The Michigan Almanac is a publication of the U-M Office of Budget and Planning, created with valuable assistance by staff members from many offices and units across campus.

Tammy Bimer
Associate Vice Provost and Executive Director
Office of Budget and Planning

Nondiscrimination Policy Statement
The University of Michigan, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University of Michigan is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, height, weight, or veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity, and Title IX/Section 504/ADA Coordinator, Office of Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, 734-763-0235, TTY 734-647-1388. For other University of Michigan information call 734-764-1817.

Copyright 2016, Regents of the University of Michigan

Mark J. Bernstein, Ann Arbor
Mike Behm, Grand Blanc
Laurence B. Deitch, Bloomfield Hills
Shauna Ryder Diggs, Grosse Pointe
Denise Ilitch, Bingham Farms
Andrea Fischer Newman, Ann Arbor
Andrew C. Richner, Grosse Pointe Park
Katherine E. White, Ann Arbor
Mark S. Schlissel, ex officio
Table of Contents

Introduction .......................................................................................................................... 1

Chapter 1 Overview of the University ............................................................................. 3
  1.1 School/College Origins ............................................................................................... 3
  1.2.1 Student Enrollment, Fall 1841-2015 ................................................................. 4
  1.2.2 Student Enrollment by Level, Fall 1960-2015 ...................................................... 5
  1.3 Composition of U-M Ann Arbor Campus Community, Fall 2015 ......................... 6
  1.4.1 Operating Revenues for the Ann Arbor Campus (including the U-M Health System), Adjusted for Inflation, FY 2005-2015 ................................................................. 7
  1.4.2 Operating Revenues for the Ann Arbor Campus (including the U-M Health System), by Percent, FY 2005-2015 ................................................................. 7

Chapter 2 Undergraduate Students: Admissions & Enrollment ...................................... 9
  2.1 Applications, Admission-Offers and Enrollment for New Freshmen and Undergraduate Transfers, Fall 2005-15 ................................................................................. 10
  2.2.1 Selectivity Rates for New Freshmen and Undergraduate Transfers, Fall 2005-15 ................................................................................................................................. 11
  2.2.2 Yield Rates for New Freshmen and Undergraduate Transfers, Fall 2005-15 ................................................................................................................................. 11
  2.3.1 GPA and Standardized Test Scores of New Freshmen, Fall 2004 and Fall 2014 ................................................................................................................................. 12
  2.3.2 SAT Math and Critical Reading Scores (25th to 75th Percentiles) for New Freshmen at U-M and Peer Institutions, Fall 2014 ................................................................................. 13
  2.3.3 SAT Math and Critical Reading Scores (25th to 75th Percentiles) for New Freshmen at U-M and Public Big Ten Universities, Fall 2014 ....................................................................... 14
  2.3.4 Average College GPA of New Undergraduate Transfer Students, Fall 2004 and Fall 2014 ......................................................................................................................... 15
  2.3.5 New Undergraduate Transfer Students by Class Level at Entry, Fall 2005 and Fall 2015 ......................................................................................................................... 15
  2.4 First-Generation Undergraduate Freshmen at U-M and Very Selective Public and Private Research Universities for Selected Years .............................................................................. 16
  2.5.1 Total Undergraduate and New Freshmen Enrollment, Fall 2005-15 ...................... 17
  2.5.2 Undergraduate Enrollment by School and College, Fall 2015 ............................... 18
  2.5.3 Undergraduate Student Fall Enrollment 10-Year Trend by School and College, 2005-15 ................................................................................................................................. 19
  2.6.1 Geographic Origin of Undergraduate Students by Headcount and Percent, Fall 2005-15 ......................................................................................................................... 20
  2.6.2 Geographic Origin of New Freshmen, U-M and Public Big Ten and Peer Institutions, by Percent, Fall 2014 ........................................................................................................... 21
  2.6.3 U-M Undergraduate Student Enrollment from the State of Michigan by County, Fall 2015 ......................................................................................................................... 22
  2.6.4 U-M Undergraduate Student Enrollment by State, Fall 2015 ............................... 23

