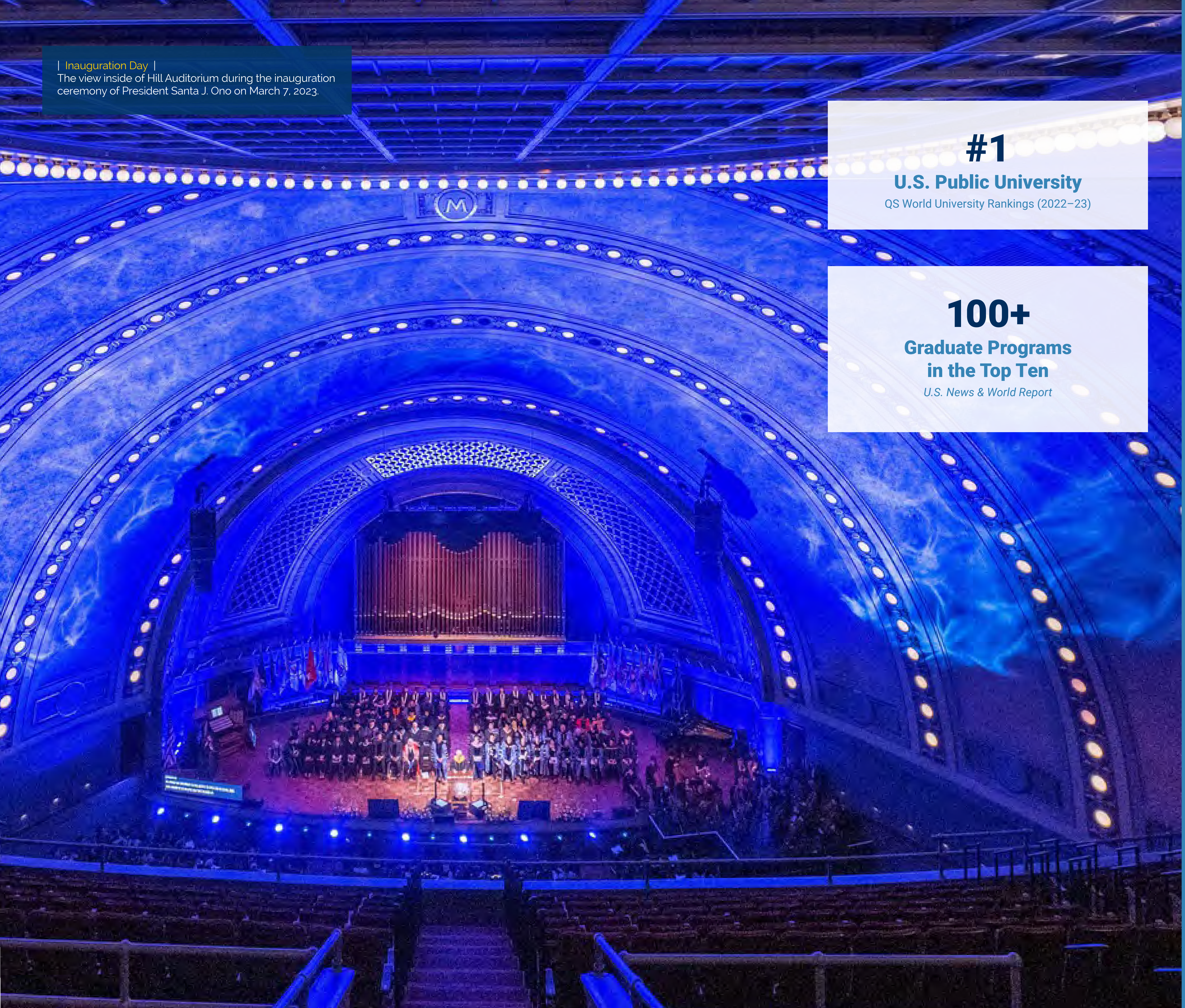
UNIVERSITY OF MICHIGAN

2023 ANNUAL REPORT



| Inauguration Day |
The view inside of Hill Auditorium during the inauguration ceremony of President Santa J. Ono on March 7, 2023.

#1
U.S. Public University
QS World University Rankings (2022–23)

100+
Graduate Programs in the Top Ten
U.S. News & World Report

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FRONT COVER
| A New Era |
Following university tradition, the inauguration day of the University of Michigan's 15th president, Santa J. Ono, on March 7, 2023, kicked off with a morning symposium, events across campus and an academic procession.

PRESIDENT’S MESSAGE

| SANTA J. ONO |

The University of Michigan stands as a beacon of excellence, marked by world-class academic programs, cutting-edge research and one of the top-rated health systems in the nation.

Underlying all that we do is our vital mission: an enduring commitment to serving the people of Michigan and the world through preeminence in creating, communicating, preserving and applying knowledge, art and academic values, and in developing leaders and citizens who will challenge the present and enrich the future.

This commitment means we have a responsibility to draw on our institution’s incredible breadth and depth of academic, research and medical expertise to address our society’s most pressing challenges. With a strong financial foundation, U-M is well positioned to do just that.

From the threat of the global climate crisis to the potential of emerging technologies and innovations like artificial intelligence and precision medicine, faculty, staff and students from a variety of disciplines are working together to open new horizons and strengthen the university’s incredible impact on our region, our state and our world.

As I embark on my second year as president of this amazing institution, I am more certain than ever that our university’s two centuries of success can be attributed to the members of this university community — faculty, students, staff, alumni, donors and so many others. They are our critical thinkers, our champions, our researchers, our benefactors and our future leaders. They are our greatest strength, and are of inestimable value to our university.

Over 65,000 students are enrolled and working toward their academic goals across our three campuses. Our growing enrollment on the Ann Arbor campus means we are now the largest and most sought-after public university in the state. The University of Michigan’s hospitals, which serve millions of patients each year, were named among the nation’s best in U.S. News & World Report’s 2023–24 Best Hospitals Honor Roll.

Every day, we are living out our public mission.

“As I embark on my second year as president of this amazing institution, I am more certain than ever that our university’s two centuries of success can be attributed to the members of this university community — faculty, students, staff, alumni, donors and so many others.”

VISION 2034: SHAPING OUR COLLECTIVE FUTURE

Over the past year, the University of Michigan community has been engaged in a collective strategic visioning process to consider our shared future over the next decade, including who we are, what we stand for and where we are going as a great public research university.

Vision 2034 is a commitment to continue pushing the boundaries of knowledge, service and innovation. It is an ambitious journey to address the most pressing global challenges, accelerate breakthrough discoveries and create a positive impact on the lives of countless individuals worldwide. The process will be informed by the insights of other university priorities, including our pursuit of carbon neutrality; our ongoing DEI and well-being efforts; and strategic planning at UM-Dearborn, UM-Flint and Michigan Medicine.

The active participation of U-M students, faculty, staff, alumni and partners has been critical to the success of Vision 2034, and I appreciate the thousands of people who have contributed their ideas and opinions on U-M's future.

As we journey toward 2034, we look forward to a future where the University of Michigan remains at the forefront of research, innovation and education, making profound contributions to society. You can learn more about this process and our timeline at Vision 2034.

FROM THE LAB TO THE MARKETPLACE

The University of Michigan reported a record $1.86 billion in research expenditures during fiscal year 2023, positioning us among the nation's leading public universities in terms of research volume.

For a university intent on contributing to the public good, it is imperative that our extensive research enterprise not only advances knowledge and develops new technologies, but does so to positively impact society.

One way we do this is through Innovation Partnerships, a unit of the Office of the Vice President for Research. Innovation Partnerships serves as the central hub for U-M research commercialization efforts, and its team achieved a record-breaking year, generating 580 new invention reports and executing 311 commercialization agreements.

U-M research also helped launch 25 new startups that range in scope from developing innovative therapies for the treatment of fibrosis to designing technologies that aid in substance abuse monitoring. These startups further reflect the university's commitment to translating research for broad societal impact.

Beyond generating knowledge and products, these efforts hold immense value, opening doors, uplifting communities and changing lives.

The University of Michigan was envisioned as America's first true research university. Together, we aim to have a profound impact on the great challenges of our time.

LEADERS AND BEST

As we look to the future, the University of Michigan is poised to carry out its public mission through a variety of bold and aspirational initiatives.

The D. Dan and Betty Kahn Health Care Pavilion, a 690,000-square-foot adult inpatient hospital in Ann Arbor, is scheduled to open for patient care in the fall of 2025. What was recently just a frame of steel girders is being transformed into a new facility that will house a state-of-the-art neurosciences center, advanced imaging and high-level, specialty care for cardiovascular and thoracic patients.

In Detroit, where the University of Michigan was founded in 1817, we are breaking ground on the U-M Center for Innovation (UMCI). The world-class research, education and entrepreneurship center will advance innovation and talent-focused community development, stimulate economic development and drive job creation.

In addition to offering graduate programs that focus on technology, robotics, sustainability and computer science, UMCI will support additional academic and research activity in the city, spark more engagement with the city and its residents, support ongoing university programs for Detroit high school students and provide non-credit-based talent development programs that will cover in-demand skill areas.

None of this would be possible without the university's solid financial footing, which I encourage you to read more about in the Chief Financial Officer's Report.

Underpinning our financial strength is the generosity of the University of Michigan family, as detailed in the Report of the Vice President for Development. This support allows us to accomplish so much, in service to so many, in Michigan and beyond.

With our vital mission at the forefront, we are eager to reach new heights of excellence in service to our region, our world and a brighter future.

Sincerely,

Santa J. Ono
President

REPORT FROM THE CHIEF FINANCIAL OFFICER

The University of Michigan has been regarded as a worldwide leader in higher education for decades. This is largely due to the high caliber of our students and faculty, the ongoing dedication of our 50,000+ employees, who have maintained an unyielding focus on supporting our missions of education, research and patient care, the generosity of our donors and support from the state of Michigan.

| GEOFFREY S. CHATAS |

FY 2023 was a remarkable and transformational year for the university in many ways. President Santa J. Ono joined U-M and a number of significant initiatives began, including Vision 2034, a collective strategic visioning process to imagine our shared future for the next 10 years, which engaged U-M students, employees, alumni and partners.

The launch of Campus Plan 2050 provides an extraordinary opportunity for the U-M community to help craft a blueprint for the university's Ann Arbor campus, with a special focus on creating the living, learning and working environments that support our strategic vision. There has also been significant progress on our sustainability efforts, including installing renewable energy infrastructure, constructing green buildings and prioritizing clean transportation. Campus improvement projects financed by our "green bonds" are addressing climate transition risks by mitigating greenhouse gas emissions from buildings and the transportation sector.

U-M continues its Culture Journey, a multi-year effort to establish, support and maintain a community where all members feel safe and supported. And we continued to lay the groundwork to launch DEI 2.0, which represents U-M's continued commitment to ensuring a diverse, equitable and inclusive community with even more sharply defined goals, new innovations and investments and enhanced measures of accountability — shaped and informed by our own university community.

Against the backdrop of these and other major initiatives, U-M maintained its unrelenting focus on ensuring that its foundation remains strong — financially and in other ways — so it is well positioned to continue educating students from around the world, conducting research that helps society and providing outstanding health care services.

"U-M maintained its unrelenting focus on ensuring that its foundation remains strong — financially and in other ways — so it is well positioned to continue educating students from around the world, conducting research that helps society and providing outstanding health care services."

INVESTMENT PERFORMANCE	RETURN FOR THE 12-MONTH PERIOD ENDED JUNE 30, 2023	ANNUALIZED 5-YEAR RETURN	ANNUALIZED 10-YEAR RETURN
LONG TERM PORTFOLIO	5.2%	10.5%	9.6%
U-M'S BENCHMARK	3.2%	7.1%	7.6%
BLENDED PASSIVE INDEX	10.7%	6.3%	6.9%

MAINTAINING A STRONG FINANCIAL POSITION

The university's financial position continues to be strong, with total assets and deferred outflows of $34.0 billion and total liabilities and deferred inflows of $13.3 billion at June 30, 2023. Net position, which represents the residual interest in the university's total assets and deferred outflows after total liabilities and deferred inflows are deducted, totaled $20.7 billion at June 30, 2023.

While net investment income can be volatile from year to year, our endowment distribution policy and long-term investment strategy combine to insulate U-M from volatility and provide dependable annual support for operations. The endowment distribution policy smooths the impact of capital market volatility by providing for annual distributions of 4.5 percent of the seven-year moving average fair value of the University Endowment Fund. This policy, along with the endowment's growth, allowed for distributions of $470 million to support university operations in FY 2023, for a total of $2.1 billion over the past five years. Distributions from more than 12,600 individual endowments provide ongoing and dependable support for a variety of academic, health-related and other needs across the university such as student scholarships, professorships, clinical operations and research.

Endowment funds, which are invested principally in the university's Long Term Portfolio, totaled $17.9 billion at June 30, 2023. The table above summarizes the investment performance of U-M's Long Term Portfolio in relation to comparative benchmark portfolio returns.

Financial markets generally saw positive returns in FY 2023 despite persistent high inflation, high interest rates, a restrictive central bank policy and increased geopolitical tensions. U-M's Long Term Portfolio generated a 5.2 percent return for the year against this backdrop, which was among the highest of the 25 largest university endowments, but lagged the performance of endowments.

The university's approach to diversifying the portfolio has helped over longer time periods. With a 5-year annualized return of 10.5 percent and a 10-year annualized return of 9.6 percent, the Long Term Portfolio is in the top quartile of performance relative to other college and university endowment investment portfolios. Similarly, the Long Term Portfolio's 20-year annualized 9.9 percent return is well into the top quartile of performance and compares well to the 7.6 percent annualized return for the median university endowment over the same period.

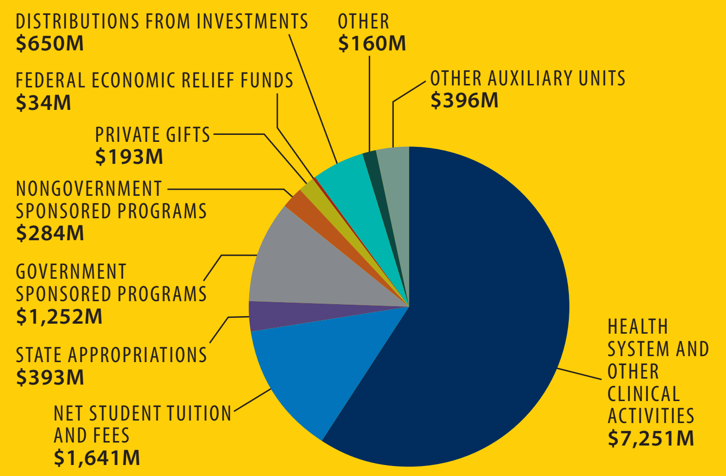
DIVERSIFICATION IN REVENUE STREAMS

U-M has a diversified revenue base, which has enabled the university to remain financially stable through various economic cycles and challenges as well as avoid unnecessary dependence on student tuition and fee increases. The components of the university's sources of revenue are depicted on the next page.

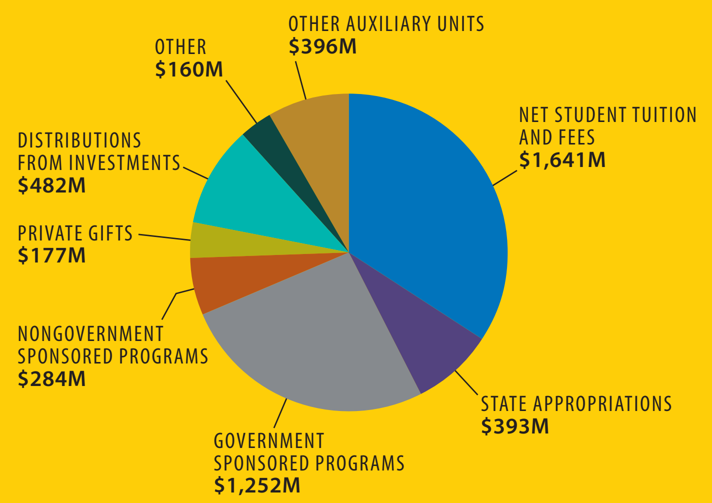
Funding from the state of Michigan continues to be an essential source of financial support for U-M. In FY 2023, state educational appropriations totaled $393 million. We are very appreciative of the continued support of higher education and U-M by the residents of our state.

U-M's operating budget continues to balance academic excellence and investment in the future with student affordability and access. For the Ann Arbor campus, tuition rate increases for FY 2023 were 3.4 percent for in-state undergraduate students and 3.9 percent for nonresident undergraduate students and most graduate students. For the Dearborn campus, tuition rate increases for undergraduate and graduate students were 3.6 percent and the Flint campus saw a 4.9 percent increase in undergraduate rates and a 4.5 percent increase for graduate students.

OPERATING ACTIVITIES
Total revenue $12,254 million



OPERATING ACTIVITIES EXCLUDING HEALTH SYSTEM AND OTHER CLINICAL ACTIVITIES
Total revenue $4,785 million



The FY 2023 budget also included a 5 percent increase in financial aid for undergraduates on the Ann Arbor campus, with 12 percent and 9 percent increases in institutionally awarded aid on the Dearborn and Flint campuses, respectively. U-M has been able to limit tuition increases and provide generous financial aid due to ongoing growth in non-tuition revenues and a long-standing commitment to controlling costs and improving efficiencies.

Demand for a U-M education continues to grow. More than 95,000 prospective first-year-student applications — a record number — were submitted from around the world for the university's three campuses. This is the 16th consecutive year that applications have increased. U-M's impressive global reputation and incredible value make it a top destination for outstanding students from Michigan, the United States and countries around the world.

ADDRESSING BOLD CHALLENGES THROUGH RESEARCH

As part of its universitywide commitment to serve the world through research, scholarship and creative practice, diverse teams from across the three U-M campuses worked together during FY 2023 to catalyze new knowledge and discoveries for the betterment of society.

The university reported a record $1.86 billion volume of research expenditures during FY 2023, driving advancements to address critical challenges ranging from global carbon emissions and youth firearm violence to structural racism and substance use disorders. Total research volume increased by 8.1 percent when compared to FY 2022 and U-M also secured 1,974 new research awards during FY 2023.

The university continues to strengthen its partnerships with the federal government, a primary sponsor of U-M research, scholarship and creative practice. During FY 2023, research expenditures sponsored by federal agencies totaled $1.05 billion, which accounts for more than half of the university's total research volume.

As a leading public research university, U-M continues to embrace its unique responsibility to translate new knowledge and discoveries from its laboratories, studios and research spaces for broad societal impact. The university is in the top five nationally for new invention reports and the execution of new licenses and options, according to the latest rankings from the Association of University Technology Managers.

GROWING COMPREHENSIVE ACADEMIC MEDICAL CENTER

Michigan Medicine — which includes University of Michigan Health, University of Michigan Medical School, Michigan Health Corporation and UM Health — is widely acknowledged across the country as a leader in advanced patient care, innovative research to improve human health and comprehensive education of physicians and medical scientists.

During 2023, the university completed a significant affiliation with Sparrow Health System and it is now part of UM Health, our wholly owned corporation created to hold and develop the university's statewide network of hospitals, hospital joint ventures and other hospital affiliations. Sparrow has more than 120 sites of care and is one of the largest health systems in Michigan, with about 10,000 caregivers and approximately 600 employed primary-care providers and specialists.

Construction of the D. Dan and Betty Kahn Health Care Pavilion continues. The new hospital will house 264 private rooms capable of converting to intensive care, a state-of-the-art neurological and neurosurgical center, high-level specialty care services for cardiovascular and thoracic patients and advanced imaging services. In addition, a new specialty and mail pharmacy facility will allow Michigan Medicine to significantly expand its services and more than double the number of prescriptions it fills each year through its in-house pharmacy.

Moving forward, Michigan Medicine will continue to invest in its people and innovative ways to provide high-quality care across the state, including building on its new affiliation with Sparrow.

| A rendering of The D. Dan and Betty Kahn Health Care Pavilion, courtesy of HOK |

> "U-M is one of only seven public universities in the country to earn the highest possible credit ratings from S&P Global (AAA) and Moody's (Aaa)."

A BRIGHT FUTURE FOR MICHIGAN

Because of its financial strength, the University of Michigan remains well positioned for the future. U-M is one of only seven public universities in the country to earn the highest possible credit ratings from S&P Global (AAA) and Moody's (Aaa). We've maintained these outstanding ratings for years, which is a clear indication of our long-term financial strength and stability.

