



MICHIGAN

OFFICE OF THE AUDITOR GENERAL

AUDIT REPORT



THOMAS H. MCTAVISH, C.P.A.
AUDITOR GENERAL

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

– Article IV, Section 53 of the Michigan Constitution

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Michigan *Office of the Auditor General* **REPORT SUMMARY**

Performance Audit

Michigan Technical Education Centers

Report Number:
032-0650-06

Released:
November 2008

Michigan Technical Education Centers (M-TECs) were created to address Michigan's shortage of workers in technical occupations. M-TECs' focus is to deliver training programs in high-wage, high-skill, and high-demand occupations in order to increase the number of skilled workers in these fields. There are 18 M-TECs operated by 16 community colleges. The M-TECs are administered by the Bureau of Workforce Transformation, Department of Labor and Economic Growth (DLEG).

Audit Objective:

To assess the effectiveness of community colleges' efforts to evaluate M-TECs' needs to provide occupational training for high-wage, high-skill, and high-demand occupations.

Audit Conclusion:

We concluded that community colleges' efforts were effective in evaluating M-TECs' needs to provide occupational training for high-wage, high-skill, and high-demand occupations. Our report does not include any reportable conditions related to this audit objective.

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Audit Objective:

To assess the effectiveness of community colleges' efforts to develop and implement occupational training programs that result in viable and sustainable employment.

Audit Conclusion:

We concluded that community colleges' efforts were effective in developing and

implementing occupational training programs. However, we could not determine what effect the programs had in providing viable and sustainable employment. We noted one reportable condition (Finding 1).

Reportable Condition:

Community colleges need to establish performance goals by which management can assess the effectiveness of occupational training programs provided through M-TECs (Finding 1).

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Audit Objective:

To assess the effectiveness of community colleges' efforts to provide proposed activities and fulfill selected M-TEC grant requirements.

Audit Conclusion:

We concluded that community colleges' efforts were moderately effective in providing proposed activities and fulfilling selected M-TEC grant requirements. We noted one reportable condition (Finding 2).

Reportable Condition:

Community colleges need to devise and implement measures to maximize utilization of their M-TECs for providing occupational training for high-wage, high-skill, and high-demand occupations (Finding 2).

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Audit Objective:

To assess the effectiveness of DLEG's efforts to evaluate M-TECs.

Audit Conclusion:

We concluded that DLEG's efforts were moderately effective in evaluating M-TECs. We noted three reportable conditions (Findings 3 through 5).

Reportable Conditions:

DLEG needs to enhance its community college reporting and validation processes (Finding 3).

DLEG needs to implement a comprehensive mechanism to evaluate the effectiveness of M-TECs (Finding 4).

DLEG did not execute a grant agreement with Lansing Community College to operate its M-TEC (Finding 5).

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Agency Response:

Our audit report includes 2 findings and 2 corresponding recommendations addressed to the community colleges. We discussed our audit findings with the management of each community college visited during our audit. These community colleges' preliminary responses indicate that 5 community colleges agree, 1 community college partially agrees, and 1 community college disagrees with the first recommendation. These preliminary responses also indicate that all 7 community colleges agree with the second recommendation. In addition, our audit report includes 3 findings and 3 corresponding recommendations addressed to DLEG. DLEG's preliminary response indicates that it agrees with 1 recommendation and partially agrees with 2 recommendations.

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A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: <http://audgen.michigan.gov>



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AUDITOR GENERAL

November 7, 2008

Mr. Keith W. Cooley, Director
Department of Labor and Economic Growth
Ottawa Building
Lansing, Michigan
and
Community College Presidents

Dear Mr. Cooley and Community College Presidents:

This is our report on the performance audit of Michigan Technical Education Centers (M-TECs).

This report contains our report summary; description; audit objectives, scope, and methodology and agency responses; background; comments, findings, recommendations, and agency preliminary responses; a summary of grant applicants' proposed M-TEC activities, 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 the community colleges' and the Department of Labor and Economic Growth's responses subsequent to our audit fieldwork. Annual appropriations acts require that the audited institutions develop formal responses within 60 days after release of the audit report. In addition, the *Michigan Compiled Laws* and administrative procedures require that DLEG 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

In 1998, Michigan Technical Education Centers (M-TECs) were created under the direction of the Michigan Jobs Commission (MJC). M-TECs were created to address Michigan's shortage of workers in technical occupations. M-TECs' focus is to deliver training programs in high-wage, high-skill, and high-demand occupations in order to increase the number of skilled workers in these fields. There are 18 M-TECs operated by 16 community colleges. Each community college operates one M-TEC, with the exception of Grand Rapids Community College and Mott Community College, which each operate two M-TECs.

For the period May 1998 to April 1999, MJC administered M-TECs. In April 1999, Executive Order No. 1999-1 established the Michigan Economic Development Corporation (MEDC) and transferred oversight of M-TECs from MJC to MEDC. In December 2003, Executive Order No. 2003-18 transferred MEDC to the Department of Labor and Economic Growth (DLEG). In November 2005, Act 225, P.A. 2005, transferred MEDC to the Department of Treasury. In December 2005, the M-TECs were transferred to DLEG and subsequently placed within DLEG's Bureau of Workforce Transformation.

