



## Appendices

**Appendix A: Peer Groups**


**Appendix B: Notes on Charts**

**Appendix C: U-M Graduate Academic Programs Grouped by Broad Disciplinary Categories**

**Appendix D: Graduate Academic and Professional Degree Programs at the University of Michigan**

**Appendix E: Glossary**

**Appendix F: Photograph Captions and Credits**

 *Chart updated since the March 2016 edition.*

## Appendix A: Peer Groups

The University of Michigan uses several groups of similar institutions of higher education for purposes of comparison. Here are descriptions and member lists of three peer groups referenced in the Michigan Almanac. Private institutions are shown in *italics*.

### 1) Official Peers (list developed by U-M officials)

- *Columbia University in the City of New York*
- *Cornell University*
- *Harvard University*
- Indiana University-Bloomington
- *Northwestern University*
- *Princeton University*
- *Stanford University*
- University of California-Berkeley
- University of California-Los Angeles
- *University of Chicago*
- University of Illinois at Urbana-Champaign
- University of Minnesota-Twin Cities
- University of North Carolina at Chapel Hill
- *University of Pennsylvania*
- University of Virginia-Main Campus
- University of Washington-Seattle Campus
- University of Wisconsin-Madison
- *Yale University*

**2) Association of American Universities (AAU)** is a nonprofit association of the leading public and private research universities in the U.S. and Canada. The Association of American Universities Data Exchange (AAUDE), a constituent group of the AAU, is comprised of the institutional research officers from each of these universities.

- *Boston University (new in 2012)*
  - *Brandeis University*
  - *Brown University*
  - *California Institute of Technology*
  - *Carnegie Mellon University*
  - *Case Western Reserve University*
  - *Columbia University in the City of New York*
  - *Cornell University*
  - *Duke University*
  - *Emory University*
  - Georgia Institute of Technology-Main Campus
  - *Harvard University*
  - Indiana University-Bloomington
  - Iowa State University
  - *Johns Hopkins University*
  - *Massachusetts Institute of Technology*
  - Michigan State University
  - *New York University*
  - *Northwestern University*
  - Ohio State University-Main Campus
  - Pennsylvania State University
  - *Princeton University*
  - Purdue University-Main Campus
  - *Rice University*
  - Rutgers University-New Brunswick
  - *Stanford University*
  - Stony Brook University
  - Texas A & M University
  - *Tulane University of Louisiana*
  - University at Buffalo
  - University of Arizona
  - University of California-Berkeley
  - University of California-Davis
  - University of California-Irvine
  - University of California-Los Angeles
  - University of California-San Diego
  - University of California-Santa Barbara
  - *University of Chicago*
  - University of Colorado Boulder
  - University of Florida
  - University of Illinois at Urbana-Champaign
  - University of Iowa
  - University of Kansas
  - University of Maryland-College Park
  - University of Michigan-Ann Arbor
  - University of Minnesota-Twin Cities
  - University of Missouri-Columbia
  - University of North Carolina at Chapel Hill
  - University of Oregon
  - *University of Pennsylvania*
  - University of Pittsburgh-Pittsburgh Campus
  - *University of Rochester*
  - *University of Southern California*
  - University of Texas at Austin
  - University of Virginia-Main Campus
  - University of Washington-Seattle Campus
  - University of Wisconsin-Madison
  - *Vanderbilt University*
  - *Washington University in St Louis*
  - *Yale University*
- Canadian university AAU members (not included in comparison groups in this publication)
- McGill University
  - University of Toronto
- Non-AAU affiliates of AAUDE
- *Syracuse University*
  - University of Nebraska-Lincoln

3) The **Big Ten**, an athletic conference formed in 1896 by seven public and private universities. The Big Ten membership is currently 14, listed below with the year the school joined the conference in parenthesis. (*Northwestern University*, in italics, is the only private institution now in the Big Ten. The (private) University of Chicago was a charter member, but left the conference in 1946.)

- Indiana University (1899)
- Michigan State University (1949)
- *Northwestern University* (1896)
- Ohio State University (1912)
- Pennsylvania State University (1990)
- Purdue University (1896)
- Rutgers University (2014)
- University of Illinois (1896)
- University of Iowa (1899)
- University of Maryland (2014)
- University of Michigan (1896)
- University of Minnesota (1896)
- University of Nebraska (2011)
- University of Wisconsin (1896)

## Appendix B: Notes on Charts

***The time frame applied to individual charts varies based on differences in the distribution date of the current edition and the latest release date for the data needed to produce a chart.***