To maintain excellence in education, research and patient care as well as offer collaboration opportunities for multiple disciplines, U-M makes important capital investments in a wide array of its facilities. An overview of the capital projects completed, in progress and in planning during FY 2023 appears in the Major Projects section. U-M has long balanced investing in new facilities against renewing existing facilities, which enables us to avoid an excessive accumulation of deferred facility maintenance.

I hope you'll review Management's Discussion and Analysis in conjunction with the audited financial statements. This section of the annual report includes additional details about U-M's financial strength, prudent financial policies and commitment to excellence. When combined with our dedicated employees, these factors allow U-M to continue making contributions that enrich the world.

Sincerely,

Geoffrey S. Chatas
Executive Vice President and Chief Financial Officer

REPORT FROM THE VICE PRESIDENT FOR DEVELOPMENT

I am thrilled to see how our community's passion for creating a better world is expressed through the breadth and depth of gifts we receive.

In FY 2023, that generosity added up to **$456 million** in pledge payments and cash gifts from nearly 100,000 donors. Gifts of every size came together for great impact: 98 percent of those gifts were less than $25,000.

Our donors' investment in areas where Michigan has always led — student experience, scientific discovery, artistic expression and societal challenges — enables us to innovate while still delivering the steady support on which our schools, colleges and units rely.

Earlier this year, the School of Education was renamed the **Marsal Family School of Education** in recognition of a new $50 million commitment — the largest in school history — and more than $55 million in total gifts by the family of **Kathleen and Bryan Marsal** and their children, Megan Marsal Kirsch and Michael Marsal.

The gift supports a diverse population of teachers, robust partnerships with schools and communities and research in collaboration with education practitioners.

| THOMAS A. BAIRD |

"Our donors' investment in areas where Michigan has always led — student experience, scientific discovery, artistic expression and societal challenges — enables us to innovate while still delivering the steady support on which our schools, colleges and units rely."

| *Back row, from left:* Michael Marsal, Bryan Marsal (holding Liam), Tyler Kirsch, Megan Kirsch Marsal (holding Charlotte). *Bottom row, from left:* Max Marsal, Alison Marsal, Kathleen Marsal |

| D. Dan and Betty Kahn |

In December 2022, Michigan Medicine announced it would name its new hospital to recognize a $50 million gift from the **D. Dan and Betty Kahn Foundation** — one of the largest ever to Michigan Medicine — and to honor the Kahns' dedication to U-M and the public good.

Scheduled to open in fall 2025, the **D. Dan and Betty Kahn Health Care Pavilion** will include 264 private inpatient rooms capable of converting into intensive care, a top-notch neurosciences center and specialty services for cardiovascular and thoracic care.

Other gifts in FY 2023 included $2.75 million and $1.5 million to the A. Alfred Taubman College of Architecture & Urban Planning to support access to architecture education and leadership in urban planning, respectively; and $2 million to endow the W.E. Upjohn Peony Garden at Nichols Arboretum. This is just a small sampling of the many gifts to support a wide variety of causes. We are so grateful for our donors' confidence in the university's mission and purpose. That steady support helps uphold U-M's position among the top universities in the world.

Thank you for your commitment and giving me the opportunity to help advance our mission.

Go Blue!

Tom Baird

Thomas A. Baird
Vice President for Development

HIGHLIGHTS

More at: 2023.annualreport.umich.edu/highlights

Arts Initiative receiving $20M to boost campus and regional efforts

The University of Michigan is allocating $20 million over a five-year period (2023–2028) for its Arts Initiative, a universitywide endeavor to expand access with new programs and projects to engage university audiences, bring more artists to campus and support and amplify the arts across the state and region. Underscoring U-M's role in the arts ecosystem, the initiative's core goals include: strengthening the student experience by expanding and integrating the arts in teaching and learning; activating interdisciplinary discovery and arts research; broadening and deepening partnerships with communities and the public; and building capacity and sustainability for the arts.

Michigan School Safety Initiative launched

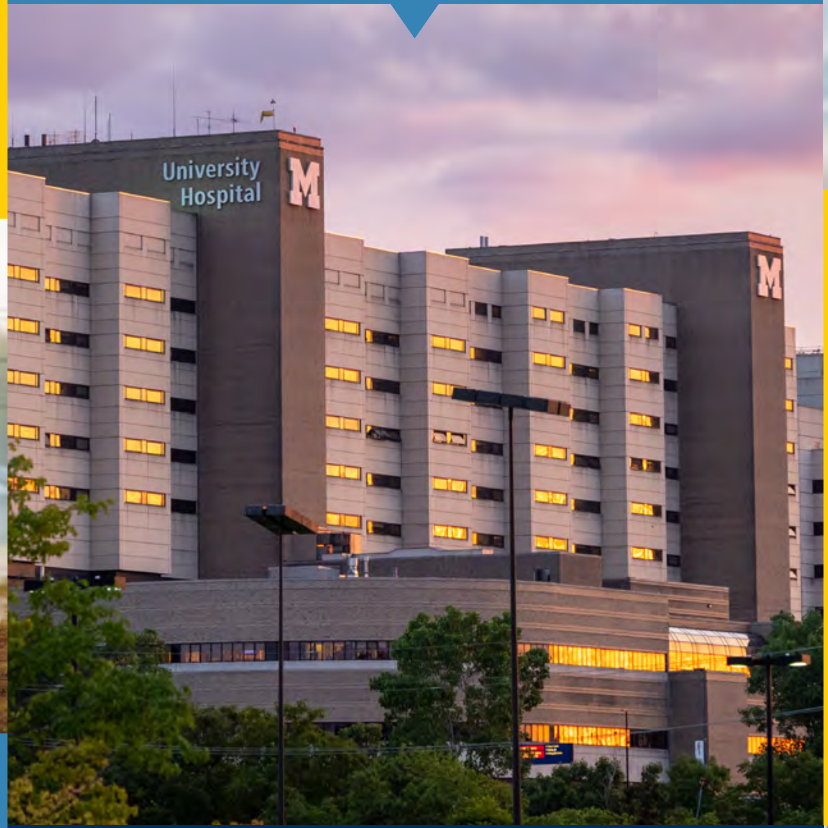
The University of Michigan Institute for Firearm Injury Prevention and the state of Michigan have finalized a $1 million contract to create a statewide initiative, designed to enhance school safety and prevent school violence. The Michigan School Safety Initiative, launched as a presidential initiative in 2019, will be available to all K-12 schools in the state, providing training and assistance to district leadership and staff regarding evidence-based best practices. The initiative aims to increase safety for 1.4 million students who are enrolled across nearly 900 Michigan public schools.

U-M nets record graduation success rate in NCAA report

The University of Michigan set another school record for its Graduation Success Rate (GSR) as the National Collegiate Athletic Association (NCAA) released the 2022 annual GSR and Federal Graduation Rate (FGR) reports for all NCAA Division I institutions. Michigan set another all-time record high with a four-year average GSR of 96 percent, which is 15 percentage points higher than it was in 2010 and one point higher than last year. U-M's four-year rolling average FGR of 83 percent also set an all-time high, surpassing its previous high of 81, set in 2017, 2018, 2020 and 2021. In addition, 14 of Michigan's 25 varsity athletic programs included in the report earned perfect GSR scores.

Michigan Medicine and Sparrow officially join to deliver health care

Sparrow Health System officially joined Michigan Medicine April 1, 2023. Sparrow and Michigan Medicine received the necessary regulatory approvals to partner after announcing their plans in December 2022 to create the premier statewide system of care. With the addition of Sparrow, Michigan Medicine now oversees more than 200 care sites across the state and its clinical care activities have grown to $7 billion. Michigan Medicine has committed to investing $800 million in Sparrow over the next eight years, to be funded through hospital operations and strategic investments.



Record number of inventions reported in FY 2023

Research led by the University of Michigan generated a record 580 new inventions last year and launched 25 startup companies ranging in scope from innovative therapies for the treatment of fibrosis to technologies that aid in substance abuse monitoring. President Santa J. Ono announced the university's FY 2023 research commercialization metrics in September 2023 at the annual Celebrate Invention event hosted by Innovation Partnerships, part of the Office of the Vice President for Research. Innovation Partnerships, the university's central hub for research commercialization activity, also reported 145 new U.S. patents and more than 300 license and option agreements with industry during the last fiscal year.

$79M invested for DEI in biomedical and health sciences

The University of Michigan and the National Institutes of Health are jointly investing $79 million to support and recruit 30 new faculty members to the Ann Arbor campus as part of a nationwide effort to enhance inclusion and equity in the biomedical and health sciences community. U-M will launch the Michigan Program for Advancing Cultural Transformation (M-PACT) with a five-year, $15.8 million grant from NIH, along with a $63.7 million university investment. M-PACT will recruit 30 new tenure-track assistant professors in 11 schools, colleges and units into three interdisciplinary research clusters: social and behavioral research, basic biomedical research and clinical-translational research.

$130 million Electric Vehicle Center launched

In an effort to cultivate a robust electric vehicle ecosystem in the state where the modern auto industry was born, the new University of Michigan Electric Vehicle Center launched on April 27, 2023. The center will focus on three areas: accelerating collaborative research and development, developing a highly skilled workforce and establishing advanced campus infrastructure and facilities to support research and education. U-M and the state of Michigan have finalized the contract for the $130 million center. The legislature approved funding for it in the fiscal year 2022–23 budget.

U-M adding 25 megawatts of solar power to campuses

The University of Michigan is in the process of building on-campus solar installations with a capacity of 25 megawatts across the Dearborn, Flint and Ann Arbor campuses, including Michigan Medicine and Athletics. The university aims to have resulting solar facilities fully operational by the end of 2025. The total amount of electricity that would be generated by the installations is estimated to equal the power consumed by approximately 3,000 homes annually. Once operational, the solar installations will help U-M eliminate direct greenhouse gas emissions on campus by 2040. The university also is on pace to achieve net-zero emissions from purchased electricity by 2025. U-M was recently recognized by the EPA Green Power Partnership for its renewable energy use. The organization ranked U-M eighth on its quarterly Top 30 College & University List and 89th on its National Top 100 List.

Academic Innovation aids 13 projects that use educational technology

The Center for Academic Innovation is providing funds and in-kind support and expertise to 13 new projects to help implement educational technology that enhances learning on the University of Michigan's Ann Arbor campus and throughout global learning communities. Funded projects will support pre-college programs, residential U-M courses and hybrid and online learning. This is the second year the center's Academic Innovation Fund has supported opportunities for greater student success and equitable course outcomes through the adoption of educational technology tools.

International student boom at UM-Dearborn

The University of Michigan-Dearborn welcomed its biggest class of international students in 2022-23. As in past years, students from India were by far the largest group by country. They make up 71 percent of the total, indicating the strength and durability of one of Dearborn's longest-running international student pipelines. Also dominant is the College of Engineering and Computer Science, home to 82 percent of UM-Dearborn's international students, a clear demonstration that STEM programs continue to be a big draw.

U-M joining worldwide alliance to advance global role

The University of Michigan accepted an invitation to join the U7+ Alliance of World Universities, an international alliance of university presidents who work together to address pressing global challenges. Launched in 2019, the alliance includes more than 100 presidents and top leaders from universities in more than 20 countries. Areas of focus include climate change and sustainability, economic inequality, ethical applications of artificial intelligence and more. In accepting the invitation from Meric Gertler, president of the University of Toronto and chair of U7+ Presidential Steering Committee, U-M became the fifth U.S. institution to join the alliance, alongside Columbia University, Georgetown University, Northwestern University and University of California, Berkeley.

UM-Flint graduates are state's first doctorally trained occupational therapists

The 30 students who celebrated their graduation from the University of Michigan-Flint's Doctor of Occupational Therapy program in August 2022 made history as the first class to graduate with a doctorate in the field in the state of Michigan. The UM-Flint program, launched in 2019, became the first fully accredited occupational therapy doctoral program in the state in 2022. The program follows a lifespan approach that teaches students to work with patients from pediatrics to adulthood to geriatrics. Labs include a living space with a kitchen, bathroom and bedroom that provides students hands-on experience in helping patients of all ages with an injury or disability to perform daily activities.

MAJOR PROJECTS

More at: **2023.annualreport.umich.edu/major-projects**

| The University of Michigan's iconic Elbel Field is being relocated and transformed into one of the country's best marching band practice facilities. It will be nearly twice the size of the Michigan Marching Band's previous outdoor practice facility and will feature upgraded technology and an array of amenities befitting a world-class outdoor classroom. |

PROJECTS IN PLANNING

Flint College of Innovation & Technology Building

Horace H. Rackham Educational Memorial 100 Farnsworth Street, Detroit Michigan

Hadley Family Recreation & Well-Being Center (Central Campus Recreation Building Replacement)

New Michigan Marching Band Practice Field

Michigan Medicine Childcare Facility

PROJECTS IN PROGRESS

Bonisteel Boulevard Water Main and Road Reconstruction | Work started December 2022 with an estimated completion date of March 2024. Financing is from reserves and utilities reserves.

Center for Academic Innovation Leasehold Improvements | Work started October 2022 with an estimated completion date of September 2023. Financing is from tenant improvement allowance and reserves.

Chemistry Building and Willard H. Dow Laboratory East Campus Switching Station Upgrade | Work started November 2021 with an estimated completion date of September 2023. Financing is from utilities reserves.

Climate and Space Research Building Leinweber Space Innovation Laboratory Renovation | Work started February 2023 with an estimated completion date of March 2024. Financing is from the College of Engineering.

East University Chiller Plant Chiller Replacement | Work started December 2021 with an estimated completion date of September 2023. Financing is from utilities reserves.

Environmental and Water Resources Engineering Building and George Granger Brown Memorial Laboratories Civil and Environmental Engineering Project | Work started September 2022 with an estimated completion date of December 2023. Financing is from the College of Engineering.

Edward and Rosalie Ginsberg Building | Work started May 2023 with an estimated completion date of June 2025. Financing is from a gift.

Hadley Family Recreation & Well-Being Center (Central Campus Recreation Building Replacement) | Work started December 2022 with an estimated completion date of June 2025. Financing is from reserves and Student Life.

Hayward Street Geothermal Facility | Work started January 2023 with an estimated completion date of March 2025. Financing is from reserves.

Leinweber Computer Science and Information Building | Work started May 2022 with an estimated completion date of September 2025. Financing is from state capital appropriation, the Office of the Provost, the College of Engineering and the School of Information.

Medical Science Research Buildings I, II and III Installation of Backup Generators | Work started July 2021 with an estimated completion date of August 2023. Financing is from the Medical School.

Medical Science Unit I B and D Wings Renovation | Work started March 2023 with an estimated completion date of December 2025. Financing is from the Medical School.

Michigan Stadium Scoreboard Replacement | Work started August 2022 with an estimated completion date of December 2023. Financing is from the Athletic Department.

New North Campus Undergraduate Housing | Work started June 2022. As of February 2023 the project is paused. Financing is from Student Life.

New Building for the College Of Pharmacy | Work started February 2023 with an estimated completion date of December 2025. Financing is from reserves and gifts.

President's Residence Infrastructure Renovation | Work started May 2022 with an estimated completion date of September 2023. Financing is from reserves.

Recreational Sports Fields Hubbard Road, North Campus | Work started June 2023 with an estimated completion date of December 2023. Financing is from Student Life.

PROJECTS IN PROGRESS, continued

University of Michigan Health | Financing is from University of Michigan Health.

- **7300 West Joy Road, Dexter, Michigan Specialty Pharmacy Expansion |** Work started June 2022 with an estimated completion date of September 2023.
- **Clinical Expansion Project 300 W. Michigan Avenue, Ypsilanti, Michigan |** Work started January 2023 with an estimated completion date of December 2023. Financing is from tenant improvement allowance and University of Michigan Health.
- **Courtyard Infrastructure Improvements and Restoration |** Work restarted December 2022 with an estimated completion date of March 2024. Financing is from reserves and utilities reserves.
- **D. Dan and Betty Kahn Health Care Pavilion |** Work restarted May 2021 with an estimated completion date of June 2025.
- **W.K. Kellogg Eye Center and Brehm Tower Boiler and Hot Water Feed Interconnection |** Work started May 2023 with an estimated completion date of December 2024. Financing is from utilities reserves and University of Michigan Health.
- **University Hospital and University South Clinical Pathology Laboratories |** Work started January 2020 with an estimated completion date of December 2023.
- **University Hospital Electrical Substation Replacement |** Work started July 2022 with an estimated completion date of September 2024.
- **University Hospital Pneumatic Tube Expansion |** Work started September 2022 with an estimated completion date of June 2024.

PROJECTS COMPLETED

William W. Cook Legal Research Library and Hutchins Hall Exterior Repairs | Completed August 2022. Financed by the general fund.

Dean Road Transportation Facility | Completed December 2022. Financed by Logistics, Transportation & Parking.

Robben W. and Aldyth Fleming Administration Building Demolition | Completed November 2022. Financed by reserves.

Palmer Field Temporary Recreation Facility | Completed January 2023. Financed by reserves.

Harold T. and Vivian B. Shapiro Library Third Floor Renovation | Completed April 2023. Financed by gifts and the Office of the Provost.

A. Alfred Taubman Biomedical Science Research Building Vivarium Expansion | Completed October 2022. Financed by the Medical School.

University of Michigan Health | Financed by University of Michigan Health.

- **Brighton Center for Specialty Care Shell Space Utilization for New Operating Rooms |** Completed June 2023.
- **Brighton Center for Specialty Care Linear Accelerator Expansion |** Completed June 2023.
- **Samuel and Jean Frankel Cardiovascular Center Positron Emission Tomography/Computed Tomography Scanner Project |** Completed March 2023.
- **C.S Mott Children's and Von Voigtlander Women's Hospitals Emergency and Psychiatric Services Renovation |** Completed March 2023.
- **Rogel Cancer Center Exterior Improvements |** Completed July 2022. Financed by University of Michigan Health and the general fund.
- **University Hospital Air Handling Unit Replacement |** Completed May 2023. Financed by insurance funds.

| The University of Michigan is moving forward with a Central Campus housing project that includes the addition of a 2,300-bed residence hall and 900-seat dining facility that are scheduled to open to students in fall of 2025. |

MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

OFFICE OF
BUSINESS & FINANCE
UNIVERSITY OF MICHIGAN

October 19, 2023

The management of the University of Michigan (the "University") is responsible for the preparation, integrity and fair presentation of the basic financial statements. The basic financial statements, presented on pages 46 to 89, have been prepared in conformity with accounting principles generally accepted in the United States of America and, as such, include amounts based on judgments and estimates made by management.

The basic financial statements have been audited by the independent accounting firm PricewaterhouseCoopers LLP, which was given unrestricted access to all financial records and related data, including minutes of all meetings of the Board of Regents. The University believes that all representations made to the independent auditors during their audit were valid and appropriate. PricewaterhouseCoopers' audit opinion is presented on pages 25-27.

The University maintains a system of internal controls over financial reporting designed to provide reasonable assurance to the University's management and Board of Regents regarding the preparation of reliable financial statements. These controls are maintained by the establishment and communication of accounting and financial policies and procedures, by the selection and training of qualified personnel and by an internal audit program designed to identify internal control weaknesses, in order to permit management to take appropriate corrective action on a timely basis. There are, however, inherent limitations in the effectiveness of any system of internal controls, including the possibility of human error and the circumvention of controls.

The Board of Regents, through its Finance, Audit and Investment Committee, is responsible for engaging the independent auditors and meeting regularly with management, internal auditors and the independent auditors to ensure that each is carrying out their responsibilities, and to discuss auditing, internal control and financial reporting matters. Both the internal auditors and independent auditors have full and free access to the Finance, Audit and Investment Committee.

Based on the above, the information contained in the accompanying basic financial statements fairly presents, in all material respects, the financial position, changes in financial position and cash flows of the University.

Geoffrey S. Chatas
Executive Vice President and Chief Financial Officer

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REPORT OF INDEPENDENT AUDITORS

pwc

To the Regents of the University of Michigan

OPINIONS

We have audited the accompanying financial statements of the business-type activities, the discretely presented component unit, and the aggregate remaining fund information of the University of Michigan (the "University") as of and for the year ended June 30, 2023, including the related notes, which collectively comprise the University's basic financial statements as listed in the table of contents.