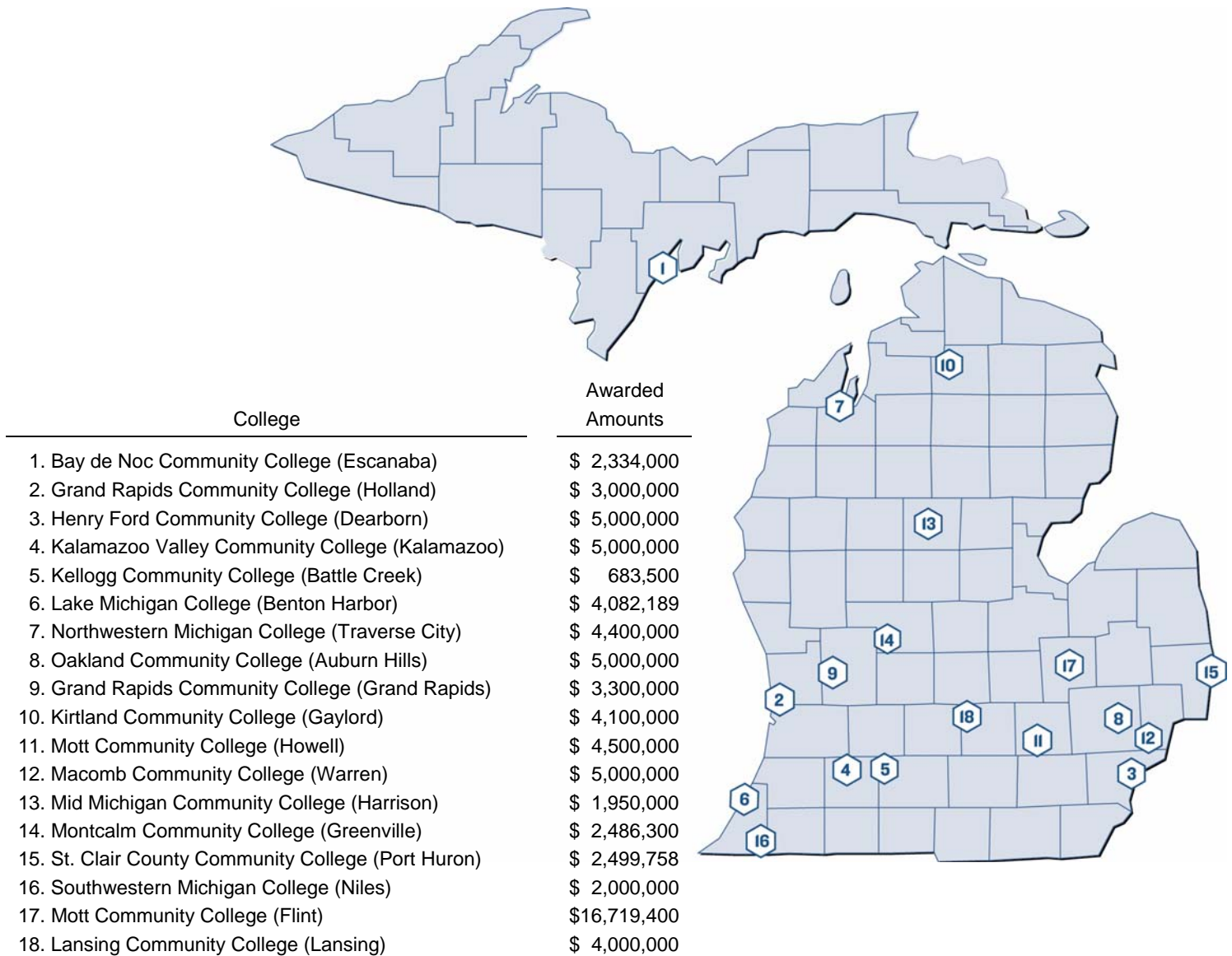
In fiscal years 1997-98 and 1998-99, the State awarded \$76.1 million from Community Development Block Grants (CDBG), the Michigan Renaissance Fund (MRF), the General Fund (GF), and capital outlay funding to construct 18 M-TECs. MJC and MEDC awarded the CDBG, MRF, and GF funds through a competitive application process to 16 community colleges in partnership with their local workforce development boards*. In addition, Mott Community College received construction funding through the State's capital outlay process to construct one of its M-TECs.

M-TEC eligibility requirements specified that community colleges demonstrate that their training and degree areas meet industry-validated standards. In addition, community colleges were required to provide training programs related to high-wage, high-skill, and high-demand occupations leading to career pathways as defined by their respective local workforce development boards based on local labor market conditions. Also, M-TEC eligibility requirements specified that community colleges must have strong

* See glossary at end of report for definition.

business/industry partnerships that included private sector funding to support the development and ongoing operation of the M-TEC and employer commitments to hire M-TEC graduates.

The following map illustrates the location of the 18 M-TECs:



Source: MEDC.

Audit Objectives, Scope, and Methodology and Agency Responses

Audit Objectives

Our performance audit* of Michigan Technical Education Centers (M-TECs) had the following objectives:

1. To assess the effectiveness* of community colleges' efforts to evaluate M-TECs' needs to provide occupational training for high-wage, high-skill, and high-demand occupations.
2. To assess the effectiveness of community colleges' efforts to develop and implement occupational training programs that result in viable and sustainable employment.
3. To assess the effectiveness of community colleges' efforts to provide proposed activities and fulfill selected M-TEC grant requirements.
4. To assess the effectiveness of the Department of Labor and Economic Growth's (DLEG's) efforts to evaluate M-TECs.