### Chapter 1 – Overview of the University

- 1.1 School/College Origins.**  
SOURCE: Bentley Historical Library web site.
- 1.2 Student Fall Enrollment, 1841-present.**  
SOURCE: Counts compiled from several sources. The Office of the Registrar has provided data for the most recent decade.
- 1.3 Composition of U-M Ann Arbor Campus Community.**  
SOURCE: Student enrollment from Report 102, Office of the Registrar. Faculty and staff counts based on November 1 HR snapshot.  
The total faculty headcount as of November 2012 was 6,682, which does not include Research Fellows. The original January 2013 edition headline for this page incorrectly reported the total faculty headcount as “nearly 8,000”. This was corrected in the Jan. 2013 edition on March 7, 2013.
- 1.4.1 Operating Revenues for the Ann Arbor Campus (including the U-M Health System), Adjusted for Inflation.**  
SOURCE: Financial Operations, which provides a special report that excludes data for the UM-Flint and UM-Dearborn campuses.
- 1.4.2 Operating Revenues for the Ann Arbor Campus (including the U-M Health System), by Percent.**  
SOURCE: Financial Operations, which provides a special report to remove data for the UM-Flint and UM-Dearborn campuses.

### Chapter 2 - Undergraduate Students: Admissions and Enrollment

- 2.1 Applications, Admission-Offers and Enrollment for New Freshmen and Undergraduate Transfers.**  
SOURCE: Applications and admissions data are from the Office of Undergraduate Admissions Spring, Summer and Fall Terms Freshmen and New Transfer Flow reports. Enrollment data are from the Office of the Registrar Report 109 and the SA05 Third Week Count.
- 2.2.1 Selectivity Rates for New Freshmen and Undergraduate Transfers.**  
SOURCE: Applications and admissions data are from the Office of Undergraduate Admissions Spring, Summer and Fall Terms Freshmen and New Transfer Flow reports. Enrollment data are from the Office of the Registrar Report 109 and the SA05 Third Week Count.
- 2.2.2 Yield Rates for New Freshmen and Undergraduate Transfers.**  
SOURCE: Applications and admissions data are from the Office of Undergraduate Admissions Spring, Summer and Fall Terms Freshmen and New Transfer Flow reports. Enrollment data are from the Office of the Registrar Report 109 and the SA05 Third Week Count.
- 2.3.1 GPA and Standardized Test Scores of New U-M Freshmen.**  
SOURCE: Freshman Profile Reports, Office of Admissions.
- 2.3.2 SAT Critical Reading and Math Scores for New Freshmen at U-M and Peer Institutions.**  
SOURCE: Institutional Characteristics Survey 2010-11, Integrated Postsecondary Education Data System (IPEDS). Freshman enrollment is based on IPEDS data for full-time, first-time degree/certificate-seeking undergraduate students.
- 2.3.3 SAT Critical Reading and Math Scores for New Freshmen at U-M and Big Ten Universities.**  
SOURCE: Institutional Characteristics Survey 2010-11, Integrated Postsecondary Education Data System (IPEDS). The University of Nebraska joined the Big Ten in 2011 and will be included in data from that year on. Freshman enrollment is based on IPEDS data for full-time, first-time degree/certificate-seeking undergraduate students.
- 2.3.4 Average College GPA of New Undergraduate Transfer Students and their Class Level at Entry.**  
SOURCE: Recruiting and Admissions data set, Office of Admissions; SA05 Third Week Count data set, Office of the Registrar.
- 2.4 First-Generation Undergraduate Freshmen at U-M and Selective Research/Doctoral Public and Private Institutions for Selected Years.**  
SOURCE: Admissions Report SA02 and Official Third Week Count SA05, U-M Data Warehouse. 2003-04 National Postsecondary Student Aid Study (NPSAS:04) and 2007-08 National Postsecondary Student Aid Study (NPSAS:08), National Center for Education Statistics, U.S. Department of Education.
- 2.5.1 Total Undergraduate Students and New Freshmen, by Headcount.**  
SOURCE: SA05 Third Week Count data set, Reports 102 and 109, Office of the Registrar.
- 2.5.2 Undergraduate Student Enrollment, by School and College.**  
SOURCE: SA05 Third Week Count data set, Report 102, Office of the Registrar.



- 2.6.1 Geographic Origin of Undergraduate Students, by Headcount and Percent.**  
SOURCE: SA05 Third Week Count data set, Report 115, Office of the Registrar.  
Students are designated as international based on citizenship, not the address provided in the application for admission.
- 2.6.2 Geographic Origin of New Freshmen, U-M and Public Peer Institutions, by Percent.**  
SOURCE: IPEDS data for First-time degree/certificate-seeking undergraduate students, by in-state/out-of-state/international status.
- 2.6.3 U-M Undergraduate Student Fall Enrollment from the State of Michigan, by Region and County.**  
SOURCE: SA05 Third Week Count data set, Report 115, Office of the Registrar.
- 2.6.4 U-M Undergraduate Student Enrollment, by State.**  
SOURCE: SA05 Third Week Count data set, Report 115, Office of the Registrar.

