcare issue no longer requires the same level of caretaking. At the instruction of President Rick Koubek, and with his thanks to all contributors, MTU Flex was dissolved in June 2022.



Independent Auditor's Report

To the Board of Trustees Michigan Technological University

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of Michigan Technological University (the "University"), a component unit of the State of Michigan, as of and for the years ended June 30, 2022 and 2021 and the related notes to the financial statements, which collectively comprise the University's basic financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the University as of June 30, 2022 and 2021 and the changes in its financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of the University and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions. The financial statements of Michigan Tech Fund, a blended component unit, were not audited under Government Auditing Standards.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

• Exercise professional judgment and maintain professional skepticism throughout the audit.

To the Board of Trustees Michigan Technological University

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion & Analysis, Schedule of the University's Proportionate Share of the Net Pension Liability and Schedule of University Pension Contributions, Schedule of the University's Proportionate Share of the Net OPEB Liability and Schedule of University OPEB Contributions, and Schedule of Changes in the University's Total OPEB Liability be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplemental Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the University's basic financial statements. The schedule of net position by fund; schedule of revenues, expenses and changes in net position by fund by object; and schedule of revenues, expenses and changes in net position by fund by function are presented for the purpose of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of net position by fund; schedule of revenues, expenses and changes in net position by fund by function are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the basic financial statements. The other information comprises the Michigan Tech strategic plan, the letter from the president, the listing of administrative officers, and the university update. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

To the Board of Trustees Michigan Technological University

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements or whether the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 6, 2022 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

October 6, 2022

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis section of the Michigan Technological University ("University") annual financial report provides an overview of its financial activities during the fiscal years ended June 30, 2022, 2021, and 2020. University management has prepared the financial statements and the related footnote disclosures along with this discussion and analysis. Responsibility for the completeness and fairness of this information rests with University management.

USING THE ANNUAL REPORT

The University's financial report includes three financial statements: the Statements of Net Position; the Statements of Revenues, Expenses, and Changes in Net Position; and the Statements of Cash Flows. These financial statements are prepared in accordance with accounting principles generally accepted in the United States of America, which establish standards for external financial reporting for public colleges and universities and require that financial statements be presented to focus on the University as a whole. The financial statements report information about the University using accrual accounting methods similar to those used by private-sector companies. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid.

REPORTING ENTITY

The Michigan Tech Fund ("Fund") is a component unit of the University and its activity has been blended into the University's financial statements.



FEDERAL CORONAVIRUS RELIEF FUNDS

During fiscal year 2020, the University was awarded Federal coronavirus relief aid of \$4,605,779 from the Higher Education Emergency Relief Fund I (HEERF I), and recognized \$80,538 of revenue on the Statements of Revenues, Expenses and Changes in Net Position. During fiscal year 2021, the University was awarded Federal coronavirus relief aid of \$6,991,814 from the Higher Education Emergency Relief Fund II (HEERF II) and \$12,364,790 from the Higher Education Emergency Relief Fund III (HEERF II) and \$12,364,790 from the Higher Education Emergency Relief Fund III (HEERF II). Awards received under HEERF I, HEERF II, and HEERF III have a student and an institutional component, with the restriction on the student component having to be satisfied before the institutional component can be recognized as revenue. During the fiscal year ended June 30, 2021, the University recognized \$11,456,581 in revenue from HEERF I and II funding, which can be found on the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues (Expenses). During fiscal year ended June 30, 2022, the University recognized \$12,420,301 in revenue from HEERF I, II, and III funding, which can be found in the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues from HEERF I, II, and III funding, which can be found in the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues from HEERF I, II, and III funding, which can be found in the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues from HEERF I, II, and III funding, which can be found in the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues (Expenses).

CONDENSED STATEMENTS OF NET POSITION

The Statements of Net Position include all assets and liabilities of the University as well as deferred outflows and inflows of resources. Over time, increases and decreases in net position is one indicator of the improvement or erosion of the University's financial health when considered with operating measures such as enrollment levels, research activities, and the physical condition of facilities.

	AS OF JUNE 30			
	2022		2021	2020
Assets		-		
Current assets	\$ 67,354,666	\$	58,692,682	\$ 46,853,171
Noncurrent assets:				
Capital assets, net	221,435,068		221,553,124	227,503,910
Other	275,883,254		262,868,880	204,634,328
Total assets	564,672,988		543,114,686	478,991,409
Deferred outflows of resources	16,291,832		6,656,404	5,739,106
Liabilities				
Current liabilities	35,448,551		32,283,267	32,524,812
Noncurrent liabilities	164,085,656		174,136,637	182,521,765
Total liabilities	199,534,207		206,419,904	215,046,577
Deferred inflows of resources	34,777,926		13,324,871	2,789,044
Net position				
Net investment in capital assets	135,834,427		135,790,477	138,086,386
Restricted				
Nonexpendable	112,022,233		106,282,134	104,236,751
Expendable	108,014,222		116,071,789	70,460,591
Unrestricted	(9,218,195)		(28,118,085)	(45,888,834)
Total net position	\$ 346,652,687	\$	330,026,315	\$ 266,894,894

CONDENSED STATEMENTS OF NET POSITION

Changes from 2021 to 2022

Total assets of the University increased by \$21.5 million. The main drivers of the increase in assets were cash and accounts receivable. Cash increased due to proceeds from a bond issuance for the construction of the H-STEM Complex which broke ground in April, and from the operations of the University returning to a more normal, pre-pandemic level. The increase in accounts receivable was due to increased billings on research grants and contracts.

Total liabilities decreased by \$6.9 million in fiscal year 2022. Long-term debt did increase during the fiscal year as a result of the bond issuance for the construction of the H-STEM Complex. Liabilities in total decreased because both the net pension and OPEB liabilities that are passed through to the University from the Michigan Public Schools Employees Retirement System (MPSERS) decreased significantly.

Deferred outflows of resources decreased by \$9.6 million and deferred inflows increased by \$21.5 million. The notable changes to those line items were from a \$9.5 million special allocation of funding from the State of Michigan for the MPSERS unfunded liability.

Total net position increased by \$27.7 million. The majority of the increase was in the unrestricted category resulting from the reduction in the MPSERS net pension and OPEB liabilities.

Changes from 2020 to 2021

Total assets of the University increased by \$64.1 million. The main driver of the increase in assets was from the investment portfolios held by the University and the Fund, which both experienced double-digit returns. Another significant increase was in the pledge receivable category. The Fund received a large pledge for scholarships that will benefit students at the University for many years into the future. Cash also increased due the receipt of Federal coronavirus relief funds.

Total liabilities decreased by \$8.6 million in fiscal year 2021. The net OPEB liability that is passed through to the University from the Michigan Public Schools Employees Retirement System (MPSERS) had a significant decrease.

Deferred inflows of resources increased by \$10.5 million. The increase was due to a change in the accounting treatment of irrevocable split-interest agreements by the Fund.

Total net position increased by \$63.1 million. The majority of the increase was in the restrictedexpendable category. Net appreciation on endowment investments is in this category and strong investment returns drove the increase.



NET POSITION

Net position represents the residual interest in the University's assets and deferred outflow of resources after liabilities and deferred inflows of resources are deducted. The composition of the University's net position is summarized as follows:

NET POSITION SUMMARY
AS OF JUNE 30

2022	2021		2020	
\$ 135,834,427	\$	135,790,477	\$	138,086,386
112,022,233		106,282,134		104,236,751
42,427,034		47,795,171		29,481,983
14,420,741		2,530,518		2,551,281
6,905,878		8,760,339		10,710,918
44,260,569		56,985,761		27,716,409
108,014,222		116,071,789		70,460,591
		· · · · · · · · · · · · · · · · · · ·		
8,026,310		6,942,720		3,961,572
1,793,775		1,291,901		4,589,683
30,878,458		27,194,753		20,989,583
(67,361,873)		(81,699,973)		(88,365,351)
17,445,135		18,152,514		12,935,679
(9,218,195)		(28,118,085)		(45,888,834)
\$ 346,652,687	\$	330,026,315	\$	266,894,894
\$	112,022,233 42,427,034 14,420,741 6,905,878 44,260,569 108,014,222 8,026,310 1,793,775 30,878,458 (67,361,873) 17,445,135 (9,218,195)	112,022,233 42,427,034 14,420,741 6,905,878 44,260,569 108,014,222 8,026,310 1,793,775 30,878,458 (67,361,873) 17,445,135 (7,218,195)	112,022,233 106,282,134 42,427,034 47,795,171 14,420,741 2,530,518 6,905,878 8,760,339 44,260,569 56,985,761 108,014,222 116,071,789 8,026,310 6,942,720 1,793,775 1,291,901 30,878,458 27,194,753 (67,361,873) (81,699,973) 17,445,135 18,152,514 (9,218,195) (28,118,085)	112,022,233 106,282,134 42,427,034 47,795,171 14,420,741 2,530,518 6,905,878 8,760,339 44,260,569 56,985,761 108,014,222 116,071,789 8,026,310 6,942,720 1,793,775 1,291,901 30,878,458 27,194,753 (67,361,873) (81,699,973) 17,445,135 18,152,514 (9,218,195) (28,118,085)



Net investment in capital assets represents the University's capital assets plus unspent bond proceeds net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction, or improvement of those assets. The net change from year to year reflects the University's improvement, maintenance, and usage of its capital assets in accordance with its long-range capital plan.

Restricted nonexpendable net position represents the historical value (corpus) of gifts to the University's permanent endowment funds. Restricted expendable net position is restricted by a party independent of the University or by law. This includes restrictions related to gifts, research contracts, grants, outstanding debt, student-loan programs, and net appreciation of permanent endowment funds.

Unrestricted net position represents those balances from operational activities of the University that have not been restricted by parties independent of the University. This includes designated funds that the Board of Trustees and management have designated for specific purposes, such as public service activities or academic and research initiatives. Unrestricted net position also includes amounts that have been contractually committed for goods and services that have not been received by fiscal year-end.

CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

The Statements of Revenues, Expenses, and Changes in Net Position present the revenues earned and expenses incurred during the fiscal year. Revenues are reported as either operating or nonoperating. State appropriations and gifts are classified as nonoperating revenues which will always result in operating losses for the University.

2022	2021	2020
57,014	\$ 98,248,502	\$ 101,082,940
11,490	55,608,186	49,635,791
92,474	4,456,771	3,643,172
02,079	20,521,130	26,965,146
63,057	 178,834,589	181,327,049
56,867	163,681,571	174,337,667
31,662	48,752,132	49,073,033
46,785	15,330,746	11,240,114
16,613	6,263,372	6,303,890
18,065	14,464,888	14,767,842
69,992	248,492,709	255,722,546
06,935)	 (69,658,120)	(74,395,497)
31,356	5,104,880	5,383,769
37,200	50,795,200	44,953,000
64,751	76,889,461	17,789,624
33,307	132,789,541	68,126,393
26,372	63,131,421	(6,269,104)
26,315	 266,894,894	 273,163,998
52,687	\$ 330,026,315	\$ 266,894,894

CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION YEAR ENDED JUNE 30

Changes from 2021 to 2022

Overall, the University experienced a \$21.4 million increase to operating revenues. Tuition and fees, net increased due to an enrollment increase that featured the largest incoming first-year class in over three decades. With students back on campus for the full school year, revenues increased for the residence halls and other auxiliary enterprises. Research revenues from grants and contracts were up as well.

Operating expenses increased by \$12.7 million. That increase is skewed by an over \$14 million pension and OPEB recovery passed through to the University from the MPSERS retirement plan. Excluding the noncash MPSERS recoveries in fiscal year 2022 and 2021, operating expenses were up by almost \$20 million. University operations returned to a more normal, pre-pandemic level during fiscal year 2022, and expenses increased accordingly to provide more campus services.

Nonoperating revenues (expenses) and other revenues decreased by \$55.3 million. The large decreases came from investment losses, decreased gifts and less revenue from Federal coronavirus relief funds.

Changes from 2020 to 2021

Overall, the University experienced a \$2.5 million decrease to operating revenues. Tuition and fees, net decreased due to a slight enrollment decline because of the pandemic. Revenues from auxiliary and departmental activities suffered from the pandemic as well, as students were given room and board refunds when there were shifts to remote learning. Research grants and contract revenue increased as faculty were able to continue with their research during the pandemic.

Operating expenses decreased by \$7.2 million. Compensation and benefits decreased due to a large credit passed through to the University from the MPSERS OPEB plan. In addition, budget reallocations were undertaken by the University due to the pandemic. Student financial support increased due to satisfying the student portion of Federal coronavirus relief funding.

Nonoperating revenues (expenses) and other revenues increased by \$64.7 million. State appropriations increased compared to the prior year. The University had its State appropriations reduced in fiscal year 2020 due to the pandemic and the funding was restored to a more normal level in fiscal year 2021. Other nonoperating revenues (expenses), net increased significantly due to the receipt of Federal coronavirus relief funds, strong investment returns, and increased charitable giving.



Revenue Diversification

The University relies on multiple sources of revenues to supplement student tuition. The University continues to aggressively increase funding from other sources consistent with its mission.

The following graph illustrates the fiscal year 2022 revenues by source:



TUITION AND FEES REVENUE

The University provides students with the opportunity to obtain a quality education at a price that is subsidized by state funding. For fiscal year 2022, the University implemented a 3% average increase in tuition and mandatory fees for Michigan resident undergraduates. Graduate students saw a 4.5% increase in tuition and mandatory fees. The following graph identifies the source of funds used to pay student tuition and fees for the fiscal year ended June 30, 2022. The graph shows that 41% of student tuition and fees are provided by the University, donors to the University, or various grant and scholarship programs.



GRANT AND CONTRACT REVENUE

The University receives revenues for sponsored programs from governmental and private sources, which provide for the direct and indirect costs of performing sponsored activities. The University also receives revenues from the federal government and its agencies for student grants. There were \$79.1 and \$71.2 million of research and sponsored programs awarded to the University in fiscal years 2022 and 2021, respectively. The University currently has 18 interdisciplinary research institutes and centers that have enabled the University to maintain its growing recognition as a research institution. The University also operates off-campus research facilities in Hancock, Michigan and Ann Arbor, Michigan.



GRANT AND CONTRACT REVENUE YEAR ENDED JUNE 30

	2022	2021	2020
Federal sources:			
Department of Agriculture	\$ 2,013,267	\$ 1,836,306	\$ 2,098,683
Department of Defense	12,375,121	12,033,433	8,476,314
Department of Education	478,114	531,842	568,952
Department of Energy	3,453,939	2,508,254	1,526,756
Department of Interior	637,551	1,070,028	799,761
Department of Transportation	789,291	406,975	363,017
Environmental Protection Agency	132,896	162,853	126,813
National Aeronautics and Space Administration	4,807,182	3,927,372	4,210,025
National Science Foundation	8,567,875	6,935,289	6,126,328
Health and Human Services	2,912,673	2,266,570	2,662,718
Other federal sources	670,474	546,908	740,607
Repayments	(1,583,372)	(1,741,655)	(2,585,315)
Total federal sources	35,255,011	30,484,175	25,114,659
Non-federal sources:			
State and local	4,828,756	3,800,457	4,076,024
Private	23,927,723	21,323,554	20,445,108
Total non-federal sources	28,756,479	25,124,011	24,521,132
Total all sources	\$ 64,011,490	\$ 55,608,186	\$ 49,635,791

The following graph illustrates the fiscal year 2022 grant and contract revenue by source.



OPERATING EXPENSES BY FUNCTION

Functional classifications are the traditional categories that universities have used for expenses. They represent the types of programs and services that the University provides.

FUNCTIONAL EXPENSES

FUNCTIONAL EXPENSES							
YEAR	R EN	DED JUNE 3	0				
		2022		2021		2020	
Instruction	\$	63,503,367	\$	62,431,697	\$	68,520,081	
Research		67,515,569		60,016,828		59,159,329	
Public service		9,935,341		11,027,767		9,768,499	
Academic support		23,709,211		21,078,846		22,555,415	
Student services		15,254,827		13,810,086		15,985,526	
Institutional support		20,145,820		23,081,412		24,913,814	
Operations and maintenance of plant		14,540,735		13,640,128		13,738,173	
Student financial support		19,381,790		16,267,506		12,470,722	
Departmental activities		6,193,379		4,232,924		6,838,574	
Student residents		6,671,888		8,440,627		7,004,571	
Depreciation		14,318,065		14,464,888		14,767,842	
Total	\$	261,169,992	\$	248,492,709	\$	255,722,546	

Overall, expenses increased by less than 1% in fiscal year 2022 compared to fiscal 2021 and decreased by 3% in fiscal year 2021 compared to fiscal year 2020. The year-over-year comparisons are skewed by non-cash pension and OPEB recoveries of \$14.3 million, \$6.7 million, and \$581,000 that were passed through to the University from the MPSERS defined benefit plan in fiscal years 2022, 2021, and 2020, respectively. The non-cash recoveries were allocated to the various functions based on payroll, so those categories with higher payroll, such as instruction and institutional support, have more dynamic swings from year to year. Research expenses have been increasing year-over-year as the University has been awarded more grants and contracts.

The pandemic caused changes in the functional categories. For instance, student financial support expenses increased in each fiscal year compared to the preceding fiscal year due to the distribution of federal coronavirus relief funds to students.



CONDENSED STATEMENTS OF CASH FLOWS

Another way to assess the financial health of an institution is to look at its Statement of Cash Flows. Its primary purpose is to provide relevant information about sources and uses of cash of an entity during a period. The Statements of Cash Flows also help users assess an entity's ability to generate future net cash

flows, its ability to meet its obligations as they come due, and its needs for external financing. The Statements of Cash Flows present information related to cash inflows and outflows summarized by operating, noncapital financing, capital and related financing, and investing activities.

CONDENSED STATEMENTS OF CASH FLOWS YEAR ENDED JUNE 30

	2022	2021	2020
Cash (used in) provided by			
Operating activities	\$ (59,133,307)	\$ (59,517,363)	\$ (58,114,055)
Noncapital financing activities	78,088,967	73,776,014	62,034,256
Capital and related financing activities	1,837,583	(7,321,222)	(7,904,720)
Investing activities	(3,566,611)	(921,726)	7,121,156
Net change in cash and cash equivalents	17,226,632	6,015,703	3,136,637
Cash and cash equivalents, beginning of the year	35,658,834	29,643,131	26,506,494
Cash and cash equivalents, end of the year	\$ 52,885,466	\$ 35,658,834	\$ 29,643,131

Changes from 2021 to 2022

Cash from operating activities increased slightly. Whereas more cash was received for tuition and fees, student residence fees, departmental and education activities, and research grants and contracts, more cash was also spent on providing those services.

Cash from noncapital financing activities increased. The increase was from cash received from State appropriations.

Cash from capital and related financing activities increased significantly. During fiscal year 2022, the Series 2021 bond issuance provided cash to be used to construct the H-STEM Complex.

Cash from investing activities decreased due to the purchase of investments being greater than the sales of investments during fiscal year 2022.

Overall, cash increased by \$17.2 million with most of the increase coming from the receipt of proceeds from the issuance of the Series 2021 bonds.

Changes from 2020 to 2021

Cash from operating activities decreased. Less cash was received from tuition and fees, student residence fees, and departmental activities due to an enrollment decline and the suspension of many campus operations during the pandemic. Cash received from research did increase, however, with research still being performed during the pandemic.

Cash from noncapital financing activities increased significantly. The increase was from cash received from Federal coronavirus relief funds.

Cash from capital and related financing activities was stable. The series 2010A bonds were refunded in fiscal year 2021 with the series 2020B bonds.

Cash from investing activities decreased due to less investments being sold in fiscal year 2021.

Overall, cash increased by \$6.0 million with most of the increase coming from the receipt of Federal coronavirus relief funds.

FACTORS IMPACTING FUTURE PERIODS

Enrollment

Admission is open to all students on a competitive basis. The University's incoming first-year students consistently have average ACT scores greater than the national average. The following tables show that about 22% of accepted students enroll at the University. Michigan residents account for 70% of the University's enrollment. Enrollment has been a priority of the University and is a part of its Strategic Plan.

	ACCEPT	TED STUD	ENTS		
	SUMMER	SUMMER AND FALL TERMS			
	2021	2020	2019	2018	2017
First-Year Students	6,895	5,260	4,442	4,313	4,074
Transfer Students	339	296	310	298	342
Graduate Students	1,433	1,525	1,655	1,566	1,616
Total	8,667	7,081	6,407	6,177	6,032

AVERAGE ACT SCORES FOR INCOMING FIRST-YEAR STUDENTS, FALL

	Michigan	
	Tech	National
2021	27.7	20.3
2020	27.5	20.6
2019	27.6	20.7
2018	27.3	20.8
2017	27.2	21.0

SELECTED ENROLLMENT DATA*

SUMMER AND FALL TERMS

	2021	2020	2019	2018	2017
First-Year Students	1,479	1,201	1,301	1,245	1,323
New Transfer Students	151	149	159	156	189
Graduate Students	385	242	389	396	434
Total	2,015	1,592	1,849	1,797	1,946

ENROLLMENT BY RESIDENCY*

	2021	2020	2019	2018	2017
Resident	4,818	4,704	4,755	4,746	4,766
Non-Resident	1,408	1,376	1,389	1,470	1,478
International	598	607	768	900	1,000
Total	6,824	6,687	6,912	7,116	7,244

*Does not include Distance Learning

THEE TIME EQUIVALENT STUDENTS OF RESIDENCE							
	2021	2020	2019	2018	2017		
Resident	4,582	4,443	4,475	4,482	4,471		
Non-Resident	1,344	1,307	1,324	1,401	1,393		
International	562	559	730	858	936		
Total	6,488	6,309	6,529	6,741	6,800		

FULL-TIME EQUIVALENT STUDENTS BY RESIDENCY*

*Does not include Distance Learning

Degrees Awarded

The University awards four levels of degrees: Associate's, Bachelor's, Master's, and Doctoral/Professional. Listed below is a five-year history of degrees awarded.