Audit Scope

Our audit scope was to examine the program and other records of Michigan Technical Education Centers. 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 audit procedures included site visits to M-TECs operated by Grand Rapids Community College (Holland and Grand Rapids), Kirtland Community College, Lansing Community College, Macomb Community College, Montcalm Community College, Northwestern Michigan College, and St. Clair County Community College. Our audit procedures, conducted from April 2006 through October 2006 and from March 2007 through July 2007, covered the period October 1, 2003 through June 30, 2007.

* See glossary at end of report for definition.

Audit Methodology

We conducted a preliminary review of M-TECs. As part of our preliminary review, we interviewed staff at 16 community colleges and reviewed the respective community colleges' records and reports. In addition, we interviewed DLEG staff and reviewed DLEG records and reports. We obtained an understanding of community colleges' processes to provide and assess training programs delivered through their M-TECs. We also obtained an understanding of DLEG's processes to monitor community colleges' compliance with grant requirements and to assess the effectiveness of M-TECs.

To achieve our first objective, we interviewed community college staff at each of the eight M-TECs we visited to obtain an understanding of the methods used to identify high-wage, high-skill, and high-demand occupational training activities. Also, we reviewed community colleges' documents that included M-TEC advisory board meeting minutes, program advisory board meeting minutes, and surveys sent to businesses and industries.

To achieve our second objective, we interviewed community college staff at each of the eight M-TECs we visited to obtain an understanding of the community colleges' methods for developing and implementing occupational training programs. Also, we evaluated community colleges' efforts to assess the effectiveness of their occupational training programs, including the viability and sustainability of their students' employment. We assessed the community colleges' efforts to establish quantifiable performance standards*. Also, we evaluated the community colleges' methodologies for collecting output* and outcome* data. In addition, we examined the community colleges' efforts to compare actual data with expected outputs and outcomes and to report their findings.

To achieve our third objective, we compared the actual activities at the eight M-TECs we visited to the community colleges' proposed M-TEC activities. Also, we assessed the community colleges' compliance with the grant provision specific to providing occupational training for high-wage, high-skill, and high-demand occupations and with the grant provision specific to establishing and maintaining an M-TEC advisory board.

To achieve our fourth objective, we evaluated DLEG's procedures and methodology for monitoring community colleges' compliance related to proposed activities and grant requirements. We assessed DLEG's efforts to establish quantifiable performance

* See glossary at end of report for definition.

standards for M-TECs. Also, we evaluated DLEG's methodology for collecting output and outcome data. In addition, we examined DLEG's efforts to compare actual data with expected outputs and outcomes and report its findings.

When selecting activities or programs for audit, we use an approach based on assessment of risk and opportunity for improvement. Accordingly, we focus our audit efforts on activities or programs having the greatest probability for needing improvement as identified through a preliminary review. Our limited audit resources are used, by design, to identify where and how improvements can be made. Consequently, we prepare our performance audit reports on an exception basis.

Agency Responses

Our audit report includes 2 findings and 2 corresponding recommendations addressed to the community colleges. We discussed our audit findings with the management of each community college visited during our audit. These community colleges' preliminary responses indicate that 5 community colleges agree, 1 community college partially agrees, and 1 community college disagrees with the first recommendation. These preliminary responses also indicate that all 7 community colleges agree with the second recommendation. In addition, our audit report includes 3 findings and 3 corresponding recommendations addressed to DLEG. DLEG's preliminary response indicates that it agrees with 1 recommendation and partially agrees with 2 recommendations.

The agency preliminary response that follows each recommendation in our report was taken from the community colleges' and DLEG's written comments and oral discussion subsequent to our audit fieldwork. Community colleges' annual appropriations acts require the principal executive officer of the audited institution to submit a written response to our audit to the House and Senate Appropriations Committees, the House and Senate Fiscal Agencies, the Department of Labor and Economic Growth, the Auditor General, and the State Budget Director. 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. In addition, Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require DLEG to develop a formal response to our audit findings and recommendations within 60 days after release of the audit report.

Background

Michigan's 28 community colleges and Focus: HOPE* were invited to submit grant applications for State funding for the construction of Michigan Technical Education Centers (M-TECs) to provide occupational training for high-wage, high-skill, and high-demand occupations. Applicants were informed that their applications would be evaluated on criteria including, but not limited to, the following:

- Demonstration that the technical training center will be used to provide training for occupations defined by workforce development boards as high-wage, high-skill, and high-demand.
- Demonstration that the technical training center will result in a net increase in the number of students enrolled in training for high-wage, high-skill, and high-demand occupations.
- Demonstration that the certificate and degree programs meet industry-validated standards.

Twenty-six community colleges applied for the M-TEC competitive grants. Seventeen grants were awarded in two rounds: eight community colleges were selected in the first round and nine were selected in the second round.

