# 2016 ANNUAL REPORT

**#1**
**U.S. Public Research University**
*National Science Foundation*

**63,351**
**Students Enrolled in Fall 2015**

| ABOVE: Mcity |
U-M opened the world's first controlled environment specifically designed to test the potential of connected and automated vehicle technologies that will lead the way to mass-market driverless cars.

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| FRONT COVER: Engaging Children with Autism |
U-M created an interactive social sensory surfaces display to help children with autism develop fine and gross motor control. This project, developed by student researchers from architecture, computer science, music, civil engineering, information, interactive design and occupational therapy, was one of five U-M exhibits featured at the South by Southwest Interactive Conference in Austin, TX in 2016.

# PRESIDENT'S MESSAGE

**The primary focus of my work as president is to position the University of Michigan for perpetual excellence and public impact in research, creative work, performance, patient care and education.**

| MARK S. SCHLISSEL |

For me, the key elements of this focus leverage the longstanding strengths of U-M. I want us to encourage research that addresses major societal issues, and scholarship and creative work that promote understanding and enrich the human experience. We will seek to provide the best and most forward-looking undergraduate, graduate and professional education available today to best prepare the leaders of tomorrow. We will also foster the translation of cutting-edge medical research into outstanding patient care in our comprehensive health system.

## LEVERAGING BREADTH

Many of the initiatives we are developing will advance excellence at U-M for years to come—while also generating significant achievements in the near term. These will include strategic investments in precision medicine (medical treatments tailored to individuals based on genetics and behaviors), academic innovation (using technology, data analytics and engagement to enhance teaching and learning) and the alleviation and prevention of poverty. They will be the type of high-impact research collaborations that allow us to take advantage of the full breadth of the university's academic portfolio.

The biggest problems we face as a society don't conveniently set themselves up to be solved by one-source solutions. Problems don't know what discipline they are supposed to fall under; they are just problems.

To approach problems from every angle and perspective, U-M can bring to bear the intellectual power of 19 outstanding Ann Arbor schools and colleges, a world-class health system and two highly valued regional campuses. Two initiatives we launched in the past year are examples of this approach:

> **Our Data Science Initiative,** along with the Michigan Institute for Data Science (MIDAS), is enhancing our faculty members' ability to conduct research while fostering new approaches related to big data. By managing, curating and sharing massive amounts of information, we can provide dramatic insights into issues such as the nature of disease, climate change, social behavior, business and economic decision-making, engineering challenges and discovery in the basic biological and physical sciences. We can then use these insights to develop applications that improve lives.
>
> The second recent initiative is our **Humanities Collaboratory,** a novel approach to humanities research. The Collaboratory brings together research teams to work on major projects that create new models for research, enhance the humanities' impact

"The biggest problems we face as a society don't conveniently set themselves up to be solved by one-source solutions."

on society and train the next generation of humanities scholars. Many of the greatest challenges we face in society will only be solved if we can better understand the multifaceted values, histories, ideas and cultures that are unique to communities around the globe.

Projects launched through the Collaboratory include faculty and students using the journal of an eighth-century Buddhist monk to digitally map his travels and illustrate the development of Buddhism itself. In another example, the Precarity Lab team is studying populations that have been disproportionately affected by inequality and insecurity stemming from digital technologies.

## AMAZING IMPACT

High-impact collaborative research is a hallmark of the University of Michigan's health system as well. A world-class public research university with a premier health system is an advantage that few can match.

Our health system is built on a solid foundation of strengths—patient care and education linked directly and deeply to leading biomedical research and discovery—that provides a great platform on which to build our future and enhance research all across U-M. For instance, University of Michigan researchers used 3-D printers to produce tracheal stents they had developed, which surgeons then used to save the lives of three babies born with potentially lethal malformations. Those babies are now preschoolers, by the way.

I am also proud that the UM-Dearborn and UM-Flint campuses continue to enhance their regional impact and respond to community needs. Both campuses have long and proud histories of improving lives through education and research.

In fall 2016, UM-Dearborn opened a newly renovated Natural Science Building that includes more than 35 labs and other facilities that promote interactive group learning. UM-Flint has provided tremendous resources to residents during the water crisis, including free educational sessions, a new early childhood educational program and partnerships among faculty and community leaders.


"There simply is no university better suited to advance the highest ideals of what a public research university should be."

## FINANCIAL STRENGTH SUPPORTS EXCELLENCE

The University of Michigan is in a strong position financially, as this report details.

Our volume of research has held strong, with $1.4 billion in research expenditures, despite the sector's challenges and ever-increasing competition for funds. The quality of our faculty and our ability to partner with the private sector give U-M tremendous advantages in this regard.

We continually seek greater operational efficiencies while also making important investments to maintain and enhance academic excellence. We also never lose sight of our goal of restraining growth in tuition.

U-M has also implemented double-digit percentage increases in financial aid in nine of the last 10 years, including a 10.8 percent increase for the current year. In fact, the net cost of attendance at U-M has not grown in seven years for most students with financial need. More than 70 percent of our in-state undergraduates are receiving need-based financial aid.

U-M is the only university in the state—and one of 23 nationwide—to be recognized by the U.S. Department of Education for having demonstrated both high post-graduation earnings as well as low costs for the lowest-income students.

The Victors for Michigan campaign directly supports our work to help students attend U-M. This $4 billion campaign includes a $1 billion goal for student support. We are more than 60 percent of the way to reaching that ambitious goal.

Donors continue to be essential partners in our efforts to enhance excellence and opportunity at U-M. Their generosity makes our academic programs stronger while providing scholarships, fellowships and research opportunities here in Michigan and abroad.

Keeping U-M's high-quality education affordable depends on all of these essential elements—cost control, increasing financial aid, tuition restraint and philanthropy—along with what we hope will be a continuation of reinvestment by the state in higher education.

In the year to come, we will be celebrating the University of Michigan's bicentennial and the amazing impact we have made over the last 200 years. A major focus of the bicentennial will be to ensure our excellence continues into the future.

There simply is no university better suited to advance the highest ideals of what a public research university should be.

Sincerely,

Mark S. Schlissel
President

## REPORT FROM THE
# CHIEF FINANCIAL OFFICER

KEVIN P. HEGARTY

**As we look forward to celebrating the University of Michigan's bicentennial in 2017, I am very pleased to report that our remarkable institution continues to be financially healthy and well positioned for the future.**

In large part, this is due to the latest generation of our outstanding faculty and staff whose extraordinary dedication to the university enables it to thrive.

Our disciplined budget approach carefully balances the necessity to compete for exceptional students and talent against a challenging economic environment where financial efficiencies must be achieved. To that end, our 46,000 faculty and staff have long had a keen focus on the university's core commitment to education, research and patient care while being exemplary stewards of the institution's financial resources.

### MAINTAINING A STRONG POSITION

The university's balance sheet continues to be strong, with a net position of $13.0 billion and $13.3 billion at June 30, 2016 and 2015, respectively. This decrease is primarily the result of net investment losses of $130 million in 2016.

We expect net investment income to be volatile from year to year and use an endowment distribution policy together with our long-term investment strategy to insulate the university from this and provide dependable annual support for operations. The university's endowment distribution policy smoothes the impact of volatile capital markets by providing for annual distributions of 4.5 percent of the moving average fair value of the endowment. This spending rule, along with the growth of the endowment, allowed for distributions to support operations of $296 million in FY 2016, for a total of $1.4 billion over the past five years.

Endowment funds, which are invested principally in the university's Long Term Portfolio, total nearly $10 billion. Distributions from approximately 9,800 separate endowments provide ongoing support for specific academic and health-related needs across the university's many disciplines, including student scholarships, educational programs, professorships, clinical operations and research.

The table to the right summarizes the university's investment performance of the Long Term Portfolio in relation to relevant comparative benchmark portfolio returns.

"Our national and international reputation for excellence continues to attract outstanding students from Michigan and all over the world as well as top faculty, researchers and clinicians."

| INVESTMENT PERFORMANCE | RETURN FOR THE 12-MONTH PERIOD ENDED JUNE 30, 2016 | ANNUALIZED 5-YEAR RETURN | ANNUALIZED 10-YEAR RETURN |
|---|---|---|---|
| LONG TERM PORTFOLIO | -1.4% | 6.0% | 6.7% |
| U-M'S BENCHMARK | -0.2% | 6.6% | 6.2% |
| BLENDED PASSIVE INDEX | 0.7% | 5.4% | 4.8% |

With a 10-year annualized return of 6.7 percent, the investment performance of the university's Long Term Portfolio ranks in the top quartile of performance relative to those of other large endowment portfolios. The university's 10-year annualized return also continues to exceed those of its custom U-M Benchmark and Blended Passive Index.

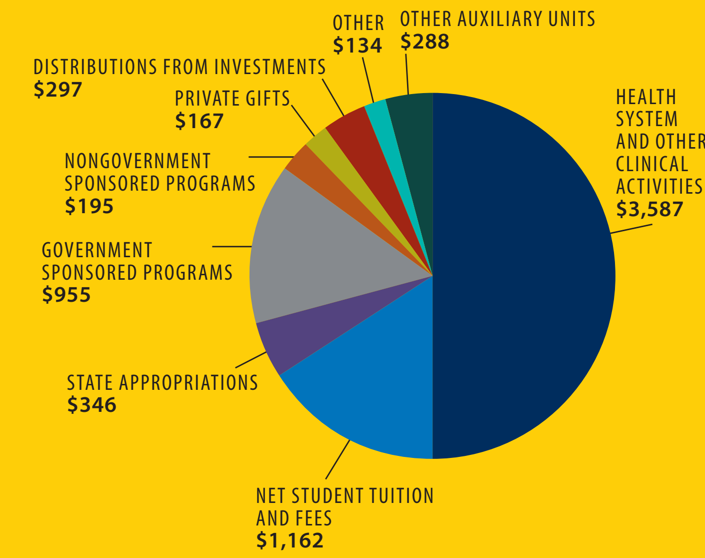
## DIVERSE REVENUE STREAMS

Revenue diversification has long been an important strategy for the university to achieve financial stability. Over the years, this diversification has proven to be an important contributing factor in maintaining financial stability throughout varying economic cycles and avoiding unnecessary dependence on student tuition and fee increases. The components of the university's sources of revenue are depicted in the adjacent charts.

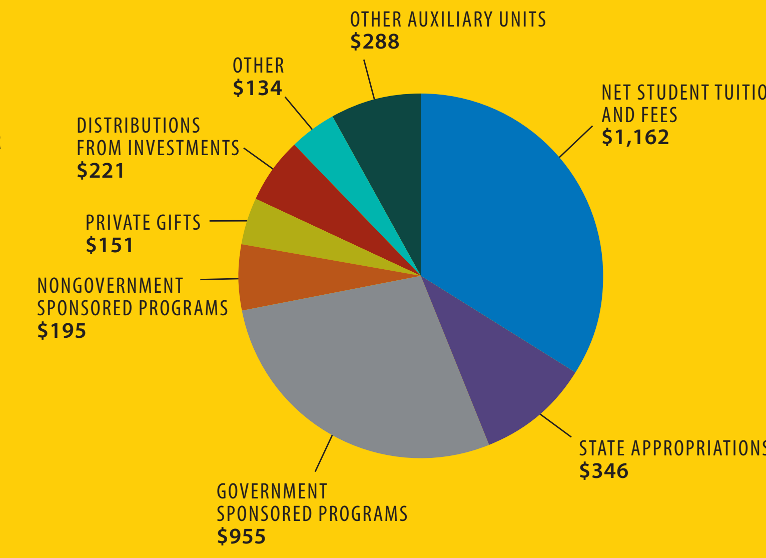
The state of Michigan's financial support continues to be a component of our strength. In FY 2016, the university received a 1.4 percent increase in state appropriations and will receive an increase of 3.1 percent in FY 2017.

The academic operating budget continues to balance academic excellence and investment in the future with student affordability and economic efficiency. The Ann Arbor campus budget for FY 2017 includes an in-state undergraduate tuition increase of 3.9 percent—below the state legislature's cap of 4.2 percent. It also includes increases of 3.9 percent for most graduate and professional programs as well as a 4.4 percent increase in nonresident undergraduate tuition. The budget also has a 10.8 percent increase in undergraduate financial aid, for a total of nearly $200 million—the largest pool in U-M's history. This marks the ninth time in the past 10 years that financial aid has increased by at least 10 percent.

### OPERATING ACTIVITIES
**Total revenue $7,131 million**




### OPERATING ACTIVITIES EXCLUDING HEALTH SYSTEM AND OTHER CLINICAL ACTIVITIES
**Total revenue $3,452 million**




> "U-M's research enterprise remains robust with record total research expenditures of $1.4 billion in FY 2016, up 7.2 percent from the previous year."

UM-Dearborn's budget for FY 2017 includes a 4.1 percent increase in resident undergraduate tuition and a 4.2 percent increase in graduate tuition rates as well as a 10.4 percent increase in institutionally awarded financial aid. At UM-Flint, the FY 2017 budget includes a 4.1 percent increase in undergraduate and graduate tuition rates and an 8.3 percent increase in institutionally awarded financial aid.

Strong growth in nontuition revenue, along with a commitment to cost containment and improved efficiencies, contributed toward limiting increases in resident student tuition. The demand for a University of Michigan education continues to be at an all-time high. The university again received a record number of undergraduate applications—more than 55,000. This is the ninth consecutive year that applications have increased. Our national and international reputation for excellence continues to attract outstanding students from Michigan and all over the world as well as top faculty, researchers and clinicians.

## ROBUST RESEARCH ENTERPRISE

U-M's research enterprise remains robust with record total research expenditures of $1.4 billion in FY 2016, up 7.2 percent from the previous year. Much of this gain arose from a 7.4 percent increase in funding from the federal government, the principal sponsor of university research. Although the university conducts research for a wide range of federal agencies, this year saw significant gains from the National Institutes of Health, the National Aeronautics and Space Administration and the National Science Foundation. Research sponsorship from industry is of growing importance to our faculty and students. Ongoing efforts to build mutually beneficial corporate partnerships led to an 8.5 percent increase in industry research expenditures, for a total of $85 million.

New external research contracts awarded in FY 2016—a measure of the pipeline of future projects—grew by 1.7 percent with a growth in total dollar value of 6.3 percent. Looking further ahead, our faculty has submitted proposals for nearly $4.8 billion in future research awards in FY 2016.

U-M is deeply committed to helping the public realize the potential of its research. The Office of Technology Transfer reported 428 new inventions in FY 2016 and a record 173 license/option agreements. It also started 12 new companies based on technology developed at U-M.

## A COMPREHENSIVE HEALTH SYSTEM

The U-M Health System (UMHS)—which includes the hospitals and health centers, Medical School and Michigan Health Corporation—continues to be a nationally recognized leader in advanced patient care, innovative research to improve human health and comprehensive education of physicians and medical scientists.

In FY 2016, the U-M hospitals and health centers continued their strong financial performance with an operating margin of 6.3 percent ($190.4 million) on operating revenues of $3.0 billion. These results reflect UMHS's focus on improving the quality and safety of care as well as the patient experience while reducing costs. In addition, strong patient volume in both clinics and hospitals along with improved patient access contributed to the strong financial performance. Beyond that, high levels of engagement of physician faculty, nurses and support staff across all clinical programs and care locations played key roles in UMHS's ongoing success.

The health system continues to focus on enhancing the experience for patients and their families. Over the past year, UMHS expanded capacity in its medical short-stay units and emergency critical care center, as well as added a new ambulatory diagnostic treatment unit and specialty imaging capacity. UMHS also embarked on other projects intended to increase patient access, including the planned opening of four new operating rooms in University Hospital, a new health center in west Ann Arbor and another health center in Brighton.

UMHS is also focusing on clinical affiliation arrangements to enhance patient care, clinical research, physician recruitment and support services. To support this objective, the university signed a definitive agreement in September 2016 in connection with a proposed affiliation with Metropolitan Health Corporation, a community health care provider in west Michigan.

UMHS is well positioned to meet its operating and financial goals for 2017, which align with its long-term plan to continuously improve the financial strength of its clinical enterprise and invest in its missions of patient care, education and research.

## LOOKING FORWARD

Controlling costs and reallocating funds to U-M's core missions remain an essential element in keeping the university financially healthy. Since FY 2004, the institution has reduced or avoided recurring General Fund expenditures totaling $337 million. By remaining relentlessly focused on strategic cost containment, the university has been able to avoid program cuts and keep tuition increases modest throughout one of the most difficult economic periods for the state of Michigan and into a period of recovery.

| University of Michigan Health System |

The university needs a wide variety of facilities to encourage collaboration among multiple disciplines and skill sets in order to maintain excellence in education, research and patient care. On that note, FY 2016 marked another noteworthy year of construction and capital renewal of our beautiful campus. You'll find a summary of capital projects completed, in progress and in planning during FY 2016 on pages 18–23.

Our long-term debt again earned the highest credit ratings available from Standard & Poor's (AAA) and Moody's Investor Services (Aaa). U-M is one of only seven public universities in the country to maintain both of these ratings, which are a strong indication of the institution's robust financial health and bright outlook for the coming years.