In our opinion, based on our audit and the report of other auditors, the accompanying financial statements present fairly, in all material respects, the respective financial position of the business-type activities, the discretely presented component unit, and the aggregate remaining fund information of the University as of June 30, 2023, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

We did not audit the financial statements of Sparrow Health System, which represents $1.6 billion and $1.3 billion, respectively, of the assets and revenues of the University's business-type activities as of and for the year ended June 30, 2023. We did not audit the financial statements of PHP Holdings, LLC, the University's discretely presented component unit, which statements reflect total assets of $73.3 million as of June 30, 2023 and a decrease in net position of $20.9 million for the year then ended. We did not audit the fiduciary financial statements of Sparrow Health System Associate Pension Plan and Sparrow Health System Associate Pension Plan A2 (collectively referred to as the "Sparrow Health Pension Trust Funds"), which represent $676 million and $161 million, respectively, of the total assets and decrease in fiduciary net position of the Pension Trust Funds column of the fiduciary statements. Those statements were audited by other auditors whose reports have been furnished to us, and our opinions, insofar as it relates to the amounts included for Sparrow Health System, PHP Holdings, LLC, and the Sparrow Health Pension Trust Funds, are based solely on the report of the other auditors.

BASIS FOR OPINIONS

We conducted our audit in accordance with auditing standards generally accepted in the United States of America ("US GAAS"). Our responsibilities under those standards are further described in the Auditors' 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.

PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, Michigan 48226
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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.

AUDITORS' 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 auditors' 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 US GAAS 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 US GAAS, we:

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

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REQUIRED SUPPLEMENTAL INFORMATION

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 28 through 45 and required supplementary information for the pension plan and postemployment benefits on pages 92 through 97 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 who 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 and other auditors 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 and comparing 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.

PricewaterhouseCoopers L.L.P.

October 19, 2023

PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, Michigan 48226
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MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

INTRODUCTION

The following discussion and analysis provides an overview of the financial position of the University of Michigan (the "University") at June 30, 2023 and its activities for the fiscal year ended June 30, 2023. This discussion has been prepared by management and should be read in conjunction with the consolidated financial statements and the notes thereto, which follow this section.

The University is a comprehensive public institution of higher learning with over 65,000 students and approximately 8,700 faculty members on three campuses in southeast Michigan. The University offers a diverse range of degree programs from baccalaureate to post-doctoral levels through 19 schools and colleges, and contributes to the state and nation through related research and public service programs. The University also has a nationally renowned health system which includes the University of Michigan Health ("UMH"), the University's Medical School, Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives) and UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations, primarily consisting of Sparrow Health System ["Sparrow Health"] and UMH-West).

The University consistently ranks among the nation's top universities by various measures of quality, both in general academic terms and in terms of strength of offerings, in specific academic disciplines and professional subjects. Research is central to the University's mission and a key aspect of its strong reputation among educational institutions. The University is widely recognized for the breadth and excellence of its research enterprise as well as for the exceptional level of cooperation across disciplines, which allows faculty and students to address the full complexity of real-world challenges. The University's health system also has a tradition of excellence in teaching, advancement of medical science and patient care, consistently ranking among the best health care systems in the nation.

FINANCIAL HIGHLIGHTS

The University's financial position remains strong, with total assets and deferred outflows of $34.0 billion and total liabilities and deferred inflows of $13.3 billion at June 30, 2023. Net position, which represents the residual interest in the University's total assets and deferred outflows after total liabilities and deferred inflows are deducted, totaled $20.7 billion at June 30, 2023. Changes in net position represent the University's results of operations and are summarized for the years ended June 30 as follows:

(in millions)	**2023**	**2022**
Operating revenues and educational appropriations	$ 11,377	$ 9,505
Federal economic relief funds	34	152
Private gifts for operating activities	193	219
Operating and net interest expenses	(12,699)	(10,668)
	(1,095)	(792)
Net investment income	1,078	336
Endowment, capital gifts and grants, and other	173	251
Increase (decrease) in net position	$ 156	$ (205)

During 2023, the University adopted Governmental Accounting Standards Board ("GASB") Statement No. 100, *Accounting Changes and Error Corrections* ("GASB 100"), which enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more relevant information for making decisions and assessing accountability. The adoption of GASB 100 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022.

During 2023, the University also adopted GASB Statement No. 96, *Subscription-Based Information Technology Arrangements* ("GASB 96"), which establishes accounting and financial reporting requirements for subscription-based information technology arrangements ("SBITAs"). The statement requires the University to recognize right-to-use assets and related subscription liabilities for SBITAs that were previously recognized as outflows of resources. The adoption of GASB 96 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022.

On April 1, 2023, the University completed an affiliation with Sparrow Health, a community health care provider in Lansing, Michigan, pursuant to which UM Health became the sole corporate member of Sparrow Health. Sparrow Health operates multiple hospitals with a combined 845 licensed beds, as well as outpatient clinics throughout Mid-Michigan. In accordance with GASB 100, this membership substitution was considered a change in reporting entity and included in the consolidated financial statements as if it occurred at the beginning of the reporting period. The University recognized, measured and combined the assets, deferred outflows, liabilities, deferred inflows and net position of Sparrow Health based upon GASB accounting principles applied at July 1, 2022. In connection with this affiliation, the University also received a majority equity interest in PHP Holdings, LLC, which is reported as a discretely presented component unit within the basic financial statements.

The impact of the affiliation with Sparrow Health and the adoption of GASB 96 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022, and is summarized as follows (in millions):

	June 30, 2022 As Previously Reported	Sparrow Health Affiliation	GASB 96 Adoption	July 1, 2022 As Restated
Current assets	$ 6,578	$ 343		$ 6,921
Noncurrent assets	24,809	1,429	$ 40	26,278
Total assets	31,387	1,772	40	33,199
Deferred outflows	1,045	6		1,051
Current liabilities	2,827	266	11	3,104
Noncurrent liabilities	9,514	250	29	9,793
Total liabilities	12,341	516	40	12,897
Deferred inflows	793	2		795
Net position	$ 19,298	$ 1,260	$ -	$ 20,558

For purposes of management's discussion and analysis, the consolidated statement of net position, consolidated statement of revenues, expenses and changes in net position and the consolidated statement of cash flows presented for the year ended June 30, 2022 do not reflect the impact of these items.

The results of operations reflect the University's emphasis on maintaining its national standards in academics, research and health care, within a competitive recruitment environment for faculty, staff and health care professionals; and a period of constrained base state appropriations and rising health care, regulatory and facility costs. The University is addressing these risks through aggressive cost cutting and productivity gains designed to help preserve access to affordable higher education and healthcare for Michigan families. To achieve sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to support enterprise-wide information technology projects and other initiatives.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

The University's long-term investment strategy combined with its endowment spending policy serves to insulate operations from expected volatility in the capital markets and provides for a stable and predictable level of spending distributions from the endowment. The success of the University's long-term investment strategy is evidenced by strong returns over sustained periods of time and the ability to limit losses in the face of challenging markets.

The University invests its financial assets in pools with distinct risk and liquidity characteristics based on its needs, with a majority of its financial assets invested in two such pools. The University's working capital is primarily invested in relatively short duration, liquid assets, through its Daily and Monthly Portfolios, while the endowment is primarily invested, along with the noncurrent portion of insurance and benefits reserves, in an equity oriented long-term strategy through its Long Term Portfolio.

USING THE BASIC FINANCIAL STATEMENTS

The University's financial report includes: the Consolidated Statement of Net Position; the Consolidated Statement of Revenues, Expenses and Changes in Net Position; the Consolidated Statement of Cash Flows; the Discretely Presented Component Unit Statement of Net Position; the Discretely Presented Component Unit Statement of Revenues, Expenses, and Changes in Net Position; the Statement of Fiduciary Net Position; and the Statement of Changes in Fiduciary Net Position. These basic financial statements are prepared in accordance with GASB principles, which establish standards for external financial reporting for public colleges and universities. The University's business-type activities are reported in the consolidated financial statements and the discretely presented component unit financial statements, while its fiduciary activities are reported in the fiduciary financial statements.

CONSOLIDATED STATEMENT OF NET POSITION

The consolidated statement of net position presents the financial position of the University at the end of the fiscal year and includes all assets, deferred outflows, liabilities and deferred inflows of the University. The difference between total assets and deferred outflows as compared to total liabilities and deferred inflows – net position – is one indicator of the current financial condition of the University, while the change in net position is an indication of whether the overall financial condition has improved or worsened during the year. The University's assets, deferred outflows, liabilities, deferred inflows and net position at June 30 are summarized as follows:

(in millions)	2023	2022
Current assets	$ 6,152	$ 6,578
Noncurrent assets:		
Endowment, life income and other investments	19,318	17,838
Capital assets, net	7,089	6,266
Other	377	705
Total Assets	32,936	31,387
Deferred outflows	1,074	1,045
Current liabilities	2,829	2,827
Noncurrent liabilities	9,065	9,514
Total liabilities	11,894	12,341
Deferred inflows	1,402	793
Net position	$ 20,714	$ 19,298

The University continues to maintain and protect its strong financial foundation. This financial health, as reflected in the University's net position, results from the prudent utilization of financial resources including careful cost controls, preservation of endowment funds, conservative utilization of debt and adherence to a long-range capital plan for the maintenance and replacement of the physical plant.

Current assets consist primarily of cash and cash equivalents, operating and capital investments, and accounts receivable and totaled $6.2 billion at June 30, 2023. Cash, cash equivalents and investments for operating activities totaled $3.9 billion at June 30, 2023, which represents approximately four months of total expenses excluding depreciation.

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and the defined benefit pension plans for Sparrow Health and UMH-West. Deferred outflows totaled $1.1 billion at June 30, 2023.

Current liabilities consist primarily of accounts payable, accrued compensation, unearned revenue, commercial paper, the current portion of bonds payable and net long-term bonds payable subject to remarketing, and totaled $2.8 billion at June 30, 2023.

Deferred inflows represent the acquisition of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, the defined benefit pension plans for Sparrow Health and UMH-West, and irrevocable split-interest agreements. Deferred inflows totaled $1.4 billion at June 30, 2023.

ENDOWMENT, LIFE INCOME AND OTHER INVESTMENTS

The composition of the University's endowment, life income and other investments at June 30 is summarized as follows:

(in millions)	2023	2022
Endowment investments	$ 17,876	$ 17,347
Life income investments	174	178
Noncurrent portion of insurance and benefits obligations investments	326	291
Other	942	22
	$ 19,318	$ 17,838

The University's endowment funds consist of both permanent endowments and funds functioning as endowment. Permanent endowments are those funds received from donors with the stipulation that the principal remain intact and be invested in perpetuity to produce income that is to be expended for the purposes specified by the donors. Funds functioning as endowment consist of restricted gifts or unrestricted funds that have been allocated by the University for long-term investment purposes, but are not limited by donor stipulations requiring the University to preserve principal in perpetuity. Programs supported by endowment funds include scholarships, fellowships, professorships, research efforts and other important programs and activities.

The University uses its endowment funds to support operations in a way that strikes a balance between generating a predictable stream of annual support for current needs and preserving the purchasing power of the endowment funds for future periods. A majority of the endowment is maintained in the University Endowment Fund ("UEF"), a unitized pool which represents a collection of over 12,600 separate funds, the majority of which are restricted for specific purposes. The UEF is invested in the University's Long Term Portfolio, a single diversified investment pool.

The endowment spending rule provides for distributions from the UEF to the participants that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of UEF shares. This spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather the uncertainties of challenging economic environments.

To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Capital gains or income generated above the endowment spending rate are reinvested so that in lean times funds will be available for distribution. In addition, participants may also use withdrawals from funds functioning as endowment to support capital expenditures and operations.

Endowment spending rate distributions totaled $470 million and withdrawals from funds functioning as endowment totaled $20 million in 2023. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 3.9 percent of the current year average fair value of the UEF for 2023. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.4 percent.

The University participates in certain split-interest agreements and currently holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions.

CAPITAL AND DEBT ACTIVITIES

One of the critical factors in continuing the quality of the University's academic, research and clinical programs is the development and renewal of capital assets. The University continues to implement its long-range plan to maintain and modernize its existing infrastructure and strategically invest in new construction.

Capital asset additions totaled $817 million in 2023. Capital asset additions primarily represent renovation and new construction of academic, research and clinical facilities, as well as significant investments in equipment, including information technology. Current year capital asset additions were primarily funded with net position and gifts designated for capital purposes of $590 million, as well as debt proceeds of $214 million and state capital appropriations of $13 million.

Construction in progress, which totaled $659 million at June 30, 2023, includes construction of new patient care, academic and research facilities.

The D. Dan and Betty Kahn Health Care Pavilion at UMH is a new 690,000 square foot clinical inpatient tower under construction. The 12-story hospital will house 264 private rooms capable of converting to intensive care, a state-of-the-art neurosciences center, and high-level specialty care services for cardiovascular and thoracic patients, along with advanced imaging. Locating these services together will enable healthcare providers to quickly respond to complex cases and deliver state-of-the-art treatments. The design will also allow for the relocation of 110 beds currently in semi-private rooms at University Hospital to this new facility, which will improve patient safety, quality and experience, while creating space for family members to participate in their loved one's care, healing and recovery. This project is scheduled to be completed in spring 2025.

The Leinweber Computer Science and Information Building under construction will be the new home for the University's School of Information ("UMSI") and provide expansion space for the Computer Science and Engineering ("CSE") Division of Michigan Engineering, bringing these two units together under one roof for the first time. This 163,000 square foot state-of-the-art facility will strengthen the collaboration between the two disciplines to develop breakthrough technologies, conduct innovative research and facilitate an innovative learning environment. It will also provide much-needed space to meet the increasing demand for computer science and information graduates for research, industry and education. This new North Campus building will connect to the existing Bob and Betty Beyster Building, current home of CSE, and bring together UMSI's community, which is currently spread across multiple buildings on central campus including leased space. This project is scheduled to be completed in summer 2025.

Projects completed in 2023 include significant expansion and new construction of academic, research and transportation facilities.

Expansion of the vivarium at the A. Alfred Taubman Biomedical Science Research Building, which was originally constructed in 2005, was completed by finishing 20,000 square feet of remaining shelled space. The vivarium houses specimens for scientific observation and research on a wide range of topics, including the impact of microbiome on human health, underlying causes of serious diseases and various groundbreaking studies in neurobiology, internal medicine and cancer research. This expansion addresses current and forecasted growth, and accommodates the relocation of germ-free vivarium functions from the Life Sciences Institute.

The new Dean Road Transportation Facility is a 70,000 square foot operations and maintenance center on the North Campus that can accommodate articulated buses, heavy equipment and electric buses for future sustainability improvement; while also maintaining current safety guidelines for vehicle maintenance, circulation and appropriate work zones. This new facility will also result in increased operational efficiency since many bus routes begin on North Campus. The University's auto and truck fleet maintenance will remain at the Transportation Services Building on the Stephen M. Ross Athletic Campus.

The University is aware of its financial stewardship responsibility and works diligently to manage its financial resources effectively, including the prudent use of debt to finance capital projects. A strong debt rating is an important indicator of the University's success in this area. In 2022, S&P Global affirmed its highest credit rating (AAA) for bonds backed by a broad revenue pledge based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, strong reputation of the University's health system, excellent balance sheet, exceptional research presence and manageable debt burden. Moody's also affirmed its highest credit rating (Aaa) based on the University's diversified student demand, sustained philanthropic support, expansive research enterprise, high brand value and reputation of the University's health system, and well-established strategic and budgetary framework.

Long-term debt activity for the year ended June 30, 2023 is summarized as follows (in millions):

	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 141		$ 9	$ 132
Bonds	5,440	$ 88	257	5,271
Line of credit	14	38		52
	$ 5,595	$ 126	$ 266	$ 5,455

The University utilizes commercial paper, backed by a general revenue pledge, to provide interim financing for its capital improvement program. Outstanding commercial paper is converted to long-term debt financing as appropriate, within the normal course of business. Certain outstanding bonds are also supported by the University's general revenue pledge.

During 2023, the Sparrow Obligated Group, a group comprised of five Sparrow Health hospitals whose collective revenues are pledged in support of all Sparrow Health debt issuances, issued $77 million of fixed rate, taxable Michigan Finance Authority Hospital Revenue Bonds Series 2022A with a net original issue premium of $11 million. Total bond proceeds of $88 million were utilized to refund $87 million of existing bonds and provide $1 million for bond issuance costs.

During 2023, the Sparrow Obligated Group also established an escrow fund using existing resources of $86 million to legally defease $83 million of Michigan Finance Authority Hospital Revenue Bonds Series 2015, resulting in a gain on defeasance of $5 million which was recognized into interest expense.

The composition of the University's debt at June 30 is summarized as follows:

(in millions)	2023	2022
Variable rate:		
Commercial paper	$ 132	$ 141
Bonds	451	426
Line of credit	52	
Fixed rate bonds	4,820	4,639
	$ 5,455	$ 5,206

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB requirements, such debt is classified as current unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements which could refinance the debt on a long-term basis. In the event that variable rate bonds are put back to the University by the debt holder, management believes that the use of remarketing agents as well as the University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time.

While fixed rate bonds typically have a higher effective rate of interest at the date of issuance as compared to variable rate bonds, they reduce the volatility of required debt service payments and do not require liquidity support such as lines of credit, standby bond purchase agreements or internal liquidity.

Effective interest rates averaged 3.5 percent in 2023, including the federal subsidies for interest on taxable Build America Bonds. Interest expense on long-term debt net of federal subsidies received for interest on taxable Build America Bonds totaled $184 million in 2023.

OBLIGATIONS FOR DEFINED BENEFIT PENSION PLANS

Sparrow Health and UMH-West have defined benefit pension plans that cover a significant number of their employees, and generally provide benefits based on years of service and employee earnings. At June 30, 2023, the obligations for defined benefit pension plans, net totaled $15 million.

OBLIGATIONS FOR POSTEMPLOYMENT BENEFITS

Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled $3.7 billion at June 30, 2023. Since a portion of retiree medical services will be provided by the University's health system, this liability is net of the related margin and fixed costs associated with providing those services which totaled $620 million at June 30, 2023.

By implementing a series of health benefit initiatives over the past several years, the University has favorably impacted its total liability for postemployment benefits by $1.8 billion at June 30, 2023. These initiatives have included cost sharing changes, elimination of Medicare Part B reimbursements for certain retirees and the adjustment of retirement eligibility criteria.

NET POSITION

Net position represents the residual interest in the University's assets and deferred outflows after liabilities and deferred inflows are deducted. The composition of the University's net position at June 30 is summarized as follows:

(in millions)	2023	2022
Net investment in capital assets	$ 3,964	$ 3,522
Restricted:		
Nonexpendable:		
Permanent endowment corpus	2,959	2,822
Expendable:		
Net appreciation of permanent endowments	3,668	3,589
Funds functioning as endowment	3,386	3,218
Restricted for operations and other	800	807
Unrestricted	5,937	5,340
	$ 20,714	$ 19,298

Net investment in capital assets represents the University's capital assets, net of accumulated depreciation, outstanding principal balances of debt, lease and subscription liabilities, unexpended bond proceeds, deferred outflows and deferred inflows associated with the acquisition, construction or improvement of those assets.

Restricted nonexpendable net position represents the corpus portion (historical value) of gifts to the University's permanent endowment funds. Restricted expendable net position is subject to externally imposed stipulations governing their use and includes net appreciation of permanent endowments, funds functioning as endowment and net position restricted for operations, facilities and student loan programs. Restricted expendable net position totaled $7.9 billion at June 30, 2023.