In May 1998, the Michigan Jobs Commission awarded \$29.5 million from Community Development Block Grants (CDBG) and the Michigan Renaissance Fund (MRF) for the

* See glossary at end of report for definition.

construction of M-TECs. In December 1998, the following community colleges received M-TEC grant awards in round one:

Community College	Location	Funding Source	Grant Amount	Square Footage	Date Opened
Bay de Noc	Escanaba	CDBG	\$ 2,334,000	40,000	March 2000
Grand Rapids	Holland	CDBG	3,000,000	35,000	September 2000
Henry Ford	Dearborn	MRF	5,000,000	30,000	April 2002
Kalamazoo Valley	Kalamazoo	MRF	5,000,000	59,215	March 2001
Kellogg*	Battle Creek	MRF	683,500	7,720	June 2000
Lake Michigan	Benton Harbor	CDBG	3,300,000	46,000	August 2000
		MRF	782,189		
Northwestern Michigan	Traverse City	CDBG	4,400,000	48,000	February 2001
Oakland	Auburn Hills	MRF	5,000,000	35,000	May 2001
Total			<u>\$29,499,689</u>		

* Kellogg Community College received funding for the construction of a 7,720-square-foot addition, resulting in a 40,520-square-foot building.

In December 1999, the Michigan Economic Development Corporation (MEDC) awarded \$29.8 million from the General Fund (GF) to establish additional M-TECs. These funds were competitively awarded to applicants that were not funded in the first round. The following community colleges received M-TEC grant awards in round two:

Community College	Location	Funding Source	Grant Amount	Square Footage	Date Opened
Grand Rapids	Grand Rapids	GF	\$ 3,300,000	73,525	August 2002
Kirtland	Gaylord	GF	4,100,000	34,035	January 2002
Mott	Howell	GF	4,500,000	34,796	September 2001
Macomb	Warren	GF	5,000,000	36,000	April 2002
Mid Michigan	Harrison	GF	1,950,000	24,000	January 2002
Montcalm	Greenville	GF	2,486,300	14,675	September 2001
St. Clair County	Port Huron	GF	2,499,758	31,304	October 2001
Southwestern Michigan	Niles	GF	2,000,000	15,400	August 2001
Lansing	Lansing	GF	4,000,000	74,335	November 2004
Total			<u>\$29,836,058</u>		

Prior to the availability of M-TEC grants, Mott Community College applied for and received capital outlay funding through the State of Michigan to construct a regional technology center on its main campus in Flint. Mott Community College's Regional

Technology Center had a purpose similar to an M-TEC and, through an application process, it received M-TEC designation:

<u>Community College</u>	<u>Location</u>	<u>Funding Source</u>	<u>Appropriation Amount</u>	<u>Square Footage</u>	<u>Date Opened</u>
Mott	Flint	Capital Outlay	\$16,719,400	180,000	August 2002

The Department of Labor and Economic Growth established agreements with the selected community colleges that specified the community colleges' responsibilities, including providing occupational training for high-wage, high-skill, and high-demand occupations as identified by the local workforce development board and establishing an M-TEC advisory board that includes a member from the local workforce development board. Also, community colleges are required to submit annual reports to address their grant responsibilities.

We released our performance audit of Selected Training Related Programs, Michigan Economic Development Corporation (07-404-02), which included M-TECs, in August 2003. The report stated that MEDC did not maintain complete documentation of its evaluation and its selection of the recipients of M-TEC grants.

COMMENTS, FINDINGS, RECOMMENDATIONS,
AND AGENCY PRELIMINARY RESPONSES

EFFECTIVENESS OF COMMUNITY COLLEGES' EFFORTS TO EVALUATE M-TECS' NEEDS TO PROVIDE OCCUPATIONAL TRAINING

COMMENT

Audit Objective: To assess the effectiveness of community colleges' efforts to evaluate Michigan Technical Education Centers' (M-TECs') needs to provide occupational training for high-wage, high-skill, and high-demand occupations.

Audit Conclusion: We concluded that community colleges' efforts were effective in evaluating M-TECs' needs to provide occupational training for high-wage, high-skill, and high-demand occupations. Our report does not include any reportable conditions* related to this audit objective.

EFFECTIVENESS OF COMMUNITY COLLEGES' EFFORTS TO DEVELOP AND IMPLEMENT OCCUPATIONAL TRAINING PROGRAMS

COMMENT

Audit Objective: To assess the effectiveness of community colleges' efforts to develop and implement occupational training programs that result in viable and sustainable employment.

Audit Conclusion: We concluded that community colleges' efforts were effective in developing and implementing occupational training programs. However, we could not determine what effect the programs had in providing viable and sustainable employment. Our assessment disclosed one reportable condition related to community colleges' assessment of program effectiveness (Finding 1).

* See glossary at end of report for definition.

FINDING

1. Community Colleges' Assessment of Program Effectiveness

Community colleges need to establish performance goals* by which management can assess the effectiveness of occupational training programs provided through M-TECs.

Establishing quantifiable performance goals would allow community colleges to assess the effectiveness of their training programs related to high-wage, high-skill, and high-demand occupations.

Program effectiveness can be assessed and improved by using a comprehensive process that includes performance goals; performance indicators* for measuring outputs and outcomes; quantifiable performance standards that describe the desired level of outputs and outcomes based on management expectations, peer group performance, and/or historical data; a process to collect output and outcome data; a comparison of actual data with desired outputs and outcomes; a reporting of the comparison results to management; and proposals for program changes to improve effectiveness where needed.