We can all be very proud of the rich history of the University of Michigan and everything that its very bright future represents. I hope you'll take some time to review Management's Discussion and Analysis, which begins on page 27 of this report, in conjunction with the audited financial statements. This informative section details how U-M's financial strength, prudent financial policies and commitment to maintaining the highest level of excellence help ensure that the university's mission will continue to be fulfilled well beyond our bicentennial year.

Sincerely,

Kevin P. Hegarty
Executive Vice President and Chief Financial Officer

# REPORT FROM THE VICE PRESIDENT FOR DEVELOPMENT

| JERRY A. MAY |

**I am delighted and grateful to report that donors to the University of Michigan made cash gifts and pledge payments this fiscal year totaling a record $440.6 million, up 10 percent over last fiscal year.**

Giving by corporations hit $47.8 million, up 101 percent from last year. Realized bequests were up 65 percent over last year to $63.5 million. We appreciate that when donors include the university in their estate plans, they demonstrate an impressive trust and belief in the university. Gifts from associations and other organizations were up 17 percent, reaching $32 million. Of note, 125,053 donors made gifts to the university this year and of those, 116,299 made gifts of $1,000 or less, demonstrating that gifts of all sizes, in the aggregate, make great things happen.

### VICTORS FOR MICHIGAN CAMPAIGN

We have passed the midway point, chronologically, of the Victors for Michigan campaign, launched publicly in 2013 with a goal of raising $4 billion, including $1 billion for student support for scholarships, fellowships, internships and global study. The generous gifts from donors this fiscal year, added to previous years' gifts, have resulted in an impressive record of donor support for the campaign:

- Donors have given **$3.5 billion, 87.5 percent** of the $4 billion goal.
  - **$601 million** from donors **designated for student support.**
- **310,683 donors.**
  - 258,000 donors, **83 percent, made gifts of $1,000 or less.**
- **18,350 faculty, staff and retirees have given $129.3 million,** a 25 percent participation rate—a tremendous commitment from people who give their talents every day through their work and then give again through their gifts.
- **5,500 students have given a total of $1.1 million.**
- **Students also raised $2.75 million** for causes they are passionate about at the university, such as the C.S. Mott Children's Hospital, scholarships, recreational sports, marching band, student publications and many others.


| Riverfront Residence Hall and Conference Center |
On the Flint campus, a donated building provides student housing and a permanent home for the School of Management.

> "The generous gifts from donors this fiscal year, added to previous years' gifts, have resulted in an impressive record of donor support for the campaign."

## ENDOWED GIFTS FOR STUDENT SUPPORT

Over many years, donors have made endowed gifts for student support. The university's prudent management of the endowment has resulted in significant support for thousands of students each year.

Donors have given **$1.14 billion** to endowment funds for student support

Through investments, that amount has grown to **$2.03 billion** and counting

generating **$81.4 million** in FY 2016

supporting **12,800 students**

## THE IMPACT OF DONORS

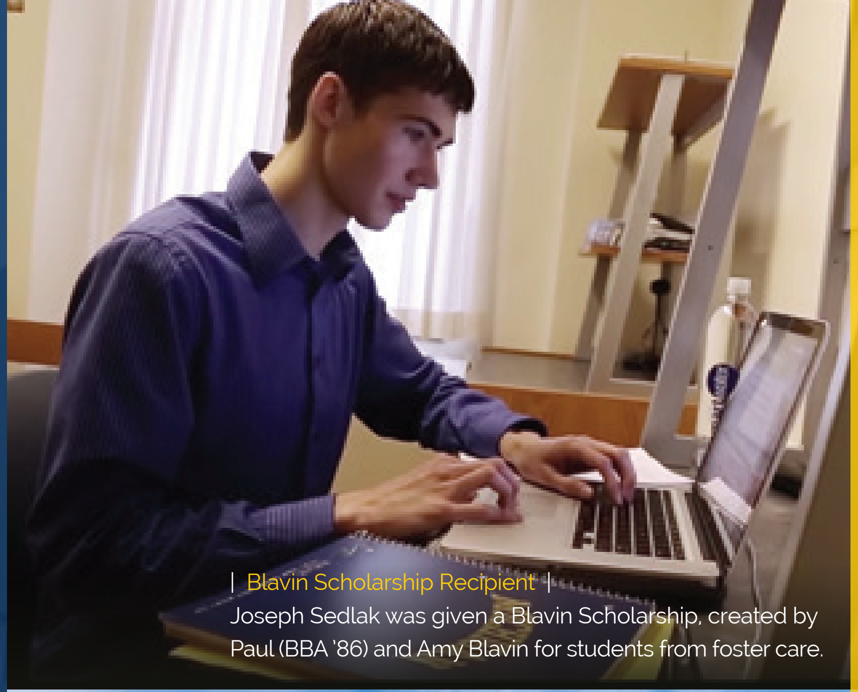
Donors make extraordinary things happen at U-M through their philanthropy, impacting research and patient care, solving societal problems and providing our students with extraordinary intellectual experiences. Here are a few examples of the impact donors have made:

Growing up in foster care in Warren, Mich., Joseph Sedlak had little guidance about college, save for a sister who told him getting an education was important. He listened to her and applied to the University of Michigan, with no idea of how he would pay for it. He was admitted and given a Blavin Scholarship, created by **Paul (BBA '86) and Amy Blavin** in 2006 for students from foster care. Along with funding, the Blavin Scholarship provides an extensive safety net with support services, counselors and academic guidance. Joseph is convinced that he never would have been able to succeed without it. Thanks to the Blavin Scholarhip and his own hard work, Joseph graduated from the University of Michigan and is now enrolled in Harvard Medical School.

**Charles Munger (LLD Hon '10)** had a vision for higher education—to bring graduate students from different disciplines to live together and learn from each other. His gift of $100 million for a residence where this could happen, along with $10 million for fellowship support for exceptional graduate students, made the opening this year of the Munger Residences a reality. Students living with students from other disciplines have had an enlightening experience. A dental student, who had not met any students outside of the School of Dentistry in his first two years, roomed with a student from the Stephen M. Ross School of Business, a School of Public Health student and a School of Social Work student. He talked about the business side of dentistry with his roommate and learned about the economic inequalities that made dental care impossible, gaining an entirely new perspective on being a dentist. It's a powerful lesson, repeated in different ways throughout the facility and made possible by a donor's vision.

**Sidney and Madeline Forbes** want to eradicate cancer. With their family, they have created the Forbes Institute for Cancer Discovery, to encourage scientists across the university to undertake high-risk, high-reward research to drive new advances in cancer research. Building on the exceptional work being done in U-M's Comprehensive Cancer Center, one of only 45 centers in the country so designated, they are providing $17.5 million to make discoveries and treatments available to patients and they will lead a fundraising effort to secure more funds for this research.





| Blavin Scholarship Recipient |
Joseph Sedlak was given a Blavin Scholarship, created by Paul (BBA '86) and Amy Blavin for students from foster care.

| Munger Graduate Residences |
Charles Munger's visionary residence hall opened and students who live there have proclaimed it a great success.

| Forbes Institute for Cancer Discovery |
Sidney and Madeline Forbes provided funds to drive advances in cancer research.

After a spectacular renovation and expansion, made possible by many donors including lead donors **William (BS '50, MS '52, LLD Hon '13) and Delores Brehm,** the Earl V. Moore Building in the School of Music, Theatre & Dance reopened to great reviews last fall. The Brehm Pavilion, a 34,000-square-foot expansion, impacts everyone connected to the school—students who have more practice spaces, faculty who have improved studio spaces for teaching and the public who come to welcoming concert spaces for free concerts by students, faculty and visiting artists. Donors to the project include the **Cohen Family Fund of the Community Foundation for Southeast Michigan; Chip Davis (BMus '69); Charles H. Gershenson Trust; H. David Kaplan (AB '56); Milton and Carolyn Kevreson Trust; Herman Miller Cares; James A. Read (AB '71); the Schwartzberg family; Glenn E. Watkins (AB '48, MMus '49) and an anonymous gift in honor of U-M Regent Katherine White.**

An initial gift of $450,000, plus future funding from the estate of **William "Bill" Stamelos,** husband of the late UM-Dearborn art lecturer and accomplished artist Electra Stamelos, will fund the initial design, planning and partial construction costs of a new art exhibition space—the William and Electra Stamelos Gallery on the Dearborn campus. Stamelos will also give his entire, extensive collection of artwork from around the world. A retired engineer, skilled photographer and stained-glass artist, Stamelos has also supported the Berkowitz Gallery as a donor and volunteer. He was married to Electra for more than 50 years.

The new gallery on the first floor of the Mardigian Library will enhance the art exhibition experience and serve the university's academic mission by providing greater access to the university's art collection and more opportunities for educational programming for students and the community.

A gift to UM-Flint will provide a permanent home for the growing School of Management and significantly increase the available on-campus housing.

Riverfront Residence Hall and Conference Center, a 15-story, 306,000-square-foot building, is a gift from the **Uptown Reinvestment Corporation** with support from the **Charles Stewart Mott Foundation.** The facility opens up recruiting opportunities for UM-Flint, adds yet more life to a newly vibrant downtown and reinforces the university's already strong commitment to the city.

We have many more stories of the impact donors to the university make every day. We are humbled by your generosity, inspired by your belief in the university and renewed by your loyalty.

Thank you,

Jerry A. May

Jerry A. May
Vice President for Development

# HIGHLIGHTS

More at: **2016.annualreport.umich.edu/highlights**

## $17.5 M Gift to Stimulate Cancer Research

The largest private gift for cancer research in the health system's history will allow U-M to lead the way in developing innovative, targeted treatments to help the 1.6 million Americans diagnosed with cancer each year. In 2016, Madeline and Sidney Forbes pledged $17.5 million to create the Forbes Institute for Cancer Discovery. The goal of the institute—to be housed in the Comprehensive Cancer Center—will be to encourage scientists across the university to undertake high-risk, high-reward initiatives with the potential to drive new advances in research.

**17,684**

**Degrees Granted in 2015–16**

## U-M Launches Wolverine Pathways and HAIL Scholars Programs

Wolverine Pathways, a pilot initiative designed to help students in targeted Michigan school districts get ready to continue their education at U-M, will initially be offered at no cost to students and families in Ypsilanti and Southfield. Students who successfully complete Pathways and are admitted to U-M will be awarded a full-tuition scholarship for four years. The program features hands-on and project-based learning activities, field trips, campus visits and internship opportunities.

Another pilot program, HAIL (High Achieving Involved Leader) Scholars, is testing a new approach to connecting with high-achieving, low-income students across the state—with the goal of enrolling more of them on the Ann Arbor campus. It includes a step-by-step guide for applying to U-M and vouchers providing free access to key portions of the application process. For those students who apply and are admitted to U-M, the payoff is huge: a HAIL scholarship that provides four years of free tuition and required fees—a $60,000 value.



## Students Take Part in a Mammoth Discovery

An ancient mammoth unearthed in September 2015 by a team of U-M paleontologists that included undergraduate, graduate and doctoral students in a farmer's field southwest of Ann Arbor may provide clues about the lives of early humans in the region. Depending on the age of the mammoth and confirmation of the suspected links to humans, the research by Professor Daniel Fisher and his paleontology students could help push back the date for human habitation in southeast Michigan.

## U-M Opens Mcity Test Environment

In July 2015, U-M opened Mcity, the world's first controlled environment specifically designed to test the potential of connected and automated vehicle technologies that will lead the way to mass-market driverless cars. This 32-acre simulated urban and suburban environment is designed to support rigorous, repeatable testing of new technologies before they are tried on public streets and highways. About $10 million has been invested in the test facility with funding coming from U-M and the Michigan Department of Transportation.


## National Medal of Arts

The University Musical Society and George Shirley, emeritus professor at the School of Music, Theatre & Dance, were honored with the National Medal of Arts—the highest award given to artists and arts patrons by the federal government—at a September 2015 event at the White House.

## Innovative Munger Graduate Residences Open

The new Munger Graduate Residences opened Aug. 1, 2015. The $150 million, approximately 380,000-square-foot building houses 630 graduate students in a unique high-density residential-academic arrangement. Students from 36 different countries and more than 70 graduate programs are represented in the new facility. It is the first residence hall on campus to receive a Gold LEED certification.

## Dearborn's New Engineering Lab Building

In June 2016, the Michigan Legislature approved a $30 million capital outlay that will help fund a new $90 million Engineering Lab Building. Replacing the nearly 60-year-old facilty was determined to be more cost- and time-efficient than renovation. There has been a growing regional and national demand for engineering graduates. UM-Dearborn's engineering program has seen a 74 percent increase in enrollment since 2010 and plans to double the number of College of Engineering and Computer Science graduates by 2020.

## Addressing the Flint Water Crisis

UM-Flint brought together more than 140 faculty members from all three U-M campuses in January 2016 to discuss ideas for collaborations and opportunities to work with local community organizations to respond to the Flint water crisis. U-M President Mark Schlissel offered to provide initial seed funding, made possible through donor gifts, to help get the work started quickly. Proposals generated through this meeting were evaluated by the Office of Provost Martha Pollack, and seven projects were selected to receive funding totaling $131,500.

# MAJOR PROJECTS

More at: **2016.annualreport.umich.edu/major-projects**

## PROJECTS IN PLANNING

Central Power Plant Chimney Stack Refurbishment

Central Power Plant Fire Protection System for Steam Turbines

Chemistry Building and Willard H. Dow Laboratory Renovations for the Department of Chemistry

Flint FirstMerit North Building Operational Separation

Institute for Social Research Wing Two Elevators Replacement

North Campus Recreation Building Additions and Renovation

North Campus Research Complex Building 550 University Collections Relocation Renovations

Robotics Laboratory

University of Michigan Hospitals and Health Centers Projects

- Brighton Health Center South
- North Campus Research Complex Buildings 30, 35, 36 and 60, University Hospital and University Hospital South Clinical Pathology Laboratories Relocation and Renovation
- University Hospital Fire Detection and Alarm System Update
- West Ann Arbor Health Center

Sam Wyly Hall Renovations for Executive Education and the William Davidson Institute

William Monroe Trotter Multicultural Center



## PROJECTS IN PROGRESS

**Art and Architecture Building A. Alfred Taubman Wing Project |** Work started November 2015 with an estimated completion date of December 2017. Financing is from gifts, investment proceeds and the A. Alfred Taubman College of Architecture and Urban Planning.

**Biological Science Building |** Work started May 2015 with an estimated completion date of September 2018. Financing is from the College of LSA and the Office of the Provost.

**College of Engineering '42E Plaza Improvements |** Work started April 2016 with an estimated completion date of December 2016. Financing is from the College of Engineering.

**George Granger Brown Memorial Laboratories Renovation |** Work started July 2014 with an estimated completion date of September 2016. Financing is from state capital appropriation, investment proceeds, the College of Engineering and the Office of the Provost.

**Joseph Aldrich and Marguerite Knowlton Bursley Hall Dining Improvements |** Work started April 2016 with an estimated completion date of December 2016. Financing is from Student Life.

**Central Power Plant Campus Switching Station Switchgear Upgrade |** Work started April 2016 with an estimated completion date of December 2016. Financing is from utilities reserves.

**College of Pharmacy Building Electrical Substation Replacement |** Work started November 2015 with an estimated completion date of September 2017. Financing is from investment proceeds.

**Dearborn Science Building and Computer Information Science Building Renovation |** Work started February 2014 with an estimated completion date of September 2016. Financing is from state capital appropriation and UM-Dearborn.

**East Hall Renovations for the Department of Psychology |** Work started March 2016 with an estimated completion date of December 2016. Financing is from the College of LSA.

**Eda U. Gerstacker Grove |** Work started May 2015 with an estimated completion date of August 2016. Financing is from gifts and the College of Engineering.

**Glen Avenue Parking Structure Elevator Replacement and Improvements |** Work started August 2014 with an estimated completion date of December 2016. Financing is from parking.

**Intramural Sports Building Renovation |** Work started July 2015 with an estimated completion date of December 2016. Financing is from investment proceeds and Student Life.

**Walter E. Lay Automotive Laboratory Dynamometer Installation |** Work started June 2016 with an estimated completion date of December 2016. Financing is from the College of Engineering.

**Walter E. Lay Automotive Engineering Laboratory Infrastructure and Interior Improvements |** Work started January 2016 with an estimated completion date of December 2017. Financing is from the College of Engineering.

**Medical Center Drive Parking Structure Lighting and Emergency Power Upgrades |** Work started November 2015 with an estimated completion date of December 2016. Financing is from parking.

**Michigan Union Exterior Masonry Repairs |** Work started May 2016 with an estimated completion date of December 2016. Financing is from Student Life.

**North Quadrangle Residential and Academic Complex Residential Wing Roof Repairs |** Work started March 2016 with an estimated completion date of December 2016. Financing is from investment proceeds.

**Nuclear Engineering Laboratory Renovation |** Work started September 2015 with an estimated completion date of June 2017. Financing is from the College of Engineering.

| SCHOOL OF NURSING |
School of Nursing students began the 2015–16 school year in a new building designed to foster leaders who can transform health care.

**Richard L. Postma Family Clubhouse |** Work started January 2016 with an estimated completion date of June 2017. Financing is from the Athletic Department and gifts.

**Stephen M. Ross Athletic Campus Athletics South Competition and Performance Project |** Work started December 2015 with an estimated completion date of March 2018. Financing is from the Athletic Department and gifts.