	2022	2021	2020	2019	2018
Associate	5	5	2	1	1
Bachelor's	1,164	1,173	1,170	1,160	1,120
Master's	353	424	357	448	438
Doctoral	74	84	85	86	93
Total	1,596	1,686	1,614	1,695	1,652



MICHIGAN TECHNOLOGICAL UNIVERSITY STATEMENTS OF NET POSITION

STATEMENTS OF NET POSIT		
	June	
Assets	2022	2021
Current assets		
Cash and cash equivalents	\$ 42,336,097	\$ 35,658,834
Accounts receivable, net	22,328,410	20,166,958
Pledges receivable, net	1,452,494	1,661,638
Other assets	1,237,665	1,205,252
Total current assets	67,354,666	58,692,682
Noncurrent assets		
Student loans receivable, net	4,677,979	6,208,258
Pledges receivable, net of allowance and current portion	17,615,926	17,377,039
Restricted cash for capital projects - unspent bond proceeds	10,549,369	-
Investments	228,200,878	229,480,734
Beneficial interest in charitable remainder trusts	6,806,179	7,778,511
Capital assets, net	221,435,068	221,553,124
Net OPEB asset - MPSERS	4,825,977	-
Other assets	3,206,946	2,024,338
Total noncurrent assets	497,318,322	484,422,004
Total assets	564,672,988	543,114,686
Deferred outflows of resources		
Deferred pension amounts	14,970,540	5,288,372
Deferred OPEB amounts	1,321,292	1,368,032
Total deferred outflows of resources	16,291,832	6,656,404
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	26,285,345	22,517,903
Unearned revenue	4,798,631	3,902,502
Annuity obligations, current portion	452,757	432,612
Insurance and benefit reserves	1,357,943	1,434,353
Long-term debt, current portion	2,553,875	3,995,897
Total current liabilities	35,448,551	32,283,267
Noncurrent liabilities		
Enrollment deposits	308,450	466,150
Annuity obligations, net of current portion	4,973,765	5,218,433
Long-term debt, net of current portion	92,661,726	81,304,743
Net pension liability	63,410,817	77,330,320
Net OPEB liability - MPSERS	-	4,770,992
Net OPEB liability - single employer plan	2,730,898	5,045,999
Total noncurrent liabilities	164,085,656	174,136,637
Total liabilities	199,534,207	206,419,904
Deferred inflows of resources		
Deferred pension amounts	19,577,145	1,078,884
Deferred OPEB amounts	2,760,822	130,182
Deferred gain on refunding	1,450,004	-
Deferred split-interest agreement amounts	10,989,955	12,115,805
Total deferred inflows of resources	34,777,926	13,324,871
Net position		
Net investment in capital assets	135,834,427	135,790,477
Restricted:		
Nonexpendable	112,022,233	106,282,134
Expendable:	o., .ozoo	10 / 700 000
Academic support and student financial support	86,687,603	104,780,932
Capital projects Student Ioans	14,420,741	2,530,518
Unrestricted	6,905,878 (9,218,195)	8,760,339 (28,118,085)
Total net position	\$ 346,652,687	\$ 330,026,315

MICHIGAN TECHNOLOGICAL UNIVERSITY STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	Year End		
Revenues	 2022		2021
Operating revenues			
Student tuition and fees (net of scholarship allowances of			
\$50,169,849 and \$43,935,267 in 2022 and 2021, respectively)	\$ 102,157,014	\$	98,248,502
Federal grants and contracts	35,255,011	+	30,484,175
State and local grants and contracts	4,828,756		3,800,457
Nongovernmental grants and contracts	23,927,723		21,323,554
Educational activities	4,892,474		4,456,771
Departmental activities	9,475,834		5,418,921
Student residence fees (net of scholarship allowances of			
\$9,742,905 and \$7,193,869 in 2022 and 2021, respectively)	19,726,245		15,102,209
Total operating revenues	 200,263,057		178,834,589
Expenses			
Operating expenses			
Compensation and benefits	162,656,867		163,681,571
Supplies and services	60,731,662		48,752,132
Student financial support	16,946,785		15,330,746
Utilities	6,516,613		6,263,372
Depreciation	14,318,065		14,464,888
Total operating expenses	 261,169,992		248,492,709
Operating loss	(60,906,935)		(69,658,120)
Nonoperating revenues (expenses)			
Federal Pell grants	5,031,356		5,104,880
Federal grants, other	529,047		628,494
Federal coronavirus relief funds	12,420,301		17,071,681
State appropriations	53,337,200		50,795,200
Gifts	10,532,471		26,059,645
Investment (loss) return	(7,540,534)		26,946,630
Interest on capital asset-related debt	(3,551,392)		(3,551,233)
Loss on disposal of capital assets	 (327,947)		(82,333)
Net nonoperating revenues	 70,430,502		122,972,964
Loss before other revenues	9,523,567		53,314,844
Other revenues			
Capital grants and gifts	1,606,692		779,867
Gifts for permanent endowment purposes	5,385,720		8,975,679
Other revenues	 110,393		61,031
Total other revenues	7,102,805		9,816,577
Change in net position	 16,626,372		63,131,421
Net position			
Beginning of year	330,026,315		266,894,894
End of year	\$ 346,652,687	\$	330,026,315
The accompanying notes are an integral part of th			

MICHIGAN TECHNOLOGICAL UNIVERSITY STATEMENTS OF CASH FLOWS

	Year Ended June 30		
	2022	2021	
Cash flows from operating activities			
Student tuition and fees	\$ 101,834,719	\$ 98,862,384	
Grants and contracts	62,457,389	54,029,281	
Payments to employees	(133,281,335)	(128,141,974)	
Payments for benefits	(42,582,346)	(41,626,886)	
Payments to suppliers	(60,186,239)	(47,663,429)	
Payments for utilities	(6,516,613)	(6,263,372)	
Payments for financial aid	(16,946,785)	(15,330,746)	
Loans issued to students	(104,757)	(130,500)	
Collection of loans to students	1,635,033	1,881,109	
Departmental activities	9,438,322	5,352,567	
Educational activities	5,426,555	4,103,030	
Student residence fees	19,643,426	15,210,344	
William D. Ford direct lending cash received	25,099,679	26,763,626	
William D. Ford direct lending cash disbursed	(25,117,885)	(26,757,588)	
Other receipts	67,530	194,791	
Net cash used in operating activities	(59,133,307)	(59,517,363)	
Cash flows from noncapital financing activities			
Federal Pell grants	4,874,132	5,072,264	
Federal coronavirus relief funds	12,949,348	17,701,659	
State appropriations	53,232,346	45,138,810	
Gifts and grants for other than capital purposes	7,356,276	6,190,695	
Payments to annuitants	(433,528)	(388,445)	
Other receipts	110,393	61,031	
Net cash from noncapital financing activities	78,088,967	73,776,014	
Cash flows from capital and related financing activities			
Grants and gifts received for capital and endowment purposes	6,537,752	9,414,685	
Proceeds from sale of capital assets	37,512	66,354	
Purchases of capital assets	(12,271,154)	(9,308,721)	
Proceeds from issuance of debt refinancing	37,903,391	7,725,000	
Principal paid on capital debt and leases	(26,941,886)	(11,326,927)	
Interest paid on capital debt and leases	(3,428,032)	(3,891,613)	
Net cash from (used in) capital and related financing activities	1,837,583	(7,321,222)	
Cash flows from investing activities			
Proceeds from sales and maturities of investments	31,728,964	31,544,438	
Purchase of investments	(39,004,371)	(35,639,469)	
Income on investments	3,708,796	3,173,305	
Net cash used in investing activities	(3,566,611)	(921,726)	
Net change in cash and cash equivalents	17,226,632	6,015,703	
Cash and cash equivalents, beginning of year	35,658,834	29,643,131	
Cash and cash equivalents, end of year	\$ 52,885,466	\$ 35,658,834	
Cash and cash equivalents per statement of net position	\$ 42,336,097	\$ 35,658,834	
Restricted cash for capital projects - unspent bond proceeds	10,549,369	-	
Total cash and cash equivalents per statement of net position	\$ 52,885,466	\$ 35,658,834	

MICHIGAN TECHNOLOGICAL UNIVERSITY STATEMENTS OF CASH FLOWS (CONTINUED)

	Year Ende	d June 30
	2022	2021
Reconciliation of operating loss to net cash from operating activities		
Operating loss	\$ (60,906,935)	\$ (69,658,120)
Adjustments to reconcile operating loss to net cash from operating activities:		
Depreciation expense	14,318,065	14,464,888
Noncash gifts	(192,682)	(265,143)
Changes in operating assets and liabilities:		
Receivables, net	(2,112,000)	(42,673)
Other assets	(33,472)	1,241,881
Student loans receivable	1,530,279	1,750,609
Accounts payable and other accrued liabilities	1,919,520	1,756,795
Unearned revenue	896,128	(1,925,318)
Enrollment deposits	(137,700)	(276,501)
Insurance and benefit reserves	(76,410)	101,597
Change in net pension and OPEB liability and deferred amounts	(14,338,100)	(6,665,378)
Net cash used in operating activities	\$ (59,133,307)	\$ (59,517,363)



NOTES TO THE FINANCIAL STATEMENTS

(1) BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

Reporting Entity

Michigan Technological University ("University") is an institution of higher education and is considered to be a component unit of the State of Michigan because its Board of Trustees is appointed by the Governor of the State of Michigan. Accordingly, the University is included in the State's financial statements as a discretely presented component unit. Transactions with the State of Michigan relate primarily to appropriations for operations, grants from various state agencies, State Building Authority (SBA) revenues, and payments to the state retirement system for University employees.

The University has two component units which are described below. The descriptions include the impact that each component unit has on the University.

The Michigan Tech Fund ("Fund") is a legally separate tax-exempt component unit of the University. The primary purpose of the Fund is to receive, invest, and disburse gifts received on behalf of the University. The Fund provides services entirely to the University and has substantially the same governing body. The Fund is blended into the University's financial statements because management of the University has operational responsibility for the Fund and the Fund exclusively benefits the University. The June 30, 2022, audited financial statements of the Fund can be obtained from its office at 1400 Townsend Drive, Houghton, MI 49931, or at www.mtu.edu/giving/about/tech-fund/.

The Michigan Tech Entrepreneurial Support Corporation (MTESC) is a legally separate tax-exempt component unit of the University. The primary purpose of the MTESC is to support the entrepreneurial and commercial development efforts of the University. The MTESC meets the criteria for blending its financial activity into the University's financial statements. The MTESC provides services entirely to the University and has substantially the same governing body. The University, however, has excluded the MTESC's financial statements due to insignificance.

The financial statements include the operations of the University and the Fund, collectively known as the University's financial statements. All significant accounts and transactions between the Fund and the University have been eliminated.



Condensed financial information for the Michigan Tech Fund is provided below:

	2022	2021
Assets		
Current assets	\$ 11,687,013	\$ 12,837,883
Noncurrent assets:		
Investments	171,980,194	177,644,281
Accounts receivable from the University	271,000	378,000
Other	26,650,507	26,201,344
Total assets	 210,588,714	217,061,508
Liabilities		
Current liabilities:		
Accounts payable to the University	267,018	-
Other	478,704	633,000
Noncurrent liabilities	4,973,765	5,218,433
Total liabilities	5,719,487	5,851,433
Deferred inflows	10,989,955	12,115,805
Net position		
Restricted		
Nonexpendable	112,022,233	106,282,134
Expendable	72,667,830	84,012,420
Unrestricted	9,189,209	8,799,716
Total net position	\$ 193,879,272	\$ 199,094,270

MICHIGAN TECH FUND CONDENSED STATEMENTS OF NET POSITION AS OF JUNE 30



MICHIGAN TECH FUND

CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION YEAR ENDED JUNE 30

	2022	2021
Operating expenses		
Supplies and services	\$ 12,332,766	\$ 9,475,174
Student financial support	3,025,139	2,200,584
Total operating expenses	15,357,905	11,675,758
Operating loss	(15,357,905)	(11,675,758)
Nonoperating revenues (expenses) and other revenues		
Gifts	10,581,204	25,717,004
Investment (loss) return	(7,226,708)	22,036,700
Gifts for capital and permanent endowment purposes	6,678,018	9,260,231
Other revenues	110,393	61,031
Net nonoperating revenues and other revenues	10,142,907	 57,074,966
Change in net position	(5,214,998)	45,399,208
Net position		
Beginning of year	199,094,270	 153,695,062
End of year	\$ 193,879,272	\$ 199,094,270

MICHIGAN TECH FUND CONDENSED STATEMENTS OF CASH FLOWS YEAR ENDED JUNE 30

	2022	2021
Cash flows from		
Operating activities	\$ (15,265,328)	\$ (11,407,463)
Noncapital financing activities	7,081,874	5,520,640
Capital and related financing activities	6,768,877	9,062,989
Investing activities	473,910	(2,178,851)
Net increase in cash and cash equivalents	(940,667)	997,315
Cash and cash equivalents, beginning of year	11,168,260	10,170,945
Cash and cash equivalents, end of year	\$ 10,227,593	\$ 11,168,260

Basis of Presentation

The accompanying financial statements have been prepared using the economic resource measurement focus and the accrual basis of accounting. In accordance with governmental accounting standards, the University follows all applicable Governmental Accounting Standards Board (GASB) pronouncements. In applying these accounting pronouncements, the University follows the guidance for special-purpose governments engaged only in "business type" activities rather than issuing financial statements that focus on accountability of individual funds.

Use of Estimates

The preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates include, but are not limited to, the allowance for doubtful accounts and pledges receivable, accrued compensated absences, net pension and other post employment benefits (OPEB) liabilities, insurance claims incurred but not reported, fair value of investments that are not readily marketable, and life expectancies for split-interest gift agreements.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents

The University considers all highly liquid investments (including restricted assets) with a maturity of three months or less when purchased to be cash equivalents. On the Statements of Net Position, restricted cash (unspent bond proceeds) is segregated from cash and cash equivalents and included in noncurrent assets. For the Statements of Cash Flows, however, restricted cash is included in the beginning and ending balances of cash and cash equivalents.

Pledges Receivable and Gifts

Pledges receivable and gifts are recognized at their fair values as revenues in the periods received. Pledges receivable that are expected to be collected in future years are recorded at the present value of estimated future cash flows. All pledges receivable are recorded at their net realizable values.

Investments

The University's and Fund's investments in marketable securities are carried at quoted fair market value whenever possible. The University also holds land for investment purposes which functions as an endowment and is recorded at fair value. Fair value is arrived at through independent appraisals of the land and of the timber holdings. Alternative investments consisting of hedge funds, private equity funds and other limited partnership interests, are valued using net asset value as a practical expedient.

Capital Assets

The University currently uses a \$5,000 capitalization threshold for capital assets acquired with an estimated useful life in excess of one year. Physical properties are stated at cost when purchased. Donated capital assets are recorded at acquisition value on date of receipt. Depreciation is provided for physical properties on a straight-line basis over the estimated useful life of the property, generally as follows:

Classification	Life
Buildings	40 years
Land improvements and infrastructure	20 years
Equipment	7 years
Computer equipment	5 years
Library books	5 years

Revenue Recognition

Revenues are recognized when earned. State appropriation revenue is recognized in the period for which it is appropriated. Restricted grant revenue is recognized only to the extent expended. Restricted and unrestricted resources are allocated to the appropriate departments within the University that are responsible for adhering to any donor restrictions. Student tuition and fee revenues and student residence fee revenues are reported net of scholarship allowances in the Statements of Revenues, Expenses and Changes in Net Position. Scholarship allowances represent the difference between the

stated charge for goods and services provided by the University and the amount that is paid by the students or third parties on behalf of the students, where the University has discretion over such expenses.

Operating and Nonoperating Revenues

The University's policy for defining operating activities as reported on the statement of revenues, expenses, and changes in net position is to report those activities that generally result from exchange transactions, such as payments received for providing services and payments made for services or goods received. Nearly all the University's expenses are from exchange transactions. Certain significant revenue streams relied upon for operations are recorded as nonoperating revenues due to their non-exchange nature, which include state appropriations and investment income. Restricted and unrestricted resources are spent and tracked within donor guidelines, if any, by the awarded University department. Federal Pell grant revenue is also classified as nonoperating. The amounts received for 2022 and 2021 are \$5,031,356 and \$5,104,880 respectively.

Classification of Expenses

Expenses are recognized when the service is provided or when materials are received. The University and the Fund have classified expenses as either operating or nonoperating expenses according to the following criteria:

Operating Expenses

Operating expenses include activities that have the characteristics of exchange transactions, such as (1) employee salaries, benefits, and related expenses; (2) scholarships and fellowships, net of scholarship discounts and allowances; (3) utilities, supplies, and other services; (4) professional fees; and (5) depreciation expense related to University capital assets.

Nonoperating Expenses

Nonoperating expenses include activities that have the characteristics of nonexchange transactions, such as interest on capital asset-related debt and other expenses that are defined as nonoperating expenses by governmental accounting standards.



Income Taxes

The University is classified as a political subdivision of the State of Michigan under Internal Revenue Code Section 115(A) and is, therefore, exempt from federal income taxes. Certain activities of the University, to the extent profitable, may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514. No such taxes were incurred for either fiscal year presented in this report. The Fund is exempt from federal income taxes under Internal Revenue Code section 501(c)(3).

Net Position

The University's net position is classified as follows:

Net investment in capital assets

Capital assets, net of accumulated depreciation, unspent bond proceeds, and outstanding principal balances of debt attributable to the acquisition, construction, or improvement of those assets.

Restricted for nonexpendable purposes

Net position from gifts and other inflows of assets that represent permanent endowments. Use of these gifts is limited by donor-imposed stipulations that neither expire by the passage of time nor can be fulfilled or otherwise removed by the University.

Restricted for expendable purposes

Net position whose use is subject to externally imposed stipulations that can be fulfilled by actions of the University pursuant to those stipulations or that expire by the passage of time. Such net position includes net appreciation of permanent endowment funds and funds designated for student financial aid and other University programs. Under Michigan law set forth in Uniform Prudent Management of Institutional Funds Act, as adopted in Michigan in 2009 ("UPMIFA"), the Board acts in a fiduciary capacity as trustee of its endowment funds. UPMIFA requires that the Board exercise its fiduciary duties prudently and consider both the charitable purposes and needs of the University and the purposes of the specific endowment regarding current expenditures and preservation of the purchasing power of the funds. Under the programmatic spending policy established by the Board, 3.8% and 3.7% of the average market value of endowment investments for the twelve quarters of the three fiscal years prior to the beginning of the fiscal year was authorized for expenditure for fiscal year 2022 and 2021.

Unrestricted

Net position that is not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action of the University's Board of Trustees or may otherwise be limited by contractual agreements with outside parties.

Deferred Outflows of Resources

In addition to assets, the Statements of Net Position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to one or more future periods and so will not be recognized as an outflow of resources (expense) until then. The University reports deferred outflows of resources for certain pension and OPEB related amounts, such as change in expected and actual experience, changes in assumptions, and certain contributions made to the plan subsequent to the measurement date.

Deferred Inflows of Resources

In addition to liabilities, the Statements of Net Position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to one or more future periods and so will not be recognized as an inflow of resources (revenue) until that time. The University reports deferred inflows of resources for certain pension and OPEB related amounts, such as the difference between projected and

actual earnings of the pension plan's investments and appropriations received for the pension plan subsequent to the measurement date. The University reports deferred inflows of resources for irrevocable split-interest agreements such as charitable remainder trusts, charitable gift annuities and pooled income funds. The remainder interests of split-interest agreements cannot be recognized as revenue until after the split-interest agreement is terminated. The University reports deferred inflows of resources for the gain on refunding of defeased debt.

Pension

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the plan and additions to/deductions from the plan fiduciary net position have been determined on the same basis as they are reported by the plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Postemployment Benefits Other Than Pensions

For the purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the plan and additions to/deductions from the plan fiduciary net position have been determined on the same basis as they are reported by the plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB Pronouncements Adopted

Effective for the fiscal year ended June 30, 2022, the University adopted GASB Statement No. 87, ("GASB 87"). This statement establishes a single model for lease accounting based on the fundamental principle that leases are financings of the right to use an underlying asset. Under this statement, a lesse is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources on the Statement of Net Position. The adoption of GASB 87 had a minimal impact on the University's financial statements.

Effective for the fiscal year ended June 30, 2021, the University adopted GASB Statement No. 84, Fiduciary Activities, ("GASB 84"). This statement establishes criteria for identifying fiduciary activities and the related reporting requirements for fiduciary activities. GASB 84 permits certain entities, such as the University, to report activities that would otherwise require separate fiduciary fund financial statements within the University's Statement of Net Position and Statement of Cash Flows as an operating activity if upon receipt, the funds are normally expected to be held for three months or less.

Upcoming GASB Statements

In May 2020, the Governmental Accounting Standards Board issued GASB Statement No. 96, Subscription-Based Information Technology Arrangements (SBITAs), which defines SBITAs and provides accounting and financial reporting for SBITAs by governments. This statement requires a government to recognize a subscription liability and an intangible right-to-use subscription asset for SBITAs. The University is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement are effective for the University's fiscal year ending June 30, 2023.

In June 2022, the Governmental Accounting Standards Board issued GASB Statement No. 101, Compensated Absences, which updates the recognition and measurement guidance for compensated absences under a unified model. This statement requires that liabilities for compensated absences be recognized for leave that has not been used and leave that has been used but not yet paid in cash or settled through non-cash means and establishes guidance for measuring a liability for leave that has not been used. It also updates disclosure requirements for compensated absences. The provisions of this statement are effective for the University's financial statements for the year ending June 30, 2025.

(2) CASH AND INVESTMENTS

Authorizations

The University utilizes the "pooled cash" method of accounting for substantially all of its cash and cash equivalents. The University investment policies are governed and authorized by University Bylaws and the Board of Trustees. The Fund's investment policies are governed by its Board of Directors and the performance of its investments is monitored by its Investment Committee.

Interest rate risk

The University has investment guidelines and the Fund has an investment policy statement which divide investments into pools based on liquidity needs, duration, and appropriate risk versus return percentage. The maturities of the University's fixed income investments as of June 30 are categorized below:

	VESTMENT MAT			
		June	30, 2022	
		Less than 1		
	Fair Value	Year	1 to 5 Years	6 to 10 Years
Mutual funds - fixed Income	\$ 85,304,098	\$ 9,164,503	\$ 64,814,057	\$ 11,325,538
Corporate bonds and notes	363,076	35,024	209,615	118,437
US government obligations	967,425	126,580	678,425	162,420
Total	\$ 86,634,599	\$ 9,326,107	\$ 65,702,097	\$ 11,606,395
		June	30, 2021	
		Less than 1	30, 2021	
	Fair Value		30, 2021 1 to 5 Years	6 to 10 Years
Mutual funds - fixed Income	Fair Value \$ 79,524,899	Less than 1		6 to 10 Years \$ 45,614,534
		Less than 1 Year	1 to 5 Years	
Mutual funds - fixed Income Corporate bonds and notes US government obligations	\$ 79,524,899	Less than 1 Year	1 to 5 Years \$ 26,045,665	\$ 45,614,534



Credit risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Credit risk is mitigated by limiting investments to those approved by Board policy and by diversifying the investment portfolio so that the failure of any one issuer or backer will not place an undue financial burden on the University. The University had the following debt instruments subject to interest rate fluctuations at June 30, 2022 and 2021:

	Market Value			Market Value		
	June 30, 2022	Rating	Rating Agency	June 30, 2021	Rating	Rating Agency
Mutual funds - fixed income	\$ 803,496	5-star	Morningstar	\$ 169,432	5-star	Morningstar
Mutual funds - fixed income	17,292,683	4-star	Morningstar	15,570,261	4-star	Morningstar
Mutual funds - fixed income	36,723,708	3-star	Morningstar	39,133,949	3-star	Morningstar
Mutual funds - fixed income	389,675		t available	101,835		t available
Mutual funds - fixed income	18,795,075		verage Quality	17,788,766		erage Quality
Mutual funds - fixed income	5,650,449		verage Quality	6,760,656	AA- AV	/erage Quality
Mutual funds - fixed income	5,649,010	A+ Av	verage Quality	-		
Corporate bonds and notes						
Arrow Electrs Note	10,038	BBB-	S&P	10,516	BBB-	S&P
Abbvie Inc Sr Note	9,028	BBB+	S&P	9,652	BBB+	S&P
Boeing Co Debenture	24,564	BBB-	S&P	27,637	BBB-	S&P
Stryker Corp Sr Note	9,834	A-	S&P	10,924	A-	S&P
Walgreens Boots Alliance Inc Note	8,762	BBB	S&P	9,804	BBB	S&P
Coca Cola Enterprises Inc Debenture	10,369	A+	S&P	31,673	A+	S&P
Baker Hughes A GE Co LLC Sr Note	-			10,334	A-	S&P
Microsoft Corp Note	10,081	AAA	S&P	10,738	AAA	S&P
Raytheon Co Debenture	12,331	A-	S&P	14,280	A-	S&P
Celgene Corp Sr Note	14,729	A+	S&P	16,668	A+	S&P
Apple Inc.	-			25,537	AA+	S&P
Chevron Corp	24,937	AA-	S&P	26,464	AA-	S&P
Intel Corp	22,307	A+	S&P	26,312	A+	S&P
Pfizer	24,986	A+	S&P	26,273	A+	S&P
Royal Bank of Canada	24,130	A	S&P	26,198	А	S&P
Visa Inc	24,610	AA-	S&P	27,350	AA-	S&P
Prudential PLC				10,828	No	t available
Comcast Corp	46,608	A-	S&P	52,443	A-	S&P
State Street Corp	43,610	A	S&P	52,069	А	S&P
Blackrock Inc	20,648	AA-	S&P	-		
Merck & Co Inc	21,505	A+	S&P	-		
US government obligations						
Fed Farm Credit Bk	60,862	AA+	S&P	68,295	AA+	S&P
Fed Home Ln Mtg Corp	-			10,122	AA+	S&P
US Treasury Notes	857,791	AAA	Moody's	920,507	AAA	Moody's
Fed National Mortgage Assn	48,773	AA+	S&P	52,056	AA+	S&P
Total	\$ 86,634,599			\$ 81,001,579		

Custodial credit risk: deposits

For deposits, custodial credit risk is present if the University's deposits would not be covered by depository insurance or collateralized by the bank. Deposits were reflected in the accounts of the banks of \$53,290,476 and \$35,866,361 as of June 30, 2022 and 2021, respectively. The University had \$13,524,154 and \$15,391,342 exposed to custodial credit risk because the deposits were uninsured or uncollateralized, as of June 30, 2022 and 2021, respectively.

Custodial credit risk: investments

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the University will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investments in external investment pools and open-ended mutual funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical and book entry form. All investments are in the name of the University or Fund, as applicable, and the investments are held in accounts with each financial institution from which they were purchased.

Concentration of credit risk

Concentration of credit risk is the risk of loss attributed to the magnitude of investment in a single issuer. Neither the University's nor the Fund's investment policy has specific limits on concentration of credit risk. The following investments comprise more than 5% of the total investments as of June 30:

	Market Value June 30, 2022		arket Value ne 30, 2021
Vanguard Total Bond Market	\$ 36,486,424	\$	38,500,794
Vanguard Total Stock Market ETF	18,496,454		22,762,178
Vanguard International Equity Index Fund	16,690,276		21,464,300
Commonfund Core Equity Fund *	 N/A		11,505,342
Total	\$ 71,673,154	\$	94,232,614

* This investment does not comprise more than 5% of total investments at June 30, 2022.

Foreign currency risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. All of the University's foreign investments at June 30, 2022 and 2021 are valued in US dollars, therefore the University was not subject to foreign currency risk.



Investments and Investment Return

Investments, carried at fair value, at June 30, are categorized as follows:

INVESTMENT PORTFOLIO

	2022		2021
Marketable securities			
Equities	\$ 22,879,083	\$	30,103,411
Equity mutual funds	57,552,966		72,026,434
Fixed income mutual funds	86,634,599		81,001,579
Total marketable securities	167,066,648	Þ	183,131,424
Alternative investments			
Hedge funds	8,050,302		7,153,471
Real estate and natural resources	11,874,087		8,423,652
Private equity limited partnerships	27,509,045		19,558,811
Global credit	2,312,213		2,045,657
Total alternative investments	49,745,647		37,181,591
Closely-held stock	20,000		20,000
Land held for investment	11,368,583		9,147,719
Total investments	\$ 228,200,878	\$	229,480,734

The University's net investment return is comprised of the following for the years ended June 30:

INVESTMENT RETURN

	2022	2021
Dividends and interest	\$ 3,551,413	\$ 3,236,534
Net gain (loss) on sale of investments	3,094,095	5,418,037
Net (decrease) increase in the fair value of investments	(13,560,593)	18,797,009
Investment fees	(625,449)	(504,950)
Total investment return	\$ (7,540,534)	\$ 26,946,630

The following tables present information about the University's assets measured at fair value on a recurring basis at June 30, 2022 and 2021 and the valuation techniques used by the University to determine those fair values.

