

PERFORMANCE AUDIT
OF
WESTERN MICHIGAN UNIVERSITY

June 2000

EXECUTIVE DIGEST

WESTERN MICHIGAN UNIVERSITY

INTRODUCTION

This report, issued in June 2000, contains the results of our performance audit* of Western Michigan University (WMU).

AUDIT PURPOSE

This performance audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Performance audits are conducted on a priority basis related to the potential for improving effectiveness* and efficiency* . For audits of universities, audit selection is based on several factors, such as length of time since our last audit and legislative requirements.

BACKGROUND

Act 156, P.A. 1903, established the Western State Normal School, under the control of the State Board of Education, as a two-year normal school responsible for preparing elementary teachers. In 1957, the School was designated as the State's fourth public university and became WMU.

During the 1998-99 academic year, WMU enrolled 26,575 students in undergraduate, masters, specialist, and doctoral programs on the Kalamazoo campus and at five regional education centers located in Battle Creek, Grand Rapids, Lansing, Muskegon, and St. Joseph.

* See glossary at end of report for definition.

WMU's academic mission* is to discover, disseminate, extend, and preserve knowledge and culture. Since 1915, WMU has been accredited by the North Central Association of Colleges and Universities. In addition, individual programs within each of its six colleges are also accredited by 26 other accrediting organizations.

For the fiscal year ended June 30, 1999, current fund revenues were \$399.2 million (Exhibit 1) and current fund expenditures and transfers amounted to \$394.2 million (Exhibit 2). WMU had 879 full-time and 214 part-time faculty during the 1998-99 academic year and 2,001 administrative and support personnel during September 1999.

AUDIT OBJECTIVES,
CONCLUSIONS, AND
NOTEWORTHY
ACCOMPLISHMENTS

Audit Objective: To assess the effectiveness of WMU's monitoring of academic and related programs provided to students.

Conclusion: We concluded that WMU effectively monitored its academic and related programs provided to students.

Noteworthy Accomplishments: In 1996, WMU began construction on hangars and classroom buildings at the Battle Creek airport to allow WMU to expand its aviation program. As a result of this expansion and the expansion of its aircraft fleet from 16 to 60 aircraft, WMU now trains students enrolled in its College of Aviation Sciences and contracts with international carriers, such as British Airways, for use of its training facilities. In 1999, WMU formalized an agreement with Mesaba Airlines that allows WMU's College of Aviation Sciences graduates to compete

* See glossary at end of report for definition.

for flight positions earlier than students from other universities.

During the past year, WMU was recognized among the top 100 universities in the nation in the annual college ranking of *U.S. News & World Reports*. At the same time, WMU was recognized for the third consecutive year as being among *America's 100 Best College Buys* by Institutional Research and Evaluation, Inc., a consulting firm that rates America's colleges and universities that have high academic ranking and low academic costs.

Audit Objective: To assess the effectiveness and efficiency of WMU's use of resources allocated to support academic and related programs.

Conclusion: We concluded that WMU was generally effective and efficient in its use of resources allocated to support academic and related programs. We noted reportable conditions* related to WMU's special admission programs, room utilization, minimum class size, and faculty assigned time (Findings 1 through 4).

**AUDIT SCOPE AND
METHODOLOGY**

Our audit scope was to examine the program and other records of Western Michigan University. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Our methodology included reviews and analyses for the period July 1, 1996 through September 30, 1999. We conducted a preliminary survey of WMU operations. This

* See glossary at end of report for definition.

included interviewing various personnel, reviewing applicable policies and procedures, analyzing available data and statistics, reviewing reference materials, and obtaining an understanding of WMU's internal control* and operational and academic activities to formulate a basis for defining the audit scope.

AGENCY RESPONSES

Our audit report includes 4 findings and 4 corresponding recommendations. The agency preliminary response indicated that WMU agrees with all 4 recommendations.

* See glossary at end of report for definition.

June 21, 2000

Mr. George A. Franklin, Chair
Board of Trustees
and
Dr. Elson S. Floyd, President
Western Michigan University
Kalamazoo, Michigan

Dear Mr. Franklin and Dr. Floyd:

This is our report on the performance audit of Western Michigan University.

This report contains our executive digest; description of agency; audit objectives, scope, and methodology and agency responses; comments, findings, recommendations, and agency preliminary responses; various exhibits, presented as supplemental information; and a glossary of acronyms and terms.

Our comments, findings, and recommendations are organized by audit objective. The agency preliminary responses were taken from Western Michigan University's responses subsequent to our audit fieldwork. Annual appropriations acts require that the audited institution develop a formal response within 60 days after release of the audit report.