**Stephen M. Ross School of Business Kresge Business Administration Library Renovation, Computer and Executive Education Building Demolition, Jeff T. Blau Hall and Exterior Cladding Project |** Work started April 2014 with an estimated completion date of December 2016. Financing is from gifts and investment proceeds.

**University of Michigan Hospitals and Health Centers Projects |** Financing is from U-M Hospitals and Health Centers.

- **Samuel and Jean Frankel Cardiovascular Center Hybrid Cardiac Catheterization Laboratory and Operating Room |** Work started March 2016 with an estimated completion date of June 2017. Financing is from Hospitals and Health Centers and gifts.
- **University Hospital Critical Power Distribution Improvements |** Work started March 2016 with an estimated completion date of September 2016.
- **University Hospital Occupancy Sensors and Controls |** Work started January 2016 with an estimated completion date of September 2016.
- **University Hospital Operating Room Expansion |** Work started February 2015 with an estimated completion date of July 2016.
- **University Hospital Unit 7A Renovation for Inpatient Bed Expansion |** Work started March 2016 with an estimated completion date of December 2016.
- **University Hospital South Electroconvulsive Therapy Relocation |** Work started February 2016 with an estimated completion date of September 2016.

**Utility Tunnel Reinforcement Dental Building Area |** Work started March 2016 with an estimated completion date of December 2017. Financing is from utilities reserves.

**Weiser Hall Renovation |** Work started November 2015 with an estimated completion date of September 2017. Financing is from the College of LSA and investment proceeds.

**West Hall Roof Replacement |** Work started December 2014 with an estimated completion date of August 2016. Financing is from the general fund.


| MUNGER GRADUATE RESIDENCES |
The facility achieved a Gold LEED certification for sustainability. It is the first residence hall on campus with this distinction.

## PROJECTS COMPLETED

**300 North Ingalls Building Renovation on Floors 9 and 11 |** Completed January 2016. Financed by the Medical School.

**Auxiliary Services Building 1 Roofing and Air Handling Units Replacement |** Completed February 2016. Financed by Procurement Services.

**Central Campus Area Utility Tunnel Reinforcement |** Completed December 2015. Financed by utilities reserves and the general fund.

**Clarence Cook Little Science Building Geological Sciences Laboratory Renovations |** Completed March 2016. Financed by the College of LSA.

**William L. Clements Library Infrastructure Improvements and Addition |** Completed December 2015. Financed by gifts and investment proceeds.

**Department of Intercollegiate Athletics Operations Center |** Completed August 2015. Financed by the Athletic Department.

**Earl V. Moore Building Renovation and Brehm Pavilion |** Completed September 2015. Financed by investment proceeds and gifts.

**East Hall Masonry Cornice and Window Soffit Repairs |** Completed December 2015. Financed by the general fund.

**East University Chiller Plant Chiller Replacement |** Completed June 2016. Financed by the general fund.

**Flint William R. Murchie Science Building Renovation |** Completed September 2015. Financed by state capital appropriation and UM-Flint.

**Hoover Avenue Heating Plant Boiler Replacement |** Completed December 2015. Financed by utilities reserves.

**Horace H. Rackham School of Graduate Studies Infrastructure Improvements |** Completed October 2015. Financed by investment proceeds.

**Institute of Continuing Legal Education First Floor Renovation |** Completed August 2015. Financed by the Institute of Continuing Legal Education.

**Lorch Hall East Wing Second Floor Renovation |** Completed October 2015. Financed by the College of LSA.

**Medical Sciences Research Building II Chiller Replacement and Chilled Water Interconnection to Medical Sciences Research Building III |** Completed April 2016. Financed by investment proceeds and the general fund.

**Michigan League Roof Replacement |** Completed December 2015. Financed by the general fund and Student Life.

**Michigan Memorial Phoenix Project Laboratory Renovations for Battery Prototype Facility |** Completed December 2015. Financed by the general fund.

**Mobility Transformation Center Temporary Modular Building |** Completed September 2015. Financed by the Mobility Transformation Center.

**Munger Graduate Residences |** Completed July 2015. Financed by gifts and Student Life.

**North Campus Research Complex Buildings 10 and 14 Renovations for the Institute for Healthcare Policy and Innovation** | Completed July 2015. Financed by the Medical School.

**North Quadrangle Residential and Academic Complex Roof Repairs** | Completed November 2015. Financed by investment proceeds.

**School of Education Renovation** | Completed September 2015. Financed by investment proceeds.

**School of Nursing New Building** | Completed July 2015. Financed by investment proceeds.

**A. Alfred Taubman Health Sciences Library Renovation** | Completed July 2015. Financed by the Medical School.

**University of Michigan Hospitals and Health Centers Projects** | Financed by U-M Hospitals and Health Centers.

- **A. Alfred Taubman Health Care Center Ambulatory Testing and Treatment Unit** | Completed June 2016.
- **C.S. Mott Children's and Von Voigtlander Women's Hospitals Renovations for Child and Adolescent Psychiatric Hospital Relocation** | Completed April 2016. Financed by U-M Hospitals and Health Centers and gifts.
- **University Hospital and University Hospital South Renovations for Magnetic Resonance Imaging Suite Expansion** | Completed April 2016.
- **University Hospital Communication Closet Upgrades** | Completed March 2016.
- **University Hospital Fire Detection and Alarm System Update** | Completed March 2016.
- **University Hospital Positron Emission Tomography/Computed Tomography Scanner Replacement** | Completed April 2016.
- **University Hospital South Air Handling Unit Upgrades** | Completed June 2016.
- **University Hospital Surgical Suite Air Handling Unit Upgrades** | Completed June 2016.
- **University Hospital South Medical Short Stay Unit** | Completed July 2015.
- **W. K. Kellogg Eye Center Auditorium Renovation** | Completed September 2015. Financed by U-M Hospitals and Health Centers and the Department of Ophthalmology.

**Varsity Drive Building Dry Collections Relocation Renovations** | Completed September 2015. Financed by the College of LSA.

**West Quadrangle and Michigan Union-Cambridge House Renovation** | Completed July 2015. Financed by Student Life.

**Wolverine Tower Exterior Repairs** | Completed December 2015. Financed by investment proceeds.

**Yost Ice Arena Ice System Improvements** | Completed September 2015. Financed by the Athletic Department.

| Earl V. Moore Building |
Following a three-year, $29.5 million renovation and expansion, the Earl V. Moore Building reopened in fall 2015, providing students with a vastly improved facility for music studies.

**38**
**Major Projects Completed**

# MANAGEMENT RESPONSIBILITY FOR FINANCIAL STATEMENTS

OFFICE OF
BUSINESS & FINANCE
UNIVERSITY OF MICHIGAN

October 20, 2016

The management of the University of Michigan (the "University") is responsible for the preparation, integrity, and fair presentation of the consolidated financial statements. The financial statements, presented on pages 45 to 73, 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 by management.

The consolidated 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 25-26.

The University maintains a system of internal controls over financial reporting, which is designed to provide reasonable assurance to the University's management and Board of Regents regarding the preparation of reliable published financial statements. Such 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 weakness 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 control, 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 internal auditors and the independent auditors have full and free access to the Finance, Audit and Investment Committee.

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

Kevin P. Hegarty
Executive Vice President and Chief Financial Officer

3014 Fleming Administration Building
Ann Arbor, MI 48109-1340

T: 734 764-7272
F: 734 936-8730



# REPORT OF INDEPENDENT AUDITORS

pwc

To The Regents of the University of Michigan:

We have audited the accompanying consolidated financial statements of the University of Michigan (the "University") as of and for the years ended June 30, 2016 and 2015, and the related notes to the consolidated financial statements, which consist of the consolidated statements of net position and the related consolidated statements of revenues, expenses and changes in net position and of cash flows.

## MANAGEMENT'S RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

## AUDITORS' RESPONSIBILITY

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements 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, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, MI 48226*
*T: (313) 394 6000, F: (313) 394 6555 www.pwc.com/us*

## OPINION

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the University at June 30, 2016 and 2015, and the changes in its financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## OTHER MATTER

The accompanying management's discussion and analysis on pages 27 through 44 is required by accounting principles generally accepted in the United States of America to supplement the basic consolidated financial statements. Such information, although not a part of the basic consolidated 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 consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary 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 consolidated financial statements, and other knowledge we obtained during our audits of the basic consolidated 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 LLP

October 20, 2016

*PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, MI 48226*
*T: (313) 394 6000, F: (313) 394 6555 www.pwc.com/us*



# 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, 2016 and 2015 and its activities for the three fiscal years ended June 30, 2016. This discussion has been prepared by management and should be read in conjunction with the financial statements and the notes thereto, which follow this section.

The University is a comprehensive public institution of higher learning with over 61,000 students and approximately 7,900 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 three hospitals, 40 health centers, more than 150 outpatient clinics, the University's Medical School and Michigan Health Corporation, a wholly-owned corporation created to pursue joint venture and managed care initiatives. The University employs over 46,000 regular employees and approximately 13,000 temporary staff.

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 assets of $18.5 billion and liabilities of $5.5 billion at June 30, 2016, compared to assets of $18.5 billion and liabilities of $5.2 billion at June 30, 2015. Net position, which represents the residual interest in the University's assets after liabilities are deducted, totaled $13.0 billion and $13.3 billion at June 30, 2016 and 2015, respectively. Changes in net position represent the University's results of operations and are summarized for the years ended June 30, 2016 and 2015 as follows:

| (in millions) | 2016 | 2015 |
|---|---|---|
| Operating revenues and educational appropriations | $ 6,667.1 | $ 6,307.6 |
| Private gifts for operating activities | 167.2 | 172.0 |
| Operating and net interest expenses | (7,200.8) | (6,735.1) |
| | (366.5) | (255.5) |
| Net investment (loss) income | (129.7) | 357.8 |
| Endowment, capital gifts and grants and other | 201.6 | 135.4 |
| (Decrease) increase in net position | $ (294.6) | $ 237.7 |

Net position decreased $295 million in 2016 after an increase of $238 million in 2015 primarily as a result of a net investment loss of $130 million in 2016, as compared to net investment income of $358 million in 2015.

# MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

In 2016, operating revenues and educational appropriations increased 5.7 percent, or $360 million, while total operating and net interest expenses increased 6.9 percent, or $466 million. Endowment, capital gifts and grants and other revenues increased $66 million in 2016 as a result of state capital appropriations and underlying activity associated with the Victors for Michigan campaign which was launched in November 2013.

The results of operations reflect the University's focus on maintaining its national standards academically, in research and in health care within a competitive recruitment environment for faculty and health care professionals and a period of reduced federal funding for research. At the same time, the University is addressing constrained state appropriations and rising health care, regulatory and facility costs with aggressive cost cutting and productivity gains to help preserve access to affordable higher education for Michigan families. To achieve aggressive and sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to bridge cuts and support enterprise-wide information technology projects and other initiatives.

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. Endowment spending rate distributions to University units totaled $296 million and $286 million in 2016 and 2015, respectively. 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 most 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 invested, along with the noncurrent portion of the insurance and benefit reserves, in an equity oriented long-term strategy through its Long Term Portfolio.

## USING THE FINANCIAL STATEMENTS

The University's financial report includes three financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows. These financial statements are prepared in accordance with Governmental Accounting Standards Board ("GASB") principles, which establish standards for external financial reporting for public colleges and universities.

## STATEMENT OF NET POSITION

The statement of net position presents the financial position of the University at the end of the fiscal year and includes all assets and liabilities of the University. The difference between total assets and total liabilities – 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. A comparison of the University's assets, liabilities and net position at June 30, 2016 and 2015 is summarized as follows:

| (in millions) | **2016** | **2015** |
|---|---|---|
| Current assets | $ 2,445 | $ 2,243 |
| Noncurrent assets: | | |
| Endowment, life income and other investments | 10,046 | 10,264 |
| Capital assets, net | 5,709 | 5,622 |
| Other | 350 | 349 |
| Total assets | 18,550 | 18,478 |
| Current liabilities | 1,771 | 1,640 |
| Noncurrent liabilities | 3,778 | 3,542 |
| Total liabilities | 5,549 | 5,182 |
| Net position | $ 13,001 | $ 13,296 |

The University continues to maintain and protect its strong financial foundation. This financial health, as reflected in the statement of net position at June 30, 2016 and 2015, 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 $2.4 billion and $2.2 billion at June 30, 2016 and 2015, respectively. Cash, cash equivalents and investments for operating activities totaled $1.2 billion at June 30, 2016, which represents approximately two months of total expenses excluding depreciation.

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. Current liabilities totaled $1.8 billion and $1.6 billion at June 30, 2016 and 2015, respectively.

## ENDOWMENT, LIFE INCOME AND OTHER INVESTMENTS

The composition of the University's endowment, life income and other investments at June 30, 2016 and 2015 is summarized as follows:

| (in millions) | 2016 | 2015 |
|---|---|---|
| Endowment investments | $ 9,743 | $ 9,952 |
| Life income investments | 111 | 111 |
| Noncurrent portion of insurance and benefits obligations investments | 192 | 201 |
| | $ 10,046 | $ 10,264 |

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 amounts (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. The major portion of the endowment is maintained in the University Endowment Fund, a unitized pool which represents a collection of approximately 9,800 separate (individual) funds, the majority of which are restricted for specific purposes. The University Endowment Fund is invested in the University's Long Term Portfolio, a single diversified investment pool.

The endowment spending rule provides for distributions from the University Endowment Fund to the units that benefit from the endowment fund. At June 30, 2016 and 2015, the annual distribution rate was 4.5 percent of the one-quarter lagged seven year moving average fair value of University Endowment Fund shares. The University's endowment spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather the challenging economic environment while avoiding measures such as faculty hiring freezes, furloughs, program cuts or halting construction.

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, departments may also use withdrawals from funds functioning as endowment to support capital expenditures and operations.

Endowment spending rate distributions totaled $303 million, $292 million and $283 million and withdrawals from funds functioning as endowment totaled $60 million, $13 million and $137 million in 2016, 2015 and 2014, respectively. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.9 percent, 4.1 percent and 6.0 percent of the current year average fair value of the University Endowment Fund for 2016, 2015 and 2014, respectively. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 5.0 percent.

## 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 $595 million in 2016, as compared to $660 million in 2015. Capital asset additions primarily represent renovation and new construction of student residence, academic, research, clinical and athletic 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 $364 million, as well as debt proceeds of $183 million and state capital appropriations of $48 million. Construction in progress, which totaled $452 million at June 30, 2016 and $529 million at June 30, 2015, includes important projects for student residential life, research, instruction, patient care and athletics.

Projects completed in 2016 include two significant residential projects. The construction and furnishing of the Munger Graduate Residences created a new state-of-the-art residence hall designed to foster a high level of diversity and interaction among graduate students studying across the University's 19 schools and colleges. By bringing together scholars with different approaches, this trans-disciplinary residence aims to break up the traditional silos of graduate work and foster greater collaboration to generate new ideas. The eight-story building is approximately 380,000 gross square feet and accommodates 630 students in an apartment-style layout.

Originally constructed in 1937, West Quadrangle, combined with the Cambridge House portion of the Michigan Union, underwent a renovation of approximately 370,000 gross square feet of space. With the creation of a central campus dining facility in nearby South Quad, the student dining facilities were repurposed to create space for living and learning activities to foster student interaction and community. The project also included infrastructure upgrades such as roof replacement, new plumbing, heating, cooling and ventilation systems, renovated student rooms and bath facilities and accessibility improvements.

Projects competed in 2016 also included construction of a new School of Nursing building of approximately 78,000 gross square feet to accommodate its instructional space needs. Key features of the building include active learning classrooms, a technologically rich clinical learning center with simulation and skills labs and simulated patient suites in an environment that will foster collaboration and community. This facility also includes offices for student services and a small number of faculty offices. The balance of the school's offices and administration remain in the existing North Ingalls building.

Construction in progress at June 30, 2016 includes several significant academic renovation and construction projects. At the Ross School of Business, work continues on a new academic building to replace the Computer and Executive Education Building and a comprehensive renovation of Kresge Hall, formerly the Kresge Business Administration Library. In total, this project represents approximately 75,000 gross square feet of building renovation and 104,000 gross square feet of new building construction. The project will add classrooms, study space, and faculty research and office space as well as enhance non-academic operations to improve the student experience, with added space for student life functions, financial aid, admissions and onsite recruiting. Connecting the new building to existing buildings improves efficiencies throughout the school as well. Exterior building finishes are also being added to Sam Wyly Hall, the Business Administration Executive Dormitory and the Hill Street Parking Structure to create a welcoming and unified look for the entire Ross School complex of buildings. This project is scheduled to be completed in fall 2016.

A Biological Science Building of approximately 300,000 gross square feet is being constructed to provide a teaching, research and museum facility for the biological sciences and exhibit museums. Bringing these programs together under one roof will create exciting opportunities for interdisciplinary teaching, research and collaboration, and offer a richer experience for museum visitors. The new building will house classrooms, research laboratories, associated support functions, offices and vivarium services, as well as the anthropology, natural history, paleontology and zoology museums currently housed at the Alexander G. Ruthven Museums Building. The structure will also include a connection to the adjacent Life Sciences Institute Building to increase the utilization of its loading dock and vivarium functions. This project is scheduled to be completed in spring 2018.