Although unrestricted net position is not subject to externally imposed stipulations, substantially all of the University's unrestricted net position has been designated for various academic programs, research initiatives and capital projects. Unrestricted net position at June 30, 2023 totaled $5.9 billion and included funds functioning as endowment of $7.9 billion offset by unfunded obligations for postemployment benefits of $4.1 billion. Unrestricted net position also includes other net resources which totaled $2.1 billion at June 30, 2023.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

CONSOLIDATED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

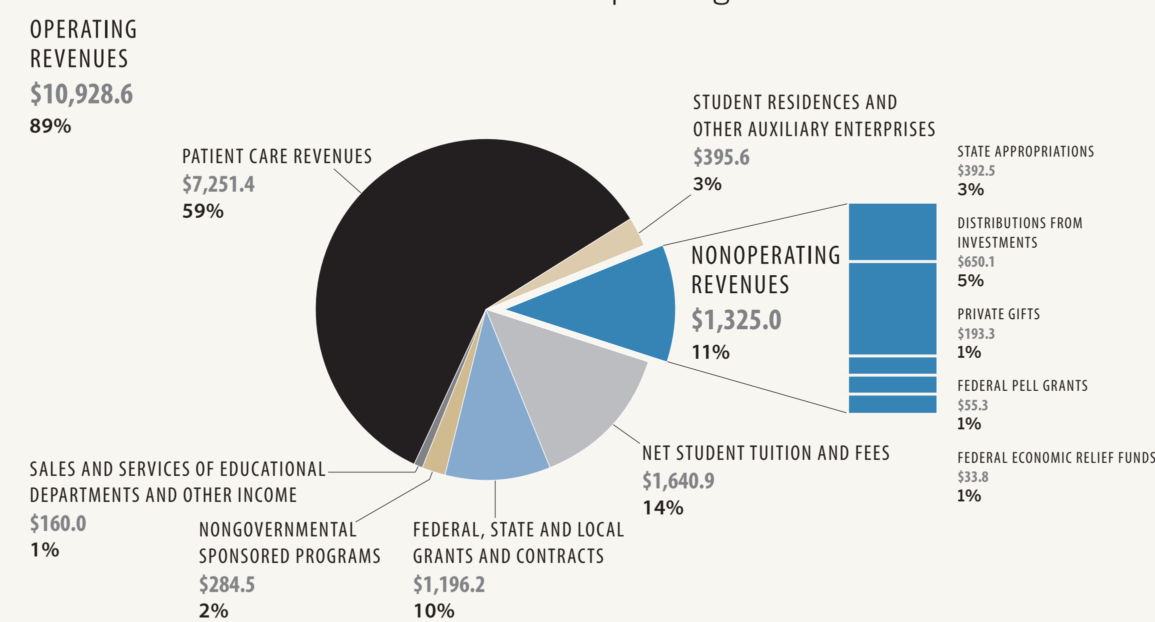
The consolidated statement of revenues, expenses and changes in net position presents the University's results of operations. In accordance with GASB reporting principles, revenues and expenses are classified as either operating or nonoperating. The University's revenues, expenses and changes in net position for the years ended June 30 are summarized as follows:

(in millions)	2023	2022
Operating revenues:		
Net student tuition and fees	$ 1,640.9	$ 1,586.1
Sponsored programs	1,480.7	1,361.3
Patient care revenues, net	7,251.4	5,605.7
Other	555.6	507.1
	10,928.6	9,060.2
Operating expenses	12,503.2	10,548.4
Operating loss	(1,574.6)	(1,488.2)
Nonoperating and other revenues (expenses):		
State educational appropriations	392.5	391.6
Federal Pell grants	55.3	53.6
Federal economic relief funds	33.8	151.9
Private gifts for operating activities	193.3	219.1
Net investment income	1,078.3	336.3
Interest expense	(201.2)	(125.2)
Federal subsidies for interest on Build America Bonds	5.5	5.5
State capital appropriations	12.9	29.8
Endowment and capital gifts and grants	177.1	235.0
Other	(16.7)	(14.0)
Nonoperating and other revenues, net	1,730.8	1,283.6
Increase (decrease) in net position	156.2	(204.6)
Net position, beginning of year	19,298.5	19,503.1
Affiliation with Sparrow Health	1,259.0	
Net position, beginning of year, as restated	20,557.5	19,503.1
Net position, end of year	$ 20,713.7	$ 19,298.5

One of the University's greatest strengths is the diverse streams of revenue that supplement its student tuition and fees, including private support from individuals, foundations and corporations, along with government and other sponsored programs, state appropriations and investment income. The University continues to aggressively seek funding from all possible sources consistent with its mission in order to supplement student tuition and prudently manage the financial resources realized from these efforts to fund its operating activities, which include instruction, patient care and research.

The following is a graphic illustration of revenues by source, both operating and nonoperating, which are used to fund the University's operating activities for the year ended June 30, 2023 (amounts are presented in millions of dollars). Certain recurring sources of the University's revenues are considered nonoperating, as defined by GASB, such as state appropriations, distributions from investments, private gifts and federal Pell grants.

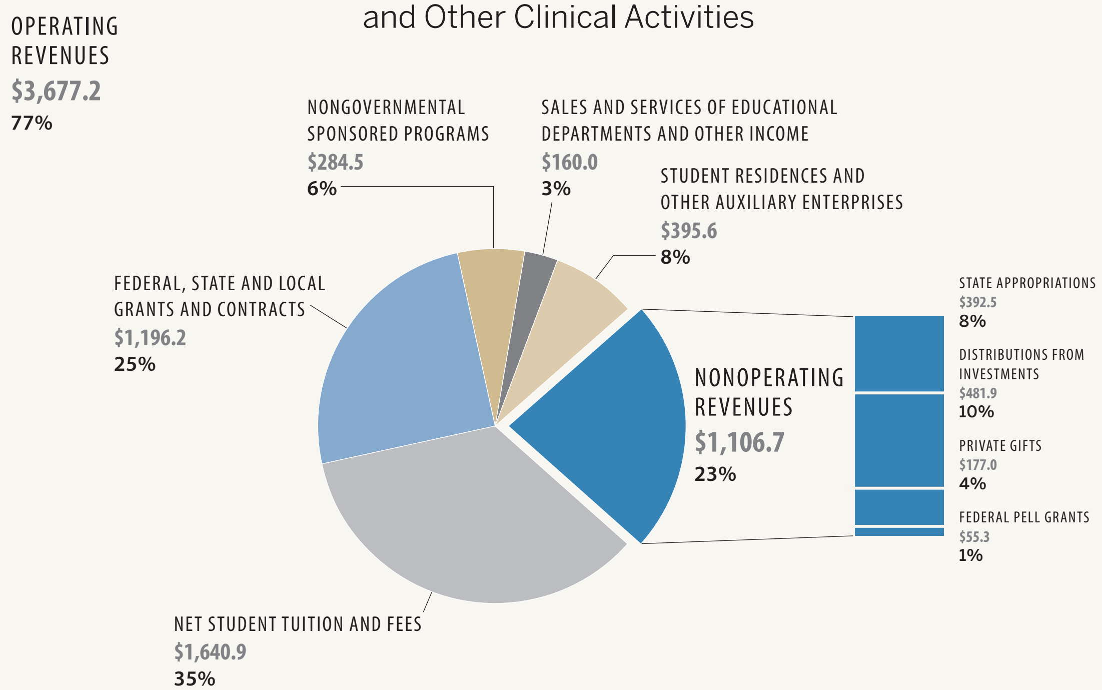
2023 Revenues for Operating Activities



MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

The University measures its performance both for the University as a whole and for the University without its health system and other clinical activities. The exclusion of these activities allows a clearer view of the operations of the schools and colleges, as well as central administration. The following is a graphic illustration of University revenues by source, both operating and nonoperating, which are used to fund operating activities other than the health system and other clinical activities, for the year ended June 30, 2023 (amounts are presented in millions of dollars).

2023 Revenues for Operating Activities Excluding Revenues from the Health System and Other Clinical Activities



Tuition and state appropriations are the primary sources of funding for the University's academic programs. There is a relationship between the growth or reduction in state support and the University's ability to restrain tuition fee increases. Together, net student tuition and fees and state educational appropriations totaled $2.0 billion in 2023.

For the years ended June 30 net student tuition and fees revenue consisted of the following components:

(in millions)	2023	2022
Student tuition and fees	$ 2,186.8	$ 2,085.0
Less scholarships allowances	545.9	498.9
	$ 1,640.9	$ 1,586.1

Tuition rate increases in 2023 were 3.4 percent for resident undergraduate students and 3.9 percent for both nonresident undergraduate students and most graduate students on the Ann Arbor campus, with a 3.6 and 4.9 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2023, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

The University's tuition rate increases have consistently been among the lowest in the state, even in years of significant reductions in state appropriations, which reflects a commitment to affordable higher education for Michigan families. In addition, the University has increased scholarship and fellowship expenses and related allowances to benefit students in financial need. The University's long-term plan includes an ongoing commitment to cost containment and reallocating resources to the highest priorities to provide support for innovative new initiatives to maintain academic excellence and help students keep pace with the evolving needs of society.

While tuition and state appropriations fund a large percentage of University costs, private support is also essential to the University's academic distinction. Private gifts for other than capital and endowment purposes totaled $193 million in 2023.

The University receives revenues for sponsored programs from various government agencies and private sources, which normally provide for both direct and indirect costs to perform these sponsored activities, with a significant portion related to federal research. Revenues for sponsored programs totaled $1.5 billion in 2023.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities and totaled $7.3 billion in 2023.

For the years ended June 30 patient care revenues by source is summarized as follows:

(in millions)	2023	2022
University of Michigan Health	$ 5,305.0	$ 4,926.4
UM Health	1,787.7	522.4
Michigan Health Corporation	23.7	22.6
Other	135.0	134.3
	$ 7,251.4	$ 5,605.7

The largest component of patient care revenues is generated by UMH, a national leader in advanced patient care and comprehensive education of physicians and medical scientists. UMH serves as the principal teaching facility for the University's Medical School and operates three hospitals with 1,043 licensed beds, as well as numerous ambulatory care centers and various other health care programs across the state. Substantially all physician services to UMH patients are provided by the University's Medical School faculty. UMH also provides educational and clinical opportunities to students of the University's Schools of Nursing, Dentistry, Social Work and Public Health, as well as the College of Pharmacy.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

UM Health patient care revenues primarily represent Sparrow Health, a community health care provider in Mid-Michigan, and UMH-West, a community health care provider in West Michigan. Sparrow Health operates multiple hospitals with a combined 845 licensed beds, as well as outpatient clinics throughout the Mid-Michigan region. UMH-West operates a hospital with 208 licensed beds, as well as outpatient clinics and a growing network of specialty services. The University's affiliations with Sparrow Health and UMH-West position UM Health to expand research capabilities, primary care, specialty services and the use of complex medical technologies.

Michigan Health Corporation generates revenue through its various joint venture and managed care initiatives, which provide services to patients including dialysis and other health services.

Other patient care revenues include amounts received from governmental and commercial payers associated with initiatives designed to improve accessibility and quality of care for patients, services provided by physicians working at facilities outside of the University and ambulatory care services provided by University Health Service, the School of Dentistry and the School of Nursing.

Contractual arrangements with governmental payers (Medicare and Medicaid) and private insurers impact patient care revenues. The distribution of net patient care service revenue by primary payer source for the years ended June 30 is summarized as follows:

	2023	2022
Medicare	30%	27%
Medicaid	13%	13%
Blue Cross	35%	38%
Other	22%	22%

Federal economic relief funds represent amounts received from the federal government to provide economic assistance to entities that have been negatively impacted by the COVID-19 pandemic. During 2023, the University recognized revenue of $34 million primarily associated with the Coronavirus State and Local Fiscal Recovery Fund.

Net investment income totaled $1.1 billion in 2023, driven in part by a stabilized interest rate environment and positive returns in both marketable and alternative asset classes.

State capital appropriations help the University improve its academic buildings. Recent capital outlays have supported renovations of the W.K. Kellogg Institute and Dental Building on the Ann Arbor campus, the Engineering Lab Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus.

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. In 2023, private gifts for permanent endowment purposes totaled $118 million, while capital gifts and grants totaled $59 million. In recent years, major gifts have been received in support of the University's wide-ranging capital initiatives which include the health system, Ross School of Business, College of Engineering and Intercollegiate Athletics.

In addition to revenue diversification, the University continues to make cost containment an ongoing priority. This is necessary as the University faces significant financial pressures, particularly in the areas of compensation and benefits, which represent 61 percent of total expenses, as well as in the areas of energy, technology and ongoing maintenance of facilities and infrastructure.

The University's expenses for the years ended June 30 are summarized as follows (amounts in millions):

	2023		2022	
Operating:				
Compensation and benefits	$ 7,808.4	61%	$ 6,573.9	62%
Supplies and services	3,809.0	30	3,137.1	29
Depreciation	685.4	5	606.5	6
Scholarships and fellowships	200.4	2	230.9	2
	12,503.2	98	10,548.4	99
Nonoperating:				
Interest, net	195.7	2	119.7	1
	$ 12,698.9	100%	$ 10,668.1	100%

The University is committed to recruiting and retaining outstanding faculty and staff and the compensation package is one way to successfully compete with peer institutions and nonacademic employers. During 2023, compensation and benefits totaled $7.8 billion, which included compensation of $5.9 billion and employee benefits of $1.9 billion.

The University faces external and industry realities that put significant pressure on its ability to reduce compensation costs while remaining competitive. To help address this risk, the University continues to review components of its existing benefits program to find opportunities for potential savings without compromising the ability to offer competitive benefits to all faculty and staff.

Health care benefits are one of the most significant employee benefits. Compared to most employers, the University is in a unique position to utilize internal experts to advise and guide its health care and drug plans. Over the past several years, the University has implemented initiatives to better control its rate of cost increase, encourage employees to choose the lowest cost health care plan that meets their needs and share a larger portion of health care cost increases with employees. These initiatives reflect the reality of the national landscape while remaining true to the commitment we make to our employees for a robust benefits package. Careful stewardship of our health benefit plans, including the use of wellness initiatives, helps maintain our competitive position while preserving funding for the University's core mission.

Supplies and services expenses totaled $3.8 billion in 2023 and reflect growth in the University's mission related activities.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

In addition to their natural classification, it is also informative to review operating expenses by function. The University's expenses by functional classification for the years ended June 30 are summarized as follows (amounts in millions):

	2023		2022	
Operating:				
Instruction	$ 1,330.8	10%	$ 1,243.3	12%
Research	971.9	8	919.2	9
Public service	303.4	2	271.1	2
Institutional and academic support	1,083.5	9	1,084.5	10
Operations and maintenance of plant	370.0	3	330.4	3
Auxiliary enterprises:				
Patient care	7,368.4	58	5,459.0	51
Other	189.4	1	403.5	4
Depreciation	685.4	5	606.5	6
Scholarships and fellowships	200.4	2	230.9	2
	12,503.2	98	10,548.4	99
Nonoperating:				
Interest, net	195.7	2	119.7	1
	$ 12,698.9	100%	$ 10,668.1	100%

Instruction expenses totaled $1.3 billion in 2023 and reflect the growth in the related revenue sources offset by cost containment efforts.

Research expenses totaled $972 million in 2023 and reflect the strength of the University's overall research enterprise. To measure its total volume of research expenditures, the University considers research expenses included in the above table, as well as research related facilities and administrative expenses, research initiative and start-up expenses, and research equipment purchases. These amounts totaled $1.9 billion in 2023.

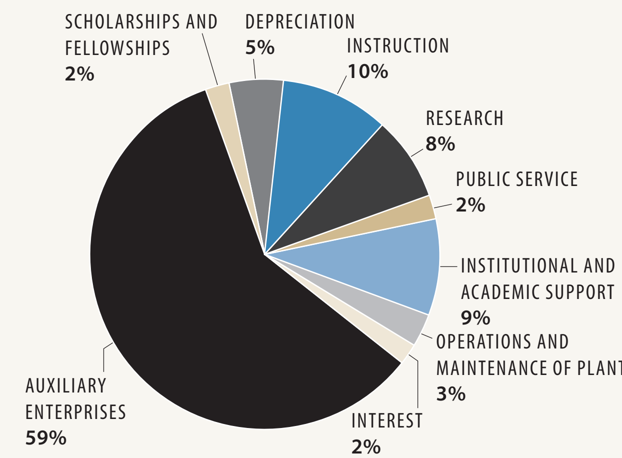
Patient care expenses totaled $7.4 billion in 2023 and reflect the impact of additional patient volume during the period. Increased medical supplies expense resulted from higher patient activity levels, the rising cost of pharmaceuticals and increased expenses related to ongoing global supply chain challenges.

Scholarships and fellowships provided to students totaled $773 million in 2023. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarships and fellowships expense. Scholarships and fellowships for the years ended June 30 are summarized as follows:

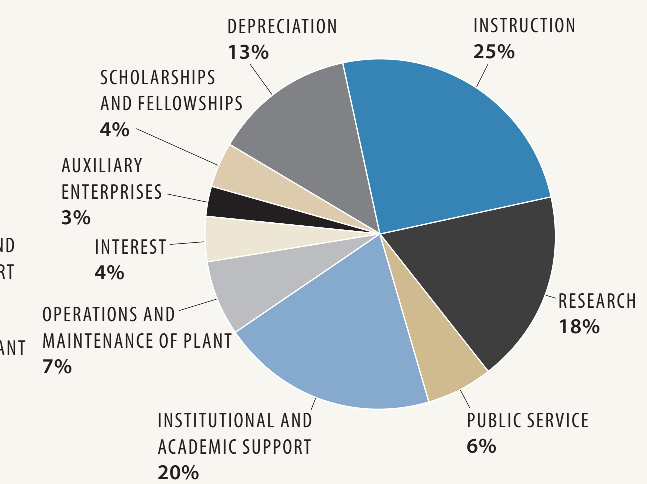
(in millions)	2023	2022
Paid directly to students	$ 200.4	$ 230.9
Applied to tuition and fees	545.9	498.9
Applied to University Housing	26.4	24.8
	$ 772.7	$ 754.6

The following graphic illustrations present total expenses by function, with and without the University's health system and other patient care activities:

2023 Expenses by Function



2023 Expenses by Function Excluding Expenses from the University's Patient Care Activities



MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

CONSOLIDATED STATEMENT OF CASH FLOWS

The consolidated statement of cash flows provides additional information about the University's financial results by reporting the major sources and uses of cash. The University's cash flows for the years ended June 30 are summarized as follows:

(in millions)	2023	2022
Cash received from operations	$ 10,827.7	$ 8,866.2
Cash expended for operations	(12,118.8)	(9,336.1)
Net cash used in operating activities	(1,291.1)	(469.9)
Net cash provided by noncapital financing activities	755.8	2,626.5
Net cash used in capital and related financing activities	(957.1)	(281.0)
Net cash (used in) provided by investing activities	(797.4)	72.5
Net (decrease) increase in cash and cash equivalents	(2,289.8)	1,948.1
Cash and cash equivalents, beginning of year	2,951.9	1,003.8
Affiliation with Sparrow Health	88.0	
Cash and cash equivalents, beginning of year, as restated	3,039.9	1,003.8
Cash and cash equivalents, end of year	$ 750.1	$ 2,951.9

Cash received from operations primarily consists of student tuition, sponsored program grants and contracts, and patient care revenues. Significant sources of cash provided by noncapital financing activities, as defined by GASB, include state appropriations, federal Pell grants and private gifts used to fund operating activities.

ECONOMIC FACTORS THAT MAY AFFECT THE FUTURE

The University maintains the highest credit ratings of S&P Global (AAA) and Moody's (Aaa). Achieving and maintaining the highest credit ratings provides the University with significant flexibility in securing capital funds on the most competitive terms. This flexibility, along with ongoing efforts toward revenue diversification and cost containment, will enable the University to provide the necessary resources to support a consistent level of excellence in service to students, patients, the research community, the state and the nation.

A crucial element to the University's future continues to be a strong relationship with the state of Michigan. Historically, there has been a connection between the growth or reduction of state support and the University's ability to control tuition increases. Over the past several years, the University has successfully addressed the realities of the state's challenging economy and, pursuant to a long-range plan, continues to work relentlessly to cut and mitigate operational costs in order to remain affordable and preserve access, while protecting the academic enterprise.

The University's budget for 2024 anticipates a 5.1 percent increase in state educational appropriations, a 2.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 7.8 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates, as well as most graduate and professional rates, will increase 4.9 percent. Resident undergraduate tuition rates for the Dearborn and Flint campuses will increase 4.4 percent and 4.9 percent, respectively.

The University continues to execute its long-range plan to maintain, modernize and expand its complement of older facilities while adding key new facilities for instruction, research, patient care, athletics and residential life. This strategy addresses the University's growth and the continuing effects of technology on teaching, research and clinical activities. Authorized costs to complete construction and other projects totaled $1,875 million at June 30, 2023. Funding for these projects is anticipated to include $1,845 million from internal sources, gifts, grants and proceeds from borrowings and $30 million from the State Building Authority.

The University's health system continues its strategy to expand access to patients, locally and on a statewide basis. In addition to strategic capital and technological investments, the University's health system is also focusing on clinical affiliation arrangements and population management programs designed to expand community access and improve patient, family and provider experiences across the continuum of care. The affiliation arrangements are also expected to enhance clinical research, physician recruitment and support services.