## Chapter 3 – Undergraduate Students: Affordability

- 3.1.1 Undergraduate Tuition and Required Fees, per Semester.**  
SOURCE: Office of the Registrar.  
Tuition rates for 2012-13 were approved by the Board of Regents on June 20, 2013.  
Upper Division students enrolled in the Computer Science program in the College of Literature, Science & the Arts pay the same tuition rate as students in the College of Engineering.
- 3.6.1 Family Income Distribution for New Freshmen and All Undergraduates, Adjusted for Inflation<sup>5</sup>, by In-State and Out-of-State Status.**  
SOURCE: U.S. Department of Education.  
A new source of data for this chart was first used in this edition; the chart is now based on family income reported on the Free Application for Federal Student Aid (FAFSA).

## Chapter 4 - Undergraduate Student Success

- 4.1 Graduation Rates for U-M And AAU Public and Private Universities for Freshman Cohorts Entering 1996-2003**  
SOURCE: Graduation Rate Surveys, Integrated Postsecondary Education Data System (IPEDS).  
U-M data are from Office of the Registrar Degree Reports. Sixty-one public and private universities comprise the AAU membership (see Appendix I). Public university AAU members number 35, one of which is the University of Michigan. The public university averages in chart 4.1 include data for the other 34 AAU public university members. If data for any institution is not available, the average calculation is adjusted accordingly.
- 4.2 Proportion of U-M baccalaureate recipients who enrolled in a graduate or professional degree program within four years.**  
SOURCE: National Student Clearinghouse (NSC). These data are susceptible to undercount because not all U-M Schools and Colleges are rigorous about participating in the NSC survey.  
No data are included for the School of Dentistry, which offers an undergraduate degree program in Dental Hygiene.
- 4.3.1 Responses of U-M Seniors to Survey Questions about Satisfaction with the University.**  
SOURCE: Data for the first four questions (A-D) are from the National Survey of Student Engagement (NSSE), known as UMAC at the University of Michigan. Questions A and B were on the survey as administered by all participating schools. Questions C and D were only on the survey as administered by Association of American University Data Exchange (AAUDE) institutions participating in that year's data collection. Data for the fifth question (E) are from the [University of Michigan Asks You \(UMAY\) undergraduate survey](#).
- 4.3.2 Responses of U-M Seniors to Survey Questions about Satisfaction with Academics, Course Availability, and Advising.**  
SOURCE: Data for the first four questions (A-D) are from the National Survey of Student Engagement (NSSE), known as UMAC at the University of Michigan.

## Chapter 5 – Graduate Academic & Professional Degree Students

- 5.1.1 Graduate Academic and Professional Student Enrollment by Level.**  
There are two different methods for grouping graduate students by level. In one method, all Master's program students are combined to determine the number of students in any Master's program. This count is reflected in Registrar Report 102. In another method, Master's students in non-professional or "academic" programs are grouped, and "professional" Master's students, such as those seeking an M.B.A. or M.Arch, are grouped with professional students, such as M.D. and J.D. This second method is used for most Almanac charts reporting on graduate education.

**5.1.2 Graduate Academic and Professional Student Enrollment by Percent of Total Enrollment for the U-M and AAU Public and Private Universities.**

SOURCE: Office of the Registrar and individual Registrars in each School/College. Degrees Granted by 2-digit CIP, Integrated Postsecondary Education Data System (IPEDS). [Totals for postgraduate medicine and visiting scholars have been removed from the data.]

**5.1.2 Graduate Academic and Professional Student Enrollment as a Percent of Total Enrollment.**

SOURCE: Office of the Registrar Annual reports: 1960-61 Table VII, 1966-67 through 1969-70 (Enrollment in Credit Programs by Residency, Class Level, and Unit: Fall, 1970), 1980 Table IX, Report 102 for 1983-2010. [Totals for postgraduate medicine and visiting scholars have been removed from the data.]

## **Chapter 6 – Faculty & Staff**

**6.2.1 Tenured/Tenure-Track Faculty, Headcount by Title.**

SOURCE: Human Resource Data Warehouse HR02 Universe.

Figures represent counts as of November 1 and reflect end-of-day activity as of October 31 for the noted year and appointments with an active or leave status, with or without pay (dry appointments).

**6.3.2 Faculty Member of National Academies, by Discipline, 2016.**

Starting with the 8<sup>th</sup> edition, the American Academy of Arts and Sciences membership is included in the chart.

**6.5.1 Headcount of Regular Staff.**

SOURCE: Headcounts are based on Human Resources data on November 1 of each year.

**6.5.2 Full-time Equivalent of Staff, All Funds and General Fund.**

SOURCE: Trends in Administration Report, Office of Budget and Planning.