Renovation of the Science Building on the University's Dearborn campus, which was originally constructed in 1959, is also underway. The renovation of this 80,000 gross square foot facility will provide updated laboratory and classroom space for the Department of Natural Sciences. In addition, approximately 20,000 gross square feet will be added to the building for state-of-the-art laboratory spaces, a new elevator, loading dock and mechanical penthouse. Infrastructure that is shared with the adjacent Computer Science Building is also being upgraded. The renewed facility will help transform science education and facilitate closer academic-industry and student-industry collaboration. This project is scheduled to be completed in fall 2016.

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 June 2016, Moody's affirmed its highest credit rating (Aaa) for bonds backed by a broad revenue pledge based on the University's ability to translate its international brand into revenue growth and philanthropic support, and ongoing superior financial flexibility from robust financial reserves. Standard & Poor's also affirmed its highest credit rating (AAA) based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, excellent balance sheet, exceptional research presence and manageable debt burden.

Long-term debt activity for the years ended June 30, 2016 and 2015 is summarized as follows:

| 2016 | | | | |
|---|---|---|---|---|
| (in millions) | Beginning Balance | Additions | Reductions | Ending Balance |
| Commercial paper | $ 138 | $ 197 | $ 175 | $ 160 |
| Bonds | 1,730 | 361 | 265 | 1,826 |
| | $ 1,868 | $ 558 | $ 440 | $ 1,986 |

| 2015 | | | | |
|---|---|---|---|---|
| (in millions) | Beginning Balance | Additions | Reductions | Ending Balance |
| Commercial paper | $ 41 | $ 137 | $ 40 | $ 138 |
| Bonds | 1,794 | | 64 | 1,730 |
| | $ 1,835 | $ 137 | $ 104 | $ 1,868 |

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. Outstanding bonds are supported by the University's general revenues.

During 2016, consistent with capital and debt financing plans, the University issued $307 million of fixed rate, tax-exempt, general revenue bonds, with a net original issue premium of $54 million. Total bond proceeds of $361 million were utilized to convert $71 million of commercial paper to long-term debt, refund $205 million of General Revenue Bonds and provide $85 million for capital projects and debt issuance costs.

The composition of the University's debt at June 30, 2016 and 2015 is summarized as follows:

| (in millions) | 2016 | 2015 |
|---|---|---|
| Variable rate: | | |
| Commercial paper | $ 160 | $ 138 |
| Bonds | 611 | 833 |
| Fixed rate bonds | 1,215 | 897 |
| | $ 1,986 | $ 1,868 |

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB Interpretation No. 1, 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 University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time. In addition, the University maintains five remarketing agents to achieve a wide distribution of its variable rate bonds.

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 2.3 percent in 2016 and 2.1 percent in 2015, including the federal subsidies for interest on taxable Build America Bonds. Interest expense net of federal subsidies received for interest on taxable Build America Bonds and interest capitalized during construction totaled $48 million in 2016 and $42 million in 2015.

## OBLIGATIONS FOR POSTEMPLOYMENT BENEFITS

In accordance with GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions*, the University recognizes the cost of postemployment benefits during the periods when employees render their services. Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled $1.84 billion and $1.75 billion at June 30, 2016 and 2015, respectively. 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 of providing those services which totaled $394 million and $331 million at June 30, 2016 and 2015, respectively.

The University amortizes changes in actuarial assumptions, plan design and experience gains and losses over a ten-year closed period. Accordingly, the liability for net postemployment benefits obligations recorded in the statement of net position may differ from the actuarial accrued liability due to the unamortized portion of these changes. At June 30, 2016, the recorded liability for net postemployment benefits obligations totaled $1.84 billion and the actuarial accrued liability totaled $1.84 billion.

By implementing a series of health benefit initiatives over the past 11 years, the University has favorably impacted its actuarial accrued liability for postemployment benefits by $847 million as of June 30, 2016. These initiatives have included cost sharing changes, elimination of Medicare Part B reimbursements for certain retirees and the adjustment of retirement eligibility criteria. Conversely, in 2015, a reduction in the discount rate and the adoption of a new mortality table, unfavorably impacted the actuarial accrued liability by $344 million.

## NET POSITION

Net position represents the residual interest in the University's assets after liabilities are deducted. The composition of the University's net position at June 30, 2016 and 2015 is summarized as follows:

| (in millions) | 2016 | 2015 |
|---|---|---|
| Net investment in capital assets | $ 3,821 | $ 3,782 |
| Restricted: | | |
| Nonexpendable: | | |
| Permanent endowment corpus | 1,815 | 1,674 |
| Expendable: | | |
| Net appreciation of permanent endowments | 1,519 | 1,708 |
| Funds functioning as endowment | 1,942 | 2,061 |
| Restricted for operations and other | 658 | 603 |
| Unrestricted | 3,246 | 3,468 |
| | $ 13,001 | $ 13,296 |

Net investment in capital assets represents the University's capital assets net of accumulated depreciation and outstanding principal balances of debt related to the acquisition, construction or improvement of those assets. The increase of $39 million in 2016 reflects the University's continued development and renewal of its capital assets in accordance with its long-range capital plan.

Restricted nonexpendable net position represents the historical value (corpus) of gifts to the University's permanent endowment funds. The increase of $141 million in 2016 primarily represents new gifts. 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 $4.1 billion at June 30, 2016, as compared to $4.4 billion at June 30, 2015, with the current year decline driven primarily by a decrease in net appreciation of permanent endowments resulting from investment losses.

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, 2016 totaled $3.2 billion and included funds functioning as endowment of $4.2 billion offset by unfunded obligations for postemployment benefits of $1.8 billion. Unrestricted net position at June 30, 2015 totaled $3.5 billion and included funds functioning as endowment of $4.3 billion offset by unfunded obligations for postemployment benefits of $1.7 billion. Unrestricted net position also includes other net resources which totaled $800 million and $900 million at June 30, 2016 and 2015, respectively.

## STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

The 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. A comparison of the University's revenues, expenses and changes in net position for the three years ended June 30, 2016 is summarized as follows:

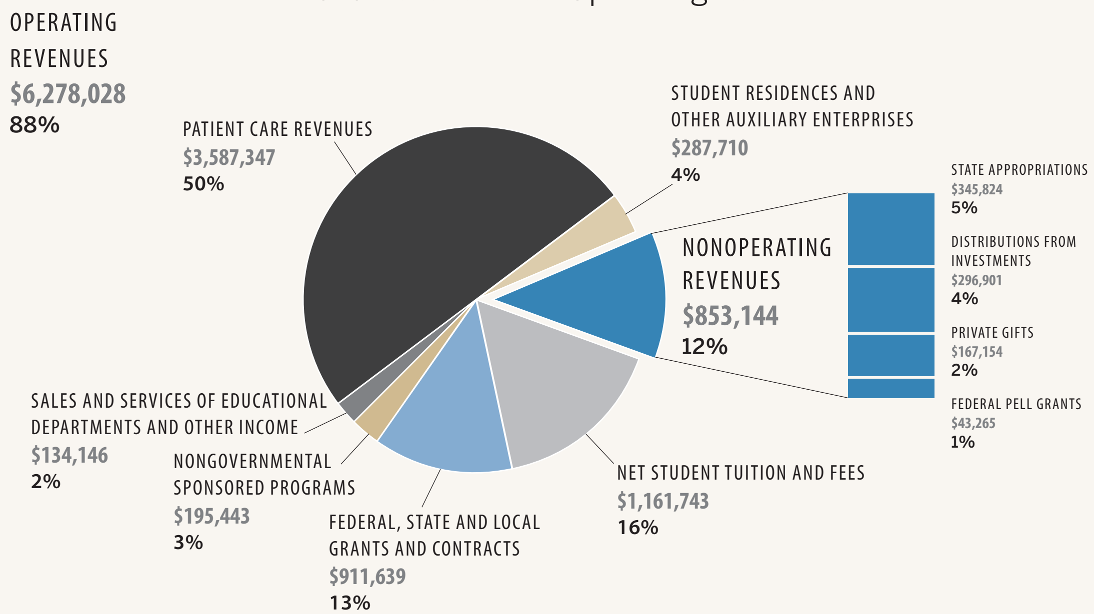
| (in millions) | 2016 | 2015 | 2014 |
|---|---|---|---|
| Operating revenues: | | | |
| Net student tuition and fees | $ 1,161.7 | $ 1,145.9 | $ 1,107.6 |
| Sponsored programs | 1,107.1 | 1,047.4 | 1,027.6 |
| Patient care revenues, net | 3,587.3 | 3,264.8 | 3,001.3 |
| Other | 421.9 | 465.3 | 398.4 |
| | 6,278.0 | 5,923.4 | 5,534.9 |
| Operating expenses | 7,152.8 | 6,693.2 | 6,381.3 |
| Operating loss | (874.8) | (769.8) | (846.4) |
| Nonoperating and other revenues (expenses): | | | |
| State educational appropriations | 345.8 | 340.2 | 321.7 |
| Federal Pell grants | 43.3 | 44.0 | 44.0 |
| Private gifts for operating activities | 167.2 | 172.0 | 166.4 |
| Net investment (loss) income | (129.7) | 357.8 | 1,653.8 |
| Interest expense, net | (55.6) | (49.3) | (54.2) |
| Federal subsidies for interest on Build America Bonds | 7.6 | 7.4 | 7.5 |
| Endowment and capital gifts and grants | 163.0 | 138.2 | 297.7 |
| State capital appropriations | 47.6 | 3.8 | |
| Other | (9.0) | (6.6) | (15.5) |
| Nonoperating and other revenues, net | 580.2 | 1,007.5 | 2,421.4 |
| (Decrease) increase in net position | (294.6) | 237.7 | 1,575.0 |
| Net position, beginning of year | 13,295.8 | 13,058.1 | 11,483.1 |
| Net position, end of year | $ 13,001.2 | $ 13,295.8 | $ 13,058.1 |

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.

# MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

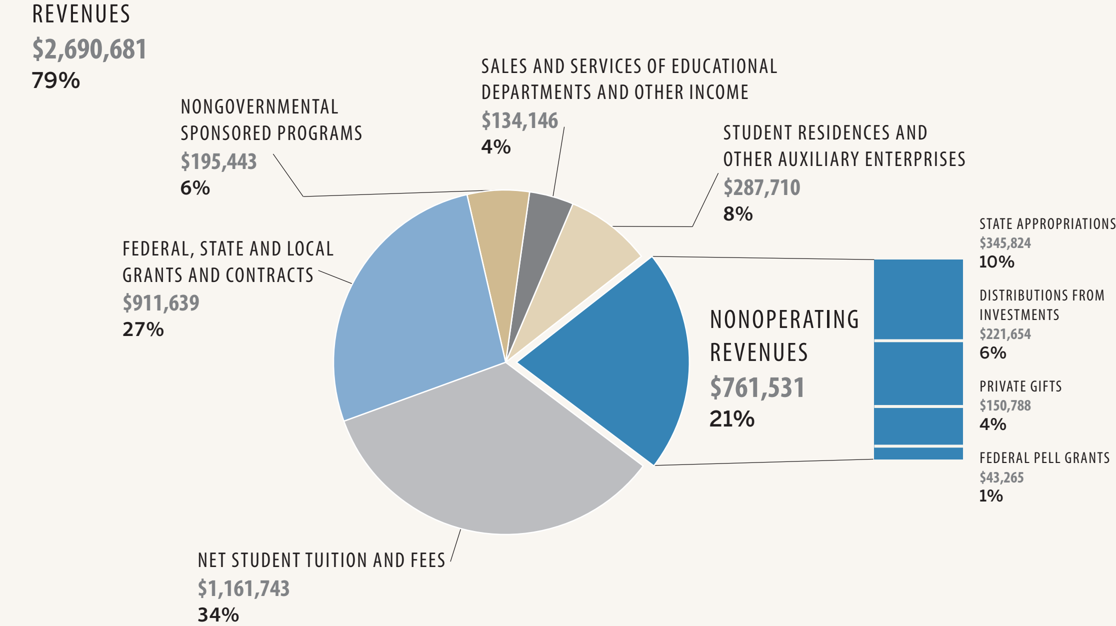
The following is a graphic illustration of revenues by source, both operating and nonoperating, which are used to fund the University's operating activities for the year ended June 30, 2016 (amounts are presented in thousands of dollars). Certain recurring sources of the University's revenues are considered nonoperating, as defined by GASB, such as state appropriations, distributions from investments, private gifts and federal Pell grants.

2016 Revenues for Operating Activities




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, 2016 (amounts are presented in thousands of dollars).

2016 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 appropriations increased 1 percent, or $21 million, to $1.51 billion in 2016, as compared to 4 percent, or $57 million, to $1.49 billion in 2015.

The University has been able to avoid the severe cuts and double digit tuition increases experienced elsewhere in the country due to a prudent long-term plan which anticipated the realities of the state's challenging economy. The University's 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.

In 2016, the University's state educational appropriations increased 2 percent, or $6 million, to $346 million. In 2015, the University's state educational appropriations increased 6 percent, or $18 million, to $340 million.

For the three years ended June 30, 2016, net student tuition and fees revenue consisted of the following components:

| (in millions) | 2016 | 2015 | 2014 |
|---|---|---|---|
| Student tuition and fees | $ 1,502.2 | $ 1,458.6 | $ 1,405.3 |
| Less scholarship allowances | 340.5 | 312.7 | 297.7 |
| | $ 1,161.7 | $ 1,145.9 | $ 1,107.6 |

In 2016, net student tuition and fees revenue increased 1 percent, or $16 million, to $1.16 billion, which reflects a 3 percent, or $44 million, increase in gross tuition and fee revenues offset by a 9 percent, or $28 million, increase in scholarship allowances. Tuition rate increases in 2016 were 2.7 percent for resident undergraduate students, 3.7 percent for nonresident undergraduate students and 2.7 percent for most graduate students on the Ann Arbor campus, with a 3.2 percent tuition rate increase for most undergraduate and graduate students on both the Dearborn and Flint campuses.

In 2015, net student tuition and fees revenue increased 3 percent, or $38 million, to $1.15 billion, which reflects a 4 percent, or $53 million, increase in gross tuition and fee revenues offset by a 5 percent, or $15 million, increase in scholarship allowances. Tuition rate increases in 2015 were 1.6 percent for resident undergraduate students, 3.4 percent for nonresident undergraduate students and 2.4 percent for most graduate students on the Ann Arbor campus, with a 3.2 percent tuition rate increase for most undergraduate and graduate students on the Dearborn campus and a 3.0 percent tuition rate increase for undergraduate and graduate students on the Flint campus.

During 2016 and 2015, the total number of students remained relatively stable; however, the University continued to experience a shift in mix from resident to non-resident 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. At the same time, the University has also increased scholarship and fellowship expenses and related allowances to benefit students in financial need.

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 permanent endowment purposes totaled $167 million in 2016, as compared to $172 million in 2015 and $166 million in 2014.

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 increased 6 percent, or $60 million, to $1.1 billion in 2016, driven primarily by an increase in federally sponsored activity. Revenues for sponsored programs increased 2 percent, or $20 million, to $1.0 billion in 2015, driven primarily by an increase in revenue from industry sponsored activities.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities under contractual arrangements with governmental payers (Medicare and Medicaid) and private insurers. In 2016, the University's Hospitals and Health Centers ("HHC") realized payment rate increases from the majority of private insurers and governmental payers as compared to 2015 and 2014. The distribution of gross charge activity by primary payer source for the three years ended June 30, 2016 is summarized as follows:

| | 2016 | 2015 | 2014 |
|---|---|---|---|
| Medicare | 35.9% | 35.6% | 34.9% |
| Medicaid | 16.7% | 16.3% | 15.1% |
| Blue Cross | 32.6% | 33.2% | 34.0% |
| Other | 14.8% | 14.9% | 16.0% |

Patient care revenues increased 10 percent, or $323 million, to $3.6 billion in 2016, as compared to an increase of 9 percent, or $264 million, to $3.3 billion in 2015. The increased revenues for both years primarily resulted from growth in outpatient and inpatient volume, as well as an increase in revenue per patient case driven by favorable changes in payment rates. Adjusted cases, which is an aggregate activity measurement combining inpatient discharges and outpatient/observation case activity, increased 7 percent in 2016 and 2015 for HHC.

Net investment loss totaled $130 million in 2016, compared to net investment income of $358 million in 2015 and $1.7 billion in 2014. The investment environment in 2016 continued to be challenging and was characterized by a high degree of volatility in the public equity and commodity sectors. The continued low interest rate environment and speculation as to whether higher rates are forthcoming has impacted asset classes within the portfolio in different ways. Both marketable equities and absolute return strategies suffered mid to high single-digit negative returns in 2016, while fixed income returns achieved high positive single-digit returns. Alternative investment results were mixed, with private equity and real estate leading with high single-digit returns. Venture capital returns were slightly negative and natural resources, although improved from the prior year, still returned double-digit losses. This compares to 2015 when the portfolio was characterized by relatively flat performance for the marketable securities with the alternative assets performing their role as a diversifier and delivering high single-digits returns. In 2014, returns were strong in fixed income, developed market equities, absolute return strategies and all alternative asset classes.