We appreciate the courtesy and cooperation extended to us during this audit.

AUDITOR GENERAL

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Description of Agency

Act 156, P.A. 1903, established the Western State Normal School, under the control of the State Board of Education, as a two-year normal school responsible for preparing elementary teachers. In 1957, the School was designated as the State's fourth public university and became Western Michigan University (WMU).

The 1963 State Constitution transferred the administration of WMU from the State Board of Education to a body known as the Board of Trustees. The Board of Trustees consists of eight members appointed by the Governor, with the advice and consent of the Senate. During the 1998-99 academic year, WMU enrolled 26,575 students in undergraduate, masters, specialist, and doctoral programs on the Kalamazoo campus and at five regional education centers located in Battle Creek, Grand Rapids, Lansing, Muskegon, and St. Joseph. In 1999, the Carnegie Foundation for the Advancement of Teaching recognized that WMU had met the criteria for Research II status* .

WMU's academic mission is to discover, disseminate, extend, and preserve knowledge and culture. In fulfilling this responsibility, WMU's instructional programs strive to increase students' capacity for intellectual growth and achievement, instill a commitment to learning and service to society, and meet the needs of an increasingly diverse student population. WMU's research mission requires the faculty and students to create new knowledge and to address social needs and concerns.

Since 1915, WMU has been accredited by the North Central Association of Colleges and Universities. In addition, individual programs within each of its six colleges are also accredited by 26 other accrediting organizations.

For the fiscal year ended June 30, 1999, current fund revenues were \$399.2 million (Exhibit 1) and current fund expenditures and transfers amounted to \$394.2 million (Exhibit 2). WMU had 879 full-time and 214 part-time faculty during the 1998-99 academic year and 2,001 administrative and support personnel during September 1999.

* See glossary at end of report for definition.

Audit Objectives, Scope, and Methodology and Agency Responses

Audit Objectives

Our performance audit of Western Michigan University (WMU) had the following objectives:

1. To assess the effectiveness of WMU's monitoring of academic and related programs provided to students.
2. To assess the effectiveness and efficiency of WMU's use of resources allocated to support academic and related programs.

Audit Scope

Our audit scope was to examine the program and other records of Western Michigan University. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

As part of our audit, we prepared, from information compiled by WMU, supplemental information (Exhibits 1 through 5) that relates to our audit objectives. Our audit was not directed toward expressing an opinion on this information and, accordingly, we express no opinion on it.

The financial statements of WMU are audited annually by a public accounting firm engaged by WMU.

Audit Methodology

Our methodology included reviews and analyses for the period July 1, 1996 through September 30, 1999. Our audit work was performed between April and September 1999.

We conducted a preliminary survey of WMU operations. This included interviewing various personnel, reviewing applicable policies and procedures, analyzing available data and statistics, reviewing reference materials, and obtaining an

understanding of WMU's internal control and operational and academic activities to formulate a basis for defining the audit scope.

To accomplish our first objective, we examined policies and procedures related to student academic progress monitoring and methods used to survey recent graduates. We analyzed student academic information to determine compliance with WMU's satisfactory academic progress policy.

To accomplish our second objective, we analyzed aspects of WMU's special admission programs, recent capital outlay projects' funding and expenditures, and deferred and preventive maintenance programs. We reviewed WMU's intercollegiate athletic program policies and procedures, recent agreed-upon procedures audits, and the results of its recently completed self-study National Collegiate Athletic Association accreditation report. We obtained information on WMU's auxiliary activity fund to determine whether activities accounted for in the fund were properly classified.

In addition, we examined policies and procedures and analyzed information related to room utilization, minimum class size, repetitive enrollments, and faculty work loads.

Agency Responses

Our audit report includes 4 findings and 4 corresponding recommendations. The agency preliminary response indicated that WMU agrees with all 4 recommendations.

The agency preliminary response which follows each recommendation in our report was taken from WMU's written comments and oral discussion subsequent to our audit fieldwork. Annual appropriations acts require the principal executive officer of the audited institution to submit a written response to our audit to the Auditor General, the House and Senate Fiscal Agencies, and the Department of Management and Budget. The response is due within 60 days after the audit report has been issued and should specify the action taken by the institution regarding the audit report's recommendations.

COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

MONITORING OF ACADEMIC AND RELATED PROGRAMS

COMMENT

Background: Management's controls to monitor and ensure the effectiveness of academic and related programs include outcome* assessment processes or performance measures* . These processes help ensure accountability over educational programs and provide feedback to management. The processes include accreditation reviews or independent surveys, academic program reviews, and student outcome assessment surveys. In addition, quantitative information, such as trends in graduation rates and retention rates, provides objective performance information for management. Management has developed policies and procedures for helping students academically.

At the time of our audit, Western Michigan University (WMU) was improving its processes to assess its academic programs and student placement. During 1998, WMU reestablished its surveying of graduates to determine placement satisfaction and to develop a data base for graduate placement success.

Audit Objective: To assess the effectiveness of WMU's monitoring of academic and related programs provided to students.

Conclusion: We concluded that WMU effectively monitored its academic and related programs provided to students.

Noteworthy Accomplishments: In 1996, WMU began construction on hangars and classroom buildings at the Battle Creek airport to allow WMU to expand its aviation program. As a result of this expansion and the expansion of its aircraft fleet from 16 to

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60 aircraft, WMU now trains students enrolled in its College of Aviation Sciences and contracts with international carriers, such as British Airways, for use of its training facilities. In 1999, WMU formalized an agreement with Mesaba Airlines that allows WMU's College of Aviation Sciences graduates to compete for flight positions earlier than students from other universities.

During the past year, WMU was recognized among the top 100 universities in the nation in the annual college ranking of *U.S. News & World Reports*. At the same time, WMU was recognized for the third consecutive year as being among *America's 100 Best College Buys* by Institutional Research and Evaluation, Inc., a consulting firm that rates America's colleges and universities that have high academic ranking and low academic costs.

USE OF RESOURCES FOR ACADEMIC AND RELATED PROGRAMS

COMMENT

Background: A key management responsibility is to establish processes to help ensure the proper allocation and efficient use of resources. Resources for academic programs include direct resources, such as faculty, space, and equipment, as well as indirect resources, such as administration and a range of support services.

Audit Objective: To assess the effectiveness and efficiency of WMU's use of resources allocated to support academic and related programs.

Conclusion: We concluded that WMU was generally effective and efficient in its use of resources allocated to support academic and related programs. We noted reportable conditions related to WMU's special admission programs, room utilization, minimum class size, and faculty assigned time.

FINDING

1. Special Admission Programs

WMU could improve the effectiveness and efficiency of its special admission programs by combining program resources.

WMU has established two special admission programs for students that it admits on probationary status. These programs, the Martin Luther King (MLK) and Alpha Programs, were established to allow students, who would not otherwise be admitted to WMU, the opportunity to be successful in college. Placement in either program is dictated by a student's American Collegiate Test (ACT) score and high school grade point average (GPA). Although the programs have only slightly different admission requirements, the level of assistance provided to students and the number of staff involved differed between the programs, as noted below, for fall semester 1999:

	MLK Program	Alpha Program
Number of staff	6 full-time/16 part-time	1 full-time/4 part-time
Number of students	231	146
ACT score	16 - 19	20 or higher
GPA	2.50 or higher	2.30 - 2.49
Assistance provided	Meet with students weekly, provide academic advising and vocational and personal counseling, offer tutorial referrals, and monitor program requirement compliance.	Meet with students periodically, evaluate academic progress, offer tutorial referrals, and monitor program requirement compliance.

We compared the success of students who enrolled at WMU in the 1992-93 academic year and participated in either of the two programs. We noted that, although the Alpha Program requires students to have higher ACT scores, the percentage of students graduating from the Alpha Program after 6 years (27.64%) was only slightly higher than the percentage of students graduating from the MLK Program after 6 years (25.24%).

By combining the resources of these programs, WMU could improve overall program effectiveness and efficiency by eliminating duplicative functions and providing more assistance to students participating in the Alpha Program.

RECOMMENDATION

We recommend that WMU improve the effectiveness and efficiency of its special admission programs by combining program resources.

AGENCY PRELIMINARY RESPONSE

WMU agrees with this finding and is reorganizing the two special admission programs accordingly.

FINDING

2. **Room Utilization**

WMU did not regularly monitor and assess room utilization.

Departments within each of WMU's six colleges are responsible for determining the classes that they are going to offer each semester. When the departments have determined class schedules, the WMU registrar's office uses a software package to assign classes to rooms. This software can also be used to generate reports to allow WMU administration to assess room utilization.