**6.6 Age Distribution of Staff.**

SOURCE: Regular staff counts are based Human Resources data for paid appointments as of November 1 of each year and include employees with a status of active or on leave with pay. These counts exclude staff members that also have a faculty appointment, even though the staff appointment may be the primary appointment.

## **Chapter 7 – Diversity**

Throughout this chapter, the “Two or More URM” category label represents individuals who identified two or more ethnic backgrounds *and* at least one of the ethnicities was an Under-Represented Minority – African American, Hispanic American, Native American, or Hawaiian. The “Two or More non-URM” label covers other multi-racial/ethnic individuals who did not identify with Under-Represented Minority.

**7.1.1 Race and Ethnicity Distribution of the Ann Arbor Campus Community.** The “Two or More URM”, Two or More non-URM” and “Hawaiian” categories were put in use starting in 2010.

The “Multiracial” category label is only used for State of Michigan data, as U.S. Census data does not use the “Two or More URM/non-URM” categories.

The “Hispanic American” group for the State of Michigan includes individuals who selected “Other Race” during the U.S. Census survey, since the U.S. Census Bureau determined that 93 percent of these respondents could be classified as Hispanic Americans.

“Research Faculty/Fellows” includes Research Scientists and Research Faculty, Librarians, Archivists and Research Fellows.

“Other Academic” includes Adjunct and Visiting Faculty, Not-on-Track Faculty and Emeritus Faculty. “Staff” excludes graduate student instructors and research assistants; these individuals are reported as students.

**7.1.2 Gender Distribution of the Ann Arbor Campus Community.** “Research Faculty/Fellows” includes Research Scientists and Research Faculty, Librarians, Archivists and Research Fellows.

“Other Academic” includes Adjunct and Visiting Faculty, Not-on-Track Faculty and Emeritus Faculty. “Staff” excludes graduate student instructors and research assistants; these individuals are reported as students.

**7.2.1 Race and Ethnicity Distribution of New Freshmen.** The “Two or More URM/non-URM” categories were put into use in 2010, so no earlier years in the chart use this category.

**7.3 U-M Freshmen by Family Income and Geographic Origin.**

Data based on reports of family income on the Free Application for Federal Student Aid (FAFSA), a different source than used in previous editions.

**7.4.1 through 7.4.7**

The Under-Represented Minority group includes students who self-identify as African American, Hispanic American, Native American, Native Alaskan or Pacific Islander.

**7.5.1 Race and Ethnicity Distribution of Graduate and Professional Students.**

All years exclude a small number (18 or fewer) of not-candidate-for-degree (NCFD) guest students who have no entry for their discipline category.

### **7.5.2 Gender Distribution of Graduate and Professional Students.**

All years exclude a small number (18 or fewer) of not-candidate-for-degree (NCFD) guest students who have no entry for their discipline category.

## **Chapter 8 – Teaching & Learning**

### **8.1 Composition of Instructional Workforce by Full-time Equivalent (FTEs).**

This chart does not include clinical and adjunct faculty (1,355 FTEs). While these individuals have roles in instruction, their participation is of a different kind than tenured/tenure-track faculty, lecturers and graduate students instructors.

## **Chapter 9 – Research & Technology Transfer**

### **9.1.3 Direct Research Expenditures by Discipline, Adjusted for Inflation.**

In 2011, the College of Literature, Sciences & the Arts adjusted the method it uses to apportion general fund-supported faculty effort for teaching, research and service. A portion of each faculty member's effort is now explicitly included in direct research expenditures. The most noticeable effect of this change is the relatively large increase in the direct research expenditures in the Humanities and the Arts in 2011; faculty salaries attributed to research effort in Humanities-related LSA departments increased from \$158,000 in FY2010 to \$8,825,000 in FY2011 due to the change in practice.

## **Chapter 10 – Finances & Fundraising**

### **10.1.1 Breakout General Fund Budget for the Ann Arbor campus.**

Additional detail available from the Office of Budget and Planning.

## **Chapter 11 – Space & Sustainability**

### **11.1 Total Facilities Space on the Ann Arbor Campus, by General Fund and all Other Funds.**

SOURCE: U-M Annual Space Management Survey Reports. Space at the North Campus Research Complex has been removed from the campus totals.