In general, fair values determined by Level 1 inputs use quoted prices in active markets for identical assets or liabilities that the University has the ability to access.

Fair values determined by Level 2 inputs use other inputs that are observable, either directly or indirectly. These Level 2 inputs include quoted prices for similar assets in active markets, and other inputs such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3 inputs are unobservable inputs, including inputs that are available in situations where there is little, if any, market activity for the related asset.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The University's assessment of the significance of particular inputs to these fair value measurements requires judgement and considers factors specific to each asset.

The fair values of investments measured on a recurring basis at June 30, 2022 are as follows:

	Fair Value				uoted Prices in Active Markets for Identical Assets (Level 1)	0	ignificant Other bservable Inputs (Level 2)	ignificant observable Inputs (Level 3)
Equities	\$	22,879,083	\$ 22,879,083	\$	-	\$ -		
Equity mutual funds		42,630,399	42,630,399		-	-		
Fixed income mutual funds		56,540,066	56,176,990		363,076	-		
Land held for investment		11,368,583	-		-	11,368,583		
Closely-held stock		20,000	 -		-	 20,000		
Total investments by fair value level		133,438,131	\$ 121,686,472	\$	363,076	\$ 11,388,583		
Investments measured at the net asset value:								
Commonfund equity funds		14,922,566						
Commonfund fixed income funds		30,094,534						
Hedge funds		8,050,302						
Real estate and natural resources		11,874,087						
Private equity limited partnerships		27,509,045						
Global credit		2,312,213						
Total investments at the net asset value		94,762,747						
Total investments	\$	228,200,878						
Beneficial interest in charitable remainder								
trusts at the net asset value	\$	6,806,179	\$	\$	-	\$ 6,806,179		

The fair values of investments measured on a recurring basis at June 30, 2021 are as follows:

	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Oł	gnificant Other oservable Inputs Level 2)	Une	ignificant observable Inputs (Level 3)
Equities	\$ 30,103,411	\$ 30,103,411	\$	-	\$	-
Equity mutual funds	53,632,124	53,632,124		-		-
Fixed income mutual funds	56,452,156	56,026,456		425,700		-
Land held for investment	9,147,719	-		-		9,147,719
Closely-held stock	20,000	-		-		20,000
Total investments by fair value level	149,355,410	\$ 139,761,991	\$	425,700	\$	9,167,719
Investments measured at the net asset value. Commonfund equity funds Commonfund fixed income funds	18,394,310 24,549,423					
Hedge funds Real estate and natural resources	7,153,471					
	8,423,652					
Private equity limited partnerships Global credit	19,558,811 2,045,657					
Total investments at the net asset value	80,125,324	-				
Total investments	\$ 229,480,734	-				
Beneficial interest in charitable remainder trusts at the net asset value	\$ 7,778,511	\$-	\$	-	\$	7,778,511

The University holds shares or interests in investment companies whereby the fair value of the investments are measured on a recurring basis using net asset values per share (or its equivalent) of the investment companies as a practical expedient. At year-end, the net asset value, the unfunded commitments, and redemptions rules of those investments are as follows:

	Net Asset Value FY 2022	Net Asset Value FY 2021	Unfunded Commitments FY 2022	Unfunded Commitments FY 2021	Redemption Frequency	Redemption Notice Period
Commonfund equity funds (1)	\$ 14,922,566	\$ 18,394,310	\$ -	\$ -	Monthly	5 business days
Commonfund fixed income funds (2)	30,094,534	24,549,423	-	-	Monthly	5 business days
						90 calendar days
Hedge funds (3)	8,050,302	7,153,471	-	_	Quarterly	+ 5 business days
					Quarterly for one fund - not redeemable	Quarterly for one fund - NA for other funds
Real estate and natural resources (4)	11,874,086	8,423,652	5,058,399	1,314,376	for others	
Private equity limited partnerships (5)	27,509,046	19,558,811	14,710,553	11,575,128	NA	NA
Global credit (6)	2,312,213	2,045,657	-	200,000	Semi- annually	90 calendar days
Total	\$ 94,762,747	\$ 80,125,324	\$ 19,768,952	\$ 13,089,504		

Strategy

- This category includes two funds which have the objective to outperform the S&P 500 by reducing risk through diversification of manager allocations and by investing in lower volatility stocks.
- (2) This category includes three funds which have the objective to outperform their benchmarks by reducing risk through diversification of manager allocations, by generating a higher current yield than short-term money market funds, and by investing in securities and strategies that offer the potential for increased yield.
- (3) This category includes one multi-strategy hedge fund.
- (4) This category includes funds that invest in commercial and residential real estate funds with U.S. properties and natural resource sector funds.
- (5) This category includes numerous private equity limited partnerships that invest in leverage buyouts, venture capital, growth equity financing, opportunistic situations, high yield, and subordinated debt across the primary and secondary markets.
- (6) This category includes one fund that invests in public and private credit markets, focusing on core, yield-oriented investments, supplemented by opportunistic positions with higher expected returns.



(3) RECEIVABLES

Accounts receivable of the University are summarized as follows as of June 30:

ACCOUNTS RECEIVABLE

	2022	2021
Student tuition and fees	\$ 408,672	\$ 397,555
State appropriations		
Operating	9,340,342	9,235,488
Capital	237,334	348,933
Grants and contracts	11,261,682	9,354,617
Auxiliary activities	301,024	291,585
Other	882,231	641,655
Less allowance for doubtful accounts	(102,875)	(102,875)
Accounts receivable, net	\$ 22,328,410	\$ 20,166,958

In addition, the University has student loans receivable in the amount of \$4,677,979 and \$6,208,258, recorded at June 30, 2022 and 2021, respectively. These amounts are net of an allowance for uncollectible accounts of \$174,000 at June 30, 2022 and 2021.

Pledges receivable of the University are summarized as follows as of June 30:

PLEDGES RECE	VABLE		
		2022	 2021
Pledges receivable in less than one year	\$	2,664,292	\$ 3,550,576
Pledges receivable in one to five years		6,884,903	6,819,569
Pledges receivable in more than five years) 	13,089,691	13,054,000
Less:			
Allowance for uncollectible pledges		(1,191,799)	(1,888,938)
Present value discount		(2,358,667)	 (2,496,530)
Net pledges receivable	\$	19,088,420	\$ 19,038,677

The present value of future cash flows were estimated using .25% over the risk-adjusted rate at the date of the gift. For fiscal year 2022, rates range from .5% to 1.7%.


(4) CAPITAL ASSETS

The following table presents the changes in the capital asset class categories for the year ended June 30, 2022:

CHANGES	IN	CAPITAL	ASSETS
---------	----	---------	--------

	Begir	nning Balance	-	Additions/ Transfers	Disposals/ Transfers	En	ding Balance
Nondepreciable capital assets							
Land	\$	10,762,548	\$	-	\$ (49,000)	\$	10,713,548
Mineral collections		6,221,172		-	-		6,221,172
Timber holdings		376,088		-	-		376,088
Construction in progress		4,434,138		9,284,274	(3,565,983)		10,152,429
Cost of nondepreciable capital assets		21,793,946		9,284,274	(3,614,983)		27,463,237
Depreciable capital assets							
Land improvements		1,433,979		-	(270,736)		1,163,243
Infrastructure		6,778,890		73,250	-		6,852,140
Buildings		395,465,558		3,492,732	(2,000)		398,956,290
Equipment		40,849,793		5,230,835	(10,353,122)		35,727,506
Library books		158,937		12,844	 (96,261)		75,520
Cost of depreciable capital assets		444,687,157		8,809,661	(10,722,119)		442,774,699
Total cost of capital assets		466,481,103		18,073,735	(14,337,102)		470,237,936
Less: accumulated depreciation							
Land improvements		604,073		58,850	(270,736)		392,187
Infrastructure		3,474,883		343,976	-		3,818,859
Buildings		215,621,454		9,225,448	(1,800)		224,845,102
Equipment		25,101,455		4,677,409	(10,074,379)		19,704,485
Library books		126,114		12,382	 (96,261)		42,235
Total accumulated depreciation		244,927,979		14,318,065	(10,443,176)		248,802,868
Capital assets, net	\$	221,553,124	\$	3,775,870	\$ (3,893,926)	\$	221,435,068



The following table presents the changes in the capital asset class categories for the year ended June 30, 2021:

CHANGES IN CAPITAL ASSETS

	Begir	nning Balance	-	dditions/ Transfers)isposals/ Transfers	En	ding Balance
Nondepreciable capital assets								
Land	\$	10,762,548	\$	-	\$	-	\$	10,762,548
Mineral collections		6,221,172		-		-		6,221,172
Timber holdings		376,088		-		-		376,088
Construction in progress		3,991,360		2,981,494		(2,538,716)		4,434,138
Cost of nondepreciable capital assets		21,351,168		2,981,494		(2,538,716)		21,793,946
Depreciable capital assets								
Land improvements		1,433,979		-		-		1,433,979
Infrastructure		6,778,890		-		-		6,778,890
Buildings		392,926,842		2,538,716		-		395,465,558
Equipment		35,753,257		5,602,391		(505,855)		40,849,793
Library books		146,385		12,552		-		158,937
Cost of depreciable capital assets		437,039,353		8,153,659		(505,855)		444,687,157
Total cost of capital assets		458,390,521		11,135,153		(3,044,571)		466,481,103
Less: accumulated depreciation					~			
Land improvements		533,869		70,204		-		604,073
Infrastructure		3,133,043		341,840		-		3,474,883
Buildings		206,427,030		9,194,424		-		215,621,454
Equipment		20,690,180		4,834,795		(423,520)		25,101,455
Library books		102,489		23,625		-		126,114
Total accumulated depreciation		230,886,611		14,464,888		(423,520)		244,927,979
Capital assets, net	\$	227,503,910	\$	(3,329,735)	\$	(2,621,051)	\$	221,553,124



Construction in Progress

One of the critical factors in continuing the quality of the University's academic programs, research programs, and residential life is the development and renewal of its capital assets. The University continues to maintain and amend its long-range capital plan to modernize its complement of older facilities balanced with new construction. Construction in progress reflects multiyear projects which, once completed and placed into service, are categorized as buildings, land improvements, and infrastructure. At June 30, construction in progress consisted of several building renovation projects and the costs of one new building as detailed below.

CONSTRUCTION	IN PROGRESS		
Project		2022	2021
Athletic Facilities renovations	\$	784,361	\$ 1,325,184
H-STEM Complex planning and construction		5,890,442	1,586,747
Residence Hall renovations		1,803,302	-
Research space		780,042	-
Instructional space		256,525	-
Office space		437,861	-
Elevator replacements		47,300	949,711
Infrastructure and other projects		152,596	572,496
Total	\$	10,152,429	\$ 4,434,138



(5) LINE OF CREDIT

The University has an unused line of credit arrangement with one bank, under which it may borrow up to \$20 million. This agreement is set at variable rates of interest, based on the 30-day London Interbank Offered Rate ("LIBOR") plus 135 basis points. There were no amounts outstanding under the line of credit at June 30, 2022 and 2021. There are no restrictive covenants associated with this line of credit. The line of credit expires on October 15, 2022.

(6) ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities of the University are summarized as follows as of June 30:

2022	2021
,947,703 \$	3,669,295
,724,477	1,345,623
,500,087	2,163,207
,885,787	8,890,547
,772,729	5,015,537
,454,562	1,433,694
,285,345 \$	22,517,903

ACCOUNTS PAYABLE AND ACCRUED LIABILITIES



(7) NONCURRENT LIABILITIES

NO	NCURRENT LIA	BILITIES			
General revenue bonds	AS OF JUNE 30, Beginning Balance	2022 Additions	Reductions	Ending Balance	Current Portion
General revenue and refunding bonds, 2008	\$ 255,000	\$-	\$ 10,000	\$ 245,000	\$ 10,000
General revenue bonds, 2009A/2009B	13,840,000	-	485,000	13,355,000	505,000
General revenue and refunding bonds, 2012A	23,570,000	-	23,570,000	-	-
General revenue refunding bonds, 2013A	9,880,000	-	715,000	9,165,000	1,010,000
General revenue bonds, 2015A	22,035,000	-	515,000	21,520,000	540,000
General revenue refunding bonds, 2020A - direct placement	4,560,000	-	170,000	4,390,000	175,000
General revenue refunding bonds, 2020B - direct placement	7,725,000	-	285,000	7,440,000	295,000
General revenue and refunding bonds, 2021	-	29,870,000	-	29,870,000	-
Total bonds payable	81,865,000	27,870,000	25,750,000	85,985,000	2,535,000
Bond premium	3,000,847	8,033,391	1,912,533	9,121,705	-
Note payable	434,793	-	325,897	108,896	18,875
Total debt	85,300,640	37,903,391	27,988,430	95,215,601	2,553,875
Other liabilities					
Insurance reserves	1,434,353	17,350,905	17,427,315	1,357,943	1,357,943
Enrollment deposits	466,150	3,950	161,650	308,450	-
Annuity and pooled income obligations	5,651,045	269,885	494,408	5,426,522	452,757
Total	\$ 92,852,188	\$ 55,528,131	\$ 46,071,803	\$ 102,308,516	\$ 4,364,575
Due within one year				(4,364,575)	
Total noncurrent liabilities (excluding net pension and OPEB	liabilities)			\$ 97,943,941	

NONCURRENT LIABILITIES

	AS OF JUNE 30, Beginning	2021		Ending	Current	
General revenue bonds	Balance	Additions	Reductions	Balance	Portion	
General revenue and refunding bonds, 2008	\$ 265,000	\$ -	\$ 10,000	\$ 255,000	\$ 10,000	
General revenue bonds, 2009A/2009B	14,305,000	-	465,000	13,840,000	485,000	
General revenue bonds, 2010A	7,655,000	-	7,655,000	-	-	
General revenue and refunding bonds, 2012A	24,985,000	-	1,415,000	23,570,000	1,490,000	
General revenue refunding bonds, 2013A	10,570,000	-	690,000	9,880,000	715,000	
General revenue bonds, 2015A	22,525,000	-	490,000	22,035,000	515,000	
General revenue refunding bonds, 2020A - direct placement	4,725,000	-	165,000	4,560,000	170,000	
General revenue refunding bonds, 2020B - direct placement	-	7,725,000	-	7,725,000	285,000	
Total bonds payable	85,030,000	7,725,000	10,890,000	81,865,000	3,670,000	
Bond premium	3,195,595	-	194,748	3,000,847	-	
Note payable	871,720	-	436,927	434,793	325,897	
Total debt	89,097,315	7,725,000	11,521,675	85,300,640	3,995,897	
Other liabilities						
Insurance reserves	1,332,756	17,224,915	17,123,318	1,434,353	1,434,353	
Enrollment deposits	635,651	15,200	184,701	466,150	-	
Annuity and pooled income obligations	5,775,592	309,479	434,026	5,651,045	432,612	
Total	\$ 96,841,314	\$ 25,274,594	\$ 29,263,720	\$ 92,852,188	\$ 5,862,862	
Due within one year				(5,862,862)		
Total noncurrent liabilities (excluding net pension and OPE	3 liabilities)			\$ 86,989,326		

Bonds

The principal and interest on bonds are payable only from certain general revenues. The obligations are generally callable. Premiums on bonds payable are recorded in total and amortized over the life of the bonds using straight line amortization.

All bonds of the University, unless otherwise specified, have received an underlying rating of A1 from Moody's.

Public Debt Issuances

During fiscal year 2009, the University's Board of Trustees approved the issuance of General Revenue and Refunding Bonds, Series 2008 in the amount of \$15.88 million. The proceeds of this bond issue were used to refund the \$10 million of Series 1998 bonds outstanding with the remainder funding the remodeling of the Michigan Tech Lakeshore Center building, remodeling of the Memorial Union ballroom and providing initial construction funds for the Keweenaw Research Center. These bonds bear fixed interest rates at 3.0% to 5.25% and mature at various dates from October 2009 through October 2038. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture. Outstanding principal of \$11.55 million was refunded with the series 2013A bonds and outstanding principal of \$4.67 million was refunded with the series 2020A bonds.

During fiscal year 2010, the University's Board of Trustees approved the issuance of General Revenue Bonds, Series 2009A and 2009B. The combined amount of bonds issued was \$18.235 million. Series 2009A, in the amount of \$17.885 million, was issued as taxable Build America Bonds. Under this federal program, 35% of the interest related to this bond issue in the principal and interest amounts due is anticipated to be paid by the federal government for the life of the Build America Bonds. This bond series consists of serial bonds in the amount of \$3.580 million with maturities of October 2011 through October 2019 and interest rates ranging from 2.58% to 5.30%. Two term bonds totaling \$14.305 million were also issued in this series.

The first term bond in the amount of \$5.650 million matures in October 2029 and bears an interest rate of 6.44%. The second term bond in the amount of \$8.655 million matures in October 2039 and bears an interest rate of 6.69%. Series 2009B, issued as a tax-exempt bond in the amount of \$350,000 matured in October 2010. The proceeds of this bond issue were used to construct a student residential facility and for the construction of a new facility at the Keweenaw Research Center. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture.

During fiscal year 2012, the University's Board of Trustees approved the issuance of General Revenue and Refunding Bonds, Series 2012A in the amount of \$33,070 million. The proceeds of this bond issue were used to partially refund Series 2003 bonds in the amount of \$3.965 million, to partially refund Series 2004 bonds in the amount of \$27.150 million with the remainder funding the replacement of the ice plant and rink slab in the hockey arena and partial replacement of the roof of the Student Development Center. The Series 2003 bonds refunded were called for redemption on April 1, 2013 and the Series 2004 bonds refunded were called for redemption on October 1, 2013 each at a redemption price equal to 100% of the principal amount plus accrued interest. The 2012A bond series



consists of serial bonds in the amount of \$19.75 million with maturities of October 2012 through October 2027 and interest rates ranging from 3.0% to 5.0%. The issue also included two term bonds totaling \$13.32 million. The first term bond in the amount of \$5.32 million matures in October 2030 and bears an interest rate of 4.0%. The second term bond in the amount of \$8.0 million matures in October 2034 and bears an interest rate of 5.0%. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture and have been rated as Aa3 by Moody's. Outstanding principal of \$22.08 million was refunded during fiscal year 2022 with the series 2021 bonds.

During fiscal year 2013, the University's Board of Trustees approved the issuance of General Revenue Refunding Bonds, Series 2013A in the amount of \$14.265 million. The proceeds of this bond issue were used to refund Series 2006 bonds in the amount of \$2.715 million and to partially refund Series 2008 bonds in the amount of \$11.550 million. The Series 2006 bonds to be refunded were called for redemption on April 1, 2016 at a redemption price equal to 100% of the principal amount to be redeemed plus accrued interest

to the redemption date. Principal and interest on the Series 2008 bonds will be paid at maturity on October 1, 2016, October 1, 2017, and October 1, 2018, respectively. The advance refunding of the \$2.715 million of Series 2006 bonds and the \$11.550 million of Series 2008 bonds provided resources to purchase US government securities that were placed in an escrow fund for the purpose of generating resources for all future debt service payments on \$14.265 million of refunded debt. The 2013A bond series consists of serial bonds in the amount of \$8.325 million with maturities of October 2013 through October 2026 and interest rates ranging from 2.0% to 5.0%. The issue also included three term bonds totaling \$5.940 million. The first term bond in the amount of \$2.200 million matures in October 2025 and bears an interest rate of 3.0%. The second term bond in the amount of \$2.470 million matures in October 2028 and bears an interest rate of 3.25%. The third term bond in the amount of \$1.270 million matures in October 2036 and bears an interest rate of 4.0%. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture.

During fiscal year 2015, the University's Board of Trustees approved the issuance of General Revenue Bonds, Series 2015A in the amount of \$24.295 million. The proceeds of this bond issue were used to renovate Daniell Heights student apartments, construct a fuel storage tank facility, renovate a campus dining facility,



upgrade information technology and safety systems, renovate a chemical storage facility and undergraduate laboratories, and renovate bathrooms in the McNair Hall dormitory. The bonds bear fixed interest rates ranging from 2.0% to 5.0%, and mature at various dates from October 2016 through October 2045. All bonds of this issuance are rated A1 by Moody's; \$8.605 million of the issuance are insured and rated AA by Standard & Poor's.

During fiscal year 2022, the University's Board of Trustees approved the issuance of General Revenue Bonds Series 2021 in the amount of \$29.870 million. The proceeds of this bond issue were used to refund Series 2012A bonds and to construct the H-STEM Complex. The Series 2021 bonds bear a fixed interest rates ranging from 4% to 5% and are comprised of serial and term bonds that mature on various dates with the latest date being October 1, 2051. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture and have been rated A1 by Moody's.

Direct Placement Debt Issuances

During fiscal year 2020, the University's Board of Trustees approved the issuance of General Revenue Refunding Bonds Series 2020A in the amount of \$4.725 million. The Series 2020A bonds bear a fixed interest rate of 2.190% and mature on October 1, 2038. The proceeds of this bond issue were used to refund certain portions of the outstanding Series 2008 bond in the aggregate principal amount of \$4.670 million, maturing on October 1 of the years 2020 (4.375% interest rate), 2023 (4.500% interest rate), 2028 (4.750% interest rate), and 2038 (5.000% interest rate). The refunded Series 2008 bonds were called for redemption on June 8, 2020. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture.

During fiscal year 2021, the University's Board of Trustees approved the issuance of General Revenue Refunding Bonds Series 2020B in the amount of \$7.725 million. The Series 2020B bonds bear a fixed interest rate of 2.190% and mature on October 1, 2040. The proceeds of this bond issue were used to refund certain portions of the outstanding Series 2010A Bond maturing on October 1 of the years 2025, 2030, and 2040, in the aggregate principal of \$7.410 million. These bonds are secured by an irrevocable pledge of general revenues as provided in the indenture.

MOLINTS DUE ON PONDED

PRINCIPAL AND INTEREST AMOUNTS DUE ON BONDED DEBI							
FOR FISCAL YEARS ENDING JUNE 30							
	All Oth	er Debt	Direct Place	ement Debt	То	tal	
	D. S. S. S. S. S.	Laborat.	D 1 1 1		Distant.	1.11	Total Principal
Fiscal Year	Principal	Interest	Principal	Interest	Principal	Interest	and Interest
2023	\$ 2,065,000	\$ 3,494,964	\$ 470,000	\$ 253,931	\$ 2,535,000	\$ 3,748,895	\$ 6,283,895
2024	2,145,000	3,397,649	490,000	243,419	2,635,000	3,641,068	6,276,068
2025	2,245,000	3,296,258	510,000	232,469	2,755,000	3,528,727	6,283,727
2026	3,320,000	3,171,059	525,000	221,136	3,845,000	3,392,195	7,237,195
2027	3,475,000	3,010,484	545,000	209,419	4,020,000	3,219,903	7,239,903
Total 5 years	13,250,000	16,370,414	2,540,000	1,160,374	15,790,000	17,530,788	33,320,788
2028 to 2032	19,675,000	12,462,658	3,015,000	856,019	22,690,000	13,318,677	36,008,677
2033 to 2037	19,005,000	7,244,710	3,580,000	497,349	22,585,000	7,742,059	30,327,059
2038 to 2042	10,685,000	3,721,146	2,695,000	104,848	13,380,000	3,825,994	17,205,994
2043 to 2047	8,075,000	1,526,150	-	-	8,075,000	1,526,150	9,601,150
2048 to 2052	3,465,000	357,500	-	-	3,465,000	357,500	3,822,500
Total bonded debt	\$ 74,155,000	\$ 41,682,578	\$ 11,830,000	\$ 2,618,590	\$ 85,985,000	\$ 44,301,168	\$ 130,286,168



(8) INSURANCE

Self-Insurance

The University is essentially self-insured for medical benefits claims, unemployment compensation, and workers' compensation. Stop-loss coverage has been purchased by the University for its medical and workers' compensation coverages. Liabilities for estimates of losses retained by the University under self-insurance programs have been determined and accrued for and included in insurance and benefit reserves on the accompanying Statements of Net Position. There were no claims or settlements that exceeded insurance coverage in the last three years. Changes in the estimated liability for self-insured plans during the past three fiscal years are as follows:

SELF-INSURED CLAIMS LIABILITY

	2022	2021	2020
Balance, beginning of year	\$ 1,434,353	\$ 1,332,756	\$ 940,371
Claims incurred, including changes in estimates	17,350,905	17,224,915	17,927,775
Less: claims paid	(17,427,315)	(17,123,318)	(17,535,390)
Balance, end of year	\$ 1,357,943	\$ 1,434,353	\$ 1,332,756

Liability and Property Insurance

The University participates with eleven other Michigan universities in the Michigan Universities Self-Insurance Corporation ("MUSIC"). MUSIC's purpose is to provide indemnity to members against auto, comprehensive general liability, errors and omissions, and property losses commonly covered by insurance. Premiums are assessed annually for (1) insurance risks retained by MUSIC, (2) costs related to excess coverage, and (3) general and administrative expenses. MUSIC also provides risk-management and loss control services and programs.

Loss coverages are structured on a three-layer basis with each member retaining a portion of its losses, MUSIC covering the second layer of losses, and commercial carriers covering the third layer.

Comprehensive general liability coverage is provided on a per-occurrence basis; errors and omissions coverage is provided on a claims-made basis. In the event of excess assets, MUSIC will return the surplus, credit the surplus toward future payments, or provide for increased coverage. Recommended reserves for both MUSIC and each member are actuarially determined on an annual basis. MUSIC will be self-sustaining through member payments and will purchase commercial coverage for claims in excess of established annual limits for each line of coverage. Members may fund their respective reserves as they deem appropriate.