We visited eight M-TECs at seven community colleges: Grand Rapids Community College - Holland, Grand Rapids Community College - Grand Rapids, Kirtland Community College, Lansing Community College, Macomb Community College, Montcalm Community College, Northwestern Michigan College, and St. Clair County Community College. We noted that these community colleges implemented some elements of a comprehensive evaluation process, such as strategic plans, advisory committees, accreditation processes, course surveys, Program Review in Occupational Education (PROE), pretests and posttests, graduate surveys, and workforce development board collaboration.

However, the seven community colleges had not established performance goals by which management could assess the effectiveness of occupational training programs provided through M-TECs.

For the eight M-TECs we visited, the seven respective community colleges described M-TEC program goals in generalized terms, such as "Increase student

** See glossary at end of report for definition.*

enrollments through increased marketing activities in all media" and "Continue to cooperate and collaborate with all departments on central campus to implement strategies that maximize the effectiveness and efficiency of operations at the M-TEC." However, the goals were not quantifiable and did not provide a standard for assessing specific performance. Quantified performance goals might describe the expected rate of enrollment increase, the expected percent of students who successfully complete their training, and the expected percent of students who obtain employment in a field related to their training within a specified period of time.

RECOMMENDATION

We recommend that community colleges establish performance goals by which management can assess the effectiveness of occupational training programs provided through M-TECs.

AGENCY PRELIMINARY RESPONSE

The community colleges' preliminary responses indicate that 5 community colleges agree, 1 community college partially agrees, and 1 community college disagrees with the recommendation.

EFFECTIVENESS OF COMMUNITY COLLEGES' EFFORTS TO PROVIDE PROPOSED ACTIVITIES AND FULFILL SELECTED M-TEC GRANT REQUIREMENTS

COMMENT

Audit Objective: To assess the effectiveness of community colleges' efforts to provide proposed activities and fulfill selected M-TEC grant requirements.

Audit Conclusion: We concluded that community colleges' efforts were moderately effective in providing proposed activities and fulfilling selected M-TEC grant requirements. Our assessment disclosed one reportable condition related to M-TEC utilization (Finding 2).

FINDING

2. M-TEC Utilization

Community colleges need to devise and implement measures to maximize utilization of their M-TECs for providing occupational training for high-wage, high-skill, and high-demand occupations.

Maximizing the use of M-TECs for occupational training for high-wage, high-skill, and high-demand occupations is consistent with the planned focus for M-TECs and would help community colleges meet local business and community demand for occupational skills.

The Department of Labor and Economic Growth (DLEG) agreements with community colleges included a requirement to utilize M-TECs to provide training in high-wage, high-skill, and high-demand occupational areas as defined by the "local workforce development board."

Our analysis of community colleges' use of the eight M-TECs selected for a site visit disclosed:

- a. Community colleges did not consistently use M-TECs for occupational training.

As a result, community colleges' use of M-TECs varied from M-TECs' focus to provide occupational training for high-wage, high-skill, and high-demand occupations.

Our review of the activities at the eight M-TECs disclosed the following uses for M-TEC buildings:

- (1) Grand Rapids Community College - Holland, Grand Rapids Community College - Grand Rapids, Kirtland Community College, Lansing Community College, Montcalm Community College, Northwestern Michigan College, and St. Clair County Community College leased M-TEC space to local employers and/or organizations. The community colleges informed us that the leased space was used for training courses and meetings. Examples of these uses include home firearm safety, hunter safety, and local employer sponsored training courses for employees.

- (2) Grand Rapids Community College - Grand Rapids, Northwestern Michigan College, and St. Clair County Community College provided M-TEC space for offices to workforce development organizations, economic development organizations, and trade organizations.
- (3) Grand Rapids Community College - Holland and Northwestern Michigan College provided M-TEC space for offices to intermediate school districts.
- (4) Montcalm Community College and Northwestern Michigan College used M-TEC space to provide personal enrichment courses. Examples of these courses included Social Dancing, Latin Dancing, Planning a Fun-Filled Family, and Beginning Beading.
- (5) Grand Rapids Community College - Holland and Montcalm Community College used M-TEC space for general education courses. Examples of these courses included English Composition, Intro to Criminal Justice, United States History, and General Psychology.
- (6) St. Clair County Community College used M-TEC space for day-care services that were available to the general public.
- (7) St. Clair County Community College used M-TEC space for university center offices.

Although these activities were not excluded by the grant agreements developed and approved by the Michigan Jobs Commission and the Michigan Economic Development Corporation (see supplemental information), the activities did not appear to be consistent with the planned focus of M-TECs.

- b. Community colleges had not assessed their utilization of M-TECs for compliance with M-TECs' focus to provide occupational training.

Building utilization analyses provide useful data to determine facility trends and needs that could assist community colleges in developing and improving occupational training programs. Building utilization information would be helpful in determining if M-TECs were being used for their intended purpose. An assessment of building utilization should compare the number of hours

each classroom is used with the number of hours the classroom is available. An assessment of M-TECs' utilization should include a summary of the amount of time spent on each type of activity, such as occupational and nonoccupational training.