While the University's health system is well positioned to maintain its strong financial condition in the near term, ongoing constraints on revenue are expected due to fiscal pressures from employers and federal and state governments. Lawmakers continue to discuss Medicare and Medicaid changes which may target graduate medical education-related payments and could result in a significant impact on teaching hospitals. In addition, private insurance and managed care contracts historically provide for annual increases in reimbursement rates that met or exceeded the rate of inflation; however, there can be no assurance that such trends will continue. Management believes that much of the payment pressure can be offset by growth in patient volume and continued efforts to contain certain costs.

The University will continue to employ its long-term investment strategy to maximize total returns, at an appropriate level of risk, while utilizing a spending rate policy to preserve endowment capital and insulate the University's operations from temporary market volatility.

As a labor-intensive organization, the University faces competitive pressures related to attracting and retaining faculty and staff. Moreover, consistent with the national landscape, the University also faces rising costs of health benefits for its employees and retirees. The University has successfully taken and will continue to take proactive steps to respond to these challenges while protecting the quality of the overall benefits package.

A portion of the University's labor force is unionized, with negotiated labor agreements defining terms and conditions of employment. Changes in relations with unions and represented employees, including the negotiation of new agreements, could have a material effect on the University.

While it is not possible to predict the ultimate results, management believes that the University's financial position will remain strong.

FINANCIAL STATEMENTS
CONSOLIDATED STATEMENT OF NET POSITION

(in thousands)	June 30, 2023
Assets	
Current Assets:	
Cash and cash equivalents	$ 750,138
Investments for operating activities	3,126,841
Investments for capital activities	510,541
Investments for student loan activities	68,387
Accounts receivable, net	1,239,770
Current portion of notes and pledges receivable, net	117,669
Current portion of other assets	333,506
Cash collateral held by agent	4,844
Total Current Assets	6,151,696
Noncurrent Assets:	
Endowment, life income and other investments	19,318,390
Notes and pledges receivable, net	259,798
Other assets	116,766
Capital assets, net	7,089,073
Total Noncurrent Assets	26,784,027
Total Assets	**32,935,723**
Deferred Outflows	**1,073,647**

Liabilities	
Current Liabilities:	
Accounts payable	626,498
Accrued compensation and other	726,360
Unearned revenue	441,655
Current portion of insurance and benefits reserves	253,398
Current portion of obligations for postemployment benefits	105,261
Commercial paper and current portion of bonds payable	298,184
Long-term bonds payable subject to remarketing, net	372,335
Collateral held for securities lending	4,844
Total Current Liabilities	2,828,535
Noncurrent Liabilities:	
Accrued compensation	15,324
Insurance and benefits reserves	212,378
Obligations for defined benefit pension plans, net	15,189
Obligations for postemployment benefits	3,611,114
Obligations under life income agreements	65,520
Government loan advances	36,448
Bonds payable	4,784,568
Other liabilities	324,381
Total Noncurrent Liabilities	9,064,922
Total Liabilities	**11,893,457**
Deferred Inflows	**1,402,152**
Net Position	
Net investment in capital assets	3,964,182
Restricted:	
Nonexpendable	2,959,142
Expendable	7,853,068
Unrestricted	5,937,369
Total Net Position	**$ 20,713,761**

The accompanying notes are an integral part of the consolidated financial statements.

FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

(in thousands)	Year Ended June 30, 2023
Operating Revenues	
Student tuition and fees	$ 2,186,769
Less scholarship allowances	545,906
Net student tuition and fees	1,640,863
Federal grants and contracts	1,186,061
State and local grants and contracts	10,154
Nongovernmental sponsored programs	284,488
Sales and services of educational departments	158,707
Auxiliary enterprises:	
Patient care revenues (net of provision for bad debts of $211,403)	7,251,435
Student residence fees (net of scholarship allowances of $26,378)	130,896
Other revenues	264,685
Student loan interest income and fees	1,367
Total Operating Revenues	**10,928,656**
Operating Expenses	
Compensation and benefits	7,808,426
Supplies and services	3,809,009
Depreciation	685,362
Scholarships and fellowships	200,439
Total Operating Expenses	**12,503,236**
Operating Loss	(1,574,580)
Nonoperating Revenues (Expenses)	
State educational appropriations	392,473
Federal Pell grants	55,299
Federal economic relief funds	33,837
Private gifts for other than capital and endowment purposes	193,284
Net investment income	1,078,343
Interest expense	(201,204)
Federal subsidies for interest on Build America Bonds	5,493
Total Nonoperating Revenues, Net	**1,557,525**
Loss Before Other Revenues (Expenses)	(17,055)
Other Revenues (Expenses)	
State capital appropriations	12,911
Capital gifts and grants	59,418
Private gifts for permanent endowment purposes	117,716
Other	(16,765)
Total Other Revenues, Net	**173,280**
Increase in Net Position	156,225
Net Position, Beginning of Year	19,298,461
Affiliation with Sparrow Health	1,259,075
Net Position, Beginning of Year, as Restated	20,557,536
Net Position, End of Year	**$ 20,713,761**

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(in thousands)	Year Ended June 30, 2023
Cash Flows from Operating Activities	
Student tuition and fees	$ 1,640,753
Federal, state and local grants and contracts	1,167,819
Nongovernmental sponsored programs	262,386
Sales and services of educational departments and other	418,478
Patient care revenues	7,196,113
Student residence fees	129,769
Payments to employees	(5,991,302)
Payments for benefits	(1,700,366)
Payments to suppliers	(4,221,202)
Payments for scholarships and fellowships	(200,439)
Student loans issued	(5,451)
Student loans collected	10,965
Student loan interest and fees collected	1,367
Net Cash Used in Operating Activities	**(1,291,110)**
Cash Flows from Noncapital Financing Activities	
State educational appropriations	389,670
State supplemental appropriations	35,000
Federal Pell grants	55,299
Federal economic relief funds	28,678
Private gifts and other receipts	300,347
Proceeds from issuance of debt	38,000
Interest payments on debt	(92,712)
Student direct lending receipts	306,502
Student direct lending disbursements	(303,478)
Amounts received for annuity and life income funds	4,503
Amounts paid to annuitants and life beneficiaries and related expenses	(5,961)
Net Cash Provided by Noncapital Financing Activities	**755,848**
Cash Flows from Capital and Related Financing Activities	
State capital appropriations	46,435
Private gifts and other receipts	46,629
Principal and interest payments on lease and subscription liabilities	(83,507)
Proceeds from issuance of capital debt	88,394
Principal payments on capital debt	(240,615)
Interest payments on capital debt	(124,737)
Federal subsidies for Build America Bonds interest	2,746
Payments for bond issuance costs	(817)
Purchases of capital assets	(692,602)
Proceeds from sales of capital assets	1,020
Net Cash Used in Capital and Related Financing Activities	**(957,054)**

FINANCIAL STATEMENTS
CONSOLIDATED STATEMENT OF CASH FLOWS, CONTINUED

(in thousands)	Year Ended June 30, 2023
Cash Flows from Investing Activities	
Interest and dividends on investments, net	239,061
Proceeds from sales and maturities of investments	8,972,888
Purchases of investments	(10,113,114)
Decrease in unexpended capital debt proceeds	305,452
Net increase in cash equivalents from noncurrent investments	(176,071)
Net increase in fiduciary custodial funds and other	(25,669)
Net Cash Used in Investing Activities	**(797,453)**
Net Decrease in Cash and Cash Equivalents	(2,289,769)
Cash and Cash Equivalents, Beginning of Year	2,951,905
Affiliation with Sparrow Health	88,002
Cash and Cash Equivalents, Beginning of Year, as Restated	3,039,907
Cash and Cash Equivalents, End of Year	**$ 750,138**

Reconciliation of Operating Loss to Net Cash Used in Operating Activities:	
Operating loss	(1,574,580)
Adjustments to reconcile operating loss to net cash used in operating activities:	
Depreciation expense	685,362
Changes in assets and liabilities:	
Accounts receivable, net	(51,004)
Notes and pledges receivable, net	507
Other assets	(36,057)
Accounts payable	27,289
Accrued compensation and other	(73,172)
Unearned revenue	(63,476)
Insurance and benefits reserves	(398,826)
Obligations for defined benefit pension plans, net	198,740
Obligations for postemployment benefits	(581,284)
Changes in deferred outflows	(26,313)
Changes in deferred inflows	601,704
Net Cash Used in Operating Activities	**$ (1,291,110)**

The accompanying notes are an integral part of the consolidated financial statements.

DISCRETELY PRESENTED COMPONENT UNIT STATEMENT OF NET POSITION

(in thousands)	December 31, 2022 PHP Holdings, LLC
Assets	
Current Assets:	
Cash and cash equivalents	$ 41,492
Accounts receivable, net	15,494
Current portion of other assets	1,546
Total Current Assets	58,532
Noncurrent Assets:	
Investments	5,814
Other assets	306
Capital assets, net	8,692
Total Noncurrent Assets	14,812
Total Assets	**73,344**
Liabilities	
Current Liabilities:	
Accounts payable	5,428
Unearned premiums	3,063
Prefunding on self-insured accounts	4,911
Current portion of other liabilities	9,240
Insurance and benefits reserves	29,520
Total Current Liabilities	52,162
Noncurrent Liabilities:	
Other liabilities	371
Total Liabilities	**52,533**
Net Position	
Net investment in capital assets	8,150
Unrestricted	12,661
Total Net Position	**$ 20,811**

The accompanying notes are an integral part of the consolidated financial statements.

FINANCIAL STATEMENTS
DISCRETELY PRESENTED COMPONENT UNIT STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	Year Ended December 31, 2022
(in thousands)	PHP Holdings, LLC
Operating Revenues	
Gross direct written premiums	$ 260,642
Ceded written premiums	(2,117)
Total Operating Revenues	**258,525**
Operating Expenses	
Losses and loss adjustment expenses, net of reinsurance	235,166
Compensation and benefits	17,296
Supplies, services and other	24,270
Depreciation	2,409
Total Operating Expenses	**279,141**
Operating Loss	(20,616)
Nonoperating Expenses	
Net investment loss	257
Interest expense	64
Total Nonoperating Expenses	**321**
Decrease in Net Position	(20,937)
Net Position, Beginning of Year	41,748
Net Position, End of Year	**$ 20,811**

The accompanying notes are an integral part of the consolidated financial statements.

STATEMENT OF FIDUCIARY NET POSITION

	June 30, 2023	
(in thousands)	Custodial Funds	Pension Trust Funds
Assets		
Receivables		$ 236
Investments	$ 274,366	742,303
Total Assets	**274,366**	**742,539**
Liabilities		
Due to individuals and organizations	37,142	980
Total Liabilities	**37,142**	**980**
Fiduciary Net Position		
Restricted for:		
Pensions		741,559
Organizations	237,224	
Total Fiduciary Net Position	**$ 237,224**	**$ 741,559**

The accompanying notes are an integral part of the consolidated financial statements.

FINANCIAL STATEMENTS
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

	Year Ended June 30, 2023	
(in thousands)	Custodial Funds	Pension Trust Funds
Additions		
Contributions:		
Organizations	$ 3,853	
Employer		$ 898
Total contributions	**3,853**	**898**
Net investment loss	(8,358)	(128,930)
Total Additions	**(4,505)**	**(128,032)**
Deductions		
Benefits paid to participants		47,830
Administrative expenses		9,159
Withdrawals	1,363	
Total Deductions	**1,363**	**56,989**
Decrease in Fiduciary Net Position	(5,868)	(185,021)
Fiduciary Net Position, Beginning of Year	243,092	90,488
Affiliation with Sparrow Health		836,092
Fiduciary Net Position, Beginning of Year, as Restated	243,092	926,580
Fiduciary Net Position, End of Year	**$ 237,224**	**$ 741,559**

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
JUNE 30, 2023

NOTE 1—ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Basis of Presentation: The University of Michigan (the "University") is a state-supported institution with an enrollment of over 65,000 students on its three campuses. The consolidated financial statements include the individual schools, colleges and departments, the University of Michigan Health ("UMH"), Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives), UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations, primarily consisting of Sparrow Health System ["Sparrow Health"] and UMH-West) and Veritas Insurance Corporation (a wholly-owned captive insurance company). The University also presents financial statements for its discretely presented component unit, PHP Holdings, LLC, a health plan providing high quality health care coverage to members across Michigan. While the University is a political subdivision of the state of Michigan, it is not a component unit of the State in accordance with Governmental Accounting Standards Board ("GASB") Statement No. 14, *The Financial Reporting Entity*. The University is classified as a state instrumentality under Internal Revenue Code Section 115 and a charitable organization under Internal Revenue Code Section 501(c)(3), and is therefore exempt from federal income taxes. Certain activities of the University may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514.

Within its consolidated financial statements and its discretely presented component unit financial statements, the University reports as a special purpose government entity engaged primarily in business type activities, as defined by GASB, on the accrual basis. Business type activities are those that are financed in whole or in part by fees charged to external parties for goods or services. The University's fiduciary activities represent those resources for which the University acts as a trustee or custodian, including the Sparrow Health and UMH-West pension plan trusts which are considered fiduciary component units.

During 2023, the University adopted GASB Statement No. 100, *Accounting Changes and Error Corrections* ("GASB 100"), which enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more relevant information for making decisions and assessing accountability. The adoption of GASB 100 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022.

During 2023, the University also adopted GASB Statement No. 96, *Subscription-Based Information Technology Arrangements* ("GASB 96"), which establishes accounting and financial reporting requirements for subscription-based information technology arrangements ("SBITAs"). The statement requires the University to recognize right-to-use assets and related subscription liabilities for SBITAs that were previously recognized as outflows of resources. The adoption of GASB 96 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022.

On April 1, 2023, the University completed an affiliation with Sparrow Health, a community health care provider in Lansing, Michigan, pursuant to which UM Health became the sole corporate member of Sparrow Health. Sparrow Health operates multiple hospitals with a combined 845 licensed beds, as well as outpatient clinics throughout Mid-Michigan. In accordance with GASB 100, this membership substitution was considered a change in reporting entity and included in the consolidated financial statements as if it occurred at the beginning of the reporting period. The University recognized, measured and combined the assets, deferred outflows, liabilities, deferred inflows and net position of Sparrow Health based upon GASB accounting principles applied at July 1, 2022. In connection with this affiliation, the University also received a majority equity interest in PHP Holdings, LLC, which is reported as a discretely presented component unit within the basic financial statements.

NOTE 1—ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

The impact of the affiliation with Sparrow Health and the adoption of GASB 96 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022, and is summarized as follows (in thousands):

	June 30, 2022 As Previously Reported	Sparrow Health Affiliation	GASB 96 Adoption	July 1, 2022 As Restated
Current assets	$ 6,577,801	$ 343,009		$ 6,920,810
Noncurrent assets	24,809,349	1,427,959	$ 40,488	26,277,796
Total assets	31,387,150	1,770,968	40,488	33,198,606
Deferred outflows	1,045,098	6,050		1,051,148
Current liabilities	2,827,166	266,687	10,796	3,104,649
Noncurrent liabilities	9,514,064	248,881	29,692	9,792,637
Total liabilities	12,341,230	515,568	40,488	12,897,286
Deferred inflows	792,557	2,375		794,932
Net position	$ 19,298,461	$ 1,259,075	$ -	$ 20,557,536

Net position is categorized as:

- Net investment in capital assets: Capital assets, net of accumulated depreciation, outstanding principal balances of debt, lease and subscription liabilities, unexpended bond proceeds, deferred outflows and deferred inflows associated with the acquisition, construction or improvement of those assets.
- Restricted:

  Nonexpendable – Net position subject to externally imposed stipulations that it be maintained permanently. Such net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.

  Expendable – Net position 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 the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently.
- Unrestricted: Net position not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. Substantially all unrestricted net position is designated for various academic programs, research initiatives and capital projects.

Summary of Significant Accounting Policies: The University considers all highly liquid investments purchased with a maturity of three months or less to be cash equivalents. Cash equivalents representing assets of the University's endowment, life income and other investments are included in noncurrent investments as these funds are not used for operating purposes.

Investments are reported in four categories in the statement of net position. Investments reported as endowment, life income and other investments are those funds invested in portfolios that are considered by management to be of a long duration. Investments for student loan and capital activities are those funds that are intended to be used for these specific activities. All other investments are reported as investments for operating activities.

GASB defines fair value and establishes a framework for measuring fair value that includes a three tiered hierarchy of valuation inputs, placing a priority on those which are observable in the market. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the University's own assumptions about how market participants would value an asset or liability based on the best information available. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. The three levels of inputs, of which the first two are considered observable and the last unobservable, are as follows:

- Level 1 – Quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date
- Level 2 – Other significant observable inputs, either direct or indirect, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable; or market corroborated inputs
- Level 3 – Unobservable inputs

GASB allows for the use of net asset value ("NAV") as a practical expedient to determine the fair value of nonmarketable investments if the NAV is calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Investments that use NAV in determining fair value are disclosed separately from the valuation hierarchy as presented in Note 2.

Investments in marketable securities are carried at fair value, as established by the major securities markets. Purchases and sales of investments are accounted for on the trade date basis. Investment income is recorded on the accrual basis. Realized and unrealized gains and losses are reported in investment income.

Investments in nonmarketable limited partnerships are carried at fair value, which is generally established using the NAV provided by the management of the investment partnerships at June 30, 2023. The University may also adjust the fair value of these investments based on market conditions, specific redemption terms and restrictions, risk considerations and other factors. As these investments are not readily marketable, the estimated value is subject to uncertainty, and therefore, may differ from the value that would have been used had a ready market for the investments existed.

Investments denominated in foreign currencies are translated into U.S. dollar equivalents using year end spot foreign currency exchange rates. Purchases and sales of investments denominated in foreign currencies and related income are translated at spot exchange rates on the transaction dates.

Derivative instruments such as financial futures, forward foreign exchange contracts and interest rate swaps held in investment portfolios, are recorded on the contract date and are carried at fair value using listed price quotations or amounts that approximate fair value. To facilitate trading in financial futures, the University is required to post cash or securities to satisfy margin requirements of the exchange where such futures contracts are listed. The University monitors the required amount of cash and securities on deposit for financial futures transactions and withdraws or deposits cash or securities as necessary.

Accounts receivable are recorded net of an allowance for uncollectible accounts receivable. The allowance is based on management's judgment of potential uncollectible amounts, which includes such factors as historical experience and type of receivable.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

The University receives pledges and bequests of financial support from corporations, foundations and individuals. Revenue is recognized when a pledge representing an unconditional promise to give is received and all eligibility requirements, including time requirements, have been met. In the absence of such a promise, revenue is recognized when the gift is received. Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, and are not recorded as assets until the related gift is received.

Unconditional promises to give that are expected to be collected in future years are recorded at the present value of the estimated future cash flows. The discounts on these amounts are computed using risk-free interest rates applicable to the years in which the promises are made, commensurate with expected future payments. An allowance for uncollectible pledges receivable is provided based on management's judgment of potential uncollectible amounts and includes such factors as prior collection history, type of gift and nature of fundraising.

Capital assets are recorded at cost or, if donated, at acquisition value at the date of donation. Depreciation of capital assets is provided on a straight-line method over the estimated useful lives of the respective assets, which generally range from three to fifty years. Right-to-use assets are recorded at the present value of payments expected to be made during the related term using discount rates which are based upon the University's incremental borrowing rates, and are depreciated over the shorter of the related term or the expected useful life of the underlying asset. The University does not capitalize works of art or historical treasures that are held for exhibition, education, research or public service, as these collections are neither disposed of for financial gain nor encumbered in any way.

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and the defined benefit pension plans for Sparrow Health and UMH-West.

Unearned revenue consists primarily of cash received from grant and contract sponsors which has not yet been earned under the terms of the agreement. Unearned revenue also includes amounts received in advance of an event, such as student tuition and advance ticket sales related to future fiscal years.

The University holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions. All life income fund assets, including those held in trust, are recorded at fair value. The present value of estimated future payments due to life income beneficiaries is recorded as a liability.

Deferred inflows represent the acquisition of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, the defined benefit pension plans for Sparrow Health and UMH-West, and irrevocable split-interest agreements.

For donor restricted endowments, the Uniform Prudent Management of Institutional Funds Act, as adopted in Michigan, permits the Board of Regents to appropriate amounts for endowment spending rule distributions as is considered prudent. The University's policy is to retain net realized and unrealized appreciation with the endowment after spending rule distributions. Net appreciation of permanent endowment funds, which totaled $3,668,054,000 at June 30, 2023, is recorded in restricted expendable net position. The University's endowment spending rule is further discussed in Note 2.