(9) RETIREMENT BENEFITS

Retirement Plans

The University has a defined contribution retirement plan and a defined benefit retirement plan for qualified employees. The defined benefit plan is discussed in note 10.

Defined Contribution Plan

The University has a defined contribution plan with Teachers Insurance and Annuities Association College Retirement Equities Fund (TIAA-CREF) and Fidelity. Any regular employee who works in a position of half-time or greater is eligible to participate in the defined contribution plan.

Plan participants maintain individual investment accounts with TIAA-CREF and/or with Fidelity Investments. At June 30, 2021, the University had approximately 3,504 plan participants. Employees may also deposit supplemental retirement funds into 403(b) and/or 457(b) plans up to permissible limits. The University

contributes a specified percentage of employee wages up to 7.75%, and has no liability beyond its own contribution. University contributions to this program are summarized in the Retirement Plan Contributions table for the years ended June 30.

DEFINED CONTRIBUTION RETIREMENT PLAN CONTRIBUTIONS

	2022	2021
University contributions to TIAA-CREF/Fidelity	\$ 7,427,307	\$ 7,118,192
Payroll covered under TIAA-CREF/Fidelity	\$ 106,603,530	\$ 103,854,435

(10) MICHIGAN PUBLIC SCHOOLS EMPLOYEES' RETIREMENT SYSTEM

Defined Benefit Plan

The University contributes to the Michigan Public Schools Employees Retirement System (MPSERS), a costsharing multi-employer pension plan administered by the State of Michigan Department of Management and Budget, Office of Retirement Services. Benefit provisions are established and may be amended by state statute. Due to State of Michigan House Bill HB4047, University employees hired after December 31, 1995 can no longer participate in this retirement plan, unless they were previously enrolled in the plan at the University or one of the other six universities that are part of MPSERS. The Office of Retirement Services (ORS) issues a publicly available financial report that includes financial statements and required supplementary information for MPSERS. That report can be found on the ORS website at michigan.gov/orsschools. In July 2015, ORS determined that MPSERS has two reporting units: universities and non-universities. ORS provided the universities a separate net pension liability and net other postemployment benefits liability/asset. Separate pension and OBEB information related to the universities reporting unit included in this plan is not available.

University participants are enrolled in one of multiple plans based on date of hire and certain voluntary elections. A summary of the pension plans offered by MPSERS is as follows:

Plan Name	Plan Type	Plan Status
Member Investment Plan (MIP)	Defined Benefit	Closed
Basic	Defined Benefit	Closed
Defined Contribution	Defined Contribution	Open

The MIP includes additional subgroups based on hire date. The MIP Fixed plan includes members hired prior to January 1, 1990. The MIP Graded plan includes members first hired from January 1, 1990 through December 31, 1995. The MIP Plus plan includes members first hired from July 1, 2008 through June 30, 2010. Members who initially enrolled in the MIP plan and made a voluntary election to contribute a higher rate are participants in the MIP 7% plan.

Members hired between July 1, 2010 and September 3, 2012 were enrolled in the *Pension* Plus plan. Members hired on or after September 4, 2012 are automatically enrolled in this plan unless an election is made to participate in the defined contribution plan. The plan includes a pension component as well as a savings component. Member contributions to the savings component are matched at a rate of 50% by the employer (up to a maximum of 1%) and invested in a 401(k) plan.

Effective February 1, 2013, members that initially enrolled in MIP were provided the option to convert to a defined contribution plan (*Basic 4%*). In these instances, any service credit accumulated under the defined benefit plan before February 1, 2013 is retained. For service performed after this date, the converted plan member receives 4% employer contributions to a personal 401 (k) account.

A member first enrolling in MPSERS on or after September 4, 2012 may elect to enroll in the *defined contribution* plan. Employer and employee contribution rates and vesting requirements are consistent with the defined contribution component of the Pension Plus plan as described above.

Benefits Provided

MPSERS provides retirement, death, disability and postemployment healthcare benefits to eligible participants. Retirement benefits are calculated as a percentage of the employee's final average compensation multiplied by the employee's years of service. All participants qualify for a benefit multiplier of 1.5% for the first 30 years of service. Certain benefit groups receive a reduced rate of 1.25% for service above 30 years. Disability benefits are calculated the same as regular service retirement. Participants are eligible to receive full retirement benefits upon reaching the age and years of service requirements below. Most plans offer additional options for early retirement if certain stipulations have been met. Voluntary contributions vest immediately.

Plan Name	Eligibility Based on Years of Service	Vesting
Member Investment Plan (MIP)	Age 46 with 30 years or age 60 with 10 years	10 years
Basic	Age 55 with 30 years or age 60 with 10 years	10 years
Defined Contribution	7	4 years

Benefit provisions of the postemployment healthcare plan are established by State statute, which may be amended. Public Act 300 of 1980, as amended, establishes eligibility and benefit provisions. Retirees have the option of health coverage, which through 2012, was funded on a cash disbursement basis. Beginning fiscal year 2013, it is funded on a prefunded basis. The System has contracted to provide the comprehensive group medical, prescription drug, dental and vision coverage for retirees and beneficiaries. A subsidized portion of the premium is paid by the System with the balance deducted from the monthly pension of each retiree healthcare recipient. For members who first worked before July 1, 2008, (Basic, MIP-Fixed, and MIP Graded plan members) the subsidy is the maximum allowed by statute. To limit future liabilities of Other Postemployment Benefits, members who first worked on or after July 1, 2008 (MIP-Plus plan members) have a graded premium subsidy based on career length where they accrue credit towards their insurance premiums in retirement, not to exceed the maximum allowable by statute. Public Act 300 of 2012 sets the maximum subsidy at 80% beginning January 1, 2013; 90% for those Medicare eligible and enrolled in the insurances as of that date. Dependents are eligible for healthcare coverage if they meet the dependency requirements set forth in Public Act 300 of 1980, as amended.

Public Act 300 of 2012 granted all active members of the MPSERS, who earned service credit in the 12 months ending September 3, 2012 or were on an approved professional services or military leave of absence on September 3, 2012, a voluntary election regarding their retirement healthcare. Any changes to a member's healthcare benefit are effective as of the member's transition date, which is defined as the first day of the pay period that begins on or after February 1, 2013.

Under Public Act 300 of 2012, members were given the choice between continuing the 3% contribution to retiree healthcare and keeping the premium subsidy benefit described above, or choosing not to pay the 3% contribution and instead opting out of the subsidy benefit and becoming a participant in the Personal Healthcare Fund (PHF), a portable, tax-deferred fund that can be used to pay healthcare expenses in retirement. Participants in the PHF are automatically enrolled in a 2% employer match into a 401 (k) account. Members who selected this option stop paying the 3% contribution to retiree healthcare as of the day before their transition date, and their prior contributions were deposited into their 401 (k) account.



Contributions

Employer contributions to the plans are based on a percentage of covered payroll that has been actuarially determined as an amount that, when combined with employee contributions, is expected to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Member contributions are determined based on date of hire and the plan selected. Contribution rates are adjusted annually by the ORS.

Employers are required by Public Act 300 of 1980, as amended, to contribute amounts necessary to finance the coverage of active and retired members. Contribution provisions are specified by State statute and may be amended only by action of the State Legislature.

Employer OPEB contributions to the System are determined on an actuarial basis using the entry age normal actuarial cost method. Under this method, the actuarial present value of the projected benefits of each individual included in the actuarial valuation is allocated on a level basis over the service of the individual between entry age and assumed exit age. The portion of this cost allocated to the current valuation year is called the normal cost. The remainder is called the actuarial accrued liability. Normal cost is funded on a current basis. The unfunded (overfunded) actuarial accrued liability as of the September 30, 2019 valuation will be amortized over a 19-year period beginning October 1, 2019 and ending September 30, 2038.

The schedules below summarize the contribution rates in effect for fiscal years 2022 and 2021:

Benefit Structure	Member	Employer (7/1/20 to 9/30/20)	Employer (10/1/20 to 9/30/21)	Employer (10/1/21 to 9/30/22)
Member Investment Plan (MIP)	3.00% - 7.00%	26.03%	26.26%	26.38%
Basic	0.00% - 4.00%	26.03%	26.26%	26.38%
Defined Contribution	0.00%	19.74%	19.74%	19.86%
C	PEB CONTRIBUT	ION RATES		

PENSION CONTRIBUTION RATES

Benefit Structure	Member	Employer (7/1/20 to 9/30/20)	Employer (10/1/20 to 9/30/21)	Employer (10/1/21 to 9/30/22)
Premium Subsidy	3.00%	6.57%	6.91%	6.79%
Personal Healthcare Fund	0.00%	5.99%	5.99%	5.87%

The University's contributions to MPSERS under all pension plans as described above for the years ended June 30, 2022 and 2021 were \$15,861,576 and \$5,769,605, respectively. The University's required and actual pension contributions include an allocation of \$11,039,481 and \$1,078,884 in revenue received from the State of Michigan and remitted to the System to fund the MPSERS unfunded actuarial accrued liability (UAAL) stabilization rate for the year ended June 30, 2022 and 2021, respectively. The University's contributions to the OPEB plan from the University were \$1,513,665 and \$1,413,381 for the years ended June 30, 2022 and June 30, 2022 and June 30, 2021, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2022 and 2021, the University reported a liability of \$63.411 million and \$77.330 million respectively, for its proportionate share of the net pension liability as calculated for the universities reporting unit of MPSERS. The net pension liability was measured as of September 30, 2021 and 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation rolled forward from September 30, 2020 and 2019, respectively. The University's proportion of the net pension liability was based on a projection of the University's long-term share of contributions to the pension plan relative to the projected contributions of all participating universities, actuarially determined. At September 30, 2021, 2020 and 2019, the University's proportion (as calculated by MPSERS) was 11.28598%, 11.32182% and 11.27592%, respectively. Subsequent to the University's year-end on July 14, 2022, Michigan Act No. 144 of Public Act of 2022 was approved. The Act's Section 236h provides total appropriations of \$300 million for all universities to pay MPSERS towards the unfunded pension liability. This additional appropriation and subsequent payment to MPSERS will significantly reduce the net pension liability.

For the years ended June 30, 2022 and 2021, the University recognized pension expense of \$1.198 million and \$6.098 million, respectively. At June 30, the University reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	2022			
	Deferred Outflows of Resources		Deferred Inflows of Resources	
Net difference between projected and actual earnings		7	¢	9 527 ///
on pension plan investments	\$	-	¢	8,537,664
		-		8,537,664
University contributions subsequent to the measurement date		14,970,540		_
Total		14,970,540	\$	8,537,664
	<u> </u>	14,770,340	<u> </u>	0,007,004
	<u> </u>		2021	0,007,004
	Du		2021	Deferred nflows of esources
	Du	2 eferred tflows of	2021	Deferred nflows of
	Du	2 eferred tflows of	2021	Deferred nflows of
Net difference between projected and actual earnings on pension plan investments	Du	2 eferred tflows of sources	2021 I R	Deferred nflows of
Net difference between projected and actual earnings on pension plan investments Total amortized deferrals	Du	2 eferred tflows of sources 98,336	2021 I R	Deferred nflows of
Net difference between projected and actual earnings	Du	2 eferred tflows of sources 98,336	2021 I R	Deferred nflows of

The amount of deferred outflows of resources related to University contributions subsequent to the measurement date will be recognized as a reduction in the net pension liability in the next year. The \$11,039,481 and \$1,078,884 reported as deferred inflows of resources resulting from the pension portion of state aid payments received pursuant to Sections 236(4) and 236(h) of the State School Aid Act (PA 94 of 1979), will be recognized as net pension expense for the years ended June 30, 2022 and 2021,

respectively. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Fiscal Year	Amount
2023	(2,279,609)
2024	(1,867,563)
2025	(2,096,929)
2026	(2,293,563)
Total	\$ (8,537,664)

OPEB Asset or Liability, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2022 and 2021, the University reported an asset of \$4,825,977 and a liability of \$4,770,992 respectively, for its proportionate share of the MPSERS net OPEB liability/asset calculated for the universities reporting unit. The net OPEB liability was measured as of September 30, 2020 and 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation rolled forward from September 2019 and 2018, respectively. The University's proportion of the net OPEB liability was determined by dividing each employer's statutorily required OPEB contributions to the system during the measurement period. At September 30, 2021, 2020 and 2019, the University's proportion was 11.25511%, 11.29115% and 11.29560%, respectively.

For the years ended June 30, 2022 and June 30, 2021, the University recognized OPEB expense (recovery) of (\$4,825,977) and (\$4,793,213), respectively. At June 30, the University reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	2022			
	o	Deferred outflows of lesources	1	Deferred nflows of esources
Net difference between projected and actual earnings				
on OPEB plan investments	\$	-	\$	2,760,822
Total amortized deferrals		-		2,760,822
University contributions subsequent to the measurement				
date		1,321,292		-
Total	\$	1,321,292	\$	2,760,822

	2021			
	Deferred	Deferred		
	Outflows of	Inflows of		
*	Resources	Resources		
Differences between expected and actual experience	\$-	\$ 129,959		
Changes of assumptions	23,277	-		
Net difference between projected and actual earnings				
on OPEB plan investments	99,256	-		
Changes in proportion and differences between employer				
contributions and proportionate share of contributions	-	223		
Total amortized deferrals	122,533	130,182		
University contributions subsequent to the measurement				
date	1,245,499			
Total	\$ 1,368,032	\$ 130,182		

University contributions subsequent to the measurement date reported as deferred outflows of resources related to OPEB will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2022. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Fiscal Year	Amount
2023	(716,714)
2024	(623,935)
2025	(678,898)
2026	(741,275)
Total	\$ (2,760,822)

Actuarial Assumptions

The total pension and OPEB liabilities measured as of September 30, 2021 are based on the results of an actuarial valuation date of September 30, 2020 and rolled forward using generally accepted actuarial procedures.

Actuarial Cost Method	Entry age, normal cost
Assumed rate of return	6.80 percent, net of investment expenses based on the groups (Pension)6.95 percent, net of investment expenses based on the groups (OPEB)
Salary increases	2.75%11.55 percent, including wage inflation of 2.75%
Cost-of-Living Pension Adjustment	3% Annual Non-Compounded for MIP members
Healthcare cost trend rate	Pre-65: 7.75% Year 1 graded to 3.5% Year 15; 3.0% Year 120 Post-65: 5.25% Year 1 graded to 3.5% Year 15; 3.0% Year 120
Mortality basis:	
Retirees	RP-2014 Male and Female Healthy Annuitant Mortality Tables, scaled by 82% for males and 78% for females and adjusted for mortality improvements using projection scale MP-2017 from 2006.
Active	RP-2014 Male and Female Employee Annuitant Mortality Tables, scaled 100% and adjusted for mortality improvements using projection scale MP-2017 from 2006.

The actuarial assumptions used for the September 30, 2020 valuation were based on the results of an actuarial experience study for the periods 2012-2017.

Significant assumption changes since the prior measurement date, September 30, 2020, for the OPEB plan include an increase in the health care cost trend rate of 0.75 percentage points for members under 65 and a reduction from 7.0 percent to 5.25 percent for members over 65.

Significant assumption changes since the prior measurement date, September 30, 2021, for the pension and OPEB plan include a reduction of both plans' discount rates to 6.0 percent. The change increases the total plan's net OPEB liability by approximately \$1.1 billion.

The total pension and OPEB liabilities measured as of September 30, 2019 are based on the results of an actuarial valuation date of September 30, 2018 and rolled forward using generally accepted actuarial procedures.

Actuarial Cost Method	Entry age, normal cost
Assumed rate of return	6.80 percent, net of investment expenses based on the groups (Pension)6.95 percent, net of investment expenses based on the groups (OPEB)
Salary increases	2.75%11.55 percent, including wage inflation of 2.75%
Cost-of-Living Pension Adjustment	3% Annual Non-Compounded for MIP members
Healthcare cost trend rate	7.50 percent, year 1 graded to 3.5% year 12
Mortality basis: Retirees	RP-2014 Male and Female Healthy Annuitant Mortality Tables, scaled by 82% for males and 78% for females and adjusted for mortality improvements using projection scale MP-2017 from 2006.
Active	RP-2014 Male and Female Employee Annuitant Mortality Tables, scaled 100% and adjusted for mortality improvements using projection scale MP-2017 from 2006.

The actuarial assumptions used for the September 30, 2019 valuation were based on the results of an actuarial experience study for the periods 2012-2017.

There were no significant changes to the benefit terms for the pension or OBEP plans since the prior measurement date of September 30, 2019.



Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan and OPEB plan investments was determined using a building-block method in which the best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	September 30, 2021			
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return		
Domestic equity pools	25.0%	5.4%		
Private equity pools	16.0%	9.1%		
International equity pools	15.0%	7.5%		
Fixed income pools	10.5%	-0.7%		
Real estate and infrastructure pools	10.0%	5.4%		
Absolute return pools	9.0%	2.6%		
Real return/opportunistic pools	12.5%	6.1%		
Short-term investment pools	2.0%	-1.3%		
Total	100.0%			

	September 30, 2020			
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return		
Domestic equity pools	25.0%	5.6%		
Private equity pools	16.0%	9.3%		
International equity pools	15.0%	7.4%		
Fixed income pools	10.5%	0.5%		
Real estate and infrastructure pools	10.0%	4.9%		
Absolute return pools	9.0%	3.2%		
Real return/opportunistic pools	12.5%	6.6%		
Short-term investment pools	2.0%	0.1%		
Τοταί	100.0%			

Rate of Return

For the fiscal year ended September 30, 2021, the annual money-weighted rate of return on pension plan investment, net of pension plan investment expense, was 27.3%. For OBEP plan investment, the annual money-weighted rate of return was 27.14%, net of OBEP plan investment expense.

Discount Rate

The discount rate used to measure the total pension liability for June 30, 2022 and 2021 was 6.80%. A discount rate of 6.95% was used to measure the total OPEB liability for June 30, 2022 and 2021. This discount rate was based on the long-term expected rate of return on pension and OPEB plan investments of 6.95%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the University's contributions will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension and OPEB liabilities.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the University, calculated using the discount rate of 6.80% for fiscal years 2022 and 2021, as well as what the University's net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

NET PENSION LIA	BILITY				
Current					
1% Decrease (5.80%)	Discount Rate (6.80%)	1% Increase (7.80%)			
\$ 76,188,276	\$ 63,410,817	\$ 52,502,576			
1% Decrease	Current Discount Rate	1% Increase			
\$ 90,626,431	\$ 77,330,320	(7.80%) \$ 65,991,453			
	1% Decrease (5.80%) \$ 76,188,276 1% Decrease (5.80%)	1% Decrease (5.80%) Discount Rate (6.80%) \$ 76,188,276 \$ 63,410,817 \$ 76,188,276 \$ Current Discount Rate (5.80%)			

Sensitivity of the Net OPEB Asset or Liability to Changes in the Discount Rate

The following presents the University's net OPEB asset or liability calculated using a discount rate of 6.95% for fiscal years ended June 30, 2022 and 2021, as well as what the University's net OPEB asset or liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher:

	NET OPEB	ASSET				
Fiscal Year	1% Decrease (5.95%)	Current Discount Rate (6.95%)	1% Increase (7.95%)			
2022	\$ 2,953,088 NET OPEB LI	\$ 4,825,977	\$ 6,429,136			
Fiscal Year	1% Decrease (5.95%)	Current Discount Rate (6.95%)	1% Increase (7.95%)			
2021	\$ 7,132,512	\$ 4,770,992	\$ 2,758,323			

Sensitivity of the Net OPEB Asset or Liability to Healthcare Cost Trend Rate

The following presents the University's proportionate share of the net OPEB asset or liability calculated using assumed trend rates, as well as what the University's proportionate share of net OPEB asset or liability would be if it were calculated using a trend rate that is 1 percentage point lower or 1 percentage point higher:

	NET OPEB	ASSET								
Fiscal Year	1% Decrease	Current Trend	1% Increase							
2022	\$ 6,549,525	\$ 4,825,977	\$ 2,860,199							
NET OPEB LIABILITY										
Fiscal Year	1% Decrease	Current Trend	1% Increase							
2021	\$ 2,625,562	\$ 4,770,992	\$ 7,226,394							

Pension and OPEB Plan Fiduciary Net Position

Detailed information about the plan's fiduciary net position is available in the separately issued MPSERS financial statements available on the State of Michigan Office of Retirement Services website at www.michigan.gov/orsschools.

(11) OTHER POSTEMPLOYMENT BENEFIT PLAN

Plan Description

The University offers postemployment benefits to its retirees through a single-employer plan, administered by the University. The University offers health coverage to its retirees and their covered dependents. The plan provides health, dental, and vision insurance benefits to eligible participants. To be eligible, a retiree from the University must be at least 65 years old with at least 10 years of service or his or her years of service plus age must be equal to, or greater than, 80. Retirees are responsible for the full cost of insurance premiums which are set at COBRA rates. Prior to January 1, 2014, the University subsidized the insurance premium costs for retirees. The phasing-out of subsidies for new retirees occurred from January 1, 2007 to December 31, 2013. The OPEB liability recognized by the University is associated with retirees and covered dependents who continue to receive subsidized premiums.

Contributions

The contribution requirements of the plan members are established annually by the University. The required contribution is based on annual projected pay-as-you go financing requirements. Prior to 2007, the University utilized its COBRA rates as the full cost value of early retiree medical and dental benefits. Depending upon specific fiscal years of retirement, these non-Medicare retirees paid a certain percentage of this COBRA rate. Even for those early retirees where their contribution requirement was 100% of the COBRA rate, there was an implied subsidy as the age-adjusted full cost for pre-Medicare eligible retirees is significantly higher. Beginning in 2007, the University began a seven year phase out of the subsidy implied when utilizing the COBRA rates so that starting on January 1, 2014 retiree contributions were established on the expected full cost of the retiree medical and dental plans (pre-Medicare and Medicare eligible populations). The University has not prefunded any of its OPEB liability, nor does it presently intend to prefund its OPEB liability. Therefore, as of June 30, 2022, the most recent measurement date, the Plan was 0% funded.



At June 30, 2022 and 2021, the University reported a liability of \$5,045,999 and \$5,445,459 respectively, for its Retiree Benefit Program. The net OPEB liability was measured as of June 30, 2022, rolled forward from a valuation date of July 1, 2021. Changes in the OPEB liability for the years ended June 30 are summarized as follows:

	2022	2021
Balance, beginning of year	\$ 5,045,999	\$ 5,445,459
Interest cost	106,043	115,498
Differences between expected and actual experience	(1,115,278)	-
Changes in assumptions	(1,031,161)	(73,904)
Benefit payments	 (274,705)	 (441,054)
Balance, end of year	\$ 2,730,898	\$ 5,045,999

On the above, there were no benefit changes. The decrease in the liability from June 30, 2021 to June 30, 2022 is due to the net impact of the changes in the trend, mortality assumptions and the removal of the excise tax which were largely offset by the decrease in the assumed discount rate from 2.21% as of June 30, 2021 to 2.16% as of June 30, 2022.

The number of plan participants consisted of the following:

	June 30, 2022	June 30, 2021
Retirees younger than 65 years old	-	-
Retirees 65 years old or older	82	105
Total inactive participants	82	105



Sensitivity of the Net OPEB Liability to Changes in Discount Rate and Healthcare Cost Trend Rate

The following presents the University's net OPEB liability calculated using a discount rate of 2.16% and 2.21% for fiscal years ended June 30, 2022 and 2021, respectively, as well as what the University's net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher:

NET OPEB LIABILITY

Fiscal Year	1% Decrease	Current Discount	1% Increase			
	(2.54%)	Rate (3.54%)	(4.54%)			
2022	\$ 2,916,397	\$ 2,730,898	\$ 2,566,655			
Fiscal Year	1% Decrease	Current Discount	1% Increase			
	(1.16%)	Rate (2.16%)	(3.16%)			
2021	\$ 5,424,273	\$ 5,045,999	\$ 4,704,929			

The following presents the University's net OPEB liability calculated using assumed healthcare trend rates, as well as what the University's net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher:

NET OPEB LIABILITY

Fiscal Year	1% Decrease	Current Trend	1% Increase
2022	\$ 2,541,804	\$ 2,730,898	\$ 2,940,580
Fiscal Year	1% Decrease	Current Trend	1% Increase
2021	\$ 4,617,704	\$ 5,054,999	\$ 5,516,457

Actuarial Assumptions

June 30, 2022 June 30, 2021 Actuarial Cost Method Entry Age, Normal Entry Age, Normal Valuation Date July 1, 2021 July 1, 2019 CPI 3.00% 3.00% Wage Inflation Rate Since the population is inactive, a wage inflator Since the population is inactive, a wage inflator is not necessary. is not necessary. Healthcare Cost Trend S&P Healthcare Economic Index and internal \$&P Healthcare Economic Index and internal trend guidance trend guidance Mortality PRI-2012 Mortality, projected generational from PRI-2012 Mortality, projected generational from a central year of 2012 with Scale MP-2021 a central year of 2012 with Scale MP-2020

SUMMARY OF ACTUARIAL ASSUMPTIONS

Discount Rate

A discount rate of 2.16% was used to measure the total OPEB liability for June 30, 2022 (2.21% for June 30, 2021). The discount rate was determined using the interest rate reported under the 20-YEAR Municipal Bond Index on the last Friday prior to the measurement date.