We obtained a list of room assignments for fall semester 1998 to analyze room utilization. Using this list, we calculated the percentage of time that rooms were used at different time periods of the day. Of the 400 rooms used, we determined that, from 8:00 a.m. to 6:00 p.m., 208 classrooms were used an average of 43% of the time, 152 laboratories were used an average of 24%, and 40 special purpose rooms (rooms used for music, dance, physical education, etc.) were used an average of 29%. Following are the results of our review:

Time Period	Total Percentage of Time in Use		
	Classrooms	Laboratories	Special Purpose Rooms
8:00 a.m. - 10:00 a.m.	40.4%	22.2%	29.9%
10:01 a.m. - 2:00 p.m.	48.2%	24.3%	32.5%
2:01 p.m. - 6:00 p.m.	40.9%	25.1%	24.2%
6:01 p.m. - 10:00 p.m.	29.2%	11.4%	8.9%

Regular monitoring and assessment of room utilization is essential to ensure that WMU is making the most efficient use of resources and to provide a basis for

future building decisions, including construction of new classroom buildings, closure of nonessential buildings, and decisions regarding limiting enrollments because of space restrictions.

RECOMMENDATION

We recommend that WMU regularly monitor and assess room utilization.

AGENCY PRELIMINARY RESPONSE

WMU acknowledges the finding relating to room utilization. WMU is making revisions to its recordkeeping, software application, and scheduling practices in order to regularly monitor and assess room utilization. Currently, the laboratories and special purpose rooms are also being used for nonclassroom activities that are not captured on the software application.

FINDING

3. Minimum Class Size

WMU had not established a minimum class size policy.

WMU could increase the efficient use of its instructional resources by establishing a minimum class size and ensuring that it is achieved.

For the purposes of class scheduling, each of WMU's colleges establishes a capacity for each class. This is based on criteria, including classroom size, program accreditation requirements, clinical and/or laboratory time in a class, and equipment available.

We analyzed student enrollment information for all six WMU colleges for fall semester 1998 and winter semester 1999. The total number of classes offered was 4,286 and 4,177, respectively. Our analysis disclosed that, during the fall semester and the winter semester, 578 (13%) and 631 (15%) classes, respectively, excluding independent study and specialty classes, had fewer than 10 students enrolled. We determined that the enrollments in 458 and 481 of these classes, respectively, represented 50% or less of the class capacity and that there were 62 instances involving 198 classes when the class was held two or more times either during the same semester or in both semesters. These classes could have been combined and offered less frequently. Offering classes that are

substantially below capacity two or more times in the same semester or in both fall and winter semesters appears to be an inefficient use of resources. Consolidating low enrollment classes may also result in the reduction of faculty overload payments or reduce the need for part-time faculty.

The establishment of a minimum class size policy would provide WMU management with the opportunity to identify an acceptable minimum enrollment level for classes, identify conditions for offering a class with enrollment below that minimum level, and require that approval of any deviations be documented.

RECOMMENDATION

We recommend that WMU establish a minimum class size policy.

AGENCY PRELIMINARY RESPONSE

WMU acknowledges the finding relating to class size policy. WMU will work to establish and implement a minimum class size policy. Any exceptions to this policy must be done in writing and be approved by the appropriate dean.

FINDING

4. Faculty Assigned Time

WMU had not established a universitywide policy for assigning values to release time for nonteaching activities.

WMU's faculty contract states that the full-time faculty work load shall be 24 credit hours of regularly scheduled courses in any one academic year. It is WMU's practice to consider 12 credit hours per semester as a full-time work load. The contract provides for adjustments of classroom teaching loads for reassignment activities, such as heavy advising responsibilities, substantial research, doctoral dissertations, graduate-level instruction, classes with high enrollments, laboratory supervision, and administrative responsibilities. However, the contract does not assign values for these reassignment activities. Instead, the individual colleges establish their own values for these activities.

We contacted each of WMU's six colleges and determined that none of them had written guidelines describing how teaching loads and release time were to be

assigned. Also, WMU central administration did not periodically review faculty work load and release time assignments.

We analyzed full-time faculty classroom teaching work loads for fall semester 1998 and winter semester 1999. This excluded faculty members who were not under the faculty contract, such as part-time faculty, administrators, and coaches. Our analysis included 603 faculty for the fall semester and 608 faculty for the winter semester. Our analysis disclosed:

- a. During fall semester, 216 (36%) faculty taught six or fewer credit hours, with 55 (9%) faculty teaching three or fewer credit hours.
- b. During winter semester, 241 (40%) faculty taught six or fewer credit hours, with 63 (10%) faculty teaching three or fewer credit hours.