The University's policy for defining operating activities as reported on the statement of revenues, expenses and changes in net position are those that generally result from exchange transactions such as payments received for providing services and payments made for services or goods received. Nearly all of the University's expenses result from exchange transactions.

Student tuition and residence fees are presented net of scholarships and fellowships applied to student accounts, while stipends and other payments made directly to students are presented as scholarship and fellowship expenses.

Patient care revenues are reported net of contractual allowances and bad debt expenses. Contractual allowances are estimated based on agreements with third-party payers that provide payments for patient care services at amounts different from established rates. These allowances are subject to the laws and regulations governing the federal and state programs and post-payment audits, and adjusted in future periods as final settlements are determined. Patient care services are primarily provided through the University's health system, which includes University Health Service, which offers health care services to students, faculty and staff, and Dental Faculty Associates, which offers dental care services performed by faculty dentists.

Patient care services are provided to patients who meet certain criteria under the University's charity care policies without charge or at amounts less than its established rates. Accordingly, charity care is not reported as revenue in the accompanying statement of revenues, expenses and changes in net position. Charges forgone for charity care services totaled $120,139,000 in 2023.

Other auxiliary enterprise revenues primarily represent revenues generated by intercollegiate athletics, parking, student unions and student publications.

Certain significant revenue streams relied upon for operations result from nonexchange transactions and are recorded as nonoperating revenues including state appropriations, federal Pell grants, gifts and investment income.

Federal economic relief funds represent amounts received from the federal government to provide economic assistance to entities that have been negatively impacted by the COVID-19 pandemic. During 2023, the University recognized revenue primarily from the Coronavirus State and Local Fiscal Recovery Fund.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. The most significant areas that require management estimates relate to self-insurance and benefits obligations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2—CASH AND INVESTMENTS

Summary: The University maintains centralized management for substantially all of its cash and investments.

Working capital of individual University units is primarily invested in the University Investment Pool ("UIP"). Together with the University's current portion of insurance and benefits reserves, the UIP is invested in the Daily and Monthly Portfolios, which are principally invested in investment-grade money market securities, U.S. government and other fixed income securities, and absolute return strategies.

The University collectively invests substantially all of the assets of its endowment funds along with the noncurrent portion of its insurance and benefits reserves, charitable remainder trusts and gift annuity program in the Long Term Portfolio. The longer investment horizon of the Long Term Portfolio allows for an equity-oriented strategy to achieve higher expected returns over time, and permits the use of less liquid alternative investments, providing for equity diversification beyond the stock markets. The Long Term Portfolio includes investments in domestic and non-U.S. stocks and bonds, commingled funds and limited partnerships consisting of venture capital, absolute return strategies, private equity, real estate and natural resources.

The University also separately invests certain endowments and charitable remainder trusts, unexpended bond proceeds and other funds outside of the Daily, Monthly and Long Term Portfolios.

The University holds invested funds as a result of agency relationships with various groups that are considered fiduciary in nature. Funds received are invested in either the UIP, or the University Endowment Fund ("UEF"), a commingled pool invested entirely in the Long Term Portfolio. The University establishes the fair value of the UIP at $1.00 per share and any participant in the pool may purchase or redeem shares at that price. The University determines the fair value of UEF shares at the end of each calendar quarter based on the fair value of the pool. Participants may purchase or redeem UEF shares at fair value at each valuation date, subject to minimum holding and notice requirements.

Given the commingled nature of the underlying pools in which the UIP and UEF invest, unitized shares are not specifically associated with individual investments. Therefore, the University's investment activities as presented within the consolidated statement of cash flows as well as this note are presented gross, with a corresponding adjustment to remove the fiduciary custodial activities that are presented within the statement of fiduciary net position and statement of changes in fiduciary net position.

Authorizations: The University's investment policies are governed and authorized by University Bylaws and the Board of Regents. The approved asset allocation policy for the Long Term Portfolio sets general targets for both equities and fixed income securities. Since diversification is a fundamental risk management strategy, the Long Term Portfolio is broadly diversified within these general categories.

The endowment spending rule provides for distributions from the UEF to the participants that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of fund shares. To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Distributions are also made from the UIP based on the 90-day U.S. Treasury Bill rate. The University's costs to administer and grow the UEF and UIP are funded by investment returns.

Cash and Cash Equivalents: Cash and cash equivalents, which totaled $750,138,000 at June 30, 2023, represent cash and short-term money market investments in mutual funds, overnight collective funds managed by the University's custodian or short-term highly liquid investments registered as securities and held by the University or its agents in the University's name. Of its cash and cash equivalents, the University had actual cash balances in its bank accounts in excess of federal deposit insurance limits in the amount of $187,671,000 at June 30, 2023. The University does not require its deposits to be collateralized or insured.

Restricted cash, which totaled $30,414,000 at June 30, 2023, represents cash and cash equivalents held pursuant to a legally enforceable requirement that the amounts only be used for a specific purpose.

Cash and cash equivalents include certain securities that are subject to the leveling requirements defined by GASB. Level 1 securities, which primarily consist of money market funds and U.S. government securities, totaled $279,704,000 at June 30, 2023. Level 2 securities, which primarily consist of commercial paper and repurchase agreements, totaled $44,610,000 at June 30, 2023.

Investments: At June 30, 2023, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows (in thousands):

Cash equivalents, noncurrent	$ 559,028
Equity securities	684,059
Fixed income securities	4,577,802
Commingled funds	3,118,279
Nonmarketable alternative investments	14,355,447
Other investments	3,910
	23,298,525
Less fiduciary custodial funds	274,366
	$ 23,024,159

NOTE 2—CASH AND INVESTMENTS, CONTINUED

At June 30, 2023, the fair value of the University's investments based on the inputs used to value them is summarized as follows (in thousands):

	Level 1	Level 2	Level 3	NAV	Total Fair Value
Cash equivalents, noncurrent	$ 559,028	-	-	-	$ 559,028
Equity securities:					
Domestic	229,942		$ 70,914		300,856
Foreign	381,836		1,367		383,203
	611,778	-	72,281	-	684,059
Fixed income securities:					
U.S. Treasury	1,994,614				1,994,614
U.S. government agency		$ 261,965			261,965
Corporate and other		2,313,838	7,385		2,321,223
	1,994,614	2,575,803	7,385	-	4,577,802
Commingled funds:					
Absolute return				$ 1,838,022	1,838,022
Domestic equities	162,677			384,505	547,182
Global equities	161,741			285,277	447,018
U.S. fixed income	262,862				262,862
Other	23,195				23,195
	610,475	-	-	2,507,804	3,118,279
Nonmarketable alternative investments:					
Venture capital			206,593	4,645,788	4,852,381
Absolute return				2,419,183	2,419,183
Private equity			347,600	2,438,648	2,786,248
Real estate				1,875,120	1,875,120
Natural resources			191,122	2,231,393	2,422,515
	-	-	745,315	13,610,132	14,355,447
Other investments	(4,853)	-	8,763	-	3,910
	$ 3,771,042	$ 2,575,803	$ 833,744	$ 16,117,936	23,298,525
Less fiduciary custodial funds					274,366
					$ 23,024,159

Investments categorized as Level 1 are valued using prices quoted in active markets for those securities. Equity securities categorized as Level 3 represent investments in start-up or venture companies. Fixed income securities categorized as Level 2 represent investments valued using a matrix pricing technique, which values debt securities based on their relationship to a benchmark and the relative spread to that benchmark. Fixed income securities categorized as Level 3 represent debt investments with select venture funded University faculty start-ups. Nonmarketable alternative investments categorized as Level 3 primarily represent direct investments which are valued using models that rely on inputs which are unobservable in the market.

The University's investment strategy incorporates certain financial instruments that involve, to varying degrees, elements of market risk and credit risk in excess of amounts recorded in the financial statements. Market risk is the potential for changes in the value of financial instruments due to market changes, including interest and foreign exchange rate movements and fluctuations embodied in forwards, futures and commodity or security prices. Market risk is directly impacted by the volatility and liquidity of the markets in which the underlying assets are traded. Credit risk is the possibility that a loss may occur due to the failure of a counterparty to perform according to the terms of the contract. The University's risk of loss in the event of a counterparty default is typically limited to the amounts recognized in the statement of net position and is not represented by the contract or notional amounts of the instruments.

Fixed income securities have inherent financial risks, including credit risk and interest rate risk. Credit risk for fixed income securities is the risk that the issuer will not fulfill its obligations. Nationally recognized statistical rating organizations ("NSROs"), such as S&P Global and Moody's, assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors. Fixed income securities considered investment grade are those rated at least BBB by S&P Global and Baa by Moody's. To manage credit risk, the University specifies minimum average and minimum absolute quality NSRO ratings for securities held pursuant to its management agreements.

The University minimizes concentration of credit risk, the risk of a large loss attributed to the magnitude of the investment in a single issuer of fixed income securities, by diversifying its fixed income issues and issuers and holding U.S. Treasury securities which are considered to have minimal credit risk. The University also manages this risk at the account level by limiting each fixed income manager's holding of any non-U.S. government issuer to 5 percent of the value of the investment account.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income securities. Effective duration, a commonly used measure of interest rate risk, incorporates a security's yield, coupon, final maturity, call features and other embedded options into one number expressed in years that indicates how price-sensitive a security or portfolio of securities is to changes in interest rates. The effective duration of a security or portfolio indicates the approximate percentage change in fair value expected for a one percent change in interest rates. The longer the duration, the more sensitive the security or portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income securities was 2.8 years at June 30, 2023. The University manages the effective duration of its fixed income securities at the account level, where fixed income managers generally may not deviate from the duration of their respective benchmarks by more than 25 percent. The Monthly Portfolio held positions in bond futures at June 30, 2023, which are used to adjust the duration of cash equivalents and the fixed income portion of the portfolios.

NOTE 2—CASH AND INVESTMENTS, CONTINUED

The composition of fixed income securities at June 30, 2023, along with credit quality and effective duration measures, is summarized as follows (in thousands):

	U.S. Government	Investment Grade	Non-Investment Grade	Not Rated	Total	Duration (in years)
U.S. Treasury	$ 1,991,104				$ 1,991,104	3.1
U.S. Treasury inflation protected	3,510				3,510	4.6
U.S. government agency	261,965				261,965	3.3
Mortgage backed		$ 63,752	$ 36	$ 7,625	71,413	2.5
Asset backed		250,317		1,149	251,466	2.3
Corporate and other		1,919,856	7,912	70,576	1,998,344	2.5
	$ 2,256,579	$ 2,233,925	$ 7,948	$ 79,350	$ 4,577,802	2.8

Of the University's fixed income securities, 98 percent were rated investment grade or better at June 30, 2023, and 62 percent of these securities consisted of either U.S. Treasury and government agencies or non-U.S. government securities rated AAA/Aaa.

Commingled (pooled) funds include Securities and Exchange Commission regulated mutual funds and externally managed funds, limited partnerships and corporate structures which are generally unrated and unregulated. Certain commingled funds may use derivatives, short positions and leverage as part of their investment strategy. These investments are structured to limit the University's risk exposure to the amount of invested capital.

Nonmarketable alternative investments consist of limited partnerships and similar vehicles involving an advance commitment of capital called by the general partner as needed and distributions of capital and return on invested capital as underlying strategies are concluded during the life of the partnership. There is not an active secondary market for these alternative investments, which are generally unrated and unregulated, and the liquidity of these investments is dependent on actions taken by the general partner. The University's limited partnerships are diversified in terms of manager selection, industry and geographic focus. At June 30, 2023, no individual partnership investment represented 5 percent or more of total investments.

Absolute return strategies in the commingled funds and nonmarketable alternative investments classifications include long/short stock programs, merger arbitrage, intra-capital structure arbitrage and distressed debt investments. The goal of absolute return strategies is to provide, in aggregate, a return that is consistently positive and uncorrelated with the overall market.

The University's investments in commingled funds and nonmarketable alternative investments are contractual agreements that may limit the ability to initiate redemptions due to notice periods, lock-ups and gates. Additional information about current redemption terms and outstanding commitments at June 30, 2023 is summarized as follows (amounts in thousands):

	Fair Value	Remaining Life	Outstanding Commitments	Redemption Terms	Redemption Notice
Commingled funds	$ 3,118,279	N/A	$ -	Daily, monthly, quarterly and annually, with varying notice periods	Lock-up provisions range from none to five years
Nonmarketable alternative investments	$ 14,355,447	1-12 years	$ 4,520,344	Ineligible for redemption	N/A

Commingled funds have liquidity (redemption) provisions, which enable the University to make full or partial withdrawals with notice, subject to restrictions on the timing and amount. Of the University's commingled funds at June 30, 2023, 75 percent are redeemable within one year, with 62 percent redeemable within 90 days under normal market conditions. The remaining amounts are redeemable beyond one year, with redemption of certain funds dependent on disposition of the underlying assets. The University's committed but unpaid obligation to nonmarketable alternative investments is further discussed in Note 14.

The University participates in non-U.S. developed and emerging markets through commingled funds invested in non-U.S./global equities and absolute return strategies. Although all of these funds are reported in U.S. dollars, price changes of the underlying securities in local markets as well as changes to the value of local currencies relative to the U.S. dollar are embedded in investment returns. In addition, a portion of the University's equity securities and nonmarketable alternative investments are denominated in foreign currencies, which must be settled in local (non-U.S.) currencies.

Foreign exchange risk is the risk that investments denominated in foreign currencies may lose value due to adverse fluctuations in the value of the U.S. dollar relative to foreign currencies. Forward foreign currency contracts are typically used to manage the risks related to fluctuations in currency exchange rates between the time of purchase or sale and the actual settlement of foreign securities. Various investment managers acting for the University use forward foreign exchange contracts in risk-based transactions to carry out their portfolio strategies and are subject to agreements that provide minimum diversification and maximum exposure limits by country and currency.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2—CASH AND INVESTMENTS, CONTINUED

The value of the University's non-U.S. dollar holdings, net of the value of the outstanding forward foreign exchange contracts, totaled $1,618,887,000 or 7 percent of total investments at June 30, 2023, and is summarized as follows (in thousands):

Euro	$ 972,724
British pound sterling	253,746
Swedish krona	189,547
Japanese yen	121,052
Canadian dollar	39,534
Danish krone	20,237
Other	22,047
	$ 1,618,887

The Long Term Portfolio and the Monthly Portfolio participate in a short-term, fully collateralized, securities lending program administered by the University's master custodian. Together, the Portfolios had $13,505,000 in securities loans outstanding at June 30, 2023. At loan inception, an approved borrower must deliver collateral of cash, securities or letters of credit to the University's lending agent equal to 102 percent of fair value for domestic securities and 105 percent for foreign securities. Collateral positions are monitored daily to ensure that borrowed securities are never less than 100 percent collateralized. At June 30, 2023, collateral of $13,822,000 (102 percent of securities on loan) includes invested cash of $4,844,000 and U.S. government securities of $8,978,000.

Cash collateral held by the University's lending agent, along with the offsetting liability to return the collateral at loan termination, are recorded in the statement of net position. Neither the University nor its securities lending agent has the ability to pledge or sell securities received as collateral unless a borrower defaults. Securities loans may be terminated upon notice by either the University or the borrower.

NOTE 3—ACCOUNTS RECEIVABLE

The composition of accounts receivable at June 30, 2023 is summarized as follows (in thousands):

Patient care	$ 1,020,903
Sponsored programs	224,731
State appropriations, educational and capital	72,047
Student accounts	40,872
Other	76,090
	1,434,643
Less allowance for uncollectible accounts receivable:	
Patient care	179,904
All other	14,969
	$ 1,239,770

NOTE 4—NOTES AND PLEDGES RECEIVABLE

The composition of notes and pledges receivable at June 30, 2023 is summarized as follows (in thousands):

Notes:	
Federal student loan programs	$ 40,998
University student loan funds	14,349
Other	5,015
	60,362
Less allowance for uncollectible notes	3,100
Total notes receivable, net	57,262
Gift pledges:	
Capital	119,212
Operations	214,916
	334,128
Less:	
Allowance for uncollectible pledges	8,489
Unamortized discount to present value	5,434
Total pledges receivable, net	320,205
Total notes and pledges receivable, net	377,467
Less current portion	117,669
	$ 259,798

The principal repayment and interest rate terms of federal and University loans vary considerably. The allowance for uncollectible notes only applies to University funded loans and the University portion of federal student loans, as the University is not obligated to fund the federal portion of uncollected student loans. Federal loan programs are funded principally with federal advances to the University under the Perkins and various health professions loan programs.

Payments on pledges receivable at June 30, 2023 are expected to be received in the following years ended June 30 (in thousands):

2024	$ 107,709
2025	69,712
2026	66,578
2027	36,600
2028	19,178
2029 and after	34,351
	$ 334,128

Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling $181,210,000 at June 30, 2023, are not recognized as assets in the accompanying consolidated financial statements. In addition, bequest intentions and other conditional promises are not recognized as assets until the specified conditions are met due to uncertainties with regard to their realizability and valuation.

NOTE 5—CAPITAL ASSETS

Capital assets activity for the year ended June 30, 2023 is summarized as follows (in thousands):

	Beginning Balance	Additions	Retirements	Ending Balance
Land	$ 175,424	$ 4,764	$ 154	$ 180,034
Land improvements	183,451	4,556	502	187,505
Infrastructure	264,874	378		265,252
Buildings	11,285,552	186,253	45,465	11,426,340
Construction in progress	330,057	328,687		658,744
Equipment	2,845,444	192,585	93,779	2,944,250
Library materials	754,882	27,490		782,372
Right-to-use assets	458,542	72,168	25,132	505,578
	16,298,226	816,881	165,032	16,950,075
Less accumulated depreciation	9,334,494	685,362	158,854	9,861,002
	$ 6,963,732	$ 131,519	$ 6,178	$ 7,089,073

The increase in construction in progress of $328,687,000 in 2023 represents the amount of capital expenditures for new projects of $632,158,000 net of assets placed in service of $303,471,000.

NOTE 6—LONG-TERM DEBT

Long-term debt at June 30, 2023 is summarized as follows (in thousands):

Commercial paper:	
Tax-exempt, variable rate (3.45%)*	$ 132,415
General revenue bonds:	
Series 2022A, taxable, 3.504% to 4.454% through 2122	1,700,000
Series 2022B, taxable, 3.504% through 2052	300,000
Series 2022C, taxable, 2.734% to 3.599% through 2047	413,205
Series 2022D, 5.00% through 2033	55,325
unamortized premium	12,331
Series 2020A, 4.00% to 5.00% through 2050	138,430
unamortized premium	30,593
Series 2020B, taxable, 1.004% to 2.562% through 2050	850,025
Series 2019A, 5.00% through 2036	114,035
unamortized premium	15,134
Series 2019B, taxable, 2.783% to 3.416% through 2029	10,615
Series 2019C, 4.00% through 2049	61,725
unamortized premium	4,936
Series 2018A, 4.00% to 5.00% through 2048	124,390
unamortized premium	13,931
Series 2017A, 4.86% to 5.00% through 2035	229,535
unamortized premium	29,620
Series 2015, 4.00% to 5.00% through 2035	112,690
unamortized premium	13,589
Series 2014A, 4.25% to 5.00% through 2030	18,925
unamortized premium	1,219
Series 2014B, taxable, 3.416% to 3.516% through 2024	1,000
Series 2013A, 2.50% to 4.00% through 2029	37,830
unamortized premium	629
Series 2012A, variable rate (4.15%)* through 2036	50,000
Series 2012B, variable rate (3.85%)* through 2042	65,000
Series 2012D-1, variable rate (3.65%)* through 2025 with partial swap to fixed through 2025	30,535
Series 2012D-2, variable rate (3.90%)* through 2030 with partial swap to fixed through 2026	39,075
Series 2010A, taxable Build America Bonds, 4.926% to 5.593% through 2040	162,345
Series 2010D, taxable Build America Bonds, 3.906% to 5.333% through 2041	145,000
Series 2009B, variable rate (3.30%)* through 2039	118,710
Series 2008A, variable rate (3.60%)* through 2038	57,085
Series 2008B, variable rate (3.93%)* through 2028 with partial swap to fixed through 2026	39,250

NOTE 6—LONG-TERM DEBT, CONTINUED

Michigan Finance Authority hospital revenue bonds:	
Series 2022A, 4.00% to 5.00% through 2043	76,700
unamortized premium	10,853
Series 2022B, 4.00% to 5.00% through 2037	11,030
unamortized premium	2,161
Series 2017A, 2.87% through 2043	51,230
Series 2017B**, variable rate (5.00%)* through 2043	51,230
Series 2015, 4.00% to 5.00% through 2045	65,565
unamortized premium	5,191
Line of credit, variable rate (5.71%)* through 2024	52,000
	5,455,087
Less:	
Commercial paper and current portion of bonds payable	298,184
Long-term bonds payable subject to remarketing, net	372,335
	$ 4,784,568

* Denotes variable rate at June 30, 2023
** Denotes variable rate bonds not subject to remarketing

Certain variable rate bonds have remarketing features which allow bondholders to put debt back to the University. Accordingly, these variable rate bonds are classified as current unless supported by liquidity agreements, such as lines of credit or standby bond purchase agreements, which can refinance the debt on a long-term basis. The classification of the University's variable rate bonds payable subject to remarketing at June 30, 2023 is summarized as follows (in thousands):

Variable rate bonds payable subject to remarketing	$ 399,655
Less current principal maturities	27,320
Long-term bonds payable subject to remarketing, net	$ 372,335

The University maintains six lines of credit which totaled $2,040,000,000 and were entirely unused at June 30, 2023. In addition, the Sparrow Obligated Group, a group comprised of five Sparrow Health hospitals whose collective revenues are pledged in support of all Sparrow Health debt issuances, maintains an outstanding line of credit totaling $52,000,000, all of which was outstanding at June 30, 2023.