## Appendix C: U-M Graduate Academic Programs<sup>1</sup> Grouped by Broad Disciplinary Categories (Rackham Divisions<sup>2</sup>)

### Biological & Health Science / Life Sciences (Rackham Division 1)

- Agriculture
- Bioinformatics
- Biology (Cellular, Molecular, Developmental, Neural, Chemical, Evolutionary, etc.)
- Biomaterials
- Biostatistics
- Chemistry
- Clinical Research
- Ecology
- Environmental Health Science
- Epidemiological Science
- Genetic Counseling
- Health & Health Care Research
- Health Services Organization and Policy
- Human Genetics
- Immunology
- Industrial Health/Industrial Ecology
- Kinesiology
- Landscape Architecture
- Microbiology & Immunology
- Natural Resources/Conservation
- Neuroscience
- Nursing
- Nutritional Science
- Oral Health Sciences (Endodontics, Orthodontics, Periodontics, Prosthodontics, etc.)
- Pathology
- Pharmaceutical Sciences
- Pharmacology
- Pharmacy
- Physiology
- Spatial Analysis
- Sustainable Systems
- Toxicology

### Physical Sciences & Engineering (Rackham Division 2)

- Applied Mechanics
- Applied Physics
- Applied Statistics
- Astronomy/Astrophysics
- Atmospheric, Oceanic & Space Sciences
- Biophysics
- Chemistry
- Complex Systems
- Computer Science & Engineering
- Construction Engineering & Management
- Design Science
- Engineering (Aerospace, Bio/Biomedical, Chemical, Civil, Electrical, Environmental, Financial, Industrial & Operations, Mechanical, Nuclear, Marine, etc.)
- Geology
- Macromolecular Science
- Materials Science
- Mathematics
- Mineralogy
- Naval Architecture
- Radiological Sciences
- Nuclear Science
- Oceanography: Physical
- Physics
- Robotics
- Scientific Computing
- Science, Technology & Public Policy
- Space & Planetary Physics
- Statistics
- Sustainable Systems
- Transportation & Logistics

### Social Sciences (Rackham Division 3)

- Anthropology
- Area Ethnic, Cultural, Gender and Group Studies
- Asian Studies
- Business Administration
- Cognitive Science/Neuroscience
- Communication Studies
- Culture And Cognition
- Economics
- Education/Higher Education
- Education & Psychology
- Educational Studies
- Health Behavior & Health Education
- Health Service Organization & Policy
- Health Services Research
- History
- Information & Library Studies
- Political Science
- Psychology
- Public Administration
- Public Policy
- Sociology
- Urban & Regional Planning

### Humanities & the Arts (Rackham Division 4)

- American Culture
- Architecture
- Art
- English Language and Literature
- Foreign Languages and Literatures
- Classical Art & Archaeology
- Classical Studies
- Comparative Literature
- Creative Writing
- Dance
- Film Studies
- History Of Art
- Judaic Studies
- Linguistics
- Medical & Biological Illustration
- Museum Studies
- Music (Composition, Education, Musicology, Performance, Theory, etc.)
- Philosophy
- Screen Arts and Cultures
- Theatre
- Women's Studies

<sup>1</sup> Excludes U-M professional degree programs by the same or similar names.

<sup>2</sup> Rackham Divisions are disciplinary groupings established by the Horace H. Rackham School of Graduate Studies.

## Appendix D: Graduate Academic and Professional Degree Programs at the University of Michigan

### Graduate Academic Degree Programs

One or more U-M School or College offers the listed degrees.

- Master of Arts (A.M.)
- Master of Science (M.S.)
- Master of Science in Engineering (M.S.E.)
- Master of Fine Arts (M.F.A.)
- Master of Landscape Architecture (M.L.A.)
- Master of Public Policy (M.P.P.)
- Master of Public Administration (M.P.A.)
- Master of Urban and Regional Planning (M.U.P.)
- Doctor of Philosophy (Ph.D.)
- Doctor of Musical Arts (D.M.A.)

### Graduate Professional Degree Programs

Taubman College of Architecture and Urban Planning (TAUP)

- Master of Architecture (M. Arch.)
- Master of Urban Design (M.U.D.)

Ross School of Business

- Master of Business Administration (M.B.A.)
- Master of Accounting (M.Acc.)
- Master of Supply Chain Management (M.S.C.M.)
- Master in Entrepreneurship (M.E.) – *degree discontinued in December 2015.*

School of Dentistry

- Doctor of Dental Surgery (D.D.S.)

College of Engineering

- Master of Engineering (M. Eng.)  
Concentration areas: Pharmaceutical Engineering, Construction Engineering and Management, Structural Engineering, Integrated Microsystems, Space Engineering, Manufacturing, Applied Climate, Automotive Engineering, Energy Systems Engineering, Global Automotive and Manufacturing, Robotics and Autonomous Vehicles
- Doctor of Engineering (D. Eng.)  
Concentration areas: Manufacturing, Engineering

Law School

- Juris Doctor (J.D.)
- Master of Comparative Law (M.C.L.)
- Master of Laws (LL.M.)
- Doctor of the Science of Law (S.J.D.)

Medical School

- Doctor of Medicine (M.D.)
- Master in Health Professions Education (M.H.P.E.)

School of Information

- Master of Science in Information (M.S.I.)