Retirement Supplemental Voluntary Plan

The University has a Retirement Supplemental Voluntary Plan (RSVP) to facilitate the voluntary retirement of eligible employees. The RSVP is not an early retirement program. The decision to retire is left to the discretion of the individual employee and remains entirely voluntary. However, if an employee decides to retire, the RSVP provides several options upon retirement: a monetary option; a phased retirement option; a combination of the monetary and phased retirement options; and a program for employment after retirement. The University recognizes the related costs in the year the employee decides to retire. There was no RSVP liability at June 30, 2022 and 2021.

(12) COMMITMENTS AND CONTINGENCIES

The University has internally funded reserves for certain employee benefits. Accrued liabilities are generally based on actuarial valuations and represent the present value of unpaid expected claims, including estimates of claims incurred but not reported.

The University receives grants and other forms of reimbursement from various federal and state agencies. These activities are subject to audit by agents of the funding authority, the purpose of which is to ensure compliance with conditions precedent to providing such funds. University administration believes there is no liability for reimbursement which may arise as the result of audits.

Certain institution facilities, including the Great Lakes Research Center, have been financed in part by State Building Authority (SBA) bond issuances, which are secured by a pledge of rentals to be received by

the State of Michigan pursuant to an arrangement between SBA, the State of Michigan, and the Institution. While the SBA bonds are outstanding, the SBA will hold title to the respective building, although the University has capitalized the building and pays all operating and maintenance costs. Once the SBA bonds are fully paid, the SBA will transfer title of the building to the institution.

In the normal course of its activities, the University is a party in various legal actions. Although some actions have been brought for large amounts, the University has not experienced any significant losses or costs. The University and its legal counsel are of the opinion that the outcome of asserted and unasserted claims outstanding will not have a material effect on the financial statements.

(13) FUNCTIONAL CLASSIFICATION OF OPERATING EXPENSES

The University's operating expenses by functional classification were as follows for years ended June 30:

	2022	2021
Instruction \$	63,503,367	\$ 62,431,697
Research	67,515,569	60,016,828
Public service	9,935,341	11,027,767
Academic support	23,709,211	21,078,846
Student services	15,254,827	13,810,086
Institutional support	20,145,820	23,081,412
Operations and maintenance of plant	14,540,735	13,640,128
Student financial support	19,381,790	16,267,506
Departmental activities	6,193,379	4,232,924
Student residents	6,671,888	8,440,627
Depreciation	14,318,065	14,464,888
Total \$	261,169,992	\$ 248,492,709

OPERATING EXPENSES BY FUNCTIONAL CLASSIFICATION



(14) IMPACT OF COVID-19

Federal Relief Legislation

The Coronavirus Aid, Relief and Economic Security (CARES) Act, the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan (ARP) were passed by Congress and signed into law to provide economic relief from COVID-19. The University received the following grants under the CARES Act, CRRSAA, and ARP through the US Department of Education:

- \$2,302,890 Student Portion of the Higher Education Emergency Relief Fund (HEERF I)
- \$2,302,889 Institutional Portion of the Higher Education Emergency Relief Fund (HEERF I)
- \$2,302,890 Student Portion of the Higher Education Emergency Relief Fund (HEERF II)
- \$4,688,924 Institutional Portion of the Higher Education Emergency Relief Fund (HEERF II)
- \$6,187,436 Student Portion of the Higher Education Emergency Relief Fund (HEERF III)
- \$6,177,354 Institutional Portion of the Higher Education Emergency Relief Fund (HEERF III) The Higher Education Emergency Relief Funding provided funding to universities to use for emergency financial aid grants to students for expenses related to the disruption of campus operations due to the coronavirus. During fiscal year ended June 30, 2022, the University recognized \$12,420,301 in revenue from HEERF I, HEERF II, and HEERF III funding, which is shown on the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues (Expenses). During fiscal year ended June 30, 2021, the University recognized \$11,456,581 in revenue from HEERF I and HEERF II funding, which is shown on the Statements of Revenues, Expenses and Changes in Net Position under Nonoperating Revenues (Expenses).



REQUIRED SUPPLEMENTARY INFORMATION

MPSERS Cost-sharing Multiple Employer Plan

SCHEDULE OF THE UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (PLAN YEAR OCTOBER 1 - SEPTEMBER 30)	2021	2020	2019	2018	2017	2016	2015	2014
University's proportion of the net pension liability	11.28598%	11.32182%	11.27592%	11.24088%	11.26247%	11.20220%	10.00520%	9.64907%
University's proportionate share of the net pension liability	\$63,410,817	\$77,330,320	\$75,502,509	\$71,833,414	\$64,788,673	\$62,759,225	\$ 54,888,547	\$36,194,241
University's covered payroll	\$24,974,000	\$24,484,000	\$24,004,000	\$23,533,179	\$23,879,000	\$ 8,943,572	\$ 9,118,081	\$ 9,156,216
University's proportionate share of the net pension liability as a								
percentage of its covered payroll	253.91%	315.84%	314.54%	305.24%	271.32%	701.72%	601.97%	252.97%
Plan fiduciary net position as a percentage of the total pension liability	52.26%	43.07%	44.24%	45.87%	47.42%	46.77%	47.45%	63.00%

SCHEDULE OF UNIVERSITY PENSION CONTRIBUTIONS (FISCAL YEAR								
JULY 1 - JUNE 30)	2022	2021	2020	2019	2018	2017	2016	2015
Contractually required pension contributions	\$ 6,519,482	\$ 5,735,218	\$ 5,635,665	\$ 5,683,916	\$ 4,919,399	\$ 4,283,370	\$ 4,150,666	\$ 3,395,404
Contributions in relation to the contractually required contribution	\$ 6,519,482	\$ 5,735,218	\$ 5,635,665	\$ 5,683,916	\$ 4,919,399	\$ 4,283,370	\$ 4,150,666	\$ 3,395,404
Contribution deficiency (excess)	\$ -	\$-	\$ -	\$ -	\$-	\$ -	\$-	\$-
University's covered payroll	\$ 25,348,610	\$24,851,260	\$24,364,060	\$23,886,295	\$ 23,619,500	\$ 8,526,091	\$ 8,606,261	\$ 8,877,145
Contributions as a percentage of covered payroll	25.72%	23.08%	23.13%	23.80%	20.83%	50.24%	48.23%	38.25%

SCHEDULE OF THE UNIVERSITY'S PROPORTIONATE SHARE OF THE

NET OPEB LIABILITY (PLAN YEAR OCTOBER 1 - SEPTEMBER 30)	2021	2020	2019	2018	2017
University's proportion of the net OPEB liability	11.25511%	11.29115%	11.29560%	11.29059%	11.22486%
University's proportionate share of the net OPEB (asset) liability	\$ (4,825,977)	\$ 4,770,992	\$10,367,445	\$13,395,226	\$15,973,138
University's covered payroll	\$24,974,000	\$24,484,000	\$24,004,000	\$23,533,179	\$23,879,000
University's proportionate share of the net OPEB liability as a					
percentage of its covered payroll	-19.32%	19.49%	43.19%	56.92%	66.89%
Plan fiduciary net position as a percentage of the total OPEB liability	123.91%	77.20%	61.07%	51.90%	44.11%

SCHEDULE OF UNIVERSITY OPEB CONTRIBUTIONS (FISCAL YEAR					
JULY 1 - JUNE 30)	2022	2021	2020	2019	2018
Contractually required OPEB contributions	\$ 1,535,302	\$ 1,497,010	\$ 1,466,062	\$ 1,465,359	\$ 1,608,346
Contributions in relation to the contractually required contribution	\$ 1,535,302	\$ 1,497,010	\$ 1,466,062	\$ 1,465,359	\$ 1,608,346
Contribution deficiency (excess)	\$-	\$-	\$ -	\$ -	\$-
University's covered payroll	\$ 25,348,610	\$ 24,851,260	\$ 24,364,060	\$ 23,886,295	\$ 23,619,500
Contributions as a percentage of covered payroll	6.06%	6.02%	6.02%	6.13%	6.81%

Notes to Required Supplementary Information

The amounts presented for the fiscal year in the above Schedule of the University's Proportionate Share of the Net Pension and OPEB Liability were determined as of September 30 of the preceding year.

GASB 68 was implemented in fiscal year 2015 and GASB 75 was implemented in fiscal year 2018. These schedules are being built prospectively. Ultimately, 10 years of data will be presented.

RSI Covered – payroll

The employers' covered payroll to be reported in the requirement supplementary information is defined by GASB 82, Pension Issues – an amendment to GASB Statements No. 67, No. 68, and No. 73, as payroll on which contributions to a pension plan are based; and by GASB 85, Omnibus 2017, as payroll on which contributions to the OPEB plan are based. For university employers, covered payroll for both pension and OPEB is the greater of 1) university payroll on which contributions to the plan are based or 2) the required minimum payroll amount required by PA 136 of 2016. For non-university employers, covered payroll represents payroll on which contributions to both plans are based.

Changes of benefit terms: There were no changes of benefit terms for each of the reported plan years ended September 30.

Changes of assumptions:

Michigan Public School Employees Retirement System (Pension) – There were no significant changes of assumptions for each of the reported plan years ended September 30, except for the following:

2019 – The discount rate used in the September 30, 2018 actuarial valuation decreased by 0.25% percentage points.

2018 – The discount rate used in the September 30, 2017 actuarial valuation decreased by 0.45% percentage points. The valuation also includes the impact of an updated experience study for periods from 2012 to 2017.

2017 – The discount rate used in the September 30, 2016 actuarial valuation decreased by 0.50% percentage points.

Michigan Public School Employees Retirement System (OPEB) – There were no significant changes of assumptions for each of the reported plan years ended September 30, except for the following:

2020 – The healthcare cost trend rate used in the September 30, 2019 actuarial valuation decreased by 0.50% percentage points and actual per person health benefit costs were lower than projected.

2019 – The discount rate used in the September 30, 2018 actuarial valuation decreased by 0.20% percentage points. The valuation also includes the impact of an updated experience study for periods from 2012 to 2017.

2018 – The discount rate used in the September 30, 2017 actuarial valuation decreased by 0.35% percentage points. The valuation also includes the impact of an updated experience study for periods from 2012 to 2017.

SCHEDULE OF CHANGES IN THE UNIT	VEF	RSITY'S TOT	AL (OPEB LIABI	LITY	AND RELA	TED	INFORMAT	ION	I
		2022		2021		2020		2019		2018
Plan fiduciary net position, beginning of year	\$	-	\$	-	\$	-	\$	-	\$	-
University contributions		274,705		441,054		436,592		449,629		435,886
Participant contributions		-		-		182,800		202,321		200,805
Benefit payments		(274,705)		(441,054)		(619,392)		(651,950)		(636,691)
Plan fiduciary net position, end of year	\$	-	\$	-	\$	-	\$	-	\$	-
Net OPEB liability	\$	2,730,898	\$	5,045,999	\$	5,445,459	\$	6,019,259	\$	6,077,123
Plan fiduciary net position as a percentage of net OPEB liability		-		-		-		-		-
University's covered payroll*		-		-		-		-		-
Net OPEB liability as a percentage of covered payroll		N/A		N/A		N/A		N/A		N/A

University's Single Employer Plan

* No active employees are covered, thus there is no employee payroll.

Discount rates used in determining the total reported liability for other post employment benefits were 2.16%, 2.21%, 3.50%, and 3.87% at the measurement dates of June 30, 2022, 2021, 2020, and 2019, respectively.

GASB 75 was implemented in fiscal year 2018. These schedules are being built prospectively. Ultimately, 10 years of data will be presented.

SUPPLEMENTARY INFORMATION



	General	Designated	Auxiliary Activities	Refirement & Insurance	Expendable Restricted	Total Current Funds	Student Loan	Plant	Agency	Michigan Tech Fund	Eliminations	2022	2021
Assets													
Current assets:													
Cash and cash equivalents	\$ (15,896,388)	\$ 31,503,605	\$ 1,321,185	\$ (13,627,254)	\$ 7,846,099	\$ 11,147,247	\$ 1,862,614	\$ 15,225,982	\$ 3,872,661	\$ 10,227,593	\$ ' \$		\$ 35,658,834
Accounts receivable, net	9,991,141	44,927	279,741	110,104	11,841,460	22,267,373	•	237,333	90,722		(267,018)	22,328,410	20,166,958
Insurance receivable		•		•	•	•	•	•	1	•	•	•	•
Pledges receivable, net	•	•	1	'	1	1	1	1	1	1,452,494	1	1,452,494	1,661,638
Other assets	291,577	13,525	905,637	20,000	•	1,230,739	•	1	1	6,926	•	1,237,665	1,205,252
Total current assets	(5,613,670)	31,562,057	2,506,563	(13,497,150)	19,687,559	34,645,359	1,862,614	15,463,315	3,963,383	11,687,013	(267,018)	67,354,666	58,692,682
Noncurrent assets:													
Student loans receivable, net							4,677,979	1	1		1	4,677,979	6,208,258
Pledges receivable, net			'					1	1	17,615,926		17,615,926	17,377,039
Restricted cash for capital projects						'		10.549.369				10,549,369	
Investments	15,799,510	1	•	29,217,591		45,017,101		11,203,583	1	171,980,194		228,200,878	229,480,734
Beneficial interest in charitable remainder trusts				,						6,806,179		6,806,179	7.778,511
Capital assets, net								221.435.068	1			221.435.068	221.553.124
Net OPER asset - MPSERS		,	ľ	4.825.977		4.825.977				,		4.825.977	
								078 5 4 4		CUT DOT C	1000 1267		
	15 700 510	•	•			010 010 01	010 111	440'0/2	•	104/174/2	loon'1 /71	012/00/240	000'470'7
lotal noncurrent assets	15,797,510			34,043,568		49,843,078	4,6/1,9/9	244,166,564		198,901,/01	(000/1/2)	491,318,322	484,422,004
	10,185,840	31,562,057	2,506,563	20,546,418	17,68/,557	84,488,437	6,540,573	1/8/429/457	3,763,383	210,588,714	(538,018)	564,6/2,788	543,114,686
Deferred outflows of resources				16,291,832		16,291,832	•		•			16,291,832	6,656,404
Gi Liabilities													
Current liabilities													
Accounts payable and accrued liabilities	8,969,560	412,599	631,689	6,497,112	1,271,528	17,782,488	11,981	4,501,546	3,963,383	292,965	(267,018)	26,285,345	22,517,903
Unearned revenue	27,707	•	1	101,504	4,488,170	4,617,381	•	181,250	•	'	•	4,798,631	3,902,502
Annuity obligations, current portion	•	•	1		•		•	•	•	452,757	•	452,757	432,612
Insurance and benefit reserves, current portion	•	•	1	1,357,943	•	1,357,943		•	•	'	•	1,357,943	1,434,353
Long-term debt, current portion	•	•	•	1		-		2,553,875	•		•	2,553,875	3,995,897
Total current liabilities	8,997,267	412,599	631,689	7,956,559	5,759,698	23,757,812	11,981	7,236,671	3,963,383	745,722	(267,018)	35,448,551	32,283,267
Concurrent liabilities	UJN BUC	000 120				570 AED	•				1000 1207	JOB AED	150
Annuite adjants and of armost and an	004'000	000/1/2				00+1210				4 072 745	[mm'1 /7]	004/000 V 012 745	5 018 422
		•	•	•				102 111 00	•			00/02/1/1 2	01 100 100
Long-term debt, net of current portion						719014 67		72,001,120		'		719017	01,304,/43
	•	•	•	/10/014/00	•	10/014/00				ľ		1000400	
	200 100	000 120	•	2// 30,070		2/ 30,070		102 111 00			1000 1201	2//30/070	7010/2
Total indicaten itabilities Total linbilities	9 305 717	Z/ 1,000	431 689	74 098 274	5 759 A98	C01/12/000	11 981	72,001,120 99 898 397	- 195 FAQ F	5 719 487	(538.018)	199 534 207	206 419 904
	11 / 000'1	110'000		+17'010'+1	010/101/0		10/11	110'010'11	000'001'0	10-11/0	(ollower)	107 400 111	+0/'/ I+'007
Deferred inflows of resources				22,337,967		22,337,967		1,450,004		10,989,955		34,777,926	13,324,871
Net position													
Net investment in capital assets Restricted:	•		1	•				135,834,427	•			135,834,427	135,790,477
Nonexpendable	,			1					1	112,022,233		112,022,233	106,282,134
Expendable	10,813	1	81,099	1	13,927,861	14,019,773	6,905,878	14,420,741	1	72,667,830	1	108,014,222	116,071,789
Unrestricted (deficit)	869,310	30,878,458	1,793,775	(59,597,991)	1	(26,056,448)	(377,266)	8,026,310	'	9,189,209	•	(9.218,195)	(28,118,085)

MICHIGAN TECHNOLOGICAL UNIVERSITY

		SCHEDULE OF REVE		MICHIGAN T S, EXPENSES	ECHNOLOGI AND CHANGI	MICHIGAN TECHNOLOGICAL UNIVERSITY NUES, EXPENSES AND CHANGES IN NET POSITION BY FUND BY OBJECT	TY ITION BY FUI	ID BY OBJECT				
				FOR THE Y	FEAR ENDED	FOR THE YEAR ENDED JUNE 30, 2022						
				Refirement &	Expendable	Total Current		2	Michigan Tech			
	General	Designated	Auxiliary	Insurance	Restricted	Funds	Student Loan	Plant	Fund	Eliminations	2022	2021
Revenues												
Operating revenues												
Student tuition and fees, net	\$ 151,048,702	\$ 27,344	\$ 1,230,060	•	\$ 20,757	\$ 152,326,863	•			\$ (50,169,849)	\$ 102,157,014	\$ 98,248,502
Federal grants and contracts	34,571	'	1	'	36,803,812	36,838,383	(1,583,372)	•	1	1	35,255,011	30,484,175
State and local grants and contracts	-				4,828,756	4,828,756	•	•	•	1	4,828,756	3,800,457
Nongovernmental grants and contracts		•	•		23,902,095	23,902,095	•	25,628	'	•	23,927,723	21,323,554
Indirect cost recoveries	17,402,254		•	-	(17,402,254)	'	•	•	•	'	'	•
Educational activities	424,903	2,527,903	723,718	528,381	685,283	4,890,188	2,286	1	1	1	4,892,474	4,456,771
Departmental activities	54,418	97,241	9,272,819	-	455	9,424,933	1	50,901	1	1	9,475,834	5,418,921
Student residence fees, net			29,426,535	•	1	29,426,535	1	42,615	•	(9,742,905)	19,726,245	15,102,209
Total operating revenues	168,964,848	2,652,488	40,653,132	528,381	48,838,904	261,637,753	(1,581,086)	119,144	•	(59,912,754)	200,263,057	178,834,589
Expenses												
Operating expenses												
Salaries and wages	90,983,360	7,322,815	8,560,508	3,681,683	23,728,210	134,276,576	1	1	1	1	134,276,576	128,525,731
Fringe benefits	36,037,728	2,043,245	2,712,720	(18,576,525)	6,163,123	28,380,291	•	•	'	1	28,380,291	35,155,840
Supplies and services	17,534,272	6,866,639	15,621,017	1,361,607	20,377,915	61,761,450	317,792	16,549,846	12,332,766	(30,230,192)	60,731,662	48,752,132
Student financial support	58,329,072	800,428	10,000		17,720,039	76,859,539	•	•	3,025,139	(62,937,893)	16,946,785	15,330,746
Utilities	3,989,064	227,647	2,278,525	-	21,377	6,516,613		•	'		6,516,613	6,263,372
0 Depreciation		1	1	-				14,318,065		1	14,318,065	14,464,888
I Total operating expenses	206,873,496	17,260,774	29,182,770	(13,533,235)	68,010,664	307,794,469	317,792	30,867,911	15,357,905	(93,168,085)	261,169,992	248,492,709
Operating (loss) income	(37,908,648)	(14,608,286)	11,470,362	14,061,616	(19,171,760)	(46,156,716)	(1,898,878)	(30,748,767)	(15,357,905)	33,255,331	(60,906,935)	(69,658,120)
Net transfers (out) in	(18,254,719)	14,802,971	(11,245,471)	841,085	(1,970,031)	(15,826,165)	(307,222)	16,133,387				
Nonoperating revenues (expenses)												
Federal Pell grants			•		5,031,356	5,031,356		ł	•	•	5,031,356	5,104,880
Federal grants, other		1	1	1	1	-	•	529,047	•	1	529,047	628,494
Federal coronavirus relief funds		1	'	1	12,420,301	12,420,301	1	ł	•	•	12,420,301	17,071,681
State appropriations	53,337,200	1	1	1	1	53,337,200	1		•	1	53,337,200	50,795,200
Gifts	4,153,496	3,489,019	282,649	1	4,989,297	12,914,461	•	260	10,581,204	(12,963,954)	10,532,471	26,059,645
Investment (loss) return	(382,869)	'	1	(2,553,177)	353	(2,935,693)	305,805	2,316,062	(7,226,708)	•	(7,540,534)	26,946,630
Interest on capital asset-related debt		1	1	1	1	1	•	(3,551,392)		•	(3,551,392)	(3,551,233)
Loss on disposal of capital assets		1	1	1	1	1	1	•		(327,947)	(327,947)	(82,333)
Net nonoperating revenues (expenses)	57,107,827	3,489,019	282,649	(2,553,177)	22,441,307	80,767,625	305,805	(705,523)	3,354,496	(13,291,901)	70,430,502	122,972,964
Income (loss) before other revenues	944,460	3,683,704	507,540	12,349,524	1,299,516	18,784,744	(1,900,295)	(15,320,903)	(12,003,409)	19,963,430	9,523,567	53,314,844
Other revenues												
Capital grants and gifts		1	1	1	1	1	1	2,312,722	1,292,298	(1,998,328)	1,606,692	779,867
Gifts for permanent endowment purposes		1	1	1	1	1	1		5,385,720	1	5,385,720	8,975,679
Other revenues		1	1	1	1	1	1		110,393	1	110,393	61,031
Fund additions		1	1	1	1	1	1	17,965,102	•	(17,965,102)	1	•
Total other revenues	'			•	•	•	•	20,277,824	6,788,411	(19,963,430)	7,102,805	9,816,577
Net increase (decrease) in net position	944,460	3,683,704	507,540	12,349,524	1,299,516	18,784,744	(1,900,295)	4,956,921	(5,214,998)	1	16,626,372	63,131,421
Net position, beginning of year	(64,337)	27,194,754	1,367,334	(71,947,515)	12,628,345	(30,821,419)	8,428,907	153,324,557	199,094,270	1	330,026,315	266,894,894
	S 880,123	\$ 30,878,458	S 1,874,874	\$ (59,597,991)	S13,927,861	\$ (12,036,675)	\$ 6,528,612 \$	\$ 158,281,478	\$ 193,879,272		S 346,652,687	\$ 330,026,315
	L	L					L	L				