In connection with certain issues of variable rate debt, the University has entered into floating-to-fixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. Information about the University's interest rate swaps is discussed in Note 7.

Long-term debt activity for the year ended June 30, 2023 is summarized as follows (in thousands):

	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 141,135		$ 8,720	$ 132,415
Bonds:				
General revenues	5,064,887		68,175	4,996,712
Michigan Finance Authority hospital revenue bonds	375,089	$ 88,394	189,523	273,960
Line of credit	14,000	38,000		52,000
	$ 5,595,111	$ 126,394	$ 266,418	$ 5,455,087

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 3.5 percent in 2023, including federal subsidies for interest on taxable Build America Bonds.

The University utilizes commercial paper to provide interim financing for its capital improvement program. The Board of Regents has authorized the issuance of up to $300,000,000 in commercial paper backed by a general revenue pledge. Outstanding commercial paper debt is converted to long-term debt financing, as appropriate, within the normal course of business.

During 2023, the Sparrow Obligated Group issued $76,700,000 of fixed rate, taxable Michigan Finance Authority Hospital Revenue Bonds Series 2022A with a net original issue premium of $11,694,000. Total bond proceeds of $88,394,000 were utilized to refund $87,577,000 of existing bonds and provide $817,000 for bond issuance costs.

Bond proceeds of $87,577,000 were used to refund Michigan Finance Authority Hospital Revenue Bonds Series 2012 which had fixed annual interest rates ranging from 4.0 to 5.0 percent and a final maturity date of November 15, 2042. As a result of the refunding, the Sparrow Obligated Group decreased its aggregate debt service payments over the next 20 years by $24,473,000, resulting in a present value economic gain of $17,411,000.

NOTE 6—LONG-TERM DEBT, CONTINUED

During 2023, the Sparrow Obligated Group also established an escrow fund using existing resources of $86,041,000 to legally defease $82,500,000 of Michigan Finance Authority Hospital Revenue Bonds Series 2015, resulting in a gain on defeasance of $4,644,000 which was recognized into interest expense.

Deferred outflows and deferred inflows associated with the University's refunding activity totaled $31,556,000 and $47,948,000, respectively, at June 30, 2023. The outstanding balance of these deferred outflows and deferred inflows will be amortized into interest expense over the remaining life of the refunded bonds.

Debt obligations are generally callable by the University and mature at various dates through fiscal 2122. Principal maturities, including interest on debt obligations, based on scheduled bond maturities for the next five years and in subsequent five-year periods are as follows (in thousands):

	Principal	Interest*	Total
2024	$ 284,550	$ 201,126	$ 485,676
2025	203,865	194,735	398,600
2026	111,300	189,262	300,562
2027	154,605	184,115	338,720
2028	121,420	177,889	299,309
2029-2033	602,130	807,936	1,410,066
2034-2038	614,735	701,576	1,316,311
2039-2043	749,715	563,576	1,313,291
2044-2048	158,685	472,451	631,136
2049-2053	1,113,895	432,746	1,546,641
2054-2118		3,474,120	3,474,120
2119-2122	1,200,000	267,240	1,467,240
Total payments	5,314,900	$ 7,666,772	$ 12,981,672
Plus unamortized premiums	140,187		
	$ 5,455,087		

* Interest on variable rate debt is estimated based on rates in effect at June 30, 2023; amounts do not reflect federal subsidies to be received for Build America Bonds interest.

The University maintains certain unsecured lines of credit and standby bond purchase agreements that, in accordance with GASB requirements, do not qualify to support the noncurrent classification of variable rate bonds payable subject to remarketing. If all of the variable rate bonds subject to remarketing were put back to the University on July 1, 2023, and these existing unsecured lines of credit and standby bond purchase agreements were not extended upon their current expiration dates, the total principal payments due in 2024 would decrease to $257,230,000, total principal payments due in 2025 would increase to $449,750,000, total principal payments due in 2026 would increase to $224,460,000, total principal payments due in 2027 would decrease to $140,635,000 and total principal payments due in 2028 would decrease to $104,880,000. Accordingly, principal payments due in subsequent years would be reduced to $524,110,000 in 2029 through 2033, $446,450,000 in 2034 through 2038 and $694,805,000 in 2039 through 2043. Principal payments due in 2044 through 2122 would not change. There would not be a material impact on annual interest payments as a result of these changes.

Condensed financial information for the Sparrow Obligated Group at and for the year ended June 30, 2023 is as follows (in thousands):

Condensed Statement of Net Position	
Assets:	
Current assets	$ 469,267
Noncurrent assets	1,168,195
Total assets	1,637,462
Deferred outflows	143,931
Liabilities:	
Current liabilities	417,516
Noncurrent liabilities	323,278
Total liabilities	740,794
Deferred inflows	6,885
Net position:	
Net investment in capital assets	312,868
Unrestricted	720,846
Total net position	$ 1,033,714
Condensed Statement of Revenues, Expenses and Changes in Net Position	
Operating revenues	$ 1,235,030
Operating expenses other than depreciation expense	(1,307,214)
Depreciation expense	(57,612)
Operating loss	(129,796)
Nonoperating expenses, net	(2,266)
Other revenues, net	46,991
Decrease in net position	(85,071)
Net position, beginning of year	1,118,785
Net position, end of year	$ 1,033,714
Condensed Statement of Cash Flows	
Net cash used in operating activities	$ (207,992)
Net cash used in noncapital financing activities	(3,321)
Net cash used in capital and related financing activities	(61,470)
Net cash provided by investing activities	261,395
Net decrease in cash and cash equivalents	(11,388)
Cash and cash equivalents, beginning of year	72,163
Cash and cash equivalents, end of year	$ 60,775

NOTE 7—DERIVATIVE INSTRUMENTS

Derivatives held by the University are recorded at fair value in the statement of net position. For hedging derivative instruments that are effective in significantly reducing an identified financial risk, the corresponding change in fair value is deferred and included in the statement of net position. For all other derivative instruments, changes in fair value are reported as investment income or loss.

Derivative instruments held by the University at June 30, 2023 are summarized as follows (in thousands):

	Notional Amount	Fair Value
Investment derivative instruments:		
Investment portfolios:		
Futures	$ 148,952	$ (2,033)
Foreign currency forwards:		
Japanese yen	96,540	3,735
Pound sterling	69,739	(1,394)
Hungarian forint	45,135	868
Mexican peso	35,918	567
Chinese yuan	21,651	532
Turkish lira	1,516	(483)
All other currencies	780,474	1,913
	1,050,973	5,738
	$ 1,199,925	$ 3,705
Floating-to-fixed interest rate swaps on debt	$ 30,475	$ (353)
Effective cash flow hedges:		
Floating-to-fixed interest rate swaps on debt	$ 37,365	$ (32)

The University utilizes bond futures in its investment portfolios to adjust the duration of cash equivalents and fixed income securities, while foreign currency forward contracts are utilized to settle securities and transactions denominated in foreign currencies and manage foreign exchange risk. Other derivative instruments in the University's investment portfolios consist primarily of interest rate swaps, credit default swaps and total return swaps used to carry out investment and portfolio strategies.

In connection with certain issues of variable rate debt, the University has entered into floating-to-fixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value of these swaps generally represent the estimated amount that the University would pay to terminate the swap agreements at the statement of net position date, taking into account current interest rates and creditworthiness of the underlying counterparty. The valuation inputs used to determine the fair value of these instruments are considered Level 2, as they rely on observable inputs other than quoted market prices. The notional amount represents the underlying reference of the instrument and does not represent the amount of the University's settlement obligations.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the year ended June 30, 2023 is summarized as follows (in thousands):

Investment Derivative Instruments:	
Investment portfolios:	
Futures	$ (4,171)
Foreign currency forwards	15,406
Other	802
	$ 12,037
Floating-to-fixed interest rate swap on debt	$ 1,337
Effective cash flow hedges:	
Floating-to-fixed interest rate swaps on debt	$ 1,312

NOTE 7—DERIVATIVE INSTRUMENTS, CONTINUED

Using rates in effect at June 30, 2023, the projected cash flows for the floating-to-fixed interest rate swaps deemed effective cash flow hedges, along with the debt service requirements of the associated variable rate debt, are summarized as follows (in thousands):

	Variable Rate Bonds		Swap	Total
	Principal	Interest	Payments, Net	Payments
2024	$ 12,410	$ 2,883	$ (92)	$ 15,201
2025	12,940	2,382	(53)	15,269
2026	12,045	1,903	(15)	13,933
2027	13,970	1,391		15,361
2028	16,540	792		17,332
2029-2030	10,420	254		10,674
	$ 78,325	$ 9,605	$ (160)	$ 87,770

By using derivative financial instruments to hedge exposures to changes in interest rates, the University is exposed to termination risk and basis risk. There is termination risk with floating-to-fixed interest rate swaps as the University or swap counterparty may terminate a swap if the other party fails to perform under the terms of the contract or its credit rating falls below investment grade. Termination risk is the risk that the associated variable rate debt no longer carries a synthetic fixed rate and if at the time of termination a swap has a negative fair value, the University is liable to the counterparty for payment equal to the swap's fair value. The University is also exposed to basis risk as a portion of the variable payments paid to the University by the counterparties are based on a percentage of the Secured Overnight Financing Rate ("SOFR"). Basis risk is the risk that changes in the relationship between the floating Securities Industry and Financial Markets Association Municipal Index and SOFR may impact the synthetic fixed rate of the variable rate debt. At June 30, 2023, the University is not exposed to credit risk as the swaps have negative fair values.

The University is subject to collateral requirements with its counterparties on certain derivative instrument positions. To meet trading margin requirements for bond futures, the University had cash and U.S. government securities with a fair value of $4,096,000 at June 30, 2023 on deposit with its futures broker as collateral.

NOTE 8—SELF-INSURANCE

The University is self-insured for medical malpractice, workers' compensation, directors' and officers' liability, property damage, auto liability and general liability through Veritas Insurance Corporation. The University is also self-insured for various employee benefits through internally maintained funds.

Claims and expenses are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Those losses include an estimate of claims that have been incurred but not reported and the future costs of handling claims. These liabilities are generally based on actuarial valuations and are reported at present value, discounted at a rate of 5 percent.

Changes in the total reported liability for insurance and benefits reserves for the year ended June 30, 2023 are summarized as follows (in thousands):

Balance, beginning of year	$ 864,602
Claims incurred and changes in estimates	1,128,310
Claim payments	(1,527,136)
Balance, end of year	465,776
Less current portion	253,398
	$ 212,378

On September 16, 2022, a settlement agreement between the University and claimants who alleged abuse by the late University physician Robert Anderson was approved by all parties and finalized. On October 12, 2022, the University transferred $490,750,000 into accounts designated per the terms of the agreement to facilitate settlement with the claimants.

NOTE 9—PENSION PLANS

Sparrow Health: Sparrow Health has two noncontributory, single-employer defined benefit pension plans, both of which are closed to new participants. Plan A1 includes employees who continue to accrue benefits and Plan A2 includes employees who are not accruing additional benefits. The plans generally provide benefits based upon years of service and employee earnings. The Sparrow Health Board of Directors has the authority to establish and amend benefit provisions of the plans.

The annual pension expense and net pension liability is actuarially calculated using the entry age normal level percent of pay method. Sparrow Health has elected to measure its net pension liability six months prior to the fiscal year end reporting date and amounts measured at December 31, 2022 were determined based on an actuarial valuation at January 1, 2022. There are no significant changes known which would impact the net pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the December 31, 2022 measurement date, the number of plan participants consisted of the following:

	Plan A1	Plan A2
Active participants	1,205	870
Vested terminated participants	209	1,376
Retirees, beneficiaries and disabled participants	1,168	1,614
	2,582	3,860

Changes in the reported net pension liability for the year ended June 30, 2023 are summarized as follows (in thousands):

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 665,557	$ 826,432	$ (160,875)
Service cost	4,429		4,429
Interest cost	44,648		44,648
Changes in assumptions	14,896		14,896
Differences between expected and actual plan experience	2,143		2,143
Benefit payments	(40,456)	(40,456)	-
Contributions from the employer		10,674	(10,674)
Administrative expenses		(8,743)	8,743
Net investment income:			
Expected investment earnings		55,935	(55,935)
Differences between expected and actual investment earnings		(168,265)	168,265
Balance, end of year	$ 691,217	$ 675,577	$ 15,640

The plan fiduciary net position as a percentage of the total pension liability was 98 percent at June 30, 2023.

Significant actuarial assumptions used at the December 31, 2022 measurement date are as follows:

	Plan A1	Plan A2
Discount rate	7.25%	6.02%
Increase in compensation rate (including inflation)	4.00%	N/A
Investment rate of return	7.25%	6.02%
Mortality table	Pri-2012, Scale MSS-2022	Pri-2012, Scale MSS-2022

Discount rates are based on the expected rate of return on pension plan investments. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made based on the minimum contribution projection under provisions of ERISA and the Pension Protection Act of 2006, for future years. Based on the stated assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the future benefit payments of the current plan members for all projection years. As a result, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments was determined using the expected future rates of return for the target asset allocation of the portfolio. The target allocation and best estimate rates of return by asset class are summarized as follows:

	Plan A1		Plan A2	
	Portfolio Allocation	Long-Term Expected Return	Portfolio Allocation	Long-Term Expected Return
U.S. Large Cap	22.0%	8.6%	10.0%	8.0%
U.S. Small/Mid Cap	8.0%	9.0%	3.0%	8.0%
International Developed	20.0%	9.3%	8.0%	9.3%
Corporate 10+ Year	20.0%	6.7%	45.5%	6.6%
STRIPs			19.5%	5.3%
High Yield	5.0%	7.8%	2.0%	7.8%
Emerging Markets Debt	5.0%	8.8%	2.0%	8.8%
Private Real Estate	8.0%	7.3%	10.0%	7.3%
Private Equity	7.0%	11.7%		
Structured Credit	5.0%	10.5%		

A one-percentage point change in the discount rate would impact the reported net pension liability at June 30, 2023 as follows (in thousands):

	1% Decrease	1% Increase
Net pension liability	$ 73,092	$ (62,364)

NOTE 9—PENSION PLANS, CONTINUED

The components of pension expense for the year ended June 30, 2023 are summarized as follows (in thousands):

Service cost	$ 4,429
Interest cost	44,648
Expected investment earnings	(55,935)
Administrative expenses	8,743
Amortization of deferred outflows and deferred inflows	41,938
	$ 43,823

Deferred outflows and deferred inflows related to the reported net pension liability at June 30, 2023 are summarized as follows (in thousands):

	Deferred Outflows	Deferred Inflows
Changes in assumptions	$ 7,006	
Difference between expected and actual plan experience	1,969	$ 221
Difference between expected and actual investment earnings	134,613	
	$ 143,588	$ 221

Deferred outflows and deferred inflows related to changes in assumptions and differences between expected and actual experience will be recognized into expense in the following years ended June 30 (in thousands):

2024	$ 40,834
2025	34,433
2026	34,433
2027	33,667
	$ 143,367

The inputs used to determine the fair value of the plan's investments reported at June 30, 2023 are summarized as follows (in thousands):

	Level 1	NAV	Total Fair Value
Cash and cash equivalents	$ 3,957		$ 3,957
Fixed income securities	56,818		56,818
Commingled funds	470,012	$ 144,790	614,802
	$ 530,787	$ 144,790	$ 675,577

UMH-West: UMH-West has a noncontributory, single-employer defined benefit pension plan, which is closed to new participants. The plan generally provides benefits based on years of service and employee earnings. The UMH-West Board of Directors has the authority to establish and amend benefit provisions of the plan.

The annual pension expense and net pension liability is actuarially calculated using the entry age normal level percent of pay method. UMH-West has elected to measure the net pension liability nine months prior to the fiscal year end reporting date and amounts measured at September 30, 2022 were determined based on an actuarial valuation at October 1, 2021. There are no significant changes known which would impact the net pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the September 30, 2022 measurement date, the number of plan participants consisted of the following:

Active participants	369
Vested terminated participants	791
Retirees, beneficiaries and disabled participants	553
	1,713

Changes in the reported net pension liability for the year ended June 30, 2023 are summarized as follows (in thousands):

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 67,758	$ 90,433	$ (22,675)
Interest cost	4,569		4,569
Changes in assumptions	165		165
Differences between expected and actual plan experience	1,394		1,394
Benefit payments	(7,374)	(7,374)	-
Contributions from the employer		1,781	(1,781)
Administrative expenses		(147)	147
Net investment income:			
Expected investment earnings		5,314	(5,314)
Differences between expected and actual investment earnings		(23,044)	23,044
Balance, end of year	$ 66,512	$ 66,963	$ (451)

The plan fiduciary net position as a percentage of the total pension liability was 101 percent at June 30, 2023.

NOTE 9—PENSION PLANS, CONTINUED

Significant actuarial assumptions used at the September 30, 2022 measurement date are as follows:

Discount rate	7.0%
Inflation	2.0%
Investment rate of return	7.0%
Mortality table	Pri-2012, Scale MP-2021

Discount rates are based on the expected rate of return on pension plan investments. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made based on the minimum contribution projection under provisions of ERISA and the Pension Protection Act of 2006, for future years. Based on the stated assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the future benefit payments of the current plan members for all projection years. As a result, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments was determined using the expected future rates of return for the target asset allocation of the portfolio. The target allocation and best estimate rates of return by asset class are summarized as follows:

	Portfolio Allocation	Long-Term Expected Return
U.S. large cap	25.0%	7.9%
U.S. mid cap	10.5%	8.7%
U.S. small cap	6.5%	9.3%
International developed	14.0%	6.0%
Emerging market	9.0%	5.6%
STRIPs	7.0%	3.9%
Corporate 10+ year	28.0%	4.5%

A one-percentage point change in the discount rate would impact the reported net pension liability at June 30, 2023 as follows (in thousands):

	1% Decrease	1% Increase
Net pension liability	$ 6,790	$ (5,798)

The components of pension expense for the year ended June 30, 2023 are summarized as follows (in thousands):

Interest cost	$ 4,569
Expected investment earnings	(5,314)
Administrative expenses	147
Amortization of deferred outflows and deferred inflows	2,497
	$ 1,899

Deferred outflows and deferred inflows related to the reported net pension liability at June 30, 2023 are summarized as follows (in thousands):

	Deferred Outflows	Deferred Inflows
Changes in assumptions	$ 63	
Difference between expected and actual plan experience	534	
Difference between expected and actual investment earnings	18,890	$ 9,783
	$ 19,487	$ 9,783

Deferred outflows and deferred inflows related to changes in assumptions and differences between expected and actual experience will be recognized into expense in the following years ended June 30 (in thousands):

2024	$ 2,115
2025	1,604
2026	1,376
2027	4,609
	$ 9,704

The inputs used to determine the fair value of the plan's investments reported at June 30, 2023 are summarized as follows (in thousands):

	Level 1	Level 2	NAV	Total Fair Value
Equity securities	$ 42,590			$ 42,590
Fixed income securities		$ 16,490		16,490
Nonmarketable alternative investments			$ 7,883	7,883
	$ 42,590	$ 16,490	$ 7,833	$ 66,963

NOTE 10—POSTEMPLOYMENT BENEFITS

The University provides retiree health and welfare benefits, primarily medical, prescription drug, dental and life insurance coverage, to eligible retirees and their eligible dependents. Substantially all full-time regular University employees may become eligible for these benefits if they reach retirement age while working for the University. For employees retiring on or after January 1, 1987, contributions toward health and welfare benefits are shared between the University and the retiree and can vary based on date of hire, date of retirement, age and coverage elections.