Chapter 3 Undergraduate Students: Affordability ............................................................. 25
  3.1 Undergraduate Tuition and Required Fees, per Semester, 2015-16 ......................... 26
  3.2.1 Total Cost of Attendance Before Financial Aid, In-State Students U-M and AAU Public Universities, Adjusted for Inflation, FY2005-15 ................................................................. 27
  3.3.1 Net Cost of Attendance for New U-M Freshmen by Family Income Level, FY2005-15 ................................................................................................................................. 28
  3.3.2 Change in Average Net Cost of Attendance for New Freshmen, at U-M and Peers, FY2012-14 ......................................................................................................................... 29
  3.3.3 Percent Change in Average Net Cost of Attendance for New Freshmen, at U-M and Peers, FY2012-14 ......................................................................................................................... 29
  3.4 Total U-M Expenditures for Undergraduate Student Grant and Scholarship Aid, by In-State/Out-of-State Status with Annual Percentage Increases, FY2004-14 ......................................................................................................................... 30
  3.5.1 Average Per Student Need-based Grant Aid, Adjusted for Inflation, by Source for New Freshmen at U-M, FY2004 and FY2014 ......................................................................................................................... 31
  3.5.2 Average Per Student Need-based Grant Aid by Source for New Freshmen Who received Grants, U-M and AAU Public Universities, 2013-14 ......................................................................................................................... 32
  3.6.1 Family Income Distribution for New Freshmen and All Undergraduates, Adjusted for Inflation, by In-State and Out-of-State Status, Fall 2004 & Fall 2014 ......................................................................................................................... 33
  3.6.2 Pell Grant Recipients as Percent of Undergraduate Student Body, U-M and AAU Institutions, 2013-14 ......................................................................................................................... 34
Chapter 4  Undergraduate Student Success .............................................................. 39
  4.1  Graduation Rates for U-M and AAU Public and Private Universities, Freshmen Cohorts
       Starting Fall 2000-10 .................................................................................................................. 40
  4.2  Proportion of U-M Baccalaureate Recipients Enrolled in a Graduate or Professional Degree
       Program within Four Years, Class of 2007-08 .............................................................................. 41
  4.3.1  Responses of U-M Seniors to Survey Questions about Satisfaction with their Educational
       Experiences .................................................................................................................................. 42
  4.3.2  Responses of U-M Seniors to Survey Questions about Satisfaction with Academics, Course
       Availability and Advising .............................................................................................................. 43

Chapter 5  Graduate Academic & Professional Degree Students ...................................... 45
  5.1.1  Graduate Academic and Professional Student Enrollment by Level, Fall 2005-2015 .................. 47
  5.1.2  Graduate Academic and Professional Student Enrollment as Percent of Total Enrollment for
       U-M and AAU Public and Private Universities, Fall 2005-15 ..................................................... 48
  5.1.3  U-M Graduate Academic and Professional Student Enrollment as Percent of Total
       Enrollment, with Headcount, Selected Years from 1960-2015 .................................................... 49
  5.1.4  U-M Graduate Academic and Professional Student Enrollment by School/College and Degree
       Sought, Fall 2015 ....................................................................................................................... 50
  5.2.1  Graduate Academic and Professional Degree Tuition and Required Fees, per Semester,
       2015-16 ....................................................................................................................................... 51
  5.2.2  Graduate Academic Student Tuition and Required Fees, Adjusted for Inflation, per Semester,
       FY1996 to FY2016 ......................................................................................................................... 52
  5.2.3  Graduate Professional Student Tuition and Required Fees, Adjusted for Inflation, In-State per
       Semester, FY1996 to FY2016 ........................................................................................................ 53
  5.2.4  Graduate Professional Student Tuition and Required Fees, Adjusted for Inflation, Out-of-State
       per Semester, FY1996 to FY2016 ................................................................................................. 53
  5.3.1  Graduate Academic and Professional Degrees Awarded, Headcount for U-M, Peers and Big
       Ten Universities, 2012-13 .......................................................................................................... 54
  5.3.2  Ph.D. Degrees Awarded, Headcount and Percent, by Discipline Group for U-M, Peers and
       Big Ten Universities, 2012-13 ..................................................................................................... 55
  5.3.3  Academic Master's Degrees Awarded, Headcount and Percent, by Discipline Group for U-M,
       Peers and Big Ten Universities, 2012-13 ..................................................................................... 57
  5.3.4  Graduate Professional Degrees Awarded, Headcount and Percent, by Program for U-M,
       Peers and Big Ten Universities, 2012-13 ..................................................................................... 59
  5.4.1  Academic Doctoral Completion Rates by Discipline Group, Enrollment Cohorts from 2000-09 .... 61
  5.4.2  Academic Master's Completion Rates by Discipline Group, Enrollment Cohorts from 2010-13 .... 62
  5.5.1  Funding Support for Rackham Ph.D. Students, 2014-15 ............................................................ 63
  5.5.2  Funding Support for Rackham Master's Students, 2014-15 ....................................................... 64
  5.6.1  Academic Doctoral Students Self-reported Cumulative Undergraduate and Graduate Debt at
       Graduation, by Discipline Group for Domestic Students, FY2004 to FY2014 ............................. 65
  5.6.2  Graduate Professional Students Self-reported Debt at Graduation, by Program, 2004-14 .......... 66
  5.7  Placement outcomes for U-M Ph.D. Students, by Discipline Group, 2002-15 .......................... 67
  5.8.1  Geographic Origins of U-M Ph.D. Recipients, Headcount and Percent, by Discipline Group,
       FY2004 to FY2014 ....................................................................................................................... 69
  5.8.2  Geographic Destinations of U-M Ph.D. Recipients, Headcount and Percent, by Discipline
       Group, FY2004 to FY2014 .......................................................................................................... 70
  5.9.1  Pass Rates for Four States’ Bar (Law) Examinations by U-M Law School Graduates,
       2010-14 ..................................................................................................................................... 71
  5.9.2  Pass Rates for U.S. Medical Licensing Examination by U-M Medical Students, 2010-14 ........ 71
  5.9.3  Pass Rates for Northeast Regional Board Examination by U-M D.D.S. Students, 2010-14 .......... 71