As a result of not having a universitywide policy for assigning values for release time, WMU cannot ensure that individual colleges are consistent when granting release time to faculty. A universitywide policy would help ensure that WMU receives its full value from its academic resources.

RECOMMENDATION

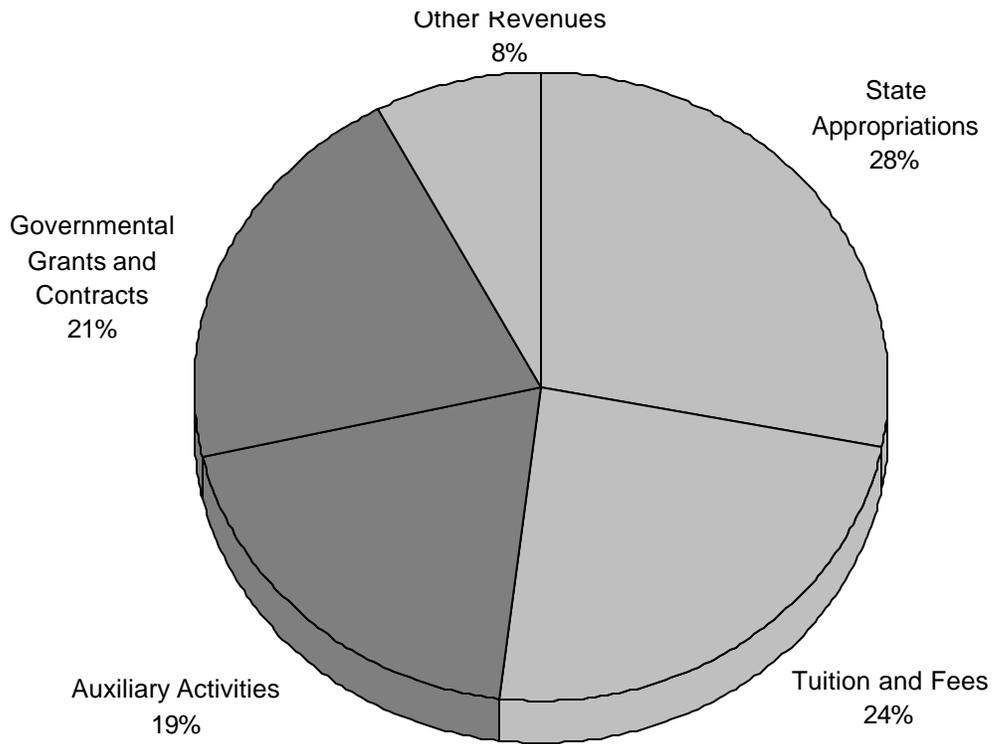
We recommend that WMU establish a universitywide policy for assigning values to release time for nonteaching activities.

AGENCY PRELIMINARY RESPONSE

WMU acknowledges the finding relating to faculty assigned time. WMU will work to establish and implement a faculty assigned time policy. Any exceptions to this policy must be done in writing taking into consideration American Association of University Professors (AAUP) contract requirements and be approved by the appropriate dean.

SUPPLEMENTAL INFORMATION

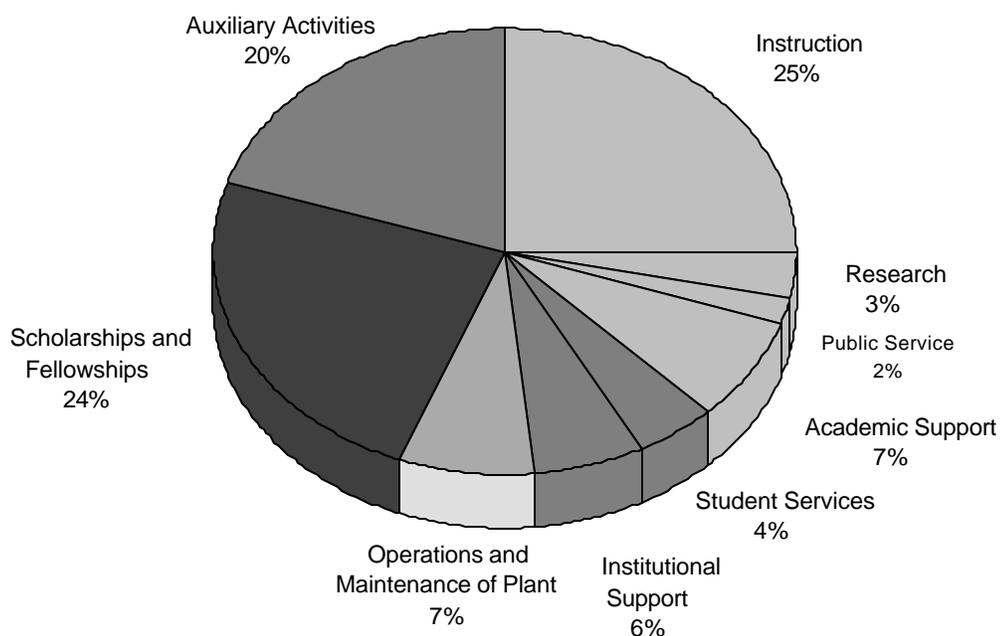
WESTERN MICHIGAN UNIVERSITY
Current Fund Revenues
For Fiscal Year 1998-99