The University also provides income replacement benefits, retirement savings contributions, and health and life insurance benefits to substantially all regular University employees that are enrolled in a University sponsored long-term disability plan and qualify, based on disability status while working for the University, to receive basic or expanded long-term disability benefits. Contributions toward the expanded long-term disability plan are shared between the University and employees and vary based on years of service, annual base salary and coverage elections. Contributions toward the basic long-term disability plan are paid entirely by the University.

NOTE 10—POSTEMPLOYMENT BENEFITS, CONTINUED

These postemployment benefits are provided through single-employer plans administered by the University. The Executive Vice Presidents of the University have the authority to establish and amend benefit provisions of the plans.

Actuarial projections of postemployment benefits are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided and announced future changes at the time of each valuation and the historical pattern of sharing benefit costs between the employer and plan members to that point.

The University's reported liability for postemployment benefits obligations is calculated using the entry age normal level percent of pay method. The University has elected to measure the total postemployment liability one year prior to the fiscal year end reporting date and amounts measured at June 30, 2022 were determined based on an actuarial valuation at January 1, 2022. There are no significant changes known which would impact the total postemployment liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2022 measurement date, the number of plan participants consisted of the following:

	Retiree Health and Welfare	Long-term Disability
Active employees	44,196	38,612
Retirees receiving benefits	12,243	
Surviving spouses	922	
Participants receiving disability benefits		544
	57,361	39,156

Changes in the reported total liability for postemployment benefits obligations for the year ended June 30, 2023 are summarized as follows (in thousands):

	Retiree Health and Welfare	Long-term Disability	Total
Balance, beginning of year	$ 3,982,200	$ 315,459	$ 4,297,659
Service cost	165,821	32,124	197,945
Interest cost	88,911	7,148	96,059
Changes in assumptions	(775,254)	(15,101)	(790,355)
Differences between expected and actual plan experience	2,073	10,348	12,421
Benefit payments	(63,891)	(33,463)	(97,354)
Balance, end of year	3,399,860	316,515	3,716,375
Less current portion	68,697	36,564	105,261
	$ 3,331,163	$ 279,951	$ 3,611,114

Since a portion of retiree medical services will be provided by the University's health system, the reported liability for postemployment benefits obligations is net of the related margin and fixed costs associated with providing those services which totaled $619,599,000 at June 30, 2023.

The University's liability for postemployment benefits obligations is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods. This subsidy would reduce the reported total postemployment benefits liability by approximately $365,000,000 at June 30, 2023.

Assets used to fund postemployment benefits are not maintained in a separate legal trust. The University has no obligation to make contributions in advance of when insurance premiums or claims are due for payment and currently pays for postemployment benefits on a pay-as-you-go basis. The University's reported postemployment benefits obligations at June 30, 2023 as a percentage of covered payroll of $4,889,673,000 were 76 percent.

Significant actuarial assumptions used at the June 30, 2022 measurement date are as follows:

Discount rate*	3.54%
Inflation rate	2.00%
Immediate/ultimate administrative trend rate	0.0%/3.0%
Immediate/ultimate medical trend rate	6.0%/4.5%
Immediate/ultimate Rx trend rate	7.5%/4.5%
Increase in compensation rate faculty/staff/union	4.50%/4.75%/3.75%
Mortality table**	PUB-2010 Teachers Head Count Table, Scale MP-2021
Average future work life expectancy (years):	
Retiree health and welfare	9.33
Long-term disability	12.00

* Bond Buyer 20-year General Obligation Municipal Bond Index as of the last publication of the measurement period
** Based on the University's study of mortality experience from 2015-2019

A one-percentage point change in the discount rate and assumed health care cost trend rates would impact the reported total liability for postemployment benefits obligations at June 30, 2023 as follows (in thousands):

	1% Decrease	1% Increase
Discount rate:		
Retiree health and welfare	$ 702,617	$ (552,156)
Long-term disability	$ 10,955	$ (16,739)
Health care cost trend rates:		
Retiree health and welfare	$ (613,511)	$ 816,955
Long-term disability	$ (10,044)	$ 10,817

NOTE 10—POSTEMPLOYMENT BENEFITS, CONTINUED

The components of postemployment benefits expense for the year ended June 30, 2023 are summarized as follows (in thousands):

	Retiree Health and Welfare	Long-term Disability	Total
Service cost	$ 165,821	$ 32,124	$ 197,945
Interest cost	88,911	7,148	96,059
Amortization of deferred outflows and deferred inflows	(35,240)	498	(34,742)
	$ 219,492	$ 39,770	$ 259,262

Deferred outflows and deferred inflows related to the reported total liability for postemployment benefits obligations at June 30, 2023 are summarized as follows (in thousands):

	Deferred Outflows	Deferred Inflows
Changes in assumptions	$ 654,212	$ 1,209,737
Difference between expected and actual plan experience	118,394	15,595
	772,606	1,225,332
Benefit payments made after measurement date	105,261	
	$ 877,867	$ 1,225,332

Deferred outflows and deferred inflows related to changes in assumptions and the differences between expected and actual plan experience will be recognized into expense in the following years ended June 30 (in thousands):

2024	$ 34,742
2025	34,742
2026	46,764
2027	53,528
2028	18,647
2029 and beyond	264,303
	$ 452,726

NOTE 11—RETIREMENT PLAN

The University has a defined contribution retirement plan for all qualified employees through TIAA and Fidelity Management Trust Company ("FMTC") mutual funds. All regular and supplemental instructional and primary staff are eligible to participate in the plan based upon age and service requirements. Participants maintain individual contracts with TIAA, or accounts with FMTC, and are fully vested.

For payroll covered under the plan, eligible employees generally contribute 5 percent of their pay and the University generally contributes 10 percent of employees' pay to the plan. The University contribution commences after an employee has completed one year of employment. Participants may elect to contribute additional amounts to the plan within specified limits that are not matched by University contributions. Contributions and covered payroll under the plan (excluding participants' additional contributions) for the year ended June 30, 2023 are summarized as follows (in thousands):

University contributions	$ 372,331
Employee contributions	$ 197,125
Payroll covered under plan	$ 4,889,673
Total payroll	$ 5,058,307

NOTE 12—NET POSITION

The composition of net position at June 30, 2023 is summarized as follows (in thousands):

Net investment in capital assets	$ 3,964,182
Restricted:	
Nonexpendable:	
Permanent endowment corpus	2,959,142
Expendable:	
Net appreciation of permanent endowments	3,668,054
Funds functioning as endowment	3,385,536
Restricted for operations and other	799,478
Unrestricted	5,937,369
	$ 20,713,761

Unrestricted net position is not subject to externally imposed stipulations; however, it is subject to internal restrictions. For example, unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. At June 30, 2023, substantially all of the unrestricted net position has been designated for various academic programs, research initiatives and capital projects.

NOTE 13—FEDERAL DIRECT LENDING PROGRAM

The University distributed $303,478,000 during the year ended June 30, 2023 for student loans through the U.S. Department of Education ("DoED") Federal Direct Lending Program. These distributions and related funding sources are not included as expenses and revenues in the accompanying consolidated financial statements. The statement of net position includes a receivable of $1,226,000 at June 30, 2023, for DoED funding received subsequent to distribution.

NOTE 14—COMMITMENTS AND CONTINGENCIES

Authorized expenditures for construction and other projects unexpended at June 30, 2023 were $1,875,447,000. Of these expenditures, the University expects that $1,845,447,000 will be funded by internal sources, gifts, grants and proceeds from borrowings and $30,000,000 by the State Building Authority.

Under the terms of various limited partnership agreements approved by the Board of Regents or University officers, the University is obligated to make periodic payments for advance commitments to venture capital, private equity, real estate, natural resources and absolute return strategies. At June 30, 2023, the University had committed, but not paid, a total of $4,520,344,000 in funding for these alternative investments. Based on historical capital calls and discussions with those managing the limited partnerships, outstanding commitments for such investments are anticipated to be paid in the following years ended June 30 (in thousands):

2024	$ 1,535,092
2025	1,078,708
2026	761,728
2027	452,496
2028	249,652
2029 and beyond	442,668
	$ 4,520,344

These commitments are generally able to be called prior to an agreed commitment expiration date and therefore may occur earlier or later than estimated.

The University has entered into leases for certain space and equipment, as well as SBITAs, which expire at various dates through 2043. Future payments, including both principal and interest on these commitments for the next five years and in subsequent five-year periods are as follows (in thousands):

	Principal	Interest	Total
2024	$ 67,709	$ 10,537	$ 78,246
2025	60,145	8,999	69,144
2026	44,472	7,660	52,132
2027	32,204	6,606	38,810
2028	23,916	5,844	29,760
2029-2033	77,288	19,667	96,955
2034-2038	40,404	4,823	45,227
2039-2043	6,271	157	6,428
	$ 352,409	$ 64,293	$ 416,702

Substantial amounts are received and expended by the University under federal and state programs and are subject to audit by cognizant governmental agencies. This funding relates to research, student aid, patient care and other programs. The University believes that any liabilities arising from such audits will not have a material effect on its financial position.

The University is a party to various pending legal actions and other claims in the normal course of business, and is of the opinion that the outcome of these proceedings will not have a material adverse effect on its financial position.

NOTE 15—OPERATING EXPENSES BY FUNCTION

Operating expenses by functional classification for the year ended June 30, 2023 are summarized as follows (in thousands):

	Compensation and Benefits	Supplies and Services	Depreciation	Scholarships and Fellowships	Total
Instruction	$ 1,171,937	$ 158,866			$ 1,330,803
Research	675,755	296,123			971,878
Public service	182,356	121,021			303,377
Academic support	351,126	77,526			428,652
Student services	121,608	45,954			167,562
Institutional support	223,685	263,632			487,317
Operations and maintenance of plant	103,073	266,925			369,998
Auxiliary enterprises	4,978,886	2,578,962			7,557,848
Depreciation			$ 685,362		685,362
Scholarships and fellowships				$ 200,439	200,439
	$ 7,808,426	$ 3,809,009	$ 685,362	$ 200,439	$ 12,503,236

NOTE 16—UM HEALTH

Condensed financial information for UM Health, a blended component unit, before the elimination of certain intra-University transactions, at and for the year ended June 30, 2023 is as follows (in thousands):

Condensed Statement of Net Position	
Assets:	
Current assets	$ 446,069
Noncurrent assets	1,638,665
Total assets	2,084,734
Deferred outflows	163,418
Liabilities:	
Current liabilities	358,034
Noncurrent liabilities	621,547
Total liabilities	979,581
Deferred inflows	19,238
Net position:	
Net investment in capital assets	427,642
Restricted:	
Nonexpendable	10,429
Expendable	49,531
Unrestricted	761,731
Total net position	$ 1,249,333

Condensed Statement of Revenues, Expenses and Changes in Net Position	
Operating revenues	$ 1,794,435
Operating expenses other than depreciation expense	(1,871,017)
Depreciation expense	(107,118)
Operating loss	(183,700)
Nonoperating revenues, net	52,216
Other expenses, net	(10,228)
Loss before transfers	(141,712)
Transfers from other University units	3,875
Decrease in net position	(137,837)
Net position, beginning of year	121,983
Affiliation with Sparrow Health	1,265,187
Net position, beginning of year, as restated	1,387,170
Net position, end of year	$ 1,249,333

Condensed Statement of Cash Flows	
Net cash used in operating activities	$ (67,203)
Net cash provided by noncapital financing activities	51,374
Net cash used in capital and related financing activities	(192,668)
Net cash provided by investing activities	184,905
Net decrease in cash and cash equivalents	(23,592)
Cash and cash equivalents, beginning of year	21,947
Affiliation with Sparrow Health	88,002
Cash and cash equivalents, beginning of year, as restated	109,949
Cash and cash equivalents, end of year	$ 86,357

REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)

PENSION PLANS

Sparrow Health

Changes in the reported net pension liability for the year ended June 30, 2023 are summarized as follows (amounts in thousands):

Total Pension Liability	
Service cost	$ 4,429
Interest cost	44,648
Changes in assumptions	14,896
Differences between expected and actual plan experiences	2,143
Benefits payments	(40,456)
Net change in total pension liability	25,660
Total pension liability, end of year	$ 691,217
Plan Fiduciary Net Position	
Benefit payments	$ (40,456)
Contributions from the employer	10,674
Administrative expenses	(8,743)
Net investment income:	
Expected investment earnings	55,935
Differences between expected and actual investment earnings	(168,265)
Net change in plan fiduciary net position	(150,855)
Plan fiduciary net position, end of year	$ 675,577
Net pension liability, end of year	$ 15,640
Plan fiduciary net position as a percentage of the total pension liability	98%

Employer contributions in relation to actuarially determined contributions for the year ended June 30 are as follows (in thousands):

	Employer Contributions*	Actuarially Determined Contributions	Excess Contributions
2023	$ 4,611	$ -	$ 4,611

* Reflects no employer contributions after June 30 of the prior fiscal year

Significant methods and assumptions used to calculate the actuarially determined contributions for the year ended June 30, 2023 are as follows:

Actuarially determined contributions	The plan is subject to funding requirements under the provisions of ERISA and the Pension Protection Act of 2006 (including MAP-21, HATFA, BBA, ARPA and IIJA). The actuarially determined contributions represent the IRC Section 430 minimum required contributions.
Contributions in relation to actuarially determined contributions	Under IRC Section 430, the due date to pay minimum required contributions for the plan year is generally 8½ months after the end of the plan year. For the plan years ended December 31, contributions are due by September 15 of the following year.
Actuarial cost method	Unit credit method
Asset valuation method	24-month smoothed value of assets
Interest rate	(see below)
Mortality	Tables prescribed by the Secretary of Treasury.

	First Segment Rate	Second Segment Rate	Third Segment Rate	Effective Rate
2023	4.75%	5.18%	5.92%	5.43%

REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)

PENSION PLANS, CONTINUED

UMH-West

Changes in the reported net pension liability for the years ended June 30 are summarized as follows (amounts in thousands):

	2023	2022	2021	2020
Total Pension Liability				
Interest Cost	$ 4,569	$ 4,543	$ 4,687	$ 4,957
Changes in assumptions	165	89	(3,540)	3,713
Differences between expected and actual plan experience	1,394	989	(1,662)	(124)
Benefit payments	(7,374)	(5,598)	(7,714)	(6,791)
Net change in total pension liability	(1,246)	23	(8,229)	1,755
Total pension liability, end of year	$ 66,512	$ 67,758	$ 67,735	$ 75,964
Plan Fiduciary Net Position				
Benefit payments	$ (7,374)	$ (5,598)	$ (7,714)	$ (6,791)
Contributions from the employer	1,781	891	900	1,244
Administrative expenses	(147)	(76)		
Net investment income:				
Expected investment earnings	5,314	4,997	4,797	5,205
Differences between expected and actual investment earnings	(23,044)	16,162	(1,137)	426
Net change in plan fiduciary net position	(23,470)	16,376	(3,154)	84
Plan fiduciary net position, end of year	$ 66,963	$ 90,433	$ 74,057	$ 77,211
Net pension liability, end of year	$ (451)	$ (22,675)	$ (6,322)	$ (1,247)
Plan fiduciary net position as a percentage of the total pension liability	101%	133%	109%	102%

	2019	2018	2017
Total Pension Liability			
Interest Cost	$ 4,930	$ 5,013	$ 4,482
Changes in assumptions	(273)	(822)	(24,906)
Differences between expected and actual plan experience	1,361	(767)	2,067
Benefit payments	(4,489)	(4,712)	(4,089)
Net change in total pension liability	1,529	(1,288)	(22,446)
Total pension liability, end of year	$ 74,209	$ 72,680	$ 73,968
Plan Fiduciary Net Position			
Benefit payments	$ (4,489)	$ (4,712)	$ (4,089)
Contributions from the employer	1,047	2,171	2,903
Administrative expenses			
Net investment income:			
Expected investment earnings	5,234	4,848	3,166
Differences between expected and actual investment earnings	(1,168)	3,664	1,316
Net change in plan fiduciary net position	624	5,971	3,296
Plan fiduciary net position, end of year	$ 77,127	$ 76,503	$ 70,532
Net pension liability, end of year	$ (2,918)	$ (3,823)	$ 3,436
Plan fiduciary net position as a percentage of the total pension liability	104%	105%	95%

REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)

PENSION PLANS, CONTINUED

Employer contributions in relation to actuarially determined contributions for the years ended June 30 are as follows (in thousands):

	Employer Contributions*	Actuarially Determined Contributions	Excess (Deficient) Contributions
2023	$ 445	$ -	$ 445
2022	$ 1,781	$ -	$ 1,781
2021	$ 891	$ 2,133	$ (1,242)
2020	$ 900	$ 1,336	$ (436)
2019	$ 1,244	$ 393	$ 851
2018	$ 1,047	$ 1,622	$ (575)
2017	$ 2,171	$ 1,754	$ 417

* Reflects no employer contributions after April 30 of the prior fiscal year

Significant methods and assumptions used to calculate the actuarially determined contributions for the years ended June 30 are as follows:

Actuarially determined contributions	The plan is subject to funding requirements under the provisions of ERISA and the Pension Protection Act of 2006 (including MAP-21, HATFA, BBA, ARPA and IIJA). The actuarially determined contributions represent the IRC Section 430 minimum required contributions.
Contributions in relation to actuarially determined contributions	Under IRC Section 430, the due date to pay minimum required contributions for the plan year is generally 8½ months after the end of the plan year. For the plan years ended September 30, contributions are due by June 15 of the following year.
Actuarial cost method	Unit credit method
Asset valuation method	24-month smoothed value of assets
Interest rate	(see below)
Mortality	Tables prescribed by the Secretary of Treasury.

Interest rate

	First Segment Rate	Second Segment Rate	Third Segment Rate	Effective Rate
2023	4.75%	5.36%	6.11%	5.61%
2022	4.75%	5.50%	6.27%	5.76%
2021	3.74%	5.35%	6.11%	5.57%
2020	3.92%	5.52%	6.29%	5.73%
2019	4.16%	5.72%	6.48%	5.94%
2018	4.16%	5.72%	6.48%	5.93%
2017	4.43%	5.91%	6.65%	6.13%

POSTEMPLOYMENT BENEFITS

The historical reconciliation of the reported total liability for postemployment benefits obligations for the years ended June 30 is summarized as follows (amounts in thousands):

	2023	2022	2021	2020
Service cost	$ 197,945	$ 213,029	$ 151,925	$ 134,115
Interest cost	96,059	101,166	125,421	124,023
Changes in assumptions	(790,355)	(368,216)	731,220	154,777
Differences between expected and actual plan experience	12,421	35,115	18,776	38,230
Benefit payments	(97,354)	(95,581)	(92,684)	(87,712)
Net change	$ (581,284)	$ (114,487)	$ 934,658	$ 363,433
Total liability, end of year	$ 3,716,375	$ 4,297,659	$ 4,412,146	$ 3,477,488
Covered employee payroll	$ 4,889,673	$ 4,502,421	$ 4,255,709	$ 4,214,627
Total liability as a percentage of covered employee payroll	76%	95%	104%	83%

	2019	2018	2017
Service cost	$ 141,933	$ 143,787	$ 122,073
Interest cost	121,800	94,153	108,561
Changes in assumptions	(383,315)	(107,874)	255,041
Differences between expected and actual plan experience	17,535	52,721	14,028
Benefit payments	(87,638)	(77,374)	(72,302)
Net change	$ (189,685)	$ 105,413	$ 427,401
Total liability, end of year	$ 3,114,055	$ 3,303,740	$ 3,198,327
Covered employee payroll	$ 4,013,983	$ 3,792,553	$ 3,568,918
Total liability as a percentage of covered employee payroll	78%	87%	90%

Discount rates used in determining the reported total liability for postemployment benefits obligations at June 30 are as follows:

2023	3.54%
2022	2.16%
2021	2.21%
2020	3.50%
2019	3.87%
2018	3.58%
2017	2.85%

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