School of Music, Theatre & Dance

- Master of Music (M.M.)  
Concentrations areas: Chamber Music; Church Music; Collaborative Piano; Composition; Conducting; Band/Wind Ensemble, Choral, Orchestral; Early Keyboard Instruments; Improvisation; Keyboard Instruments; Music Education; Music Education with Certification; Performance; Piano Pedagogy and Performance; Wind Instruments.
- Specialist in Music (Spec.M.)  
Concentrations areas: Church Music; Ethnomusicology; Music Education; Performance;

School of Nursing

- Doctor of Nursing Practice (D.N.P.)

College of Pharmacy

- Doctor of Pharmacy (Pharm.D.)

School of Public Health

- Master of Public Health (M.P.H.)
- Master of Health Services Administration (M.H.S.A.)
- Doctor of Public Health (D.P.H.)

School of Social Work

- Master of Social Work (M.S.W.)

## Appendix E: Glossary

**AAU:** American Association of Universities, a nonprofit association of 59 U.S. and two Canadian preeminent public and private research universities.

**ACT:** A standardized test designed to measure high school achievement and aid in the college admissions process.

**Auxiliary activities:** Essentially self-supporting activities primarily intended to furnish services to students, faculty and staff; examples include parking services, health care services to the public, residential services to students, and the athletic program.

**Common Application:** An undergraduate college admission application that students may use to apply to any of 488 member colleges and universities in the United States and various other countries. Its mission is to encourage the use of “holistic admission,” a process that includes subjective factors gleaned from essays and recommendations alongside objective criteria such as class rank and standardized testing.

**Constant Dollars:** An adjustment made to financial values to account for the effects of inflation. Sometimes referred to as “real dollars”.

**Cooperative Institutional Research Program (CIRP) Freshman Survey:** An annual survey administered during orientation or registration to entering students. The survey covers a wide range of student characteristics, achievement and activities, educational and career plans and values, attitudes, beliefs and self-concept.

**Cost of Attendance:** Cost of attendance is the estimated full and reasonable cost of completing a full year as a full-time student and typically includes tuition and fees, books and supplies, room and board, personal costs and transportation. See Net Cost of Attendance.

**Clinical faculty:** At the University of Michigan, these non-tenure track instructional faculty appointments emphasize clinical/practice and teaching skill.

**Current Dollars:** The value of dollars in the year they were received or paid without any adjustment for inflation. Sometimes referred to as “actual dollars”.

**Emeritus faculty:** At the University of Michigan, regular and clinical instructional faculty, research professors, research scientists, librarians, curators, and archivists may, upon officially retiring from the University, be granted an emeritus or emerita title by the Board of Regents.

**Expected Family Contribution (EFC):** An estimate calculated according to a Federal formula of the amount that a student and his or her parents might be expected to contribute toward the costs of a college education. Once a student’s EFC has been determined, the amount of federal, state, and institutional need-based aid the student is eligible to receive is calculated using the following equation: Cost of Attendance (minus) Expected Family Contribution (minus) Other Financial Resources (private scholarships, etc.) (equals) Eligibility for Need-Based Aid.

**FTE:** Full-time equivalent. A unit used to indicate the workload of an employed person or calculate the number of students or faculty members in a comparable or standardized way across institutions.

**First generation student:** An undergraduate student whose parents have not previously attended college at any level.

**GPA:** Grade point average. An indicator of past academic success that is requested as part of a student’s application for admission.

**General Fund:** At the University of Michigan, the General Fund relies largely on student fees and state appropriations and pays for teaching, research, library services, student scholarships, fellowships, and maintenance and operation of physical properties, among other services.

**Geographic origin:** A student’s geographic origin is defined according to the address used in the application for admission. The geographic origin of a student is similar, but not identical, to residency status.

**Graduate Student Instructor (GSI):** They are graduate students who help teach classes. GSIs act in different capacities depending on the class setup and professor preference. They can lead discussion sections, lead lectures, hold extra office hours, or be available for student help and advice.

**Graduate Student Research Assistant (GSRA):** A Graduate Student Research Assistantship (GSRA) is an appointment which may be provided to a student in good standing in a University of Michigan graduate degree program who performs personal research (including thesis or dissertation preparation) or who assists others performing research that is relevant to his or her academic goals.

**Graduate Student Staff Assistant (GSSA):** The GSSA is a graduate student whose employment is a part of a degree requirement or is otherwise considered academically relevant. GSSAs perform administrative, counseling or educational duties other than those of a GSI.

**Grant Aid:** Financial aid provided to students that is typically based on need.

**Grant, research:** See research grant.

**Indirect costs:** Indirect costs are the real costs of University operations that are not readily assignable to a particular project. Officially known as Facilities and Administrative costs, these costs are determined by federal auditors under the guidelines of the Office of Management and Budget.