With the Victors for Michigan campaign well underway, gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. Endowment and capital gifts and grants totaled $163 million in 2016, as compared to $138 million and $298 million in 2015 and 2014, respectively. Private gifts for permanent endowment purposes totaled $127 million in 2016, as compared to $115 million and $89 million in 2015 and 2014, respectively. Capital gifts and grants totaled $36 million in 2016, as compared to $23 million and $209 million in 2015 and 2014, respectively. In recent years, major gifts have been received in support of the University's wide-ranging capital initiatives which include graduate student housing, the Health System, Law School, Stephen M. Ross School of Business, College of Engineering and Intercollegiate Athletics.

State capital appropriations are also helping the University improve its academic buildings. Current capital outlays are supporting renovations of the George Granger Brown Memorial Laboratories on the Ann Arbor campus, the Science Building and Computer Information Science Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus. Revenue is recognized as qualified capital expenditures are incurred and totaled $48 million in 2016 and $4 million in 2015.

In addition to revenue diversification, the University continues to make cost containment an ongoing priority. This is necessary as the University continues to face significant financial pressures, particularly in the areas of compensation and benefits, which represent 64 percent of total expenses, as well as in the areas of energy, technology and ongoing maintenance of facilities and infrastructure.

A comparative summary of the University's expenses for the three years ended June 30, 2016 is as follows:

| (in millions) | 2016 | | 2015 | | 2014 | |
|---|---|---|---|---|---|---|
| Operating: | | | | | | |
| Compensation and benefits | $ 4,627.4 | 64% | $ 4,330.9 | 64% | $ 4,150.8 | 64% |
| Supplies and services | 1,891.6 | 26 | 1,735.9 | 26 | 1,618.5 | 25 |
| Depreciation | 501.6 | 7 | 493.6 | 7 | 487.5 | 8 |
| Scholarships and fellowships | 132.2 | 2 | 132.8 | 2 | 124.5 | 2 |
| | 7,152.8 | 99 | 6,693.2 | 99 | 6,381.3 | 99 |
| Nonoperating: | | | | | | |
| Interest, net | 48.0 | 1 | 41.9 | 1 | 46.7 | 1 |
| | $ 7,200.8 | 100% | $ 6,735.1 | 100% | $ 6,428.0 | 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. The resources expended for compensation and benefits increased 7 percent, or $297 million, to $4.6 billion in 2016, as compared to 4 percent, or $180 million, to $4.3 billion in 2015. Of the 2016 increase, compensation increased 5 percent, to $3.5 billion, and employee benefits increased 14 percent, to $1.1 billion, with the increase in employee benefits driven primarily by a change in the underlying mortality and discount rate assumptions used to develop the recorded liability for postemployment benefits. For 2015, compensation increased 5 percent, to $3.4 billion, and employee benefits increased 2 percent, to $962 million. During 2016 and 2015, nursing and other health professionals were added to support higher patient volume levels.

# MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

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.

Effective January 1, 2015, the University changed its defined contribution retirement plan to use base pay alone as eligible pay for calculating plan contributions. Elements of salary beyond base pay such as administrative and added-duties differentials, one-time lump sum payments, overtime pay and payout of unused vacation time upon termination will now be excluded from retirement savings calculations. Additionally, University contributions to the plan for certain employees of its health system were reduced to a cap of 9 percent from 10 percent of eligible pay to better align these benefits with those offered within the health care industry. All employees participating in the University's retirement savings plans continue to have the option to save additional base pay via a supplemental retirement account on a pre-tax basis.

Health care benefits are one of the most significant employee benefits. 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.

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. For example, the Pharmacy Benefits Advisory Committee, which consists of internal experts including Health System physicians, School of Pharmacy faculty and on-staff pharmacists, monitors the safety and effectiveness of covered medications and guides appropriate prescribing, dispensing and cost effective use of prescription drugs. In addition, the University utilizes its nationally recognized health policy experts to guide future health plan strategies.

During 2013, the University began to implement changes to eligibility requirements and the University contribution to retiree health benefits that were announced in 2011. These changes were recommended by a committee that evaluated ways to maintain competitive retiree health benefits while helping address the acceleration of future costs. The changes are being phased in over eight years in order to assist current employees with the transition.

The University utilizes a point system to determine retirement eligibility, where points represent the combination of age and years of service for full-time employees. The points needed to retire with health benefits will gradually be increased from 76 in 2013 to 80 in 2021. Over the same period, the University's contribution towards health care benefits will gradually decrease from 87.5 percent for the retiree and 65 percent for any dependents for employees who retire in 2013 to a maximum of 80 percent for the retiree and 50 percent for any dependents for employees who retire in 2021. Employees who retire after December 31, 2020 will need a minimum of 20 years of service to receive the maximum contribution upon retirement which will be 68 percent for the retiree and 26 percent for any dependents. These adjustments will keep the University's retiree benefits competitive with peer institutions while producing an estimated $9 million reduction in annual cash outlay by 2020 and an estimated $165 million reduction in annual cash outlay by 2040.

The University continues to monitor and evaluate the cost of employee and retiree health benefits, following key benchmarks to ensure competitiveness with local and national higher education and health care markets. As national health care reforms are implemented under the Affordable Care Act, the University is closely tracking cost and coverage implications. Careful stewardship of our health benefit plans helps maintain our competitive position while preserving funding for the University's core mission.

The MHealthy initiative is a University-wide effort to improve the health and well-being of faculty, staff and their dependents by creating a culture of health and reducing or preventing health risks in our population. A five-year review of the program conducted in 2015 noted that overall annual program participation has been stable, with over 20,000 employees. Over the five-year period, decreases in the percentage of high risk employees occurred in many risk areas including back pain, alcohol, tobacco, nutrition and physical activity.

These initiatives and programs reflect the reality of the national landscape, while remaining true to the commitment we make to our employees for a robust benefits package.

Supplies and services expenses increased 9 percent, or $156 million, to $1.9 billion in 2016, as compared to an increase of 7 percent, or $117 million, to $1.7 billion in 2015. These increases were primarily due to growth in patient care related expenses including higher costs of prescription drugs and surgical implants, as well as costs associated with significant capital projects. During 2014, the new Northville Health Center facility was placed in service and the University implemented several significant information technology systems, including the third phase of an electronic medical record and patient billing system.

Depreciation expense increased 2 percent, or $8 million, to $502 million in 2016, as compared to an increase of 1 percent, or $6 million, to $494 million in 2015. The increased depreciation expense is primarily related to the completion of current year capital projects, as well as the impact of a full year of depreciation for the capital projects completed during the prior year. Capital assets placed in service during 2016 include the renovation of the West Quadrangle and Michigan Union-Cambridge House, as well as new construction of the Munger Graduate Residences and an instructional building for the School of Nursing. Capital assets placed in service in 2015 include the renovation and expansion of South Quad, the A. Alfred Taubman Health Sciences Library buildings and the Phyllis Ocker Field Hockey Stadium.

Net interest expense increased $6 million in 2016 to $48 million, from $42 million in 2015 and $47 million in 2014.

In addition to their natural (object) classification, it is also informative to review operating expenses by function. A comparative summary of the University's expenses by functional classification for the three years ended June 30, 2016 is as follows:

| (in millions) | 2016 | | 2015 | | 2014 | |
|---|---|---|---|---|---|---|
| Operating: | | | | | | |
| Instruction | $ 1,031.0 | 14% | $ 983.5 | 15% | $ 953.9 | 15% |
| Research | 754.8 | 10 | 706.1 | 10 | 708.8 | 11 |
| Public service | 182.2 | 3 | 189.4 | 3 | 152.8 | 2 |
| Institutional and academic support | 623.0 | 9 | 581.5 | 9 | 542.9 | 8 |
| Auxiliary enterprises: | | | | | | |
| Patient care | 3,402.5 | 47 | 3,127.1 | 46 | 2,925.0 | 46 |
| Other | 218.5 | 3 | 201.5 | 3 | 208.5 | 3 |
| Operations and maintenance of plant | 307.0 | 4 | 277.7 | 4 | 277.4 | 4 |
| Depreciation | 501.6 | 7 | 493.6 | 7 | 487.5 | 8 |
| Scholarships and fellowships | 132.2 | 2 | 132.8 | 2 | 124.5 | 2 |
| | 7,152.8 | 99 | 6,693.2 | 99 | 6,381.3 | 99 |
| Nonoperating: | | | | | | |
| Interest, net | 48.0 | 1 | 41.9 | 1 | 46.7 | 1 |
| | $ 7,200.8 | 100% | $ 6,735.1 | 100% | $ 6,428.0 | 100% |

Instruction expenses increased 5 percent, or $48 million in 2016, and 3 percent, or $30 million in 2015. This increase is consistent with the modest level of growth in the related revenue sources offset by cost containment efforts.

Research expenses increased 7 percent, or $49 million in 2016, and decreased 0.4 percent, or $3 million in 2015. The increase in 2016 reflects the strength of the University's research enterprise, in spite of continued pressure from sequestration and intense competition for research dollars. 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 $1.4 billion, $1.3 billion and $1.3 billion in 2016, 2015 and 2014, respectively.

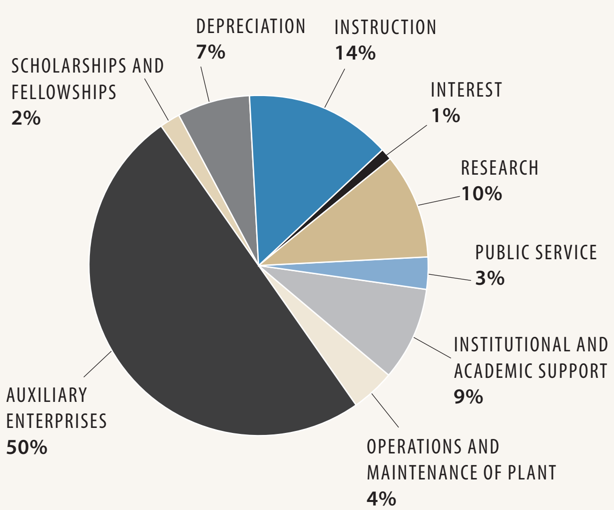
Patient care expenses increased 9 percent, or $275 million in 2016, and 7 percent, or $202 million in 2015. These increases are the result of additional patient care volume, including costs of staffing, medical supplies and pharmaceuticals.

Total scholarships and fellowships provided to students aggregated $494 million in 2016, as compared to $465 million in 2015 and $441 million in 2014, an increase of 12 percent over the past two years. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarship and fellowship expenses. Scholarships and fellowships for the three years ended June 30, 2016 are summarized as follows:

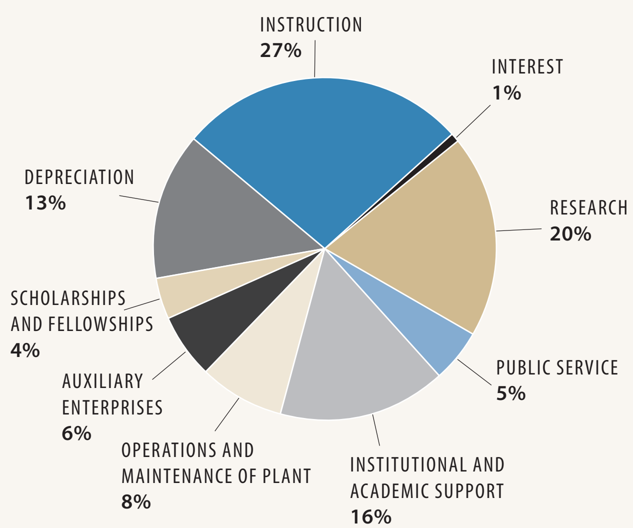
| (in millions) | 2016 | 2015 | 2014 |
|---|---|---|---|
| Paid directly to students | $ 132.2 | $ 132.8 | $ 124.5 |
| Applied to tuition and fees | 340.5 | 312.7 | 297.7 |
| Applied to University Housing | 21.6 | 19.8 | 18.6 |
| | $ 494.3 | $ 465.3 | $ 440.8 |

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

2016 Expenses by Function




2016 Expenses by Function Excluding Expenses from the University's Health System and Other Patient Care Activities




## STATEMENT OF CASH FLOWS

The statement of cash flows provides additional information about the University's financial results by reporting the major sources and uses of cash. A comparative summary of the statement of cash flows for the years ended June 30, 2016 and 2015 is as follows:

| (in millions) | 2016 | 2015 |
|---|---|---|
| Cash received from operations | $ 6,330.7 | $ 5,943.7 |
| Cash expended for operations | (6,496.5) | (6,238.8) |
| Net cash used in operating activities | (165.8) | (295.1) |
| Net cash provided by investing activities | 116.4 | 291.0 |
| Net cash used in capital and related financing activities | (449.3) | (617.0) |
| Net cash provided by noncapital financing activities | 679.0 | 660.8 |
| Net increase in cash and cash equivalents | 180.3 | 39.7 |
| Cash and cash equivalents, beginning of year | 105.5 | 65.8 |
| Cash and cash equivalents, end of year | $ 285.8 | $ 105.5 |

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 WILL AFFECT THE FUTURE

The University continues to face significant financial challenges to its academic programs, stemming from the State's uncertain financial circumstances. Given the continuation of this difficult economic environment, it is noteworthy that the University maintains the highest credit ratings of Moody's (Aaa) and Standard & Poor'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 difficult 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 2017 anticipates a 3.0 percent increase in state educational appropriations, a 3.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 10.8 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 4.4 percent, while most graduate and professional rates will increase 3.9 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 4.1 percent.

# MANAGEMENT'S DISCUSSION AND ANALYSIS
## (UNAUDITED)

While tuition and state appropriations fund a large percentage of academic costs, private support is also essential to the University's academic distinction. In November 2013, the University launched the public phase of a major fundraising campaign with the announcement of an ambitious goal of $4 billion. The campaign, titled "Victors for Michigan," is focused on raising funds for three priority areas of student support, engaged learning and bold ideas, in order to better prepare tomorrow's leaders and address the complex problems facing the world. Since commencing the quiet phase of the campaign in 2011, the University has raised 87.5 percent of the goal, in cash, pledges and bequests. The campaign will continue through 2018.

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 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 $1.1 billion at June 30, 2016. Funding for these projects is anticipated to include $1.0 billion from internal sources, gifts, grants and future borrowings, $26 million from the State Building Authority and $36 million from the utilization of unexpended debt proceeds.

In addition to strategic capital and technological investments, the University's Health System is also focusing on clinical affiliation arrangements to enhance patient care, clinical research, physician recruitment and support services. In support of this goal, the University signed a definitive agreement in September 2016 in connection with a proposed affiliation with Metropolitan Health Corporation ("Metro Health"), a community health care provider in west Michigan. In addition to its 208-bed hospital, Metro Health has neighborhood outpatient centers and offices throughout west Michigan to serve the greater Grand Rapids area.

While HHC is well positioned to maintain a strong financial position in the near term, ongoing constraints on revenue are expected due to fiscal pressures from employers and federal and state governments. 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.

U.S. health care reform will also continue to influence benefits planning. Since the Affordable Care Act was signed into law in March 2010 and subsequently affirmed by the Supreme Court, new regulatory requirements continue to affect health plans, providers and employers alike. Beginning in 2011, the University has implemented several initiatives in response to this new law including required cost-sharing, eligibility and communications changes. University experts are continuing to assess additional health care reform impacts, including health insurance exchanges for large employers in 2017 and the excise tax on high-cost plans in 2020. As of January 1, 2016, the University was required to offer minimum essential health coverage to 95 percent of its full time employees regardless of regular or temporary status. The University is working to develop clear strategies and options for the future that will ensure compliance over the coming years of regulatory change.