MICHIGAN TECHNOLOGICAL UNIVERSITY

				Defirement 8	Evnandahla	Total Current		4	Michigan Tech			
	General	Designated	Auxiliary	Insurance	Restricted	Funds	Student Loan	Plant	Fund	Eliminations	2022	2021
Revenues												
Operating revenues												
Student tuition and fees, net	\$ 151,048,702	\$ 27,344	\$ 1,230,060	' \$	\$ 20,757	\$ 152,326,863	\$	1	, 4	\$ (50,169,849)	\$ 102,157,014	\$ 98,248,502
Federal grants and contracts	34,571	-		-	36,803,812	36,838,383	(1,583,372)	•	1	•	35,255,011	30,484,175
State and local grants and contracts		•	1	•	4,828,756	4,828,756	'	•	•	'	4,828,756	3,800,457
Nongovernmental grants and contracts	•	1	1	•	23,902,095	23,902,095	•	25,628	1	•	23,927,723	21,323,554
Indirect cost recoveries	17,402,254	•	-		(17,402,254)	1	•	1	1	•	1	
Educational activities	424,903	2,527,903	723,718	528,381	685,283	4,890,188	2,286	1	1	1	4,892,474	4,456,771
Departmental activities	54,418	97,241	9,272,819	1	455	9,424,933	•	50,901	1	1	9,475,834	5,418,921
Student residence fees, net			29,426,535	•	•	29,426,535	'	42,615		(9,742,905)	19,726,245	15,102,209
Total operating revenues	168,964,848	2,652,488	40,653,132	528,381	48,838,904	261,637,753	(1,581,086)	119,144	•	(59,912,754)	200,263,057	178,834,589
Expenses												
Operating expenses												
Instruction	65.826.212	2,434.716		(4,401,797)	126.010	63.985.141	,			(481.774)	63,503,367	62,431,697
Research	19,442,370	11.213,625		(3.828.273)	43.816.679	70,644,401		•	•	(3,128,832)	67,515,569	60.016,828
Public service	1.704.325	454,659		(530,509)	8,258,296	9,886,771		•		48,570	9,935,341	11.027.767
Academic support	25.058.385	526.177	•	(1.505.500)	1.082	24.080.144	,			(370.933)	23.709.211	21.078.846
Student services	9,667,013	597.485	5774.123	(831,409)	119,186	15.326.198	'			(12,12)	15.254.827	13,810,086
	19 821 874	342 475	-	1 245 484	849.337	19 788 397		504,393	19 339 746	112 501 7341	20.145.820	23 081 412
Student financial support	54.393.768	-	,		14.840.079	69.233.847	317.792	-	3.025.139	(53.194.988)	19.381.790	16.267.506
Operations and maintenance of plant	10.959,549	1,671,437	'	(559,186)		12.071,800		16.023.453		(13,554,518)	14,540,735	13,640,128
Sales and services of dept activities	1	1	1				1	1	1	6,193,379	6,193,379	4,232,924
Student residents	1		23,408,647	(630,877)		22.777.770		•	1	(16,105,882)	6,671,888	8,440,627
Depreciation	'	'	'	•	•	-		14,318,065	•	•	14,318,065	14,464,888
Total operating expenses	206,873,496	17,260,774	29,182,770	(13,533,235)	68,010,664	307,794,469	317,792	30,867,911	15,357,905	(93,168,085)	261,169,992	248,492,709
Operating (loss) income	(37,908,648)	(14,608,286)	11,470,362	14,061,616	(19,171,760)	(46,156,716)	(1,898,878)	(30,748,767)	(15,357,905)	33,255,331	(60,906,935)	(69,658,120)
Net transfers (out) in	(18,254,719)	14,802,971	(11,245,471)	841,085	(1,970,031)	(15,826,165)	(307,222)	16,133,387				
Nonoperating revenues (expenses)												
Federal Pell grants	1	1	1	1	5,031,356	5,031,356		•	•	1	5,031,356	5,104,880
Federal grants, other	1	1	1	1	1			529,047	•	1	529,047	628,494
Federal coronavirus relief funds	1	1	1	1	12,420,301	12,420,301	•	•	ľ	•	12,420,301	17,071,681
State appropriations	53,337,200	1	1	1	1	53,337,200	•	1	•	•	53,337,200	50,795,200
Gifts	4,153,496	3,489,019	282,649	1	4,989,297	12,914,461	•	760	10,581,204	(12,963,954)	10,532,471	26,059,645
Investment return	(382,869)	1	1	(2,553,177)	353	(2,935,693)	305,805	2,316,062	(7,226,708)	•	(7,540,534)	26,946,630
Interest on capital asset-related debt	•	•	•	•	•	•	•	(3,551,392)	•	•	(3,551,392)	(3,551,233)
Loss on disposal of capital ass e ts	•	•	•	•	•	•		•	•	(327,947)	(327,947)	(82,333)
Net nonoperating revenues (expenses)	57,107,827	3,489,019	282,649	(2,553,177)	22,441,307	80,767,625	305,805	(705,523)	3,354,496	(13,291,901)	70,430,502	122,972,964
Income (loss) before other revenues	944,460	3,683,704	507,540	12,349,524	1,299,516	18,784,744	(1,900,295)	(15,320,903)	(12,003,409)	19,963,430	9,523,567	53,314,844
Other revenues												
Capital grants and gitts	•	•	•	•		•	•	2,312,722	1,292,298	(1,998,328)	1,606,692	/////
Gifts for permanent endowment purposes	•	•	•	•	•	•	•	•	5,385,720	•	5,385,720	8,975,679
Other revenues	•	1	1			1	•	-	110,393		110,393	61,031
Fund additions	•	'	'	'	'	'	•	201,687,11		[201,687,11]		
lotal other revenues							-	20,277,824	6,788,411	(19,963,430)	/,102,805	7/5'918'6
Ner increase (decrease) in ner position	744,460	3,083,704	507,540	2,347,524	0 6' 4 4 7'	18,184,144	(1,700,275)	4,750,721	(5,214,778)	•	0,020,3/2	03. 3.47
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2022 FINANCIAL REPORT



Michigan Technological University 1400 Townsend Drive Houghton, Michigan 49931-1295 mtu.edu

VIII-E. H-STEM BUILDING RESOLUTION

As part of obtaining state funding for the H-STEM building, it is necessary for the Board of Trustees to adopt a Resolution approving: (1) the form of the construction agreement between the State Building Authority, the State of Michigan, and Michigan Technological University; (2) the conveyance of H-STEM to the State Building Authority; (3) the lease back of the building; and (4) a related easement agreement.

RECOMMENDATION: It is recommended that the Board of Trustees approve the Resolution as stated.

RESOLUTION OF THE BOARD OF CONTROL OF MICHIGAN TECHNOLOGICAL UNIVERSITY APPROVING A CONSTRUCTION AND COMPLETION ASSURANCE AGREEMENT, A CONVEYANCE OF PROPERTY, A LEASE AND AN EASEMENT AGREEMENT, IF NECESSARY, FOR THE MICHIGAN TECHNOLOGICAL UNIVERSITY H-STEM ENGINEERING AND HEALTH TECHNOLOGY COMPLEX-PHASE I

A RESOLUTION of the Board of Control of Michigan Technological University (i) approving (a) a form of construction and completion assurance agreement (the "Construction Agreement"), by and among the State Building Authority (the "Authority"), the State of Michigan (the "State") and Michigan Technological University, a Michigan constitutional body corporate (the "Educational Institution"), providing for the rights, duties and obligations of the Authority, the State and the Educational Institution with respect to the Educational Institution's H-STEM Engineering and Health Technology Complex-Phase I and the site therefor (the "Facility") during the construction, renovation and/or equipping of the Facility and prior to the conveyance of the Facility to the Authority, (b) the conveyance of the Facility to the Authority, (c) a lease (the "Lease"), by and among the Authority, the Educational Institution and (d) an easement agreement (the "Easement Agreement") between the Authority and the Educational Institution, if necessary in connection with the entering into or performance of the Lease, and (ii) providing for other matters related thereto.

WHEREAS, the Authority has been incorporated under and pursuant to the provisions of Act No. 183, Public Acts of Michigan, 1964, as amended ("Act 183"), for the purpose of acquiring, constructing, furnishing, equipping, owning, improving, enlarging, operating, mortgaging and maintaining buildings, necessary parking structures or lots and facilities, and sites therefor, for the use of the State, including institutions of higher education created pursuant to Section 4, 5, 6 or 7 of Article 8 of the Michigan Constitution of 1963 (the "State Constitution"), or any of its agencies; and

WHEREAS, the Educational Institution has been maintained and created pursuant to Sections 4 and 6 of Article 8 of the State Constitution; and

WHEREAS, the State and the Educational Institution desire that the Authority finance the acquisition, construction, renovation and/or equipping of the Facility in consideration of (i) the Educational Institution granting a license to the Authority to enter upon the site of the Facility (the "Site") in order to undertake such construction, renovation and/or equipping, (ii) the Educational Institution undertaking on behalf of the Authority the oversight of such construction, renovation and/or equipping and (iii) the Educational Institution conveying the Facility to the Authority on or prior to the date of its completion, and the Authority is willing to provide such financing in consideration of the items described above; and

WHEREAS, in accordance with the Construction Agreement, the State and the Educational Institution desire that the Authority acquire the Facility on or prior to the date of its completion, and lease the same to the State and the Educational Institution, and the Authority is willing to acquire the Facility and lease the same to the State and the Educational Institution; and

WHEREAS, the Site is presently owned by the Educational Institution, the Facility will be constructed by the Educational Institution on behalf of the Authority, and it is intended that the Site and the Facility be conveyed to the Authority by the Educational Institution; and

WHEREAS, the acquisition of the Facility by the Authority for use by and lease to the Educational Institution and the State is necessary in order for the State and the Educational Institution to carry out necessary governmental functions and to provide necessary services to the people of the State as mandated or permitted by constitution and law, and the use of Act 183 to accomplish such acquisition represents the most practical means to that end at the lowest cost to the State and the Educational Institution; and

WHEREAS, Section 7 of Act 183 provides that the Lease shall be approved by the Authority, by the State Administrative Board of the State and as provided in an appropriations act and if the Lease is for an institution of higher education existing or created pursuant to Section 4, 5, 6 or 7 of Article 8 of the State Constitution, then in addition, the Lease shall be authorized by the institution of higher education and signed by its authorized officers and, accordingly, it is necessary that the Educational Institution authorize and approve the Lease; and

WHEREAS, if it is determined that (i) the Authority will require an easement from a public road to the Facility over real property owned by the Educational Institution so that the Authority has access to the Facility, (ii) the Educational Institution will require for future use certain easements through the Facility, (iii) the Authority and the Educational Institution will require an agreement to share a common structural wall or (iv) the Authority will require an easement over real property owned by the Educational Institution so that the Authority has sufficient parking available in connection with the reasonable use of the Facility, then in order to meet any such requirement, it may be necessary for authorized officers of the Educational Institution to approve an Easement Agreement to provide for such easements or the sharing of a common structural wall, as the case may be;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF CONTROL OF THE EDUCATIONAL INSTITUTION THAT:

1. The plans for the Facility, as filed with the Educational Institution, are hereby approved.

2. The Educational Institution hereby authorizes and approves the Construction Agreement in substantially the form attached as Exhibit A, and any two of the following then seated officers of the Educational Institution: the President, the Treasurer or its designee, and the Chief Financial Officer are hereby authorized and directed to execute and deliver, at the appropriate time, the Construction Agreement in substantially the form attached as Exhibit A for and on behalf of the Educational Institution. Such officers are hereby authorized to approve such changes in and modifications to the Construction Agreement as do not materially adversely affect the Educational Institution.

3. The conveyance of the Site and the Facility to the Authority in accordance with the Construction Agreement is hereby approved, and any two of the following then seated officers of the Educational Institution: the President, the Treasurer or its designee, and the Chief Financial Officer are hereby authorized and directed to execute and deliver a warranty deed in substantially the form attached as Exhibit B and bills of sale to accomplish such conveyance in such form as may be from time to time approved by such officers.

4. The Educational Institution hereby authorizes and approves the Lease in substantially the form attached as Exhibit C, and any two of the following then seated officers of the Educational Institution: the President, the Treasurer or its designee, and the Chief Financial Officer are hereby authorized and directed to execute and deliver the Lease in accordance with the Construction Agreement and in substantially the form attached as Exhibit C for and on behalf of the Educational Institution and such officers are hereby designated as authorized officers of the Educational Institution for purposes of Section 7 of Act 183. Such officers are hereby authorized to approve such changes in and modifications to the Lease as do not materially alter the substance and intent

3

thereof as expressed in the Lease and the request for action submitted to the Board of Control in connection therewith; provided such officers are not hereby authorized to approve a change in the Lease with respect to the range of rental, the description of the Facility or the material financial obligations of the Educational Institution contained in the Lease approved herein. The Educational Institution hereby determines that the maximum rental in the amount described below is reasonable and the authorized officers are hereby authorized to approve in the Lease, as executed, rental in annual amounts determined by the final appraisal of "True Rental," but not exceeding \$2,428,000 in any 12 month period and a lease term of not exceeding 40 years.

5. If in connection with the entering into or performance of the Lease, and any two of the following then seated officers of the Educational Institution: the President, the Treasurer or its designee, and the Chief Financial Officer determine that (i) the Authority will require an easement from a public road to the Facility over real property owned by the Educational Institution so that the Authority has access to the Facility, (ii) the Educational Institution will require for future use certain easements through the Facility, (iii) the Authority and the Educational Institution will require an easement over real property owned by the Educational Institution will require an easement over real property owned by the Educational Institution so that the Authority has sufficient parking available in connection with the reasonable use of the Facility, then such officers are hereby authorized and directed to execute and deliver an Easement Agreement, or any amendments thereto, if necessary in order to meet any such requirement.

6. Any of the following then seated officers of the Educational Institution: the President, the Treasurer or its designee, and the Chief Financial Officer are hereby severally authorized and directed to take or cause to be taken all other actions, including, without limitation, making requests of and approving requests from the Authority and the State and signing certificates, documents or other instruments, each on behalf of the Educational Institution, as they deem necessary or desirable under the circumstances to accomplish the purposes of the transactions authorized in this Resolution.

7. The Educational Institution further confirms its obligations to perform the duties and obligations specified in the Construction Agreement (only upon its execution by authorized officers of the Educational Institution) and the Lease (only upon its execution by authorized officers of the Educational Institution) and acknowledges that such obligations do not depend upon passage of title to the Facility to the Educational Institution without consideration upon termination

4

of the Lease. The Educational Institution hereby recognizes that it would execute and deliver the Lease even if title to the Facility would not pass upon termination of the Lease.

8. The Educational Institution recognizes that the Authority shall pay for costs of the Facility in an amount not in excess of \$29,699,800.

9. All ordinances, resolutions and orders or parts thereof in conflict with the provisions of this Resolution are, to the extent of such conflict, hereby repealed.

10. This Resolution shall be effective immediately upon its adoption.

4890-3778-4365 v2 [9694-5]
VIII-F. ADOPTION OF CAMPUS MASTER PLAN

RESOLUTION FOR CONSIDERATION AND ACTION BY MICHIGAN TECHNOLOGICAL UNIVERSITY'S BOARD OF TRUSTEES

ADOPTION OF THE CAMPUS MASTER PLAN 2022, BUILD THE FUTURE

The Campus Master Plan 2022 reflects the vision, mission, and values of the institution and the goals and objectives of a multitude of stakeholders. It represents a unifying vision that aligns the university's academic mission, strategic plan, and physical development goals into a single document to help guide the future direction of the physical campus.

This document is a collection of ideas that establishes a flexible, realistic, and multipledecade framework for coordinating facility improvements across the institution. It is a guide for academic and research space development, it is a framework of land uses, building forms, and open spaces, and it is a roadmap for mobility and parking changes.

This plan will not only guide the planning and design of campus facilities, but it will also influence academic programming, existing and future space scheduling, and appropriate building and open space uses. It also demonstrates a path forward to increase sustainability and resiliency.

The Board of Trustees' adoption of the Campus Master Plan would indicate the Board's endorsement of the plan as a blueprint for future growth. Specific projects would remain subject to Board approval as indicated by Board policy. Adjustments to master plans are expected and necessary as a natural facet of long-range planning.

RECOMMENDATION: That the Board of Trustees adopts the Campus Master Plan 2022 to use as a guide for campus development, academic programming, research endeavors, and infrastructure investments.

VIII-G. APPROVAL OF BOND FOR PHASE 1 RENOVATIONS

In support of the campus master plan, the Administration has identified several projects to be executed. These projects include renovations to Classroom and Teaching Labs, Keweenaw Research Center High Bay Building, Student Development Complex MacInnes Ice Arena HVAC Improvements, R.L. Smith Mechanical Engineering-Engineering Mechanics Building 11th Floor Renovations, and 7th Street Parking.

As the Classroom and Teaching Labs and the Keweenaw Research Center High Bay Building projects exceed the \$5 million threshold for capital additions as stated in Board of Trustees Policy 11.9, the Administration is requesting that the Board approve these two projects, and the financing of all of these projects through the issuance of general revenue bonds in the amount of \$32 million.

RECOMMENDATION: That the Board of Trustees approves the Classroom and Teaching Labs Renovation Project at a cost not to exceed \$16.3 million and the Keweenaw Research Center High Bay Building Project at a cost not to exceed \$5.5 million, and further approves the Resolution Authorizing the Issuance and Delivery of General Revenue Bonds, in the amount of \$32 million, as presented.

RESOLUTION OF THE BOARD OF TRUSTEES OF MICHIGAN TECHNOLOGICAL UNIVERSITY AUTHORIZING THE ISSUANCE AND DELIVERY OF GENERAL REVENUE BONDS <u>AND PROVIDING FOR OTHER MATTERS RELATING THERETO</u>

WHEREAS, the Board of Trustees of Michigan Technological University, a constitutional body corporate, being the board of control of Michigan Technological University established pursuant to Article VIII, Section 6 of the Michigan Constitution of 1963 (the "Board"), is granted general supervision of Michigan Technological University (the "University") and the control and direction of all expenditures from the University's funds; and

WHEREAS, in the exercise of its constitutional duties and in order to properly serve the needs of students attending the University, the Board has determined that it is appropriate and in the best interests of the University to finance a portion of the cost of certain capital projects of the University, as described in <u>Exhibit A</u> attached hereto (collectively, the "Projects"); and

WHEREAS, the Board has previously issued and has outstanding certain series of General Revenue Bonds payable from and secured by a lien on General Revenues (as hereinafter defined) (collectively, the "Prior Bonds"); and

WHEREAS, it may be appropriate and economic to refund all or portions of the outstanding Prior Bonds as shall be determined by an Authorized Officer (as hereinafter defined) (the portions of the Prior Bonds to be refunded, if any, as determined by an Authorized Officer, is referred to herein as the "Bonds to be Refunded"); and

WHEREAS, in the exercise of its constitutional duties, and in order to prudently control and direct expenditures from the University's funds, the Board determines it is necessary and desirable to authorize the issuance and delivery of General Revenue Bonds of the Board, in one or more series (the "Bonds"), to be payable from and secured by a pledge of General Revenues, in order to provide funds which, together with other available funds, will be used to pay all or part of the costs of the Projects, to pay all or part of the costs of refunding the Bonds to be Refunded, if any, and to pay costs incidental to the issuance of the Bonds and the refunding; and

WHEREAS, one or more trust indentures (collectively, the "Trust Indenture") must be entered into by and between the Board and a trustee (the "Trustee") to be designated by an Authorized Officer, pursuant to which the Bonds will be issued and secured; and

WHEREAS, it is necessary to authorize the Authorized Officers, or either of them individually, to negotiate the sale of the Bonds with one or more underwriters or groups of underwriters to be selected by an Authorized Officer (collectively, the "Underwriter") or with a direct placement lender to be selected by an Authorized Officer (the "Purchaser"), and to enter into one or more bond purchase agreements and/or continuing covenant agreements or similar agreements with the Underwriter or Purchaser (collectively, the "Bond Purchase Agreement") setting forth the terms and conditions upon which the Underwriter or Purchaser will agree to purchase the Bonds and the interest rates thereof and the purchase price therefor; and WHEREAS, in order to be able to market the Bonds at the most opportune time, it is necessary for the Board to authorize the President and the Treasurer (each an "Authorized Officer"), or either of them individually, to negotiate the terms of and to execute and deliver on behalf of the Board the Trust Indenture, the Bond Purchase Agreement, and other related documents, to establish the specific terms of the Bonds, and to accept the offer of the Underwriter or Purchaser to purchase the Bonds, and to undertake such other actions and make such other determinations on behalf of the Board as authorized hereby, all within the limitations set forth herein; and

WHEREAS, the trust indentures authorizing issuance of the Prior Bonds establish certain conditions for the issuance of additional obligations secured by a pledge of General Revenues on a parity basis with the Prior Bonds; and

WHEREAS, an Authorized Officer shall, on or prior to the date of delivery of the Bonds, certify that the conditions for issuing the Bonds, secured by General Revenues on a parity basis with the Prior Bonds, have been met; and

WHEREAS, the financing of the Projects and the refunding of the Bonds to be Refunded, if any, through the issuance of the Bonds will serve proper and appropriate public purposes; and

WHEREAS, the Board has full power under its constitutional authority for supervision of the University, and control and direction of expenditures from the University's funds, to acquire, construct, furnish and equip the Projects, to refund the Bonds to be Refunded, if any, and to pay the costs of the Projects and the costs of the refunding by issuance of the Bonds, and to pledge General Revenues for payment of the Bonds.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF MICHIGAN TECHNOLOGICAL UNIVERSITY, AS FOLLOWS:

1. The Board hereby approves the definition of the term "Projects" as set forth in Exhibit A attached hereto, and authorizes the Authorized Officers, or either of them individually, to select the portions of the Projects to be financed, in whole or in part, from the proceeds of the Bonds, and to fund, as appropriate, the remaining costs of the Projects from available funds of the University or other available funds. Subject to the Board's policies regarding approval of capital projects, either Authorized Officer may subsequently approve additional capital projects of the University and specify that such additional capital projects shall be financed in whole or in part from the proceeds of the Bonds, upon which occurrence such capital projects shall thereupon become components of the Projects hereunder. The Board further approves the refunding of all or any portion of the outstanding Prior Bonds, and authorizes the Authorized Officers, or either of them individually, to select the portion of the Prior Bonds, if any, to constitute the Bonds to be Refunded, in order to produce interest or other cost savings or a more favorable debt service structure, or to provide for more favorable terms or covenants, and to fund, if deemed appropriate, a portion of the costs of the refunding from available funds of the University and the balance of such costs from the proceeds of the Bonds, and to proceed with the refunding.

2. The Board hereby authorizes the issuance, execution and delivery of the Bonds of the Board, in one or more series, to be designated GENERAL REVENUE BONDS, with

appropriate series designations, in the aggregate original principal amount to be established by an Authorized Officer, but not to exceed the aggregate principal amount necessary to produce proceeds of THIRTY-TWO MILLION DOLLARS (\$32,000,000) for the payment of the costs of the Projects and the costs of issuance of the Bonds, plus the amount necessary, if any, to accomplish refunding of the Bonds to be Refunded and to pay costs related thereto, as determined by an Authorized Officer. The Bonds shall be dated as of the date or dates established by an Authorized Officer, and shall be issued for the purpose of providing funds which, together with other available funds, will be used to pay a portion of the costs of the Projects, including, if determined to be appropriate by an Authorized Officer, capitalized interest related to all or any portion of the Projects for a period of time specified by an Authorized Officer, to pay all or a portion of the costs of refunding the Bonds to be Refunded, if any, and to pay costs related to the issuance of the Bonds and the refunding, including the costs of bond insurance premiums, if an Authorized Officer determines such insurance to be appropriate. The Bonds shall be serial bonds or term bonds, which may be subject to redemption requirements, or both, as shall be established by an Authorized Officer, but the first maturity or mandatory redemption date shall be no earlier than January 1, 2023 and the last maturity shall be no later than December 31, 2055. The Bonds may be issued as federally tax-exempt bonds or as federally taxable bonds, or any combination thereof, as shall be determined by an Authorized Officer. The Bonds may bear interest at stated fixed rates for the respective maturities thereof as shall be established by an Authorized Officer, but the weighted average yield of the Bonds (computed using the stated coupon and the stated original offering price) shall not exceed 7.0% per annum for tax-exempt bonds and 9.0% per annum for taxable bonds, subject, in the case of Bonds sold to a Purchaser pursuant to a direct purchase arrangement, to adjustments for increased costs of the Purchaser, rating changes and defaults and other specified factors, but in no event in excess of the lesser of 25% per annum, the maximum rate permitted by law or the maximum rate, if any, specified in the Trust Indenture. Alternatively, all or part of the Bonds may bear interest at a variable rate of interest for all or a portion of their term, determined on the basis of an index or a spread to an index or through market procedures, or both, and the variable rate of interest shall not exceed the lesser of 25% per annum, the maximum rate permitted by law or the maximum rate, if any, specified in the Trust Indenture. The Bonds may be subject to redemption or call for purchase prior to maturity at the times and at the prices (which may be expressed as a percentage of the principal amount being redeemed or be based on a "make-whole" formula, or both) as shall be determined by an Authorized Officer. Interest on the Bonds shall be payable at such times as shall be specified by an Authorized Officer. The Bonds shall be issued in fully-registered form in denominations, shall be payable as to principal and interest in the manner, shall be subject to transfer and exchange, and shall be executed and authenticated, and may be issued in book-entry-only form, all as shall be provided in the Trust Indenture. The Bonds shall be sold to the Underwriter or Purchaser for a price to be established by an Authorized Officer (but the Underwriter's or Purchaser's discount, exclusive of original issue discount, shall not exceed 1.00% of the principal amount thereof) plus accrued interest, if any, from the dated date of the Bonds to the date of delivery thereof.

Any or all of the Bonds purchased by a Purchaser may be made subject to tender for purchase at the option of the holder thereof or to mandatory tender for purchase. The obligation of the Board to purchase any Bonds subject to tender for purchase may be limited to the remarketing proceeds of such Bonds, or may be made payable from General Revenues (as defined in Section 3 below) or from available cash reserves of the University, subject to such limitations as may be specified in the Trust Indenture, all as shall be determined by an Authorized Officer and provided for in the Trust Indenture.

In connection with the issuance of any series of the Bonds, either Authorized Officer may, at any time, on behalf of and as the act of the Board, enter into a rate lock, forward delivery or similar agreement or agreements (collectively, the "Rate Lock Agreement") with a counterparty or counterparties selected by an Authorized Officer. Any Rate Lock Agreement may be required to be terminated upon the conditions stated therein, with the possibility of a resulting termination payment due by the Board. Any termination payment owing by the Board under a Rate Lock Agreement may be paid from the proceeds of the Bonds and/or from other available funds of the Board, as determined by an Authorized Officer.

3. The Bonds shall be limited and not general obligations of the Board, payable from and secured by a lien on the General Revenues of the Board (as shall be defined in the Trust Indenture in a manner generally consistent with the definition of General Revenues contained in the trust indentures pursuant to which the Prior Bonds were issued). The lien on General Revenues securing the Bonds shall be on a parity basis with the liens on General Revenues securing the Prior Bonds and other previously issued obligations of the Board secured by a first lien on General Revenues. The Bonds may also be payable from and secured by a lien on moneys, securities or other investments from time to time on deposit in certain funds created pursuant to the Trust Indenture.

No recourse shall be had for the payment of the principal amount of or interest or premium on the Bonds, or for any claim based thereon, against the State of Michigan, or any member or agent of the Board (including, without limitation, any officer or employee of the University), as individuals, either directly or indirectly, nor, except as specifically provided in the Trust Indenture, against the Board, nor shall the Bonds and interest or premium with respect thereto become a lien on or be secured by any property, real, personal or mixed, of the State of Michigan or the Board, other than General Revenues and the moneys, securities or other investments from time to time on deposit in certain funds established as pledged pursuant to the Trust Indenture.