**Indirect cost recovery:** Payments for overhead costs received from a research sponsor.

**In-state student:** The informal designation of a student who pays the “resident” tuition rate. In broad terms, such students are permanent residents of the State of Michigan as demonstrated by the applicant’s parents and/or the applicant or the applicant’s spouse or partner holding permanent employment in the state.

**Instructional faculty:** Individuals at the University of Michigan involved in student instruction, excluding graduate student instructors. ‘Regular instructional faculty’ includes tenure track faculty, clinical instructional faculty, and lecturers. ‘Supplemental instructional faculty’ includes adjunct instructional faculty, adjunct clinical instructional faculty, and visiting instructional faculty.

**National Postsecondary Student Aid Study (NPSAS):** A comprehensive research dataset on financial aid provided by the federal government, the states, postsecondary institutions, employers, and private agencies, along with student demographic and enrollment data.

**National Survey of Student Engagement (NSSE):** A higher education survey administered by the Center for Postsecondary Research in the Indiana University School of Education. NSSE annually collects information at hundreds of four-year colleges and universities about student participation in programs and activities that institutions provide for their learning and personal development. The results provide an estimate of how undergraduates spend their time and what they gain from attending college.

**Net Cost of Attendance:** The net cost of attendance is defined as the sum of tuition and fees, room and board, books and supplies, and other expenses for a full time freshman minus the sum of need and merit-based grant aid (not including work-study programs or government subsidized loans). See Cost of Attendance.

**Net Student Tuition/Fees:** When used in the context of the University’s operating revenues, this is determined by subtracting scholarship aid from the tuition and fees paid by students.

**Out-of-state student:** The informal designation of a student who pays the “non-resident” tuition rate. In broad terms, such students are *not* permanent residents of the State of Michigan as demonstrated by the applicant’s parents and/or the applicant or the applicant’s spouse or partner holding permanent employment in another state or country.

**Residency status:** Residency status determines whether a student pays “in-state” or “out-of-state” tuition. Residency status is similar, but not identical, to geographic origin.

**SAT:** A standardized test designed to measure high school achievement and aid in the college admissions process.

**Scholarship Aid:** Financial aid provided to students, typically based on merit. (In some instances, scholarships may also have a need-based component.)

**Selectivity:** The percentage of applicants offered admission.

**STEM:** An acronym for fields related to science, technology, engineering and mathematics.

**Technology transfer:** The set of activities aimed at turning university research discoveries into products or processes with economic value.

**Tenured/tenure-track faculty:** Instructional faculty members who have either received tenure or who intend to be evaluated for tenure in the future.

**U-M Health System:** This phrase refers collectively to the U-M Hospitals and Health Centers, Michigan Health Corporation, Medical School patient care-related activity and the Office of the Executive Vice President for Medical Affairs.

**University of Michigan Asks You (UMAY):** The name used at the U-M for its version of the Student Experience in the Research University (SERU) survey. The survey, designed to learn about undergraduate student experiences, is administered to all U-M undergraduates at the Ann Arbor campus. Other research institutions to their students administer similar surveys.

**Yield:** The percentage of admitted students who enroll.

## Appendix F: Photography Captions and Credits

- Cover: Student studying outside of Angell Hall.  
Photographer: Scott Soderberg.
- Page 2: Aerial of U-M Central Campus as the sun rises over the University of Michigan in August 2011.  
Photographer: Scott Soderberg.
- Page 8: A student studies in the stacks of the Hatcher Graduate Library.  
Photographer: Austin Thomason.
- Page 24: The study room in Michigan Union is filled with student cramming for exams.  
Photographer: Scott Soderberg.
- Page 39: U-M students Molly Livingston, Lizzy McDonald and Katy Tylus post a favorite memory on a chalkboard at the Senior Send Off in April 2012.  
Photographer: Scott Soderberg.
- Page 45: Sociology graduate student Jun Yang of Korea works in the Tanner Philosophy Library.  
Photographer: Eric Bronson.
- Page 73: Professor Charlie Doering conducts a lecture for his “Nonlinear Dynamics and Chaos” class.  
Photographer: Charlie Doering
- Page 87: Students at Engineering Welcome Day.  
Photographer: Martin Vloet
- Page 105: School of Education Dean Deborah Loewenberg Ball conducts a mathematics class in the Elementary Mathematics Laboratory, which allows teachers to observe her techniques.  
Photographer: Joel S. Johnson.
- Page 117: Abdoulaye Djire and Kanako Okada work at an electrochemical workstation in the Michigan Energy Institute at the Phoenix Memorial Lab.  
Photographer: Martin Vloet.
- Page 131: The Reflection pond fountain just outside Lurie Engineering Building.  
Photographer: Eric Bronson.
- Page 141: A student jogs to catch up to one of the new M Hybrid Bus as it passes in front of Michigan Union.  
Photographer: Scott Soderberg.
- Page 155: Students walk through the arch leading from South University street to the Diag.  
Photographer: Daryl Marshke.
- Page 169: Marching Band senior saxophonist Aubrie Marsh works on her precision marching at Elbel Field.  
Photographer: Lon Horwedel.