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, 2016 | 2015 |
|---|---|---|
| **Assets** | | |
| Current Assets: | | |
| Cash and cash equivalents | $ 285,838 | $ 105,465 |
| Investments for operating activities | 919,270 | 957,915 |
| Investments for capital activities | 320,934 | 294,013 |
| Investments for student loan activities | 57,273 | 55,751 |
| Accounts receivable, net | 615,969 | 580,291 |
| Current portion of notes and pledges receivable, net | 73,958 | 79,445 |
| Current portion of prepaid expenses and other assets | 108,834 | 86,581 |
| Cash collateral held by agent | 63,292 | 83,203 |
| Total Current Assets | 2,445,368 | 2,242,664 |
| Noncurrent Assets: | | |
| Endowment, life income and other investments | 10,045,608 | 10,264,326 |
| Notes and pledges receivable, net | 318,278 | 321,639 |
| Prepaid expenses and other assets | 32,685 | 27,101 |
| Capital assets, net | 5,708,576 | 5,622,386 |
| Total Noncurrent Assets | 16,105,147 | 16,235,452 |
| **Total Assets** | **$ 18,550,515** | **$ 18,478,116** |
| | | |
| **Liabilities and Net Position** | | |
| Current Liabilities: | | |
| Accounts payable | $ 292,817 | $ 232,110 |
| Accrued compensation and other | 416,099 | 365,789 |
| Unearned revenue | 265,563 | 228,144 |
| Current portion of insurance and benefits reserves | 90,791 | 84,634 |
| Current portion of obligations for postemployment benefits | 74,885 | 65,172 |
| Commercial paper and current portion of bonds payable | 292,021 | 201,146 |
| Long-term bonds payable subject to remarketing, net | 217,637 | 336,374 |
| Collateral held for securities lending | 63,292 | 83,203 |
| Deposits of affiliates and others | 58,258 | 43,890 |
| Total Current Liabilities | 1,771,363 | 1,640,462 |
| Noncurrent Liabilities: | | |
| Accrued compensation | 50,411 | 53,606 |
| Insurance and benefits reserves | 112,412 | 108,271 |
| Obligations for postemployment benefits | 1,765,698 | 1,687,691 |
| Obligations under life income agreements | 58,272 | 46,570 |
| Government loan advances | 87,630 | 87,483 |
| Bonds payable | 1,476,712 | 1,330,897 |
| Deposits of affiliates and other | 226,762 | 227,329 |
| Total Noncurrent Liabilities | 3,777,897 | 3,541,847 |
| Total Liabilities | 5,549,260 | 5,182,309 |
| | | |
| Net Position: | | |
| Net investment in capital assets | 3,820,905 | 3,782,130 |
| Restricted: | | |
| Nonexpendable | 1,815,575 | 1,673,996 |
| Expendable | 4,119,019 | 4,371,607 |
| Unrestricted | 3,245,756 | 3,468,074 |
| Total Net Position | 13,001,255 | 13,295,807 |
| **Total Liabilities and Net Position** | **$ 18,550,515** | **$ 18,478,116** |

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, 2016 | 2015 |
|---|---|---|
| **Operating Revenues** | | |
| Student tuition and fees | $ 1,502,202 | $ 1,458,576 |
| Less scholarship allowances | 340,459 | 312,659 |
| Net student tuition and fees | 1,161,743 | 1,145,917 |
| Federal grants and contracts | 900,778 | 845,263 |
| State and local grants and contracts | 10,861 | 7,925 |
| Nongovernmental sponsored programs | 195,443 | 194,219 |
| Sales and services of educational departments | 131,081 | 193,487 |
| Auxiliary enterprises: | | |
| Patient care revenues (net of provision for bad debts of $101,799 in 2016 and $124,783 in 2015) | 3,587,347 | 3,264,832 |
| Student residence fees (net of scholarship allowances of $21,640 in 2016 and $19,825 in 2015) | 107,028 | 98,221 |
| Other revenues | 180,682 | 170,631 |
| Student loan interest income and fees | 3,065 | 2,879 |
| **Total Operating Revenues** | **6,278,028** | **5,923,374** |
| **Operating Expenses** | | |
| Compensation and benefits | 4,627,415 | 4,330,909 |
| Supplies and services | 1,891,519 | 1,735,922 |
| Depreciation | 501,631 | 493,629 |
| Scholarships and fellowships | 132,228 | 132,758 |
| **Total Operating Expenses** | **7,152,793** | **6,693,218** |
| Operating loss | (874,765) | (769,844) |
| **Nonoperating Revenues (Expenses)** | | |
| State educational appropriations | 345,824 | 340,201 |
| Federal Pell grants | 43,265 | 44,061 |
| Private gifts for other than capital and endowment purposes | 167,154 | 171,952 |
| Net investment (loss) income | (129,669) | 357,780 |
| Interest expense, net | (55,564) | (49,288) |
| Federal subsidies for interest on Build America Bonds | 7,565 | 7,443 |
| **Total Nonoperating Revenues, Net** | **378,575** | **872,149** |
| (Loss) income before other revenues (expenses) | (496,190) | 102,305 |
| **Other Revenues (Expenses)** | | |
| State capital appropriations | 47,566 | 3,847 |
| Capital gifts and grants | 36,439 | 22,975 |
| Private gifts for permanent endowment purposes | 126,630 | 115,203 |
| Other | (8,997) | (6,597) |
| **Total Other Revenues, Net** | **201,638** | **135,428** |
| (Decrease) increase in net position | (294,552) | 237,733 |
| Net Position, Beginning of Year | 13,295,807 | 13,058,074 |
| **Net Position, End of Year** | **$ 13,001,255** | **$ 13,295,807** |

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



## CONSOLIDATED STATEMENT OF CASH FLOWS

| (in thousands) | Year Ended June 30, 2016 | 2015 |
|---|---|---|
| **Cash Flows From Operating Activities** | | |
| Student tuition and fees | $ 1,166,315 | $ 1,141,704 |
| Federal, state and local grants and contracts | 902,253 | 840,144 |
| Nongovernmental sponsored programs | 201,683 | 201,852 |
| Sales and services of educational departments and other | 340,514 | 354,555 |
| Patient care revenues | 3,588,770 | 3,284,591 |
| Student residence fees | 108,481 | 98,801 |
| Payments to employees | (3,511,163) | (3,374,825) |
| Payments for benefits | (1,006,801) | (936,342) |
| Payments to suppliers | (1,826,563) | (1,771,937) |
| Payments for scholarships and fellowships | (132,228) | (132,758) |
| Student loans issued | (19,730) | (22,942) |
| Student loans collected | 19,656 | 19,206 |
| Student loan interest and fees collected | 3,065 | 2,879 |
| **Net Cash Used in Operating Activities** | **(165,748)** | **(295,072)** |
| **Cash Flows From Investing Activities** | | |
| Interest and dividends on investments, net | 77,309 | 50,605 |
| Proceeds from sales and maturities of investments | 4,809,747 | 5,763,848 |
| Purchases of investments | (4,670,131) | (5,530,132) |
| Net (increase) decrease in cash equivalents from noncurrent investments | (109,039) | 5,701 |
| Net increase in deposits of affiliates and other | 8,532 | 968 |
| **Net Cash Provided by Investing Activities** | **116,418** | **290,990** |
| **Cash Flows From Capital and Related Financing Activities** | | |
| State capital appropriations | 27,494 | |
| Private gifts and other receipts | 43,397 | 44,154 |
| Proceeds from issuance of capital debt | 558,249 | 136,915 |
| Principal payments on capital debt | (437,000) | (100,640) |
| Interest payments on capital debt | (57,652) | (54,801) |
| Federal subsidies for Build America Bonds interest | 7,545 | 7,603 |
| Payments for bond refunding and related costs | (911) | |
| Purchases of capital assets | (591,336) | (652,241) |
| Proceeds from sales of capital assets | 898 | 1,995 |
| **Net Cash Used in Capital and Related Financing Activities** | **(449,316)** | **(617,015)** |
| **Cash Flows From Noncapital Financing Activities** | | |
| State educational appropriations | 344,802 | 336,834 |
| Federal Pell grants | 43,265 | 44,061 |
| Private gifts and other receipts | 298,926 | 277,284 |
| Student direct lending receipts | 281,898 | 304,656 |
| Student direct lending disbursements | (292,106) | (303,638) |
| Amounts received for annuity and life income funds | 9,743 | 9,136 |
| Amounts paid to annuitants and life beneficiaries and related expenses | (7,509) | (7,533) |
| **Net Cash Provided by Noncapital Financing Activities** | **679,019** | **660,800** |
| Net increase in cash and cash equivalents | 180,373 | 39,703 |
| Cash and Cash Equivalents, Beginning of Year | 105,465 | 65,762 |
| **Cash and Cash Equivalents, End of Year** | **$ 285,838** | **$ 105,465** |

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

## CONSOLIDATED STATEMENT CASH FLOWS, CONTINUED

| (in thousands) | Year Ended June 30, 2016 | 2015 |
|---|---|---|
| Reconciliation of operating loss to net cash used in operating activities: | | |
| Operating loss | $ (874,765) | $ (769,844) |
| Adjustments to reconcile operating loss to net cash used in operating activities: | | |
| Depreciation expense | 501,631 | 493,629 |
| Changes in assets and liabilities: | | |
| Accounts receivable, net | (4,440) | (13,716) |
| Prepaid expenses and other assets | (9,425) | (19,257) |
| Accounts payable | 65,143 | (16,927) |
| Accrued compensation and other | 20,671 | 261 |
| Unearned revenue | 37,419 | 11,132 |
| Insurance and benefits reserves | 10,298 | (1,759) |
| Obligations for postemployment benefits | 87,720 | 21,409 |
| Net cash used in operating activities | $ (165,748) | $ (295,072) |

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





## 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 61,000 students on its three campuses. The financial statements include the individual schools, colleges and departments, the University of Michigan Hospitals and Health Centers, Michigan Health Corporation (a wholly-owned corporation created to pursue joint venture and managed care initiatives) and Veritas Insurance Corporation (a wholly-owned captive insurance company). 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.

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 financial statements of all controlled organizations are included in the University's financial statements; affiliated organizations that are not controlled by, and not dependent on the University, such as booster and alumni organizations, are not included.

Net position is categorized as:

- Net investment in capital assets: Capital assets, net of accumulated depreciation and outstanding principal balances of debt related to the acquisition, con struction 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.

**Adoption of New Accounting Standard:** During 2016, the University adopted GASB Statement No. 72, *Fair Value Measurement and Application* ("GASB 72"). With the adoption of this statement, the University expanded disclosures to present cash equivalents, investments and derivative instruments across the hierarchy of valuation inputs.

**Accounting Standard Issued But Not Yet Adopted:** In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which establishes new accounting and financial reporting requirements for the University's postemployment benefits. This statement is effective for fiscal years beginning after June 15, 2017 and the University is currently evaluating the potential impact to its financial statements and related disclosures.

**Summary of Significant Accounting Policies:** For purposes of the statement of cash flows, 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.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

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 72 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 marketplace. 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 72 allows for the use of net asset value ("NAV") as a practical expedient for valuation purposes. 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 as of June 30, 2016 and 2015. 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.

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 pay 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 fair 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 four to forty years. The University does not capitalize works of art or historical treasures that are held for exhibition, education, research or public service. These collections are neither disposed of for financial gain nor encumbered in any way. Accordingly, such collections are not recognized or capitalized for financial statement purposes.

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.

Deposits of affiliates and others represent cash and invested funds held by the University as a result of agency relationships with various groups. Noncurrent deposits of affiliates represent the portion of endowment and similar funds held by the University on behalf of others.

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.

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 $1,519,149,000 and $1,708,175,000 at June 30, 2016 and 2015, respectively, is recorded in restricted expendable net position. The University's endowment spending rule is further discussed in Note 2.

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 of Michigan Health System, which includes the Hospitals and Health Centers, the University of Michigan Medical Group and the Michigan Health Corporation. Patient care services are also provided through University Health Services, which provides health care services to students, faculty and staff, and Dental Faculty Associates, which provides dental care services performed by faculty dentists.

Patient care services are provided to patients who meet certain criteria under the Hospitals and Health Centers' charity care policy 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 $48,203,000 and $20,557,000 in 2016 and 2015, respectively.

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

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 are from exchange transactions.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

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.

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.

**Reclassifications:** Certain prior year amounts have been reclassified to conform with current year presentations.

**Subsequent Event:** In September 2016, the University and Metropolitan Health Corporation signed a definitive, non-binding agreement to affiliate and consummate a member substitution where the University would become the parent organization. The signing of this agreement did not have a material impact on the University's 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 invested in the University Investment Pool ("UIP"). Together with the University's short-term insurance and other 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 a 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, private equity, real estate, natural resources and absolute return strategies.

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

**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 a general target of 80 percent equities and 20 percent fixed income securities, within a permitted range of 65 to 90 percent for equities and 10 to 35 percent for 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 University Endowment Fund to the University entities that benefit from the endowment fund. At June 30, 2016 and 2015, the annual distribution rate was 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 to University entities based on the 90-day U.S. Treasury Bill rate. The University's costs to administer and grow the University Endowment Fund and UIP are funded by investment returns.

**Cash and Cash Equivalents:** Cash and cash equivalents, which totaled $285,838,000 and $105,465,000 at June 30, 2016 and 2015, respectively, represent 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 Corporation limits in the amount of $9,687,000 and $9,136,000 at June 30, 2016 and 2015, respectively. The University does not require its deposits to be collateralized or insured.

Cash and cash equivalents include certain securities that are subject to the leveling requirements defined by GASB 72. Level 1 securities, which primarily consist of money market funds and U.S. government securities, totaled $63,433,000 and $37,424,000 at June 30, 2016 and 2015, respectively. Level 2 securities, which primarily consist of U.S. agencies, totaled $96,343,000 and $39,993,000 at June 30, 2016 and 2015, respectively.

**Investments:** At June 30, 2016 and 2015, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Cash equivalents, noncurrent | $ 161,500 | $ 52,461 |
| Equity securities | 1,396,023 | 1,300,173 |
| Fixed income securities | 1,868,581 | 2,301,472 |
| Commingled funds | 2,597,267 | 2,903,066 |
| Nonmarketable alternative investments | 5,308,968 | 4,997,621 |
| Other investments | 10,746 | 17,212 |
| | $ 11,343,085 | $ 11,572,005 |

## NOTE 2—CASH AND INVESTMENTS, CONTINUED

GASB 72 establishes a hierarchy that prioritizes inputs to valuation techniques used to measure fair value. At June 30, 2016 and 2015, the fair value of the University's investments based on the inputs used to value them is summarized as follows:

**2016**

| (in thousands) | Level 1 | Level 2 | Level 3 | NAV | Total Fair Value |
|---|---|---|---|---|---|
| Cash equivalents, noncurrent | $ 161,500 | | | | $ 161,500 |
| Equity securities: | | | | | |
| Domestic | 457,605 | | $ 18,868 | | 476,473 |
| Foreign | 918,992 | | 558 | | 919,550 |
| | 1,376,597 | - | 19,426 | - | 1,396,023 |
| Fixed income securities: | | | | | |
| U.S. Treasury | 537,988 | | | | 537,988 |
| U.S. government agency | | $ 287,098 | | | 287,098 |
| Corporate and other | | 880,777 | 162,718 | | 1,043,495 |
| | 537,988 | 1,167,875 | 162,718 | - | 1,868,581 |
| Commingled funds: | | | | | |
| Absolute return | | | | $ 1,578,437 | 1,578,437 |
| Domestic equities | 16,094 | | | 246,522 | 262,616 |
| Global equities | 9,222 | | | 692,613 | 701,835 |
| U.S. fixed income | 5,817 | | | 43,222 | 49,039 |
| Other | 5,340 | | | | 5,340 |
| | 36,473 | - | - | 2,560,794 | 2,597,267 |
| Nonmarketable alternative investments: | | | | | |
| Venture capital | | | | 1,306,581 | 1,306,581 |
| Absolute return | | | | 1,092,694 | 1,092,694 |
| Private equity | | | 162,878 | 1,130,422 | 1,293,300 |
| Real estate | | | 8,590 | 907,602 | 916,192 |
| Natural resources | | | 168,897 | 531,304 | 700,201 |
| | - | - | 340,365 | 4,968,603 | 5,308,968 |
| Other investments | 213 | 549 | 9,984 | | 10,746 |
| | $ 2,112,771 | $ 1,168,424 | $ 532,493 | $ 7,529,397 | $ 11,343,085 |

**2015**

| (in thousands) | Level 1 | Level 2 | Level 3 | NAV | Total Fair Value |
|---|---|---|---|---|---|
| Cash equivalents, noncurrent | $ 52,461 | | | | $ 52,461 |
| Equity securities: | | | | | |
| Domestic | 436,536 | | $ 11,051 | | 447,587 |
| Foreign | 852,570 | | 16 | | 852,586 |
| | 1,289,106 | - | 11,067 | - | 1,300,173 |
| Fixed income securities: | | | | | |
| U.S. Treasury | 844,161 | | | | 844,161 |
| U.S. government agency | | $ 396,594 | | | 396,594 |
| Corporate and other | | 900,894 | 159,823 | | 1,060,717 |
| | 844,161 | 1,297,488 | 159,823 | - | 2,301,472 |
| Commingled funds: | | | | | |
| Absolute return | | | | $ 1,385,538 | 1,385,538 |
| Domestic equities | 15,387 | | | 314,652 | 330,039 |
| Global equities | 11,140 | | | 1,120,363 | 1,131,503 |
| U.S. fixed income | 6,424 | | | 43,633 | 50,057 |
| Other | 5,929 | | | | 5,929 |
| | 38,880 | - | - | 2,864,186 | 2,903,066 |
| Nonmarketable alternative investments: | | | | | |
| Venture capital | | | | 1,362,389 | 1,362,389 |
| Absolute return | | | | 807,894 | 807,894 |
| Private equity | | | 89,252 | 1,208,261 | 1,297,513 |
| Real estate | | | 7,137 | 907,535 | 914,672 |
| Natural resources | | | 177,830 | 437,323 | 615,153 |
| | - | - | 274,219 | 4,723,402 | 4,997,621 |
| Other investments | (1,725) | 9,463 | 9,474 | | 17,212 |
| | $ 2,222,883 | $ 1,306,951 | $ 454,583 | $ 7,587,588 | $ 11,572,005 |

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 a note receivable associated with the sale of a portion of the University's nonmarketable alternative real estate investments. Certain assumptions about the appropriate yield curve and underlying credit rating of the issuer were made in determining the fair value of the note. Nonmarketable alternative investments categorized as Level 3 include direct investments and are primarily valued using models that rely on inputs which are unobservable in the market.

## NOTE 2—CASH AND INVESTMENTS, CONTINUED

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 Moody's and Standard & Poor'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 Baa by Moody's and BBB by Standard & Poor'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 imbedded 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 5.9 years at June 30, 2016, compared to 3.4 years at June 30, 2015. 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, 2016 and 2015, which are used to adjust the duration of cash equivalents and the fixed income portion of the portfolios.