The pledge of General Revenues and of funds specified in the Trust Indenture shall be valid and binding from the date of the issuance and delivery of the Bonds, and all moneys or properties subject thereto that are thereafter received shall immediately be subject to the lien of the pledge without physical delivery or further act. The lien of said pledge shall be valid and binding against all parties (other than the holders of any other bonds, notes or other obligations secured by a parity first lien on General Revenues) having a claim in tort, contract or otherwise against the Board, irrespective of whether such parties have notice of the lien.

4. The right is reserved to issue additional bonds, notes or other obligations payable from General Revenues and secured on a parity or subordinated basis with the Bonds, the Prior Bonds and other obligations of the Board so secured by a lien on General Revenues, upon compliance with the terms and conditions therefor as shall be set forth in the Trust Indenture.

5. Either Authorized Officer is hereby authorized and directed, in the name and on behalf of the Board, and as its corporate act and deed, to select the Trustee and to negotiate the terms of and execute and deliver the Trust Indenture. The Trust Indenture may contain such

covenants on behalf of the Board and terms as either Authorized Officer deems appropriate, including, but not limited to, covenants with respect to the establishment of General Revenues at levels expressed as a percentage of debt service on the Bonds or all General Revenue obligations of the Board, and with respect to the issuance of additional bonds, notes or other obligations payable from and secured by General Revenues. The approval of the Trust Indenture and the terms thereof shall be conclusively evidenced by the execution of the Trust Indenture by an Authorized Officer. In addition, either Authorized Officer is hereby authorized, empowered and directed to negotiate, if deemed appropriate by an Authorized Officer in connection with the issuance of the Bonds, for the acquisition of bond insurance and to execute and deliver an insurance commitment or other documents or instruments required in connection with such insurance.

6. Either Authorized Officer is hereby authorized and directed, in the name and on behalf of the Board and as its corporate act and deed, to select the Underwriter or Purchaser and to negotiate, execute and deliver the Bond Purchase Agreement with the Underwriter or Purchaser setting forth the terms of the Bonds and the sale thereof, and containing such other covenants and agreements of the Board as may be required by the Underwriter or the Purchaser in connection therewith, in the forms as an Authorized Officer may approve, all within the limitations set forth herein.

7. Either Authorized Officer is hereby authorized, empowered and directed, in the name and on behalf of the Board, and as its corporate act and deed, to execute the Bonds by manual or facsimile signature, and to deliver the Bonds to the Underwriter or Purchaser in exchange for the purchase price therefor.

8. Either Authorized Officer is authorized to solicit ratings on the Bonds from any national rating services that the Authorized Officer deems appropriate and, if necessary, to cause the preparation of a Preliminary Official Statement and an Official Statement with respect to each series of the Bonds, to deem such official statements "final" in accordance with applicable law, and to execute and deliver the Official Statements. Either Authorized Officer, or the Underwriter or the University's financial advisor, as appropriate, is authorized to circulate and use, in accordance with applicable law, the Preliminary Official Statements and the Official Statements in connection with the offering, marketing and sale of the Bonds.

9. Each Authorized Officer, the Secretary to the Board and any other appropriate officer or representative of the Board or the University are each hereby authorized to perform all acts and deeds and to execute and deliver for and on behalf of the Board all instruments and documents required by this Resolution, the Trust Indenture and the Bond Purchase Agreement, or necessary, expedient and proper in connection with the issuance, sale and delivery of the Bonds, as contemplated hereby, including, if deemed appropriate, one or more escrow deposit agreements with an escrow agent to be selected by an Authorized Officer as may be necessary to accomplish the refunding of the Bonds to be Refunded. Either Authorized Officer is authorized to designate and empower the escrow agent to subscribe for United States Treasury Securities – State and Local Government Series, on behalf of the Board, as may be necessary in connection with any refunding authorized hereby. Either Authorized Officer is further authorized to execute and deliver all instruments and documents for and on behalf of the Board or the University, and to take all other actions, required, necessary or appropriate for the ongoing administration or operation of the financing program represented by the Bonds, the Trust Indenture and the Bond Purchase

Agreement. Any action required under the Trust Indenture, the Bond Purchase Agreement or any other instrument related to the Bonds may be taken by and on behalf of the Board by an Authorized Officer. Any reference to an officer of the Board or the University herein shall include any interim or acting officer occupying such position or having been assigned all or a portion of the functions of such position.

10. In accordance with the requirements of Rule 15c2-12 of the United States Securities and Exchange Commission, the Board may be required in connection with the issuance of the Bonds to enter into one or more continuing disclosure undertakings for the benefit of the holders and beneficial owners of the Bonds. Either Authorized Officer is authorized to cause to be prepared and to execute and deliver, on behalf of the Board, the continuing disclosure undertakings.

11. Either Authorized Officer is hereby authorized and delegated the power to execute, on behalf of the Board, one or more declarations of intent to reimburse the University from Bond proceeds for any expenditures with respect to the Projects incurred prior to the issuance of the Bonds, and for future projects to be funded with the proceeds of future bond issues, all in accordance with U.S. Treasury Regulation § 1.150-2. Any and all actions of an Authorized Officer previously taken in connection with the execution of such declarations of intent are hereby ratified and confirmed.

12. If deemed necessary by the University's bond counsel, either Authorized Officer is authorized to arrange for the publication of a notice of and to conduct a public hearing with respect to the issuance of the Bonds, all in accordance with requirements of Section 147(f) of the Internal Revenue Code of 1986, as amended.

13. Any resolutions or parts of resolutions or other proceedings of the Board in conflict herewith are hereby repealed insofar as such conflict exists.

EXHIBIT A THE PROJECTS

The Projects, as that term is used in the Resolution to which this <u>Exhibit A</u> is attached, consist of the capital projects set forth below:

	Project	Currently Estimated Costs to be Funded From <u>Bond Proceeds</u> *
1.	Classroom and Teaching Lab Renovations	\$16,322,000
2.	Keweenaw Research Center High Bay Building	\$5,500,000
3.	Ice Arena HVAC Replacement	\$4,000,000
4.	R. L. Smith Mechanical Engineering-Engineering Mechanics Building 11 th Floor Renovations	\$2,500,000
5.	7 th Avenue Parking Lot Construction	<u>\$2,000,000</u>
	TOTAL	<u>\$30,322,000</u>

*Exclusive of capitalized interest, if any, and bond issuance costs.

I hereby certify that the attached is a true and complete copy of a resolution adopted by the Board of Trustees of Michigan Technological University at a meeting held on October 7, 2022, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with all applicable law, and that the minutes of said meeting were kept and will be or have been made available as required by law.

I further certify as follows:

1. Present at the meeting were the following Board members:

Absent from the meeting were the following Board members:

2. The following members of the Board voted for the adoption of the Resolution:

The following members of the Board voted against adoption of the Resolution:

RESOLUTION DECLARED ADOPTED.

Sarah H. Schulte Secretary to the Board of Trustees of Michigan Technological University

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VIII-H. FIVE YEAR CAPITAL OUTLAY PLAN AND REQUEST

FY24 FIVE-YEAR STATE CAPITAL OUTLAY PLAN AND REQUEST

The FY24 Five-Year State Capital Outlay Plan and Request is required to be submitted to the State of Michigan this fall with Board of Trustees approval, and is included herein.

RECOMMENDATION: That the Board of Trustees approves the FY24 Five-Year State Capital Outlay Plan and Request to be submitted to the State of Michigan.

FY24 Five-Year State Capital Outlay Plan									
Rank	Project Name	Gross Sq. Ft. New	Gross Sq. Ft. Renovated	Total Project Costs (000's)	State Funds (000's)	Est. Const. Univ. Funds (000's)	FY Start/ FY End		
1	Center for Convergence and Innovation (CCI)	175,000	0	70,000	29,900	40,100	2023/2026		

Description

1. Center for Convergence and Innovation (CCI): The Center for Convergence Innovation (CCI) will help position Michigan's economy as a leader in digital transformation through cutting edge research, workforce development, and strategic partnerships. According to the Michigan Bureau of Labor, the state expects an 8.5 percent increase in workforce demand for business and financial operations, a 9.1 percent increase for management, and a 11.9 percent increase for computer and mathematical operations - cumulatively generating over 58,000 projected new jobs by 2030. Michigan Tech's College of Computing has had consecutive years of greater than 10 percent year-over-year growth (with 12 percent growth over Fall 2021) and is poised to double in size by the end of the decade. Michigan Tech's College of Business has had 6% growth in enrollment over Fall 2021. The CCI also aligns with Michigan's "60x30" and economic prosperity goals by supporting innovations in computing, connectivity, sensorization, and business in this new age of digital transformation.

Congruent with the state's long-term economic transformation, the project will provide a place for existing business, data science, and computing programs to converge to spur new degree programs, entrepreneurial projects, outreach to businesses and communities, increased industry and government funding for research, and the development of a highly agile workforce prepared to implement digital transformation solutions throughout Michigan. Students and employees from the College of Business and College of Computing will be commingled to promote cross-disciplinary collaboration, innovation, and entrepreneurship. The design of the building will intentionally promote connections among faculty and students across colleges. Reconfigurable spaces and theme-based shared digital lab facilities will be spread throughout. Additional features of the building will include convergence centers of excellence (fintech, cybersecurity, data science and business analytics, health informatics, and tech-based entrepreneurship), active-learning, computer-learning and online learning classrooms, flexible collaboration spaces open to all, student learning centers, open access conference rooms, a reconfigurable digital maker space, entrepreneurship training hall, and large, mid- and small-sized lecture halls. In addition to meeting Michigan Tech's convergence needs, this building will facilitate continued aggressive growth in areas that will help Michigan reach its goal of Talent Retention/Attraction. The estimated investment of \$70,000,000 will allow Michigan Tech's Colleges of Business and Computing to realize their combined potential and ensure Michigan's future economic prosperity.

VIII-I. RISK TOLERANCE STATEMENT

As part of the University's Enterprise Risk Management Program, the Board of Trustees establishes the University's Risk Tolerance Statement and reviews it every three years.

RECOMMENDATION: That the Board of Trustees approves the Risk Tolerance Statement in the form provided in the Board materials.

Risk Tolerance Statement

Overview

The risk tolerance statement is a foundational statement in the University's Enterprise Risk Management program. It sets forth the amount of risk the University is willing to tolerate, usually in relation to the value being pursued.

Authority

The University's risk tolerance is set by the Board of Trustees upon recommendation from the administration.

University Risk Tolerance Statement

The University risk tolerances are as follows:

- high tolerance for risk in the areas of
 - encouraging and promoting innovative research;
 - academic freedom;
 - freedom of speech and expression; and
 - open inquiry;
- medium tolerance for risk with respect to financial activities tailored to long-term success that align with the University's strategic plan and legislative purpose, but which may carry some risk to short-term financial plans. The legislative purpose of the university is to "provide the inhabitants of this state with the means of acquiring through knowledge of the mineral industry in its various phases, and of the application of science to industry, as exemplified by the various engineering courses offered at technological institutions" MCL 390.351;
- low to no tolerance for risk with respect to
 - illegal or unethical conduct;
 - regulatory noncompliance;
 - o failure to report actual or suspected misconduct;
 - where there is a likelihood of significant and lasting harm to the University's ability to accomplish its mission; and
 - \circ where there is a significant risk of loss of life or serious harm to students, faculty, staff, or others.

Frequency of Review

The Board of Trustees will review the University's risk tolerance statement at least every three years.

IX. REPORTS

A. Rediscovering Red Wolf Ancestry

Kristin Brzeski, Assistant Professor, College of Forest Resources & Environmental Science

- **B. Recruiting and Enrollment Update** John Lehman, Vice President for University Relations and Enrollment
- C. Undergraduate Student Government Cheyenne Scott, President
- D. Graduate Student Government Ranit Karmakar, President

E. University Senate Mike Mullins, President

GULF COAST

CANINE PROJECT

Contraction of the states

Rediscovering red wolf ancestry

Dr. Kristin Brzeski

Assistant Professor, Michigan Technological University





Conservation



Education

Science



EVOLUTIONARY BIOLOGY

Reviving ghost alleles: Genetically admixed coyotes along the American Gulf Coast are critical for saving the endangered red wolf

Bridgett M. vonHoldt¹*, Joseph W. Hinton², Amy C. Shutt³, Sean M. Murphy⁴, Melissa L. Karlin⁵, Jennifer R. Adams⁶, Lisette P. Waits⁶, Kristin E. Brzeski⁷* vonHoldt *et al.*, *Sci. Adv.* **8**, eabn7731 (2022) 29 June 2022



Comparison of a coyote (left; photo by Joseph Hinton²⁶captured in SWLA to a captive red wolf at the Wolf Conservation Center in New York (right; photo by Maggie Howell)

The Red Wolf

- Historic wolf in southeastern US
- ESA listed & removed from wild in 1970-80s
- Captive breeding program
 - 14 founders (inbreeding)
 - Reintroduced 1987





The Red Wolf

- Historic wolf in southeastern US
- ESA listed & removed from wild in 1970-80s
- Captive breeding program
 - 14 founders (inbreeding)
 - Reintroduced 1987





"Red wolves at the crossroads"



2018 Rediscovering red wolf ancestry



Unknown Galveston Island canid



2018 Rediscovering red wolf ancestry

Galveston Island, Texas

Substantial red wolf ancestry, discovered ghost alleles (lost red wolf genetics)



Heppenheimer, Brzeski...vonHoldt. 2018. Genes.

Southwest Louisiana

Purple triangles = red wolf mtDNA or ≥10% nDNA ancestry



Murphy et al. 2018. Conservation Letters.



Objectives of project:

- 1. Find red wolf ancestry
- 2. Understand ecology & behavior
- Inform conservation & management of both red wolves & coyotes



132

Research: Galveston Island



 Identified red wolf ancestry across the island



Barnes et al. 2022

Research: Galveston Island



- At least 4 family groups
- 50 unique individuals



Barnes et al. 2022

Research: Southwest Louisiana

Coyotes in SWLA carry a high proportion of red wolf genetic ancestry



Range of red wolf ancestry: Cameron = 24-69% Jefferson Davis = 21-37% East Baton Rouge = 10-12% Iberville = 14% Calcasieu (n=1) = 18%

Research: Southwest Louisiana

Cameron Parish is a hot zone of high red wolf ancestry



How can this project help red wolves?



How can this project help red wolves? Identify landscapes and habitats that retain red wolf genetics



GHOST ALLELES



Genetic variation found in GCC absent from reference populations

(lost red wolf genetics)

INBREEDING!



Recover lost alleles from admixed coyotes







Looking for canids on Galveston Island, Texas, at dusk: Bridgett vonHoldt, near right, an evolutionary biologist at Princeton, and Kristir Brzeski, a scientist at Michigan Technological University. Above, canid tracks at the airport.

Mystery 'Coyotes' Hold Key For Revival

Canids in Texas carry DNA from the highly endangered red wolf.

By EMILY ANTHES From a distance, the canids of Galveston Island, Texas, look almost like coyotes, prowling around the beach at night, eyes gleaming in the dark.

But look closer and oddities appear. The animals' bodies seem slightly out of proportion, with overly long legs, unusually broad heads and sharply pointed snouts. And then there is their fur, distinctly reddish in hue, with white patches on their muzzles.

The Galveston Island canids are not conventional coyotes — at least, not entirely. They carry a ghostly genetic legacy: DNA from red wolves, which were declared extinct in the wild in 1980.

For years, these genes have been hiding in plain sight, tucked away in the seemingly unremarkable animals that scavenged for food behind housing developments and roamed the grounds of the local airport.

Their discovery, which came after a determined local resident persuaded scientists to take a closer look at the canids, could help revive a captive breeding program for red wolves and restore the rich genetic variation that once existed in the wild population.

"It doesn't seem to be lost any longer," said Bridgett vonHoldt, an evolutionary biloogist at Princeton University, referring to the genetic diversity that once characterized red wolves. "We might have a chance to bring it back."

Ron Wooten, a Galveston resident, never paid close attention to the local coyotes until they ran off with his dog one night in 2008. "A pack took him and carried him off," recalled Mr. Wooten, an outreach specialist at the U.S. Army Corps of Engineers.

He found the pack, and what remained of his dog, in a nearby field. He was horrified, and he blamed himself for his dog's death. But as his flashlight swept over their red muzzles, he found himself fascinated.

Determined to learn more, he posted CONTINUED ON PAGE D8

Endangered red wolf populations could be revived with 'ghost' genes from coyotes, scientists say

Only 20 to 30 red wolves currently exist in the wild, conservationists say.



By <u>Julia Jacobo</u> June 29, 2022, 2:14 PM

TUESDAY, JANUARY 4, 2022 D

K N



'Ghost genes' from coyotes could help save critically endangered red wolves, study says

Zoe Sottile, CNN





https://www.gulfcoastcanineproject.org



IX-B. RECRUITING AND ENROLLMENT UPDATE

John Lehman, Vice President for University Relations and Enrollment

Board of Trustees Formal Session

EED

S

G

TOMORROW

Undergraduate Recruitment and Enrollment Review October 7, 2022



Michigan Technological University
MORE THAN NUMBERS





LIFEATMICHIGANTECH

Posts

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LIFEATMICHIGANTECH

Posts

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Community

Tom Hampton Regional Admissions Manager

Tom: Hey Aaron, how is everything going at Tech? I hope you enjoyed O Week and you're having a great start with classes. Make sure to have a little fun and attend K Day next week! Tom

Aaron: I love it here and I'm glad I made the decision I did.

Tom: I'm so glad too! Great to hear that you are doing well!

Aaron: It just feels like the 2nd life I was meant to live. Everything feels different but right here, so it's a good different.



Aaron Hathcock Class of '26 Mechatronics

"I've spent 4 weeks here at Tech now with no car, no tv and no video games. I feel better than I ever have before...I haven't been on social media much, but I want to express that since I've moved to tech, my life has improved significantly..."













Enrolled First Year Undergraduate Students by State







Sense of Belonging

Tara Brewer Regional Admissions Manager

"Chris Gonzalez was a Husky before we met, and what I mean by that is once he found us, he found home. When I met with students at Hoffman Estates and asked how they found Michigan Tech, they all said their friend Chris told them about it. He was going to Tech for sure and he thought they should all go too, so that's why they applied! How cool is that!? Chris was excited to chat with me again after seeing him at a couple of college fairs in 2019. Soon after, he set up a Zoom meeting with me so I could help his family see what he saw in MTU (home). He visited campus, attended regional events and told the story of Tech to anyone who would listen. He is a Husky in spirit and energy. Passionate, committed, driven, and I can't wait to see what he does next!"



Chris Gonzalez Class of '26 Computer Engineering "I chose Tech because as soon as I took that first step on campus, I felt a sense of belonging that I have never felt before. Then, the more I learned about the opportunities I would have and the programs that I can be involved in, I was sold. Michigan Tech was my first choice, ever since I visited campus for the first time."



THANK YOU



IX-C. UNDERGRADUATE STUDENT GOVERNMENT Cheyenne Scott, President

USG BOARD OF TRUSTEES UPDATE

Cheyenne Scott, USG President October 7, 2022





Events Committee



- Auditing Student Body Barn and maximizing space RSOs can use.
- Chartering 2 busses for both Thanksgiving and Winter break.

Public Relations Committee

- Purchasing of PR materials for distribution to students.
- Exploring collaboration opportunities with GSG.
- Drafting publication materials for campus improvement project.

Political Affairs Committee



- Coordinating communication/relationships with other student governments.
- Continuing campus efforts to increase MTU students voter engagement.
- Revising and providing renter's information to students in off -campus housing.

Student Affairs Committee

- Investigating student concerns regarding dining services, housing availability and affordability, and student worker wages and conditions.
- Advocating for these concerns at Student Commission meetings.

Ways and Means Committee



- Working with newly registered student organizations to provide them funding.
- Continuing to review the SAF distribution in collaboration with GSG

Judiciary Committee

- Finalizing necessary changes to USG Constitution and Bylaws.
- Supporting the USG on Robert's Rules and Judicial Review of the Constitution and Bylaws.

Future Plans



- Supporting and drafting campus improvement plans to be funded by USG's Reserve Fund with the rollover funds from the 20212022 academic year
- Widening collaborations with MTU administrations, Alumni Board of Directors, and the students assembly to provide accurate representation and resources



Thank You! Questions or @mments?

CheyenneScott

Undergraduate Student Government, President

clscott@mtu.edu | usg-president@mtu.edu

(231) 203-4032

IX-G. GRADUTATE STUDENT GOVERNMENT

Ranit Karmakar, President



Presentation to BOARD OF TRUSTEES Ranit Karmakar

GRADUATE STUDENT GOVERNMENT OCTOBER 10, 2022



GSG SUMMER SOFTBALL LEAGUE



CONGRATULATIONS, ALCOBALLICS!!!

October 10th, 2022



GSG SOCIAL EVENTS



October 10th, 2022



GSG ACADEMIC EVENTS

Alumni Reunion Poster Session (Aug 5th)

Career Fair Prep Session (Sep 14th)





GRAD COMMONS

"New house for Grad students, new home for GSG"





TRAVEL AND CAREER ENRICHMENT GRANT



October 10th, 2022

*as of Sept 16



ADVOCACY AND INITIATIVES

- Student Activity Fee Reallocation
- Advising and Mentorship
- Grad student sense of belonging
- Student health and wellbeing
- Housing
- Transportation Hancock Shuttle
- Alumni Collaborations



PARTNERS, COLLABORATORS AND FRIENDS



Michigan Technological University Van Pelt and Opie Library



Michigan Technological University Facilities Management



Michigan Technological University Alumni & Friends



Michigan Technological University Graduate School





Michigan Technological University



Michigan Technological University International Programs and Services





















THANK YOU

GraduateStudentGovernment

Ø/gsg.mtu

/Graduate Student Government of Michigan Tech

Email: gsg@mtu.edu Website: https://gsgmtu.edu Office: Admin 405 / Grad Commons Call: (906) 370-6534

IX-E. UNIVERSITY SENATE

Michael Mullins, President

University Senate Fall Update

Michael Mullins, Senate President





Upcoming Business for 2022-23

- Implementation of several new academic programs and degrees.
- Searches for key administrative positions including provost and CFO.
- Enhancing the involvement and participation of professional staff in the Senate.
- Promoting more transparency and enhanced disclosure by publishing the agendas and minutes of the executive committee.
- Improving communication with all constituents by reinstating blogs, newsletters, forums, and important senate presentations.
- Elect or otherwise designate a Senate parliamentarian to streamline meetings and set limits where appropriate.
- Developing guidelines for a fair and neutral senate ethics policy (revise15-95)
- Bring issues of better working conditions, salary equity, health benefits, & retirement contributions back to center stage in the senate.
- Initiate a faculty workload analysis.



Upcoming Business for 2022-23 cont.

- Re-examine the evaluation and selection processes for Chairs.
- Recommend changes to the Senate Bylaws to clarify officer qualifications, elections, and removal processes.
- Continue recommendations on the improvement of employee benefits.
- Examine the academic calendar going forward to make it more consistent and predictable.
- Increasing tenure track faculty numbers from near all-time lows.
- Propose a structure for tenure-track-like librarian appointments
- Clarify ownership/copyright/royalties for on-line education materials (amend 23-14).
- Re-examine on-line course, summer, and overload compensation.
- Work with the administration to enhance safety and proper behavior on campus.
- Support the proposal for textbook and course material accessibility.
- Recommend a living wage for all employees of the University.
- Address homelessness and hunger across campus.
- Revisit parking, non-motorized travel, and larger transportation issues.



X. INFORMATIONAL ITEMS

- A. Analysis of Investments
- B. Research & Sponsored Programs
- C. Advancement & Alumni Relations
- D. Media Coverage
- E. Employee Safety Statistics
- F. Disposal of Surplus Property

X-A. ANALYSIS OF INVESTMENTS

MICHIGAN TECH UNIVERSITY INVESTMENT PORTFOLIO JUNE 30, 2022 THROUGH AUGUST 31, 2022

	Market Value 6/30/2022	Market Value 8/31/2022	Fiscal-Year Investment Return	Benchmark Return	Benchmark
Money Market Fund	\$ 2,094,114	\$ 2,100,861	0.26%	0.26%	ICE BofA Merrill Lynch US T-Bill Index
Equity Funds:					
Core Equity Fund	8,446,297	8,830,603	4.55%	4.77%	S&P 500
Commonfund Strategic Solutions Equity Fund	6,476,270	6,591,936	1.79%	4.77%	S&P 500
Total Equity Funds	14,922,567	15,422,539			
Fixed Income Funds:					
Intermediate Term Fund	9,410,365	9,389,248	-0.22%	-0.40%	ICE BofA Merrill Lynch 1-3 Yr Treasury
Commonfund Contingent Asset Portfolio	9,384,710	9,375,123	-0.10%	-0.40%	ICE BofA Merrill Lynch 1-3 Yr Treasury
High Quality Bond Fund	5,650,449	5,622,583	-0.49%	-0.45%	Bloomberg Barclays US Aggregate Bond Index
Multi-Strategy Bond Fund	5,649,010	5,620,074	-0.51%	-0.45%	Bloomberg Barclays US Aggregate Bond Index
Total Fixed Income Funds	30,094,534	30,007,028			
Total	\$ 47,111,215	\$ 47,530,428	0.91%		



Target Asset Allocation

X-B. RESEARCH AND SPONSORED PROGRAMS


Federal award dollars do NOT include \$19,356,604 CRRSAA HEERF II [Covid Relief] from US Department of Education; received in last two quarters of FY21.