	<u>Amount</u>
State appropriations	\$111,503,267
Tuition and fees	96,296,626
Auxiliary activities	77,704,361
Governmental grants and contracts	83,037,679
Other revenues	<u>30,648,149</u>
Total Revenues	<u>\$399,190,082</u>

Source: Western Michigan University financial statements.

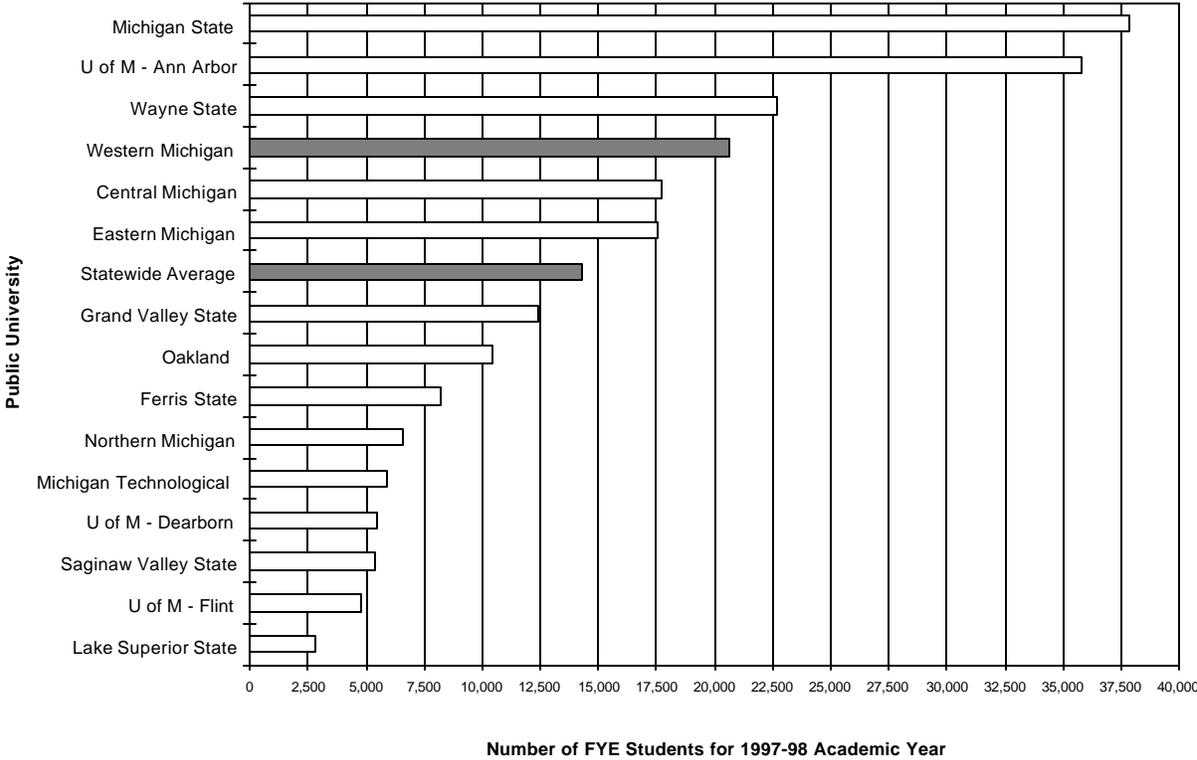
WESTERN MICHIGAN UNIVERSITY
 Current Fund Expenditures and Transfers
 For Fiscal Year 1998-99



	<u>Amount</u>
Instruction	\$99,153,682
Research	12,600,522
Public Service	8,029,385
Academic support	29,550,244
Student services	17,519,683
Institutional support	24,627,971
Operations and maintenance of plant	29,326,623
Scholarships and fellowships	95,496,516
Auxiliary activities	79,606,877
Insurance and Benefits Fund	<u>(1,701,962)</u>
Total Expenditures and Transfers	<u>\$394,209,541</u>