Chapter 6  Faculty & Staff ............................................................................................... 73
  6.1.1  Academic Workforce, Headcount by Title, Fall 2015 ............................................................... 74
  6.1.2  Academic Workforce, Full-Time Equivalents by Title, Fall 2015 ............................................ 74
  6.1.3  Academic Workforce by Full-Time Equivalents, 2005-15 ...................................................... 75
Chapter 9 Research & Technology Transfer .................................................. 119
  9.1.1 Total Research Expenditures, Adjusted for Inflation, 1980-2015 ......................... 120
  9.1.2 Research Expenditures by Major Funding Source, Adjusted for Inflation, FY2005-15 . 121
  9.1.3 Direct Research Expenditures by Discipline, Adjusted for Inflation, FY2005-15 ........ 122
  9.1.4 Sponsored Research Expenditures by Type, FY2015 ........................................ 123
  9.1.5 Sponsored Research Indirect Cost Recovery by Source, Adjusted for Inflation, FY2005-15 . 124
  9.2 Research Workforce by Full-Time Equivalents (FTEs), Fall 2014 ........................ 125
  9.3 University R&D Expenditures, U-M and Other Leading Institutions, FY2004-13 ........ 126
  9.4.2 Revenues from Royalties and Equity Sales, FY2004-14 .................................. 128
  9.4.3 Formation of Start-up Companies that Utilize U-M Technology, FY2004-14 .......... 129
  9.5 Technology Transfer Indicators for the U-M and Research-Intensive Universities, FY2013 .. 130

Chapter 10 Finances & Fundraising ............................................................. 133
  10.1.1 Breakout of FY2016 General Fund Budget for the Ann Arbor campus ................ 134
  10.1.2 Revenue and Expenditure Budget Summary for Ann Arbor Campus, FY2006-16 .... 134
  10.1.3 Breakdown by Funds of Revenue and Expenditure Budget Summary for Ann Arbor Campus, FY2006-16 ......................................................... 135
  10.2 Relative Contributions to the University’s General Fund by State Appropriations, Tuition and Fees, and Other Revenues, FY1970-2016 ........................................ 136
  10.3 FY2002 State Appropriation Adjusted for Inflation and Projected Forward to Maintain Constant Value, Compared to Actual Annual State Appropriations, FY2002-16 ........ 137
  10.4 State of Michigan Appropriations to the U-M Ann Arbor Campus per Student, Adjusted for Inflation, FY2004-2016 .................................................... 138
  10.5 Total Gifts to the University, by Gift Type, FY2005-15 ........................................ 139
  10.6.1 Total Value of U-M Endowment, Ann Arbor Campus, Adjusted for Inflation, 2005-15 . 140