* US Dept of Commerce, US Environmental Protection Agency, US Dept of the Interior, National Endowments for the Arts & Humanities, US Dept of Homeland Security, US Dept of Justice, US Dept of Housing & Urban Development, US Dept of Labor, US Dept of State

**Gifts represent non-contractual funding from corporations, foundations, associations and societies in supp8/t of academic programs, scholarships/fellowships, student design & enterprise, research, youth programs and special programs.



SPO & OIC Metrics ¹	Administration	Advanced Power Systems Research Center / MEEM	College of Business	College of Computing	College of Engineering	College of Forest Resources & Env Science	College of Sciences & Arts	Great Lakes Research Center	Keweenaw Research Center	Michigan Tech Research Institute	Pavlis Honors College	Totals	Fiscal Comparison	Percent Change
Proposals Submitted	29	20	2	55	386	98	109	29	49	76	N/A	853	916	-6.9%
Awards Received	156	12	7	34	322	90	66	32	48	74	N/A	841	854	-1.5%
Federal	237,466	1,547,336	50,000	2,975,408	12,452,438	2,787,354	10,215,725	862,641	5,182,506	1,636,557	-	37,947,431	37,005,211	2.5%
Federal Pass-Through	1,155,724	20,000	-	240,377	11,385,681	371,271	705,119	591,794	-	9,904,304	-	24,374,270	13,477,040	80.9%
Foreign	-	-	-	-	468,399	-	631,717	-	25,829	-	-	1,125,945	2,217,088	-49.2%
Gifts	2,293,277	-	35,140	114,500	1,786,594	161,059	119,846	-	21,000	-	-	4,531,416	2,722,474	66.4%
Crowdfunding	-	-	-	3,174	215,596	-	5,284	1,850	93	-	-	225,997	12,804	1665.0%
Industry	20,000	327,469	-	17,500	2,639,448	686,709	17,500	257,475	2,206,450	237,292	-	6,409,843	5,496,106	16.6%
Other	27,493	-	84,659	5,000	1,140,940	73,400	225,964	61,236	7,400	30,000	-	1,656,092	1,255,330	31.9%
State of MI	639,663	50,000	-	-	1,720,559	244,152	65,025	126,773	-	-	-	2,846,172	5,058,255	-43.7%
Total \$ by Division	4,373,623	1,944,805	169,799	3,355,959	31,809,655	4,323,945	11,986,180	1,901,769	7,443,278	11,808,153	N/A	79,117,166	67,244,308	17.7%
Fiscal Comparison	2,960,280	N/A	33,000	2,619,982	24,160,165	6,716,872	7,004,834	1,622,256	9,049,938	12,464,145	612,836	67,244,308		
Percent Change	47.7%	N/A	414.5%	28.1%	31.7%	-35.6%	71.1%	17.2%	-17.8%	-5.3%	N/A	17.7%		
Disclosures Received ²	1.61%	-	-	3.23%	61.54%	9.68%	11.84%	-	6.45%	5.65%	-	31	23	34.8%
Nondisclosure Agreements	8	5	-	-	39	3	4	-	12	17	-	88	84	4.8%
Patents Filed or Issued ²	-	-	-	-	54.50%	-	39.40%	-	1.55%	4.55%	-	22	26	-15.4%
License Agreements	-	-	-	-	5	-	1	-	-	-	-	6	13	-53.8%
Gross Royalties ²	-	-	-	-	11.54%	-	19.23%	-	3.85%	65.38%	-	76,548	121,965	-37.2%

Federal award dollars do NOT include \$19,356,604 CRRSAA HEERF II [Covid Relief] from US Department of Education; received in last two quarters of FY21.

¹ Combined Metrics from both the Sponsored Programs Office (SPO) and Office of Innovation & Commercialization (OIC)

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).



			College of	College of	College of	College of Forest Resources & Env	College of	Great Lakes	Keweenaw	Michigan Tech Research	Pavlis Honors			Percent
Sponsored Awards & Gifts	Administration	APRSC / MEEM	Business	Computing	Engineering	Science			Research Center	Institute	College	Totals	Fiscal Comparison	Change
Automotive	215,900	164,112	640	7,500	1,091,565	-	-	-	2,044,061	197,331	-	3,721,109	3,319,210	12.1%
Business & Economics	73,153	-	2,000	-	43,500	-	-	-	35,240	-	-	153,893	17,500	779.4%
Chemical	38,000	-	-	-	196,200	45,261	-	-	-	-	-	279,461	371,068	-24.7%
Civil	50,762	18,621	-	-	116,250	-	-	-	-	87,000	-	272,633	600,162	-54.6%
Consumer Products	325,545	22,015	-	-	386,118	523,209	30,185	-	-	-	-	1,287,072	1,015,658	26.7%
Defense & Space	49,998	-	-	17,500	942,107	-	-	-	91,162	7,558,028	-	8,658,795	6,293,463	37.6%
Energy	80,500	122,721	-	-	364,906	-	-	257,475	-	-	-	825,602	2,648,137	-68.8%
Environmental	26,080	-	-	-	30,685	-	-	12,663	-	39,961	-	109,389	95,743	14.3%
Health	58,266	-	-	-	207,937	-	591,988	-	63,375	-	-	921,566	191,589	381.0%
Industrial Engineering	6,000	-	-	-	86,887	-	57,320	-	2,650	-	-	152,857	533,058	-71.3%
IT Services	4,000	-	-	65,000	30,110	-	-	-	-	-	-	99,110	178,478	-44.5%
Mining & Metals	26,500	-	-	-	311,051	134,147	-	-	-	-	-	471,698	565,730	-16.6%
Other	361,036	50,000	-	-	168,625	90,851	19,500	-	-	53,592	-	743,604	405,919	83.2%
Technology	27,500	-	500	99,998	83,721	-	-	8,000	-	129,964	-	349,683	444,865	-21.4%
Total \$ by Division	1,343,240	377,469	3,140	189,998	4,059,662	793,468	698,993	278,138	2,236,488	8,065,876	N/A	18,046,472	16,680,580	8.2%
Fiscal Comparison	539,062	N/A	13,000	1,047,270	3,976,121	1,263,667	350,830	83,187	2,363,376	6,794,467	249,600	16,680,580		
Percent Change	149.2%	N/A	-75.8%	-81.9%	2.1%	-37.2%	99.2%	234.4%	-5.4%	18.7%	0.0%	8.2%		

Michigan Technological University Total PRELIMINARY Research Expenditures by College/School/Division Fiscal Year 2022 & 2021 As of June 30, 2022 and June 30, 2021

	Preliminary	Preliminary		
College/School/Division	FY2022	FY2021	Variance	%
Administration*	3,097,604	820,733	2,276,871	277.4%
Advanced Power Systems Research Center (APSRC)/ME-EM	1,020,792	N/A	1,020,792	N/A
College of Business	1,823,367	1,522,209	301,158	19.8%
College of Computing	4,940,119	4,021,921	918,198	22.8%
College of Engineering	33,957,094	31,614,848	2,342,246	7.4%
College of Forest Resources & Environmental Science	6,964,038	6,084,790	879,248	14.4%
College of Science & Arts	16,503,279	14,267,247	2,236,032	15.7%
Great Lakes Research Center (GLRC)**	1,419,899	1,480,740	(60,841)	-4.1%
Pavlis Honors College	585,952	597,330	(11,378)	-1.9%
Keweenaw Research Center (KRC)	11,276,788	10,090,175	1,186,613	11.8%
Michigan Tech Research Institute (MTRI)	13,322,889	11,215,400	2,107,489	18.8%
Total	94,911,821	81,715,393	13,196,428	16.1%

*Includes the Vice Presidents, Provost, and others who report to a VP, Provost or the

President. Except for the research institutes that report to the VPR.

**Includes GLRC department (non-academic researchers) expenditures only. All other GLRC

center expenditures are shown in the researchers' respective colleges.

X-C. ADVANCEMENT AND ALUMNI RELATIONS

Advancement and Alumni Engagement Narrative Michigan Tech Board of Trustees October 7, 2022

2022-2023 Goals and Initiatives to be achieved in collaboration with administrative and academic leadership and the Michigan Tech Fund Board of Directors.

- Donors First- integrity and intention in every aspect of our business
- Move into Campaign Execution Phase
- Review of the MTF Investment Policy
- Consider alternative asset classes
- Enhance cash flow management
- Leverage New Governance Committee

Highlights

- Raised \$9.0M to date or 22% of the \$41.77M goal (as of September 30, 2022)
- \$43.5 million in outstanding asks from individuals
- Campaign
 - Conversation started with over 50 principal donors
 - Meeting with corporations to discuss capital investment
 - Initiated the Leadership Phase
 - Preparing campaign marketing materials
 - Developed a comprehensive national volunteer management strategy
 - Preparing to launch our Day of Giving
- The Alumni Engagement Office hosted over 35 regional & local events, increased frequency of the alumni enewsletter, modifying alumni webpages and expanding outreach.
- Hosted the first in-person DEIS Alumni Board, October 6, 2022
- Reunion Weekend 2022: August 4-6, 2022 had nearly 450 guests registered (2019 record is 453)
- Organizational
 - New hires:
 - Information Systems Analyst
 - Vacant positions:
 - Assistant Director for Major Gifts College of Business
 - Assistant Director for Major Gifts College of Computing & Athletics
 - Director for Advancement College of Engineering

Fundraising totals as of August 31, 2022

\$4,345,000 in planned gifts

- \$161,123 in realized planned gifts
- \$1,793,696 in major outright gifts and pledges
- \$254,406 in annual gifts under \$10,000
- \$883,154 in corporate support
- \$200,181 in foundation gifts

11 illustrations, proposals, and gift agreements were provided for donors 9 executed gift agreements

Principal Giving

• Notable gifts received since last report: \$647k to support the GLRC.

• Working with alum and campus stakeholders on pending and future gifts over \$15 million for endowed positions, scholarships, the College of Business, Mechanical Engineering-Engineering Mechanics and Alumni Way.

Regional Areas of Focus Principal Giving/Presidential Outreach and Recent Events

- VIP Champions Pavilion Principal Donors/Prospects invited throughout the 2022-2023 season
- McInnes Presidential Suite Hockey Skyboxes hosted throughout the 2022-2023 season.
- GLI President's Box Grand Rapids December 27, 2022
- SW Florida Presidential Events March '23
- Silicon Valley a donor event hosted by David House '65 at his home in Saratoga on November 7.
- September 23 Houghton President's/Advancement Backstage Jazz Event
- August 29 Inaugural Ringing of the Bernard Clock Tower Bell
- August 18 Lake Linden MTU Nara Family Forest Sugar Shack dedication
- August 11 Seminar event hosted by President Koubek featuring Kim Nowack '85, Mackinac Bridge Authority, and Dr. Stephen Techtmann, Associate Professor Biology and his graduate student
- August 10 Traverse City Principal Giving event hosted by Gary '67 and Judy Anderson and Dale 79' and Judy Elliott.

Major Giving

Our team partnered with Admissions by engaging three major gift donors to host Evenings of Excellence recruiting events for outstanding potential Michigan Tech students.

The search for two Assistant Directors for Major Gifts to grow the fundraising team is underway, with five qualified applicants.

- Notable gifts received since last report: \$3.3M estate gift received to create endowed scholarship for ME students and Cadets.
- Received over \$600,000 in gifts for Mechanical Engineering students and Cadets, Chemical Engineering, Materials Science and Engineering, Civil, Environmental, and Geospatial Engineering, Biological Sciences and Geospatial Engineering
- In discussion with donors for \$19 million in gifts.
- Pending planned and outright gifts over \$5.5 M

Annual Giving

- FY23 Campus Campaign: \$19,614.05 (4% participation 58 donors)
- Soft launch of crowdfunding platform through RNL will support projects from departments, athletics and student organizations.
- Planning underway for Days of Giving in conjunction with 2023 Winter Carnival.
- 50 new pavers placed at Clock Tower.
- In conjunction with Athletics, 227 pavers were placed at Kearly Stadium.
- Received \$15,000 gift to place first of five value plaques (Tenacity) at the Clock Tower in memory of David Parker '78 EE.

Corporate and Foundation Relations

- Notable gifts received since last report: \$246,000 to support Enterprise & Senior Design projects, STEM outreach in Detroit Public Schools, and Husky Connect, Machine Learning & AI research, SAE AutoDrive Challenge, scholarships and Summer Youth Programs.
- In collaboration with campus stakeholders, prepared and officially submitted a proposal, requesting \$10 million for enhancement and renovations.

- In addition to submission of a \$75,000 proposal by Dr. Melissa Baird, collaborated with Dr. Ana Dyreson to submit a \$499,000 Sloan Foundation proposal.
- CFR provided fall semester leadership and operational support to Career Services to coordinate and deliver Fall 2022 Career Fair and CareerFEST events and programming, restoring in-person recruiting and registering over 365 companies, along with administering four sections of co-op courses for over 120 students.

Advancement Services

- CRM conversion progressing, first pass with MTU data will be reviewed in early October, report development training underway.
- Stewardship giving society recognition program is being revamped to provide more customization for donors. A review of donor relations activities across campus is underway to identify and communicate best practices to departments.
- Alumni and Friends enewsletter will return to a monthly schedule in October.

Alumni Engagement

- Worked with Comms team in Adv Services to increase alumni enewsletter to a monthly send, and create a new social media calendar so we can plan content together more effectively.
- Working with UMC on modifying <u>alumni webpages</u> to be more informative and interesting to navigate. Many changes are already live, but the <u>regional programming</u> page is still in the works (this page is getting a total overhaul, removing association language/formal chapter structure that doesn't apply, offering more information more clearly to better serve our alumni).
- The AE professional staff has set a goal to expand to 100+ events this year (last year hosted approx 80) and working more proactively as professional staff to arrange further ahead, recruit more alumni hosts, and offer more variety : pregame socials, game watches (more than just hockey), service days, professional events (see TTT below) and family-friendly events as well as virtual (exploring pasty cooking demo and e-sports).
 - <u>Check out upcoming events here.</u>
- Standing up new professional series: Traveling Tech Talks (TTT)
 - Inaugural Traveling Tech Talks event will be hosted on Thurs Nov 3 in Seattle, WA with a panel featuring 3 alumni subject matter experts + a faculty moderator for "A Conversation on Human Factors Engineering and User Experience".
 - This new event series will be hosted 2x/yr in different areas, highlighting alumni thought leaders in varying fields in a structured program with a moderator, and offer professional networking opportunities. Learn more here.
 - Goal is to round out diverse regional programming offerings, and attract alumni that aren't typically engaged with other regional events (while also still retaining those already engaged) in our key markets.
- <u>2023 Alumni Awards</u> nominations open now December 31, 2022.
 - 5 awards: Outstanding Young Alumni, Outstanding Service, Humanitarian, Honorary Alumni, and the highest honor - Distinguished Alumni Award.

X-D. MEDIA COVERAGE

Media Report: July 16 to Sept. 22, 2022 Michigan Technological University Regular Meeting of the Board of Trustees Oct. 7, 2022

Overview

Articles	2,695
Total engagement	61,501
Average engagement	25
Journalist shares	406
Journalist reach	~ 14.56M
Average unique visitors per month (UVM)	~ 2.89M
Total UVM	~ 7.02B

Between July 16 and Sept. 11, 2022, a total of 2,695 online articles mentioned Michigan Technological University:



10/07/2022 MTU Board of Trustees Regular Meeting, Media Report -Articles

MUCK RACK

Those 2,695 articles were shared, commented on, or liked on social media roughly 61,501 times, for an average engagement of 25 shares, comments, or likes per article:



10/07/2022 MTU Board of Trustees Regular Meeting, Media Report -Article Engagement

MUCK RACK

Journalists shared the articles on Twitter 406 times, resulting in a reach of roughly 14.56 million people:







10/07/2022 MTU Board of Trustees Regular Meeting, Media Report -Journalist Reach

MUCK RACK

News Highlights:

Research News

<u>AP News, ABC News, Yahoo News</u>, the <u>Houston Chronicle</u>, the <u>San Francisco Chronicle</u>, <u>MLive</u>, the <u>Duluth News Tribune</u> and more than 150 other news outlets across the country reported on the findings of Michigan Tech's 63rd annual Isle Royale Winter Study, authored by Sarah Hoy, John Vucetich and Rolf Peterson (CFRES). The study updates, which estimated the island's current wolf population at 28 and the moose population at 1,346, were announced Aug. 24 by <u>Michigan Tech News</u>.

Kristin Brzeski (CFRES) was quoted by <u>KHOU 11</u>, the <u>Houston Chronicle</u> and <u>Chron</u> in stories about the unique species of red wolf/coyote hybrids called ghost wolves found on Galveston Island, Texas. Brzeski's comments provided background information on the critically endangered red wolf and its decline. The ghost wolves' genetic material could help save the species. The story was picked up by multiple regional news outlets.

Ph.D. in Forest Science candidate Ryne Rutherford was interviewed by <u>MLive</u> for a story on his discovery of an eastern prickly pear cactus growing in the Upper Peninsula. Rutherford found the cactus in bloom at the high elevations of the Huron Mountains. Rutherford was interviewed by the <u>Detroit Free Press</u> and <u>WLUC TV6</u>, and his discovery was also mentioned by Grand Rapids' <u>Mix 95.7 WLHT-FM</u>.

Jeff Naber (ME-EM/APSRC) was quoted by <u>WJMN Local 3</u> in a story on the opening of the U.S. Department of Energy's newest Solar Energy Regional Test Center in Calumet. <u>WLUC TV6</u> also ran a story on the event. MTU and Sandia National Laboratories partnered to open the facility, which is housed at Tech's Advanced Power Systems Research Center, aka APSLABS. The location will allow research on the effectiveness of new solar power technology in severe winter environments. <u>Government Technology</u> and the <u>Keweenaw Report</u> ran similar stories.

Pengfei Xue (CEGE/GLRC) was mentioned by <u>Phys.org</u>, <u>EurekAlert!</u>, <u>Newswise</u> and 13 other outlets in a story on the COMPASS (Coastal Observations, Mechanisms, and Predictions

Across Systems and Scales) project, which seeks to understand the long-term influence of the Great Lakes on regional weather patterns, especially under a changing climate. Xue is a member of the COMPASS research team.

A NASA <u>press release</u> announced that the Michigan Tech Planetary Surface Technology Development Lab has advanced to the next phase of the Watts on the Moon Challenge. The lab will receive \$200,000 in additional funding and move on to compete in Phase 2, Level 2 of the challenge.

The <u>Daily Mining Gazette</u> ran a <u>two-part story</u> that examines the potential use of abandoned mines in the Upper Peninsula for hydro pumping electrical storage. Timothy Scarlett (SS) was quoted, and Roman Sidortsov (SS), Ana Dyreson (ME-EM) and David Watkins (CEGE), as well as doctoral student in social sciences Shardul Tiwari, were mentioned. The series made multiple references to the team's pumped underground storage hydropower <u>technical report</u> released spring 2022.

<u>University of Michigan News</u> published a feature story on Wolverine alumnus Brad King's (ME-EM) decision to found Orbion Space Technology in Houghton because of its "vibrant community of innovators connected with Michigan Technological University" and proximity to the Upper Peninsula's natural beauty and outdoor activities.

General News

<u>Traverse City Business News</u> highlighted the TechMBA, which began offering a remote option to students in the Grand Traverse region this year. Offered by the Michigan Tech College of Business, the story says the degree is also piquing interest and generating excitement among area businesses and organizations.

<u>WJMN Local 3</u> and Lansing's <u>WLNS-TV</u> covered the Safety in the Straits commissioning ceremony hosted by Michigan Tech and the Great Lakes Observing System on Aug. 12. The event commissioned a high-frequency radar system in the Straits of Mackinac.

<u>WLUC TV6</u> aired a pair of video segments with Michigan Tech President Rick Koubek to mark the start of fall classes. The segments were filmed live Aug. 30 during the morning broadcast.

First-year students Declan Cashin and Coryn Hamill, as well as Cody Kangas (ADV), were quoted by <u>WLUC TV6</u> in a story about Michigan Tech's Sept. 13 CareerFEST day, featuring informal, in-person meetings between students and potential employers. The <u>same outlet</u> also reported on student turnout at Career Fair on Sept. 21.

Student participants in Michigan Tech Summer Youth Programs' aviation and aerospace exploration were quoted by <u>WJMN Local 3</u> in a story about the popular weeklong program. The <u>Daily Mining Gazette</u> and <u>WLUC TV6</u> ran similar stories.

Gabriel Escobedo (CDI) was quoted by <u>WLUC TV6</u> in a story about a new scholarship program at Michigan Tech supporting students transferring from community and technical colleges to the University.

The <u>Traverse City Record-Eagle</u> announced a second STEAM (Science, Technology, Engineering, Arts and Mathematics) program being offered by Michigan Tech for Grand Traverse area youth. The free three-day course for students in sixth through ninth grades will

take place Aug. 22-24 in Traverse City, focusing on the technology and art aspects of STEAM and including instruction on writing code and programming LEDs.

<u>WJMN Local 3</u>, <u>Radio Results Network</u> and the <u>Keweenaw Report</u> picked up a Michigan Tech News <u>press release</u> about the Lupine, a 47-foot catamaran donated to MTU by alumnus Gary Hagstrom '72. The Lupine arrived in Houghton on July 23 and will be put into service for Michigan Tech as part of the Great Lakes Research Center's fleet.

Michigan Tech was featured in an <u>MLive</u> story highlighting the University's approach toward a new enrollment milestone of 30% women. Juniors Abby Mello and Aerith Cruz were among those quoted in the article, which noted the steady growth in the number of women attending Tech over its 137-year history and explored the changes on campus that have occurred as a result.

Numerous local media outlets covered the <u>33rd Parade of Nations</u>, including <u>ABC 10</u>, <u>WLUC</u> <u>TV6</u> and the <u>Daily Mining Gazette</u>. The event took place Sept. 17.

X-E. EMPLOYEE SAFTETY STATISTICS



EMPLOYEE SAFETY STATISTICS YEAR-TO-DATE

Jan - Aug 2021/2022

	Ostanomi				Employ	ee Classific	ation			
	Category	Years	AFSCME	Faculty	Non-Exempt	POA	Professional	Temporary	UAW	Total
	Injury Only w/Medical - No Lost	2021	1	0	0	0	3	0	0	4
	Time	2022	0	0	0	0	0	0	0	0
	Lost Time Cases	2021	5	0	0	0	1	0	0	6
Number of	Lost Time Cases	2022	3	0	0	0	1	1	0	5
Recordable Injuries	Restricted Work Cases	2021	1	0	0	0	1	0	0	2
	Restricted work Cases	2022	0	0	0	0	1	0	0	1
	Occupational Safety and Health Administration (OSHA) Recordable	2021	7	0	0	0	5	0	0	12
	Injuries (Total of above)	2022	3	0	0	0	2	1	0	6
	Injury Lost Time 3	2021	229	0	0	0	11	0	0	240
Number of	lingury Lost Time 5	2022	163	0	0	0	5	21	0	189
Days	Restricted Work Days 3	2021	30	0	0	0	14	0	0	44
	Resulcied work Days 5	2022	0	0	0	0	7	0	0	7
	Total Work Hours	2021	149,234	449,330	57,765	10,856	719,078	48,178	105,425	1,539,866
Hours	Iotal Work Hours	2022	152,312	447,969	57,034	11,329	731,277	48,598	97,271	1,545,790
Worked	Percentage of Work Hours	2021	9.7%	29.2%	3.8%	0.7%	46.7%	3.1%	6.8%	100.0%
	Percentage of work Hours	2022	9.9%	29.0%	3.7%	0.7%	47.3%	3.1%	6.3%	100.0%
	Lost Time Case Rate 1	2021	6.7	0.0	0.0	0.0	0.3	0.0	0.0	0.8
Rates		2022	3.9	0.0	0.0	0.0	0.3	4.1	0.0	0.6
Nates	Frequency Rate 2 (Recordable)	2021	9.4	0.0	0.0	0.0	1.4	0.0	0.0	1.6
	Trequency Trate 2 (Trecordable)	2022	3.9	0.0	0.0	0.0	0.5	4.1	0.0	0.8

OSHA has established specific calculations that enable the University to report the Recordable Injuries, Lost Time Case Rates and Frequency Rates. The Standard Base Rate (SBR) calculation is based on a rate of 200,000 labor hours which equates to 100 employees who work 40 hours per week for 50 weeks per year. Using the SBR allows the University to calculate their rate(s) per 100 employees.

1 The Lost Time Case Rate is calculated by multiplying the number of Lost Time Cases by 200,000 then dividing by the labor hours at the University.

2 The Frequency Rate is calculated by multiplying the number of recordable cases by 200,000 then dividing by the labor hours at the University.

3 The number of days are total days for the life of the cases first reported during this period.

The Bureau of Labor Statics 2020 reports, for Colleges and Universities over 1,000 employees; the average LOST TIME CASE RATE of days away from the average LOST TIME CASE RATE of days away from work was 0.5 and the average FREQUENCY RATE was 1.2.

X-F. DISPOSAL OF SURPLUS PROPERTY

Michigan Technological University Surplus Property Sales July 1, 2022 - August 31, 2022									
Date	Description		Amount						
07/01/22	Recycled iMacs	\$	410.00						
08/12/22	Miscellaneous scrap metal, including the following:		823.75						
	2005 Chevrolet Silverado 3500 Crew Cab								
Total		\$	1,233.75						
08/12/22	Miscellaneous scrap metal, including the following:	⊅ \$	8						