[Photographs by Michigan Photography](#)

# INDEX

## A

**Auxiliary Activities**, 83, 135, 147, 180

## C

**College of Engineering**, 3, 18, 26, 50, 51, 53, 59, 181, 184

**College of Literature, Science & the Arts**, 3, 18, 26, 41, 50, 51, 181

**College of Pharmacy**, 3, 18, 26, 50, 51, 53, 183

**cost of attendance**, 9, 25, 27, 28, 29, 51, 63, 64, 184, 185

**Coursera**, 105

## D

**Designated Fund**, 83, 135

**diversity**, 1, 9, 10, 39, 45, 73-103, 164

## E

**endowment**, 25, 30, 133, 135, 141, 142

**Expendable Restricted Fund**, 83, 135

## F

**family income**, 25, 28, 33, 92, 181, 182

**financial aid**, 9, 16, 25, 27-35, 37, 39, 51, 63, 66, 92, 133-135, 174, 184, 185

**first generation students**, 16, 172, 184

**fundraising**, 30, 133, 135, 140-142, 156, 181

## G

**General Fund**, 25, 30, 83, 134-136, 146, 149-151, 177, 178, 184

**Gerald R. Ford School of Public Policy**, 3, 18, 26, 50-51, 159, 182, 184

**GPA**, 12, 15, 177, 183

**graduation outcomes**, 41, 45, 67-68

**graduation rates**, 39, 40, 61, 62, 158, 167, 169, 174

## H

**Horace H. Rackham School of Graduate Studies**, 3, 45, 47, 48, 50, 52, 54-58, 61-65, 67-70, 181, 183

## I

**instruction**, 74, 88, 105, 107, 114, 134, 135, 143, 156, 180, 184, 185

## L

**Law School**, 3, 45, 50, 51, 53, 59, 71, 159, 178

**learning**, 1, 9, 39, 105-116, 180, 184

## M

**Medical School**, 3, 50, 51, 53, 66, 71, 81, 119, 183, 185

## P

**Pell Grants**, 34, 165

**Penny W. Stamps School of Art & Design**, 3, 18, 26, 50, 51, 182, 184

## R

**research**, 1, 3, 6, 9, 16, 45, 73, 74, 76, 79, 80, 82, 83, 88, 105, 109, 115, 119-130, 133-135, 145, 147, 149, 158, 159, 160, 167, 171, 180, 181, 184, 185

## S

**salaries**, 81, 123, 158, 175

**School of Dentistry**, 3, 18, 26, 45, 50, 51, 53, 59, 71, 179, 183

**School of Education**, 3, 18, 26, 50, 51, 159, 186

**School of Information**, 3, 18, 50, 51, 53, 59, 159, 182, 183

**School of Kinesiology**, 3, 18, 26, 50, 51, 182

**School of Music, Theatre & Dance**, 3, 18, 26, 50, 51, 53, 59, 182, 183

**School of Natural Resources & Environment**, 3, 50, 51, 183

**School of Nursing**, 3, 18, 26, 45, 50, 51, 59, 159, 182, 183

**School of Public Health**, 3, 45, 50, 51, 53, 59, 159, 183

**School of Social Work**, 3, 45, 50, 51, 53, 59, 159, 183

**selectivity**, 11, 158, 178, 185

**state appropriation**, 3, 7, 133-139, 184

**STEM fields**, 54-58, 185

**Stephen M. Ross School of Business**, 3, 18, 26, 45, 50, 51, 53, 58, 147, 159, 182

**student loans**, 25, 28, 35, 37, 45, 64, 65, 66, 166, 185

**student-faculty ratio**, 9, 108, 158, 164

**surveys of students**, 9, 16, 36, 42, 43, 65-70, 87, 93-97, 105, 113-116, 174, 184, 185

**sustainability**, 1, 76, 143, 152-155, 181

## T

**Taubman College of Architecture & Urban Planning**, 3, 18, 26, 45, 50, 51, 53, 59, 177, 178

**teaching**, 1, 45, 73, 76, 79, 105, 113-116, 161, 180

**technology transfer**, 1, 119, 127-130, 181, 185

**tuition**, 3, 7, 11, 19, 25, 26, 27, 30, 45, 51-53, 63, 64, 133-136, 179, 184, 185

## U

**U.S. News & World Report**, 9, 108, 157-161, 164

**U-M Health System**, 1, 3, 7, 75, 82, 143, 179, 185

## Y

**yield** (related to admission), 11, 179, 185