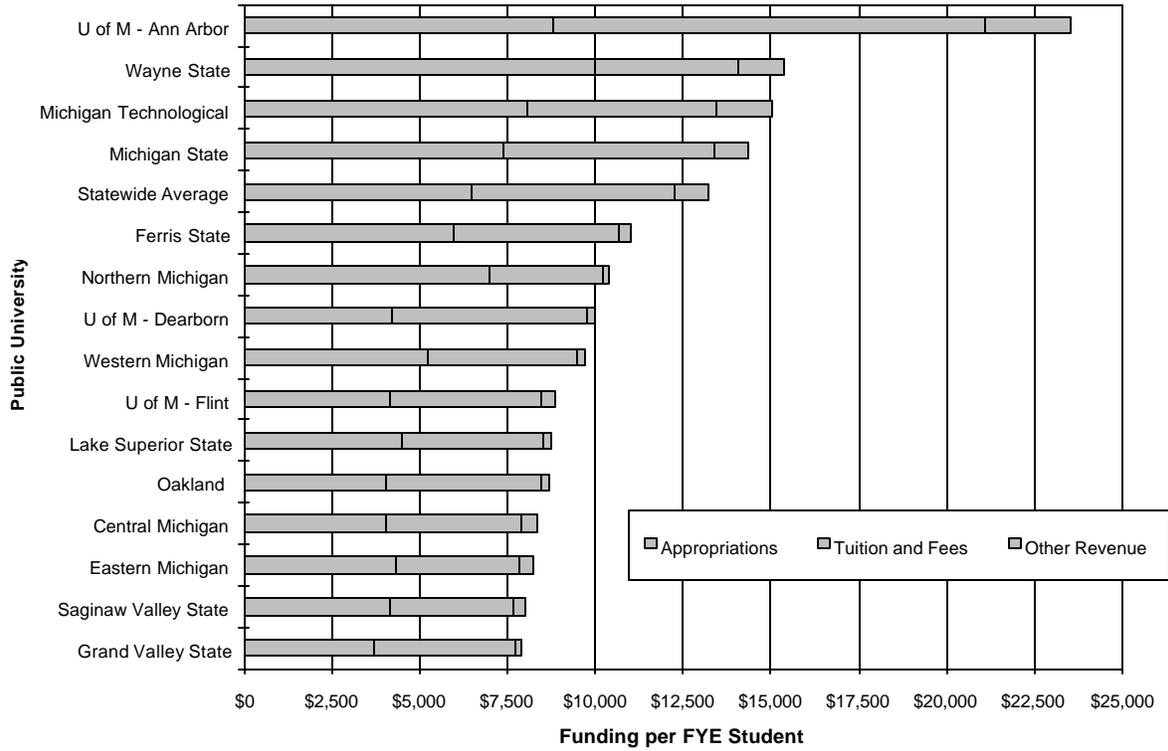
Source: Western Michigan University financial statements.

WESTERN MICHIGAN UNIVERSITY
Statewide Enrollment by Public University
For Fiscal Year 1997-98