For the eight M-TECs we visited, our analysis of the building utilization data for academic year 2005-06 disclosed:

- (1) Grand Rapids Community College assessed the utilization of its Holland M-TEC on a classroom basis. The utilization rate included regularly scheduled classes and excluded customized training sessions, room rentals, and meetings. For academic year 2005-06, the calculated utilization rate was 45% for regularly scheduled classes. The calculation did not distinguish between the amount of use for occupational and nonoccupational training activities.
- (2) Northwestern Michigan College and Lansing Community College assessed the utilization of their M-TECs on a classroom basis. The assessments included regularly scheduled classes, customized training sessions, room rentals, and meetings. However, the Colleges did not assess a utilization rate in relation to the total time their M-TECs were available for use. For academic year 2005-06, we calculated the utilization rates of Northwestern Michigan College's and Lansing Community College's M-TECs at 10% and 24%, respectively, for regularly scheduled classes, customized training sessions, room rentals, and meetings. The Colleges' calculation did not distinguish between the amount of use for occupational and nonoccupational training activities.
- (3) Grand Rapids Community College had not consistently assessed the utilization rate of its Grand Rapids M-TEC. The College assessed the utilization rate of the Grand Rapids M-TEC once in calendar year 2004, at which time the College calculated the utilization rate on a classroom basis. The utilization rate included regularly scheduled classes, customized training sessions, and room rentals. For calendar year 2004, the calculated utilization rate was 44% for regularly scheduled classes, customized training sessions, and room rentals. The calculation did not

distinguish between the amount of use for occupational and nonoccupational training activities.

- (4) Macomb Community College had not assessed the utilization rate of its M-TEC until January 2007, at which time the College assessed building utilization on a classroom basis and included scheduled classes and events that were instructional related. For the period July 1, 2006 through April 11, 2007, we calculated the utilization rate at 29% for scheduled classes and events. The College's assessment did not compare the total time used with the total time available for use.
- (5) St. Clair County Community College had not assessed the utilization rate of its M-TEC. After our inquiry, the College calculated the utilization rate of the building but not on a classroom basis. The utilization rate included training sessions, meetings, and other scheduled events. For academic year 2005-06, the calculated utilization rate was 25% for training sessions, meetings, and other scheduled events. The calculation did not distinguish between the amount of use for occupational and nonoccupational activities.
- (6) Kirtland Community College and Montcalm Community College had not assessed the utilization rates of their respective M-TECs. The Colleges informed us that they only monitor classroom schedules.

RECOMMENDATION

We recommend that community colleges devise and implement measures to maximize utilization of their M-TECs for providing occupational training for high-wage, high-skill, and high-demand occupations.

AGENCY PRELIMINARY RESPONSE

The community colleges' preliminary responses indicate that all 7 community colleges agree with the recommendation.

EFFECTIVENESS OF DLEG'S EFFORTS TO EVALUATE M-TECS

COMMENT

Audit Objective: To assess the effectiveness of DLEG's efforts to evaluate M-TECs.

Audit Conclusion: **We concluded that DLEG's efforts were moderately effective in evaluating M-TECs.** Our assessment disclosed three reportable conditions related to DLEG's reporting and validation processes, DLEG's M-TEC evaluation efforts, and grant agreements (Findings 3 through 5).

FINDING

3. **DLEG's Reporting and Validation Processes**

DLEG needs to enhance its community college reporting and validation processes.

Without such enhancements, DLEG lacks assurance that community colleges operate their M-TECs in a manner consistent with the M-TECs' planned focus to provide occupational training for high-wage, high-skill, and high-demand occupations.

Comprehensive processes for reporting and validating community colleges' compliance with proposed activities and provisions of grant agreements should include mechanisms to gather and verify operational data of the various M-TECs so that DLEG can make informed assessments about community colleges' effectiveness in complying with the grant agreements (see Finding 4). Minimally, such mechanisms would require community colleges to routinely and uniformly report on M-TEC activities.

DLEG requires community colleges to submit annual reports to address the community colleges' responsibilities specified in the grant agreement. Community colleges are responsible for providing training in high-wage, high-skill, and high-demand occupations and establishing an advisory board that includes a member from the local workforce development board.

Our review of DLEG's reporting and validation processes disclosed weaknesses related to DLEG's reporting efforts:

- a. DLEG had not standardized reporting expectations for community colleges' annual reports related to M-TEC activities.

As a result, the annual reports submitted by community colleges did not contain uniform and sufficient information to assess the community colleges' compliance with grant requirements. Requiring and collecting comparative data would allow DLEG to identify best practices, perform trend analyses among community colleges, and evaluate the success of community colleges' M-TECs.

The information provided in the community colleges' annual reports did not identify the high-wage, high-skill, and high-demand occupational areas as defined by the community colleges' respective local workforce development boards. Also, the annual reports did not describe the community colleges' efforts to provide training related to the identified occupational areas. In addition, the annual reports did not consistently provide information regarding the M-TEC advisory boards' members and meetings, annual operating revenues and costs, the amount of private sector support, or how the M-TEC buildings were being used.