The composition of fixed income securities at June 30, 2016 and 2015, along with credit quality and effective duration measures, is summarized as follows:

**2016**

| (in thousands) | U.S. Government | Investment Grade | Non-Investment Grade | Not Rated | Total | Duration (in years) |
|---|---|---|---|---|---|---|
| U.S. Treasury | $ 308,171 | | | | $ 308,171 | 9.0 |
| U.S. Treasury inflation protected | 229,817 | | | | 229,817 | 2.7 |
| U.S. government agency | 287,098 | | | | 287,098 | 1.0 |
| Mortgage backed | | $ 18,875 | $ 4,603 | $ 531 | 24,009 | 1.8 |
| Asset backed | | 50,113 | 864 | | 50,977 | 2.3 |
| Corporate and other | | 949,218 | 12,326 | 6,965 | 968,509 | 7.4 |
| | $ 825,086 | $ 1,018,206 | $ 17,793 | $ 7,496 | $ 1,868,581 | 5.9 |

**2015**

| (in thousands) | U.S. Government | Investment Grade | Non-Investment Grade | Not Rated | Total | Duration (in years) |
|---|---|---|---|---|---|---|
| U.S. Treasury | $ 617,218 | | | | $ 617,218 | 1.3 |
| U.S. Treasury inflation protected | 226,943 | | | | 226,943 | 3.1 |
| U.S. government agency | 396,594 | | | | 396,594 | 0.8 |
| Mortgage backed | | $ 42,578 | $ 11,738 | $ 7,738 | 62,054 | 1.6 |
| Asset backed | | 31,509 | 1,553 | | 33,062 | 3.5 |
| Corporate and other | | 923,984 | 33,984 | 7,633 | 965,601 | 6.1 |
| | $ 1,240,755 | $ 998,071 | $ 47,275 | $ 15,371 | $ 2,301,472 | 3.4 |

Of the University's fixed income securities, 99 percent and 97 percent were rated investment grade or better at June 30, 2016 and 2015, and 51 percent and 59 percent of these securities consisted of either U.S. treasury and government agencies or non-U.S. government securities rated AAA/Aaa at June 30, 2016 and 2015, respectively. Corporate and other fixed income securities include a receivable associated with the sale of a portion of the University's real estate nonmarketable alternative investments which totaled $160,305,000 and $157,832,000 at June 30, 2016 and 2015, respectively.

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.

## NOTE 2—CASH AND INVESTMENTS, CONTINUED

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, 2016 and 2015, 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, 2016 is summarized as follows (amounts in thousands):

| | Fair Value | Remaining Life | Outstanding Commitments | Redemption Terms | Redemption Notice |
|---|---|---|---|---|---|
| Commingled funds | $ 2,597,267 | N/A | | Daily, monthly, quarterly, and annually, with varying notice periods | Lock-up provisions range from none to 3 years |
| Nonmarketable alternative investments | $ 5,308,968 | 1-12 years | $ 3,859,336 | 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, 2016 and 2015, approximately 83 percent and 88 percent are redeemable within one year, with 58 and 64 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 13.

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 substantially 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.

The value of the University's non-U.S. dollar holdings net of outstanding forward foreign exchange contracts totaled $940,947,000 or 8 percent of total investments at June 30, 2016, and $624,515,000 or 5 percent of total investments at June 30, 2015. Non-U.S. dollar exposures at June 30, 2016 and 2015 are summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Euros | $ 602,240 | $ 574,210 |
| British pounds sterling | 142,091 | (93,105) |
| Canadian dollar | 113,689 | 8,771 |
| Japanese yen | 105,989 | 166,751 |
| New Zealand dollar | (69,991) | (145,909) |
| Singapore dollar | (110,707) | (141,793) |
| Other | 157,636 | 255,590 |
| | $ 940,947 | $ 624,515 |

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 $95,505,000 and $91,157,000 in securities loans outstanding at June 30, 2016 and 2015, respectively. 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, 2016, collateral of $99,200,000 (104 percent of securities on loan) includes invested cash of $63,292,000 and U.S. government securities of $35,908,000, while at June 30, 2015, collateral of $98,820,000 (108 percent of securities on loan) includes invested cash of $83,203,000 and U.S. government securities of $15,617,000.

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, 2016 and 2015 is summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Patient care | $ 573,339 | $ 584,311 |
| Sponsored programs | 133,196 | 113,594 |
| State appropriations, educational and capital | 86,795 | 65,701 |
| Student accounts | 28,935 | 29,580 |
| Other | 44,878 | 49,002 |
| | 867,143 | 842,188 |
| Less allowance for uncollectible accounts receivable | 251,174 | 261,897 |
| | $ 615,969 | $ 580,291 |

## NOTE 4—NOTES AND PLEDGES RECEIVABLE

The composition of notes and pledges receivable at June 30, 2016 and 2015 is summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Notes: | | |
| Federal student loan programs | $ 89,644 | $ 89,839 |
| University student loan funds | 17,586 | 17,495 |
| Other | 851 | 673 |
| | 108,081 | 108,007 |
| Less allowance for uncollectible notes | 3,100 | 3,100 |
| Total notes receivable, net | 104,981 | 104,907 |
| Gift pledges: | | |
| Capital | 179,712 | 184,184 |
| Operations | 122,932 | 121,938 |
| | 302,644 | 306,122 |
| Less: | | |
| Allowance for uncollectible pledges | 11,411 | 5,581 |
| Unamortized discount to present value | 3,978 | 4,364 |
| Total pledges receivable, net | 287,255 | 296,177 |
| Total notes and pledges receivable, net | 392,236 | 401,084 |
| Less current portion | 73,958 | 79,445 |
| | $ 318,278 | $ 321,639 |

The principal repayment and interest rate terms of federal and university loans vary considerably. The allowance for uncollectible notes only applies to University funded notes 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, 2016 are expected to be received in the following years ended June 30 (in thousands):

| | |
|---|---|
| 2017 | $ 60,537 |
| 2018 | 47,157 |
| 2019 | 35,048 |
| 2020 | 26,225 |
| 2021 | 27,063 |
| 2022 and after | 106,614 |
| | $ 302,644 |

As discussed in Note 1, permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling $168,434,000 and $154,133,000 at June 30, 2016 and 2015, respectively, are not recognized as assets in the accompanying 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 years ended June 30, 2016 and 2015 is summarized as follows:

**2016**

| (in thousands) | Beginning Balance | Additions | Retirements | Ending Balance |
|---|---|---|---|---|
| Land | $ 112,400 | $ 1,366 | $ 50 | $ 113,716 |
| Land improvements | 123,003 | 3,166 | 1,117 | 125,052 |
| Infrastructure | 248,047 | 7,132 | | 255,179 |
| Buildings | 7,486,312 | 490,954 | 20,777 | 7,956,489 |
| Construction in progress | 528,728 | (76,581) | | 452,147 |
| Property held for future use | 24,502 | | | 24,502 |
| Equipment | 1,861,266 | 142,607 | 112,006 | 1,891,867 |
| Library materials | 567,461 | 26,306 | | 593,767 |
| | 10,951,719 | 594,950 | 133,950 | 11,412,719 |
| Less accumulated depreciation | 5,329,333 | 501,631 | 126,821 | 5,704,143 |
| | $ 5,622,386 | $ 93,319 | $ 7,129 | $ 5,708,576 |

**2015**

| (in thousands) | Beginning Balance | Additions | Retirements | Ending Balance |
|---|---|---|---|---|
| Land | $ 112,011 | $ 389 | | $ 112,400 |
| Land improvements | 116,677 | 8,564 | $ 2,238 | 123,003 |
| Infrastructure | 241,528 | 6,519 | | 248,047 |
| Buildings | 7,283,237 | 245,727 | 42,652 | 7,486,312 |
| Construction in progress | 270,963 | 257,765 | | 528,728 |
| Property held for future use | 30,779 | (6,277) | | 24,502 |
| Equipment | 1,879,237 | 122,262 | 140,233 | 1,861,266 |
| Library materials | 542,672 | 24,789 | | 567,461 |
| | 10,477,104 | 659,738 | 185,123 | 10,951,719 |
| Less accumulated depreciation | 5,010,433 | 493,629 | 174,729 | 5,329,333 |
| | $ 5,466,671 | $ 166,109 | $ 10,394 | $ 5,622,386 |

The decrease in construction in progress of $76,581,000 in 2016 represents the amount of capital expenditures for new projects of $504,099,000 net of assets placed in service of $580,680,000. The increase in construction in progress of $257,765,000 in 2015 represents the amount of capital expenditures for new projects of $585,979,000 net of assets placed in service of $328,214,000.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 6—LONG-TERM DEBT

Long-term debt at June 30, 2016 and 2015 is summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Commercial Paper: | | |
| Tax-exempt, variable rate (.467%)* | $ 155,085 | $ 132,625 |
| Taxable, variable rate (.549%)* | 4,885 | 5,865 |
| General Revenue Bonds: | | |
| Series 2015, 4.00% to 5.00% through 2046 | 306,715 | |
| unamortized premium | 53,754 | |
| Series 2014A, 4.00% to 5.00% through 2044 | 79,560 | 81,310 |
| Series 2014B, 0.597% to 3.516% through 2024 | 7,505 | 8,370 |
| unamortized premium | 7,433 | 7,914 |
| Series 2013A, 2.75% to 5.00% through 2029 | 47,820 | 49,710 |
| unamortized premium | 2,133 | 2,395 |
| Series 2012A, variable rate (.39%)* through 2036 | 50,000 | 50,000 |
| Series 2012B, variable rate (.31%)* through 2042 | 65,000 | 65,000 |
| Series 2012C, 5.00% through 2017 | 68,120 | 73,175 |
| unamortized premium | 2,590 | 5,373 |
| Series 2012D-1, variable rate (.36%)* to fixed via swap through 2025 | 66,885 | 69,980 |
| deferred amount on refunding | (12,335) | (14,409) |
| Series 2012D-2, variable rate (.41%)* to fixed via swap through 2026 and variable rate 2027 through 2030 | 71,110 | 75,085 |
| deferred amount on refunding | (4,618) | (5,529) |
| Series 2012E**, variable rate (.84%)* through 2033 | 95,970 | 95,970 |
| Series 2012F**, variable rate through 2016 | | 100,970 |
| Series 2010A, taxable-Build America Bonds, 4.926% to 5.593% through 2040 | 163,110 | 163,110 |
| Series 2010C, 3.75% to 5.00% through 2027 | 138,970 | 149,970 |
| unamortized premium | 8,228 | 9,650 |
| Series 2010D, taxable-Build America Bonds, 2.738% to 5.333% through 2041 | 181,190 | 189,095 |
| Series 2009A, 3.00% to 5.00% through 2029 | 56,105 | 63,870 |
| Series 2009B, variable rate (.43%)* through 2039 | 118,710 | 118,710 |
| unamortized premium | 5,040 | 5,430 |
| Series 2009D, taxable-Build America Bonds, 5.155% to 6.172% through 2030 | 89,815 | 89,815 |
| Series 2008A, variable rate (.37%)* through 2038 | 57,085 | 105,810 |
| Series 2008B, variable rate (.39%)* to fixed via swap through 2026 and variable rate 2027 through 2028 | 83,590 | 89,725 |
| Series 2005A, 5.00% through 2018 | 2,080 | 3,045 |
| unamortized premium | 50 | 98 |
| Series 2002, variable rate (.44%)* to fixed via swap through 2018 and variable rate through 2016 | 14,785 | 76,285 |
| | 1,986,370 | 1,868,417 |
| Less: | | |
| Commercial paper and current portion of bonds payable | 292,021 | 201,146 |
| Long-term bonds payable subject to remarketing, net | 217,637 | 336,374 |
| | $ 1,476,712 | $ 1,330,897 |

* Denotes variable rate at June 30, 2016

** 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, variable rate bonds payable is 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 at June 30, 2016 and 2015 is summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Variable rate bonds payable subject to remarketing | $ 527,165 | $ 650,595 |
| Less: | | |
| Current principal maturities | 20,965 | 20,075 |
| Long-term liquidity agreements: | | |
| Unsecured line of credit | 150,000 | 150,000 |
| Standby bond purchase agreements | 138,563 | 144,146 |
| Long-term bonds payable subject to remarketing, net | $ 217,637 | $ 336,374 |

The University's available line of credit and standby bond purchase agreements were entirely unused at June 30, 2016.

In connection with certain issues of variable rate debt, the University has entered into various 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, significant terms and other information about the University's interest rate swaps is discussed in Note 7.

Long-term debt activity for the years ended June 30, 2016 and 2015 is summarized as follows:

| 2016 | | | | |
|---|---|---|---|---|
| (in thousands) | Beginning Balance | Additions | Reductions | Ending Balance |
| Commercial paper | $ 138,490 | $ 196,885 | $ 175,405 | $ 159,970 |
| Bonds | 1,729,927 | 361,364 | 264,891 | 1,826,400 |
| | $ 1,868,417 | $ 558,249 | $ 440,296 | $ 1,986,370 |

| 2015 | | | | |
|---|---|---|---|---|
| (in thousands) | Beginning Balance | Additions | Reductions | Ending Balance |
| Commercial paper | $ 41,090 | $ 136,915 | $ 39,515 | $ 138,490 |
| Bonds | 1,793,569 | | 63,642 | 1,729,927 |
| | $ 1,834,659 | $ 136,915 | $ 103,157 | $ 1,868,417 |

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 2.3 percent and 2.1 percent in 2016 and 2015, respectively, 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.

## NOTE 6—LONG-TERM DEBT, CONTINUED

During 2016, the University issued $306,715,000 of fixed rate General Revenue Bonds Series 2015 with a net original issue premium of $54,649,000. Total bond proceeds of $361,364,000 were utilized to convert $71,425,000 of commercial paper to long-term debt and refund $204,325,000 of existing bonds, as well as provide $84,685,000 for capital projects and $929,000 for debt issuance costs.

Debt obligations are generally callable by the University and mature at various dates through fiscal 2046. Principal maturities, including amortization of deferred amounts on refunding and 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 |
|---|---|---|---|
| 2017 | $ 283,915 | $ 58,676 | $ 342,591 |
| 2018 | 56,675 | 53,813 | 110,488 |
| 2019 | 56,030 | 52,148 | 108,178 |
| 2020 | 57,615 | 50,291 | 107,906 |
| 2021 | 60,920 | 48,269 | 109,189 |
| 2022-2026 | 338,480 | 212,561 | 551,041 |
| 2027-2031 | 351,105 | 149,596 | 500,701 |
| 2032-2036 | 368,845 | 92,782 | 461,627 |
| 2037-2041 | 283,210 | 40,403 | 323,613 |
| 2042-2046 | 67,300 | 7,440 | 74,740 |
| | 1,924,095 | $ 765,979 | $ 2,690,074 |
| Plus unamortized premiums, net | 79,228 | | |
| Less deferred amount on refunding | 16,953 | | |
| | $ 1,986,370 | | |

* Interest on variable rate debt is estimated based on rates in effect at June 30, 2016; amounts do not reflect federal subsidies to be received for Build America Bonds interest

If all variable rate bonds were put back to the University and existing unsecured lines of credit and standby bond purchase agreements were not extended upon their current expiration dates, the total principal payments due in 2017 would increase to $501,552,000, total principal payments due in 2018 would increase to $256,081,000, total principal payments due in 2019 would increase to $87,288,000 and total principal payments due in 2020 would increase to $65,764,000. Accordingly, principal payments due in subsequent years would be reduced to $45,920,000 in 2021; $228,755,000 in 2022 through 2026; $282,645,000 in 2027 through 2031; $230,005,000 in 2032 through 2036; $169,860,000 in 2037 through 2041; and $56,225,000 in 2042 through 2046. There would not be a material impact on annual interest payments due to the low variable rate of interest on these bonds.

## NOTE 7—DERIVATIVE INSTRUMENTS

Derivatives held by the University are recorded at fair value in the statement of net position in accordance with GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* ("GASB 53"). For hedging derivative instruments that are effective in significantly reducing an identified financial risk, as defined by GASB 53, 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 net investment income (loss).

Derivative instruments held by the University at June 30, 2016 and 2015 are summarized as follows:

| | 2016 | | 2015 | |
|---|---|---|---|---|
| (in thousands) | Notional Amount | Fair Value | Notional Amount | Fair Value |
| Investment Derivative Instruments: | | | | |
| Investment portfolios: | | | | |
| Futures | $ 252,104 | $ 241 | $ 571,891 | $ (2,238) |
| Foreign currency forwards | 1,714,843 | 11,139 | 2,173,950 | (977) |
| Other | 177,750 | 14,084 | 28,763 | 9,546 |
| | $ 2,144,697 | $ 25,464 | $ 2,774,604 | $ 6,331 |
| Floating-to-fixed interest rate swap on debt | $ 14,785 | $ (648) | $ 21,655 | $ (971) |
| Effective Cash Flow Hedges: | | | | |
| Floating-to-fixed interest rate swaps on debt | $ 180,420 | $ (29,938) | $ 193,615 | $ (27,377) |

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 various 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 generally represents 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.