Chapter 11 Space & Sustainability ................................................................. 143
  11.1 Total Facilities Space on the Ann Arbor Campus (excluding U-M Health System), by General Fund and all Other Funds, FY 2004-14 ........................................ 144
  11.2.1 Ann Arbor Campus Space, by Room Type, FY2005-15 ..................................... 145
  11.2.2 Ann Arbor Campus Space, by Function, FY2005-15 ......................................... 146
  11.3 Age of Ann Arbor Campus General Fund Space, by 10-year Increments ............... 147
  11.4 General Fund Deferred Maintenance Project Expenditures, by Type, FY1999-14 ........ 148
  11.6 Ratio of General Fund Infrastructure Renovation Costs to Total Replacement Costs, FY2004-14 ................................................................. 150
  11.7.1 Building Energy Use, Total and per Square Foot per Person, FY2005-15 .............. 151
  11.7.2 Greenhouse Gas Emissions, Total and Percent of Emissions by Energy Generation Source, FY2005-15 ................................................................. 152
  11.7.3 Waste, Total and Percent Recycled, FY2005-15 ............................................. 153
  11.7.4 Paper Purchased by Percent Recycled Content, FY2008-15 ............................. 154

Chapter 12 Academic & Reputational Rankings ............................................ 156
  12.1.2 U.S. News & World Report Rankings of U-M Top Ten Graduate Programs, 2015 .... 159

Table of Contents (7th Edition)  iv
12.5 National Research Council (NRC) Graduate Program Assessment, U-M and Peers, 2005-06 .................................................................................................................. 165
12.8 America's Top Colleges, Forbes, 2011-15 ............................................................ 168
12.9 Center for World University Rankings, 2012-15 .................................................................................................................. 169
12.10 Kiplinger's Best Value Public Colleges, U-M, Public Peer and Public Big Ten Universities, 2012-2016 ........................................... 170

Appendices .......................................................................................................................... 173
Appendix A: Peer Groups ........................................................................................................ 174
Appendix B: Notes on Charts .................................................................................................. 176
Appendix C: U-M Graduate Academic Programs Grouped by Broad Disciplinary Categories (Rackham Divisions) .......................................................... 180
Appendix D: Graduate Academic and Professional Degree Programs at the University of Michigan ........................................... 181
Appendix E: Glossary ............................................................................................................ 182
Appendix F: Photography Captions and Credits ................................................................... 184

INDEX ..................................................................................................................................... 185
Introduction

The Michigan Almanac provides a consolidated source of data and commentary covering major activities of the University of Michigan Ann Arbor campus. This document includes sections on student admissions and enrollment, costs of attendance, student achievement, faculty and staff statistics, diversity indicators for all parts of the campus community, teaching and learning activities, research and technology transfer, budget, development, space, sustainability, and academic rankings.

The Almanac has been prepared with several different audiences in mind. Members of the University administration, faculty and staff who manage and monitor any of the institution’s programs should find this a useful source of information. Others who have interests in U-M – the state’s legislators and government officials in Lansing and Washington, prospective and current students and their families, donors, other higher education institutions, and the media – will also find information of value in this document.

Through the Almanac, the University aims to present a balanced and factual picture of all facets of the institution. The U-M applauds its successes, but also tries to be objective about areas that need improvement. The data has been collected from public sources, and, when possible, from readily accessible reports, so that the charts and tables in the Almanac can be replicated.

The U-M Health System is not presented in Almanac data and charts, except in a few instances. The University’s Flint and Dearborn campuses are also excluded from this document.

When relevant, the University is compared to its peer institutions, sometimes as individual universities or as groups of universities with similar characteristics. The membership of these peer comparison groups is listed in Appendix A.

This fifth edition of the Michigan Almanac was published in December 2014. Any chart that has been updated since the fourth edition (July 2014) is marked with a star: .

Questions regarding the Almanac and its contents can be directed to michigan.almanac@umich.edu. The University of Michigan hopes that readers find the Almanac to be a valuable window into the institution’s characteristics and operations.