Our review of community colleges' annual reports for academic year 2004-05 disclosed an array of piecemeal information. The following table illustrates

inconsistencies in the academic year 2004-05 information included in the 17 annual reports submitted by community colleges:

Information Included in Annual Reports	Number of M-TECs
Listing of courses offered	14
Listing of employers served	14
Program/Course enrollment data	5
Contact hours	17
M-TEC student head counts	17
Financial data	2
Satisfaction survey results	12
Satisfaction survey comments	4
Identification of advisory board members	2
Summary of advisory board meeting minutes	1
Room rental information	5
Accomplishments	3

- b. DLEG had not compared the actual activities at M-TECs to the activities proposed in the M-TEC grant applications.

As a result, DLEG lacked assurance that community colleges provided activities designed to foster training in high-wage, high-skill, and high-demand occupations.

The M-TEC grant application process required community colleges to list all certificate and degree programs to be provided at M-TECs. Also, the process required community colleges to explain the link between each training program and the high-wage, high-skill, and high-demand occupations identified in the application. Comparing the information included in annual reports to the programs proposed in the grant applications would help DLEG substantiate that community colleges provided training in high-wage, high-skill, and high-demand occupations.

RECOMMENDATION

We recommend that DLEG enhance its community college reporting and validation processes.

AGENCY PRELIMINARY RESPONSE

DLEG partially agrees with the recommendation. DLEG informed us that it now recognizes that the opportunity exists to implement improved reporting standards for community colleges' annual reports related to M-TEC activities and will take steps to do so. DLEG also informed us that once it completes steps to ensure that it has the legal authority to increase the scope of M-TEC reporting, it will implement new standardized reporting requirements.

In addition, DLEG concurs that the activities currently performed by M-TECs do not always match those proposed in their original grant applications. DLEG informed us that the reason for this is because it deemed some of the originally proposed M-TEC activities to be outdated at the time M-TECs were transferred under DLEG's supervision. DLEG stated that it is working with community colleges to develop performance metrics that are aligned with the objective of providing training for high-wage and high-skill jobs. Also, DLEG has increased its monitoring efforts to better understand community colleges' efforts to maximize M-TEC resources to achieve this objective.

FINDING

4. DLEG's M-TEC Evaluation Efforts

DLEG needs to implement a comprehensive mechanism to evaluate the effectiveness of M-TECs.

A comprehensive mechanism to evaluate M-TECs' effectiveness would enhance DLEG's ability to identify strengths and weaknesses and make meaningful recommendations for improving the effectiveness and success of M-TECs. The importance of DLEG having a comprehensive mechanism to evaluate the effectiveness of M-TECs is heightened by the fact that community colleges are not individually assessing their occupational training programs, as more fully described in Finding 1.

A comprehensive mechanism to evaluate M-TECs' effectiveness should include performance goals, performance indicators for measuring outputs and outcomes, and performance standards that describe the desired level of outputs and outcomes based on management's expectations. A comprehensive mechanism should also include a process to accurately collect relevant output and outcome

data and to identify best practices among the M-TECs. In addition, a comprehensive mechanism should include a process to compare actual data to desired outputs and outcomes and report the comparison results so that management can make informed decisions to improve the effectiveness of M-TECs.

Our review of DLEG's efforts to evaluate M-TECs disclosed:

- a. DLEG had not developed performance goals that could help assess the effectiveness of the M-TECs.

Goals guide an M-TEC's efforts in meeting its planned focus. Goals should be quantifiable, be ranked in priority, and address the internal and external issues facing the program.

Although DLEG established a planned focus for M-TECs to provide occupational training for high-wage, high-skill, and high-demand occupations, it had not developed or established quantifiable goals related to expectations of M-TECs. Quantified performance goals might describe the expected rate of a specific occupational skill increase, the expected rate of unemployment decrease, or the expected rate of M-TECs' enrollment increase.

- b. DLEG had not accurately collected output and outcome data sufficient to identify the activities of and assess the performance of M-TECs.

Accurately collecting output and outcome data would provide DLEG with the information necessary to compare M-TECs' performance to performance standards.

As noted in Finding 3, part a., DLEG collected annual reports from community colleges; however, the information provided by the community colleges was piecemeal and varied by M-TEC. If DLEG had standardized the reporting expectations for annual reports, DLEG could have collected relevant data that it could use to assess M-TEC performance. For example, DLEG could collect data for all M-TECs regarding the programs/courses provided, the number of students taught, and the number of students who obtained viable and sustainable employment related to their field of study.

- c. DLEG had not compared reported data with the service levels proposed in community college grant applications.

Such comparisons would help demonstrate the community colleges' fulfillment of their M-TEC proposals, guide decisions related to program content, and facilitate the sharing of best practices among community colleges.

Areas, for example, in which comparisons of reported data to proposed service levels would benefit DLEG's assessment process include training programs provided; certificates, apprenticeships, and degrees issued; number of students achieving industry-validated standards; and the number of students hired by businesses that support the M-TEC.

DLEG informed us that it is not required to and does not have the resources to assess program effectiveness. Also, DLEG told us that its assessment efforts are limited to the provisions of the grant agreements established with and followed by the community colleges for over five years. In 2004, DLEG contracted for an assessment of M-TECs. The assessment did not specify performance standards that describe the desired level of outputs and outcomes. However, the assessment stated that M-TECs experienced "under utilization" and "lack State focus." In addition, the assessment recommended that DLEG develop a strategy for M-TECs going forward in conjunction with community college presidents. The assessment results are consistent with the findings contained in this audit report.