## NOTE 7—DERIVATIVE INSTRUMENTS, CONTINUED

In accordance with GASB 53, an interest rate swap is considered an effective cash flow hedge if the swap payments received substantially offset the payments made on the associated debt. An interest rate swap that is not considered an effective cash flow hedge is deemed to be an investment derivative instrument and changes in fair value are recorded as net investment income (loss).

At June 30, 2016 and 2015, the fair value of floating-to-fixed interest rate swaps associated with the University's variable rate debt is a liability of $30,586,000 and $28,348,000, respectively, and is included in the statement of net position as part of noncurrent other liabilities. The deferred outflow of resources for the fair value of swaps deemed effective cash flow hedges totaled $12,985,000 and $7,439,000, at June 30, 2016 and 2015, respectively, and is included in the statement of net position as part of noncurrent other assets. Three bond issues were refunded in 2013 and the deferred outflow of resources related to the effective cash flow hedges associated with these bonds was reclassified to deferred amount on refunding and net against bonds payable. The deferred amount on refunding is being amortized into interest expense over the remaining term of the refunding bonds and totaled $16,953,000 and $19,938,000 at June 30, 2016 and 2015, respectively.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the years ended June 30, 2016 and 2015 is summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Investment Derivative Instruments: | | |
| Investment portfolios: | | |
| Futures | $ (31,031) | $ 18,584 |
| Foreign currency forwards | 23,683 | (3,836) |
| Other | 1,992 | (82) |
| | $ (5,356) | $ 14,666 |
| Floating-to-fixed interest rate swap on debt | $ 323 | $ 509 |
| Effective Cash Flow Hedges: | | |
| Floating-to-fixed interest rate swaps on debt | $ (2,561) | $ 1,835 |

The University's interest rate swaps, along with their associated variable rate debt and significant terms, are summarized below.

The floating-to-fixed interest rate swap associated with the Series 2008B General Revenue Bonds has a notional amount of $66,875,000 and $73,010,000 at June 30, 2016 and 2015, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. Effective April 1, 2008, the University makes payments based on a fixed rate of 3.105 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, until the swap terminates in April 2026. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2016 and 2015 and has a fair value of ($9,064,000) and ($7,766,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 2005B Hospital Revenue Bonds has a notional amount of $46,795,000 and $50,765,000 at June 30, 2016 and 2015, respectively. The Series 2005B Hospital Revenue Bonds were refunded on February 1, 2013, and the swap is now associated with the Series 2012D-2 General Revenue Bonds. Effective December 1, 2005, the University makes payments based on a fixed rate of 3.229 percent and receives variable rate payments from the swap counterparty based on 68 percent of the One-Month USD LIBOR, until the bonds mature in December 2025. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2016 and 2015 and has a fair value of ($5,874,000) and ($5,258,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 2002 General Revenue Bonds has a notional amount of $14,785,000 and $21,655,000 at June 30, 2016 and 2015, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. Effective June 1, 2007, the University makes payments based on a fixed rate of 3.5375 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, through April 1, 2009, and 63 percent of the Five-Year USD LIBOR Swap Rate for the balance of the term, through April 2018. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is not considered an effective hedge at June 30, 2016 and 2015 and has a fair value of ($648,000) and ($971,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 1998A-2 Hospital Revenue Refunding Bonds has a notional amount of $44,670,000 at both June 30, 2016 and 2015 tied to the outstanding balance of the bonds. The Series 1998A-2 Hospital Revenue Refunding Bonds were refunded on January 4, 2013, and the swap is now associated with the Series 2012D-1 General Revenue Bonds. Effective May 14, 1998, the University makes payments based on a fixed rate of 4.705 percent and receives variable rate payments from the swap counterparty based on the floating Securities Industry and Financial Markets Association ("SIFMA") Municipal Index through the final maturity dates of the underlying bonds in December 2024. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2016 and 2015 and has a fair value of ($12,230,000) and ($11,016,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 1998A-1 Medical Service Plan Revenue Refunding Bonds has a notional amount of $22,080,000 and $25,170,000 at June 30, 2016 and 2015, respectively, tied to the outstanding balance of the bonds. The Series 1998A-1 Medical Service Plan Revenue Refunding Bonds were refunded on January 4, 2013, and the swap is now associated with the Series 2012D-1 General Revenue Bonds. Effective May 14, 1998, the University makes payments based on a fixed rate of 4.685 percent and receives variable rate payments based on the floating SIFMA Municipal Index through the final maturity dates of the underlying bonds in December 2024. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2016 and 2015 and has a fair value of ($2,770,000) and ($3,337,000), respectively.

Using rates in effect at June 30, 2016, 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:

| | Variable Rate Bonds | | Swap | Total |
|---|---|---|---|---|
| (in thousands) | Principal | Interest | Payments, Net | Payments |
| 2017 | $ 13,775 | $ 834 | $ 5,846 | $ 20,455 |
| 2018 | 14,020 | 781 | 5,416 | 20,217 |
| 2019 | 13,770 | 727 | 4,970 | 19,467 |
| 2020 | 14,365 | 673 | 4,530 | 19,568 |
| 2021 | 15,000 | 615 | 4,051 | 19,666 |
| 2022-2026 | 109,725 | 1,865 | 8,798 | 120,388 |
| 2027-2030 | 40,930 | 251 | | 41,181 |
| | $ 221,585 | $ 5,746 | $ 33,611 | $ 260,942 |

## NOTE 7—DERIVATIVE INSTRUMENTS, CONTINUED

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 because 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 some of the variable payments paid to the University by the counterparties are based on a percentage of LIBOR. Basis risk is the risk that changes in the relationship between SIFMA and LIBOR may impact the synthetic fixed rate of the variable rate debt. The University is not exposed to credit risk because 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 $17,003,000 and $12,220,000 at June 30, 2016 and 2015, respectively, 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 6 percent.

Changes in the total reported liability for insurance and benefits obligations for the years ended June 30, 2016 and 2015 are summarized as follows:

| (in thousands) | **2016** | **2015** |
|---|---|---|
| Balance, beginning of year | $ 192,905 | $ 194,664 |
| Claims incurred and changes in estimates | 588,653 | 533,182 |
| Claim payments | (578,355) | (534,941) |
| Balance, end of year | 203,203 | 192,905 |
| Less current portion | 90,791 | 84,634 |
| | $ 112,412 | $ 108,271 |

## NOTE 9—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 of the approximately 40,000 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.

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.

The University's annual postemployment benefits expense is actuarially determined in accordance with GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* ("GASB 45"). Projections of 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 of benefit costs between the employer and plan members to that point.

The University implemented GASB 45 in 2008 and elected to amortize its initial unfunded actuarial accrued liability over one year, the minimum period allowed by the Statement. The University also elected to amortize subsequent changes in actuarial assumptions, plan design and experience gains and losses over a ten-year closed period. Therefore, the liability for net postemployment benefits obligations recorded in the statement of net position may differ from the actuarial accrued liability due to the unamortized portion of these changes. At June 30, 2016, the recorded liability for net postemployment benefits obligations and the actuarial accrued liability totaled $1,840,583,000 and $1,844,785,000, respectively.

Changes in the total reported liability for postemployment benefits obligations for the years ended June 30, 2016 and 2015 are summarized as follows:

**2016**

| (in thousands) | Retiree Health and Welfare | Long-term Disability | Total |
|---|---|---|---|
| Balance, beginning of year | $ 1,588,838 | $ 164,025 | $ 1,752,863 |
| Service cost | 59,550 | 10,918 | 70,468 |
| Amortization of assumption changes, plan changes and net actuarial (gains) losses | (28,671) | 12,747 | (15,924) |
| Interest cost | 88,657 | 12,105 | 100,762 |
| Payments of current premiums and claims | (47,893) | (19,693) | (67,586) |
| Balance, end of year | 1,660,481 | 180,102 | 1,840,583 |
| Less current portion | 51,237 | 23,648 | 74,885 |
| | $ 1,609,244 | $ 156,454 | $ 1,765,698 |

**2015**

| (in thousands) | Retiree Health and Welfare | Long-term Disability | Total |
|---|---|---|---|
| Balance, beginning of year | $ 1,580,898 | $ 150,556 | $ 1,731,454 |
| Service cost | 40,987 | 9,300 | 50,287 |
| Amortization of assumption changes, plan changes and net actuarial (gains) losses | (86,474) | 10,741 | (75,733) |
| Interest cost | 96,119 | 11,864 | 107,983 |
| Payments of current premiums and claims | (42,692) | (18,436) | (61,128) |
| Balance, end of year | 1,588,838 | 164,025 | 1,752,863 |
| Less current portion | 45,479 | 19,693 | 65,172 |
| | $ 1,543,359 | $ 144,332 | $ 1,687,691 |

## NOTE 9—POSTEMPLOYMENT BENEFITS, CONTINUED

Since a portion of retiree medical services will be provided by the University's Health System, the liability for postemployment benefits obligations is net of the related margin and fixed costs of providing those services which totaled $393,541,000 and $331,473,000 of actuarial accrued liability at June 30, 2016 and 2015, respectively. In accordance with GASB 45, the University's liability for postemployment benefits obligations at June 30, 2016 is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods of approximately $219,000,000 on an actuarial accrued liability basis.

The annual required contribution represents a level of funding that an employer is projected to need in order to prefund its obligations for postemployment benefits over its employees' years of service and totals $190,334,000 and $112,864,000 at June 30, 2016 and 2015, respectively. 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 postemployment benefits obligations at June 30, 2016, 2015 and 2014 as a percentage of covered payroll of $3,392,614,000, $3,228,997,000 and $3,083,357,000, was 54, 54 and 56 percent, respectively.

The University's recorded liability for postemployment benefits obligations was calculated using the projected unit credit method. Significant actuarial methods and assumptions used in the valuation for the years ended June 30, 2016 and 2015 are as follows:

**2016**

| | Retiree Health and Welfare | Long-term Disability |
|---|---|---|
| Discount Rate | 5.58% | 7.38% |
| Immediate/Ultimate Administrative Trend Rate | 0.0%/3.0% | 0.0%/3.0% |
| Immediate/Ultimate Medical Trend Rate | 5.5%-7.0%/4.5% | 5.5%-7.0%/4.5% |
| Immediate/Ultimate Rx Trend Rate | 10.5%/4.5% | 10.5%/4.5% |
| Expected Retirement Age (Faculty/Staff/Union) | 66/62/61 | Not Applicable |
| Mortality/Termination Table | RP-2014 Generational | 2005 SOA Life Waiver (Modified) |

**2015**

| | Retiree Health and Welfare | Long-term Disability |
|---|---|---|
| Discount Rate | 6.08% | 7.88% |
| Immediate/Ultimate Administrative Trend Rate | 0.0%/3.0% | 0.0%/3.0% |
| Immediate/Ultimate Medical Trend Rate | 6.0%-7.0%/4.5% | 6.0%-7.0%/4.5% |
| Immediate/Ultimate Rx Trend Rate | 6.5%/4.5% | 6.5%/4.5% |
| Expected Retirement Age (Faculty/Staff/Union) | 66/62/61 | Not Applicable |
| Mortality/Termination Table | RP-2000 Generational | 2005 SOA Life Waiver (Modified) |

The actuarial accrued liability is determined using current assumptions as of the valuation date, which may differ from those used to calculate the recorded liability.

## NOTE 10—RETIREMENT PLAN

The University has a defined contribution retirement plan for all qualified employees through the Teachers Insurance and Annuity Association - College Retirement Equities Fund ("TIAA-CREF") 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-CREF, 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. Effective January 1, 2015, the plan was modified for certain employees of the University's health system who now generally contribute 4.5 percent of their pay, with the University contributing 9 percent of those 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 plans within specified limits that are not matched by University contributions. Contributions and covered payroll under the plan (excluding participants' additional contributions) for the three years ended June 30, 2016 are summarized as follows:

| (in thousands) | 2016 | 2015 | 2014 |
|---|---|---|---|
| University contributions | $ 259,268 | $ 251,614 | $ 245,973 |
| Employee contributions | $ 135,829 | $ 131,545 | $ 127,815 |
| Payroll covered under plan | $ 3,392,614 | $ 3,228,997 | $ 3,083,357 |
| Total payroll | $ 3,543,959 | $ 3,385,973 | $ 3,230,004 |

## NOTE 11—NET POSITION

The composition of net position at June 30, 2016 and 2015 is summarized as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Net investment in capital assets | $ 3,820,905 | $ 3,782,130 |
| Restricted: | | |
| Nonexpendable: | | |
| Permanent endowment corpus | 1,815,575 | 1,673,996 |
| Expendable: | | |
| Net appreciation of permanent endowments | 1,519,149 | 1,708,175 |
| Funds functioning as endowment | 1,942,388 | 2,061,089 |
| Restricted for operations and other | 657,482 | 602,343 |
| Unrestricted | 3,245,756 | 3,468,074 |
| | $ 13,001,255 | $ 13,295,807 |

Unrestricted net position, as defined by GASB, 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, 2016 and 2015, substantially all of the unrestricted net position has been designated for various academic programs, research initiatives and capital projects.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 12—FEDERAL DIRECT LENDING PROGRAM

The University distributed $292,106,000 and $303,638,000 for the years ending June 30, 2016 and 2015, respectively, 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 financial statements. The statement of net position includes a receivable of $7,871,000 and a payable of $2,337,000 at June 30, 2016 and 2015, respectively, for DoED funding received subsequent or prior to distribution.

## NOTE 13—COMMITMENTS AND CONTINGENCIES

Authorized expenditures for construction and other projects unexpended as of June 30, 2016 were $1,072,287,000. Of these expenditures, the University expects that $1,009,952,000 will be funded by internal sources, gifts, grants and future borrowings, $25,910,000 by the State Building Authority and the remaining $36,425,000 will be funded using unexpended debt proceeds.

Under the terms of various limited partnership agreements approved by the Board of Regents or by 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. As of June 30, 2016, the University had committed, but not paid, a total of $3,859,336,000 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):

| | |
|---|---|
| 2017 | $ 1,352,188 |
| 2018 | 880,157 |
| 2019 | 667,404 |
| 2020 | 337,750 |
| 2021 | 231,254 |
| 2022 and beyond | 390,583 |
| | $ 3,859,336 |

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 capital and operating leases for certain space and equipment, which expire at various dates through 2039. Outstanding commitments for these leases are expected to be paid in the following years ended June 30:

| (in thousands) | Capital | Operating |
|---|---|---|
| 2017 | $ 4,473 | $ 30,670 |
| 2018 | 4,473 | 24,754 |
| 2019 | 4,473 | 20,709 |
| 2020 | 3,735 | 18,013 |
| 2021 | 3,045 | 16,673 |
| 2022-2026 | 14,913 | 46,649 |
| 2027-2031 | 15,322 | 368 |
| 2032-2036 | 16,089 | 150 |
| 2037-2039 | 9,936 | |
| | 76,459 | $ 157,986 |
| Less amount representing interest | 38,386 | |
| Present value of net minimum capital lease payments | $ 38,073 | |

Operating lease expenses totaled $32,929,000 and $35,821,000 in 2016 and 2015, respectively.



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 14—OPERATING EXPENSES BY FUNCTION

Operating expenses by functional classification for the years ended June 30, 2016 and 2015 are summarized as follows:

**2016**

| (in thousands) | Compensation and Benefits | Supplies and Services | Depreciation | Scholarships and Fellowships | Total |
|---|---|---|---|---|---|
| Instruction | $ 891,703 | $ 139,307 | | | $ 1,031,010 |
| Research | 494,907 | 259,907 | | | 754,814 |
| Public service | 117,025 | 65,120 | | | 182,145 |
| Academic support | 224,841 | 61,999 | | | 286,840 |
| Student services | 84,728 | 25,151 | | | 109,879 |
| Institutional support | 172,634 | 53,669 | | | 226,303 |
| Operations and maintenance of plant | 37,018 | 269,935 | | | 306,953 |
| Auxiliary enterprises | 2,604,559 | 1,016,431 | | | 3,620,990 |
| Depreciation | | | $ 501,631 | | 501,631 |
| Scholarships and fellowships | | | | $ 132,228 | 132,228 |
| | $ 4,627,415 | $ 1,891,519 | $ 501,631 | $ 132,228 | $ 7,152,793 |

**2015**

| (in thousands) | Compensation and Benefits | Supplies and Services | Depreciation | Scholarships and Fellowships | Total |
|---|---|---|---|---|---|
| Instruction | $ 844,505 | $ 138,924 | | | $ 983,429 |
| Research | 469,871 | 236,257 | | | 706,128 |
| Public service | 128,604 | 60,794 | | | 189,398 |
| Academic support | 207,878 | 58,304 | | | 266,182 |
| Student services | 79,609 | 24,447 | | | 104,056 |
| Institutional support | 161,661 | 49,570 | | | 211,231 |
| Operations and maintenance of plant | 35,588 | 242,159 | | | 277,747 |
| Auxiliary enterprises | 2,403,193 | 925,467 | | | 3,328,660 |
| Depreciation | | | $ 493,629 | | 493,629 |
| Scholarships and fellowships | | | | $ 132,758 | 132,758 |
| | $ 4,330,909 | $ 1,735,922 | $ 493,629 | $ 132,758 | $ 6,693,218 |

# OFFICERS AND STAFF
## AS OF JUNE 30, 2016

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