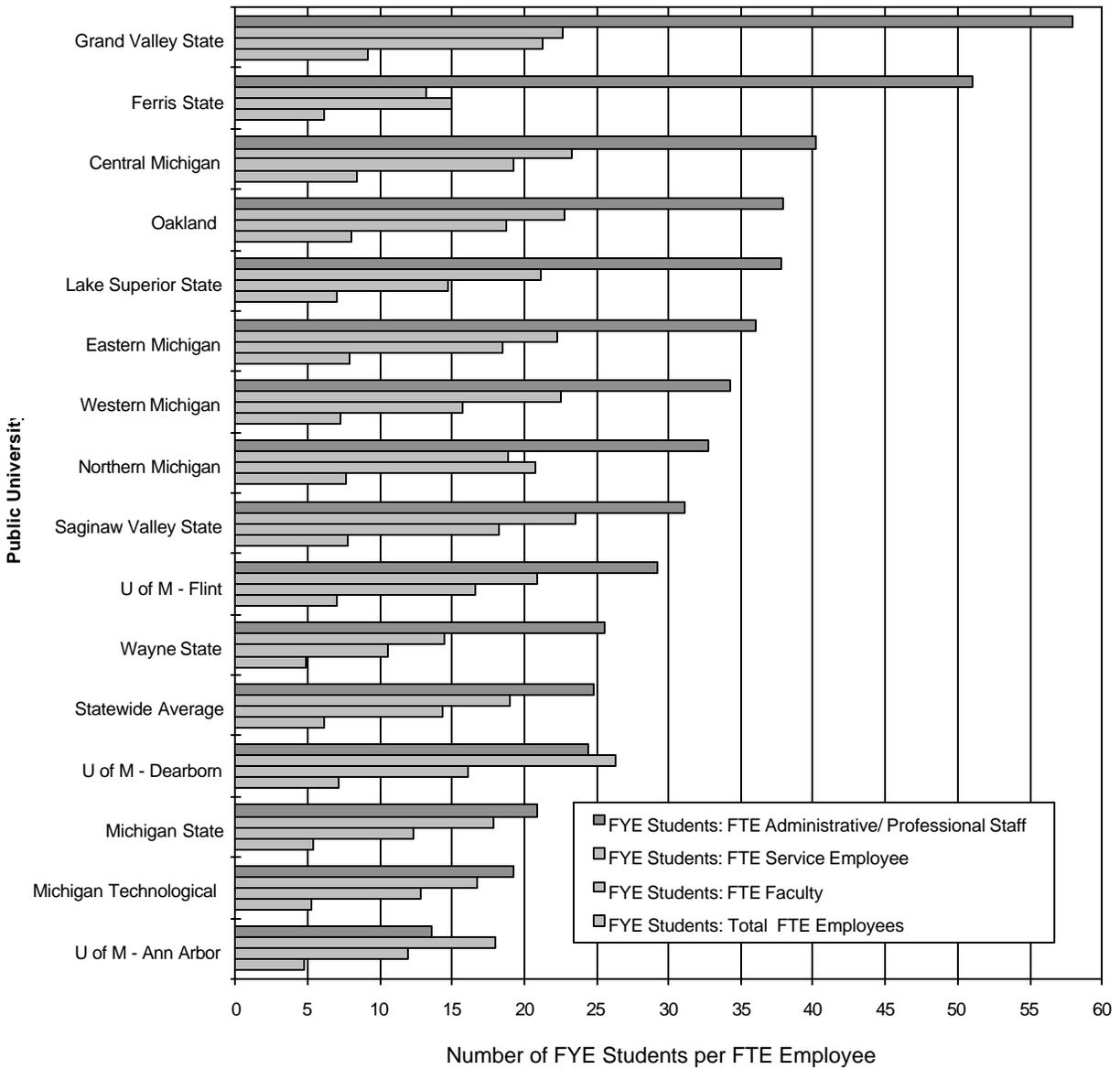
Source: Higher Education Institutional Data Inventory (HEIDI) data.

WESTERN MICHIGAN UNIVERSITY
Per Student Funding From General Fund Sources
By Public University
For Fiscal Year 1997-98



Source: Higher Education Institutional Data Inventory (HEIDI) data.

WESTERN MICHIGAN UNIVERSITY
Number of Students per Employee by Public University
For Fiscal Year 1997-98



Source: Higher Education Institutional Data Inventory (HEIDI) data.

Glossary of Acronyms and Terms

ACT	American Collegiate Test (of the American College Testing Board).
effectiveness	Program success in achieving mission and goals.
efficiency	Achieving the most outputs and outcomes practical for the amount of resources applied or minimizing the amount of resources required to attain a certain level of outputs or outcomes.
FTE	full-time equated.
FYE	fiscal year equated.
GPA	grade point average.
internal control	The management control environment, management information system, and control policies and procedures established by management to provide reasonable assurance that goals are met; that resources are used in compliance with laws and regulations; and that valid and reliable performance related information is obtained and reported.
mission	The agency's main purpose or the reason the agency was established.
MLK	Martin Luther King.
outcomes	The actual impacts of the program. Outcomes should positively impact the purpose for which the program was established.

performance audit	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve public accountability and to facilitate decision making by parties responsible for overseeing or initiating corrective action.
performance measures	Information of a quantitative or qualitative nature indicating program outcomes, outputs, or inputs. Performance measures are typically used to assess achievement of goals and/or objectives.
reportable condition	A matter coming to the auditor's attention that, in the auditor's judgment, should be communicated because it represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.
Research II status	The criteria for Research II institutions is the annual issuance of 50 or more doctoral degrees from 5 different disciplines and the annual receipt of between \$15.5 and \$40.0 million in federal support.
U of M	University of Michigan.
WMU	Western Michigan University.