RECOMMENDATION

We recommend that DLEG implement a comprehensive mechanism to evaluate the effectiveness of M-TECs.

AGENCY PRELIMINARY RESPONSE

DLEG partially agrees with the recommendation. DLEG agrees that new mechanisms, goals, and measures reflective of current market conditions are needed. DLEG informed us that it plans to work with the community colleges, the Michigan Community College Association, the Michigan Economic Development Corporation, and the Department of Attorney General to first develop a legal basis to work from and then work to develop and implement realistic goals, performance indicators, and assessment processes.

Also, DLEG agrees that opportunities exist to improve the accuracy of collected data. DLEG informed us that this process will be improved when it obtains legal authority to impose new reporting criteria on M-TECs.

Further, DLEG concurs that it has not compared reported data with service levels proposed by community colleges in their original agreements. DLEG informed us that this was not done because the original service levels were deemed obsolete at the time M-TECs were transferred under DLEG's supervision. DLEG stated that its philosophy is that M-TECs were designed to be demand driven. DLEG also stated that, accordingly, it is working with community colleges to refine requirements for reporting service level data that are reflective of current economic and industry conditions.

FINDING

5. Grant Agreements

DLEG did not execute a grant agreement with Lansing Community College to operate its M-TEC.

As a result, DLEG did not have a mechanism to monitor Lansing Community College's compliance with M-TECs' planned focus to provide training for high-wage, high-skill, and high-demand occupations.

A grant agreement is a key element for defining community colleges' responsibilities to fulfill M-TECs' planned focus. Grant agreements were executed for 17 of the 18 M-TECs. Specifically, M-TEC grant agreements state that community colleges' responsibilities include:

- a. Providing training, at the M-TEC, in high-wage, high-skill, and high-demand occupational areas as defined by the local workforce development board.
- b. Establishing an M-TEC advisory board that includes a member from the local workforce development board.
- c. Displaying the M-TEC name.

- d. Providing DLEG attribution on any M-TEC related publication or document prepared.
- e. Submitting annual reports addressing the community colleges' responsibilities specified in the grant agreement.

RECOMMENDATION

We recommend that DLEG execute a grant agreement with Lansing Community College to operate its M-TEC.

AGENCY PRELIMINARY RESPONSE

DLEG agrees with the recommendation. DLEG informed us that it learned of this deficiency after the M-TECs were transferred under its supervision. DLEG stated that it plans to enter into an agreement with Lansing Community College shortly.

SUPPLEMENTAL INFORMATION

Summary of Grant Applicants' Proposed Michigan Technical Education Center (M-TEC) Activities

The 17 M-TEC applications approved by the Michigan Jobs Commission and the Michigan Economic Development Corporation included building uses not directly related to occupational training. For example, two M-TECs (Grand Rapids Community College - Holland and Northwestern Michigan College) proposed providing office space and classrooms to intermediate school districts. Also, three M-TECs (Grand Rapids Community College - Grand Rapids, Mott Community College - Howell, and St. Clair County Community College) proposed providing space to their local workforce development boards. In addition, one M-TEC (St. Clair County Community College) proposed providing space to operate a day-care facility.

The table below illustrates the range of proposed programs and uses for each of the 17 grant recipients. The proposed programs included the following areas: construction trades, industrial trades, information technology, health care, and remedial education.

Proposed Activities	BDN	GRCC - Holland	HFCC	KVCC	Kellogg CC	LMC	NMC	OCC	GRCC - Grand Rapids	Kirtland CC
M-TEC Activities Outside of Grant Criteria:										
ISD Office / Classrooms		*					*			
Workforce Development Board Office									*	
Child Day Care										
Upper Peninsula Safety Training Institute	*									
M-TEC Class and Course Formats:										
Open Entry / Open Exit	*	*	*		*	*	*	*	*	*
Modular Classes	*		*		*	*	*	*		*
Distance Learning / Interactive Learning	*	*	*	*	*	*	*	*	*	*
Credit Courses	*	*		*	*	*		*	*	
Non-Credit Courses	*	*		*	*					
Customized Training	*		*	*	*	*		*	*	
M-TEC Building Uses:										
Harvest Simulator	*									
Resource Center		*								
Performance Place									*	
Machinist Training Center										
Construction Related Programs:										
Construction Trades				*					*	
Carpentry							*			*
Plumbing							*			
Masonry							*			*
Concrete										
Insulating										
HVAC and Refrigeration		*		*			*			*
Residential and Industrial Electricity		*			*	*	*			*
Repair Related Programs:										
Electronics and Repair		*				*	*			
Appliance Repair			*							
Automotive Technology				*					*	
Automotive I-CAR and Aftermarket									*	
Diesel / Heavy Equipment	*									
Manufacturing Related Programs:										
Industrial Machine Tool Technology	*				*					*
Tool and Die					*	*				
Mold Making						*				
Die Setting									*	
Die Design										
Tool and Die Machine Building / Repair		*				*				

This summary continued on next page.

<u>Mott CC - Howell</u>	<u>Macomb CC</u>	<u>MMCC</u>	<u>Montcalm CC</u>	<u>SC4</u>	<u>SMC</u>	<u>LCC</u>
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Summary of Grant Applicants' Proposed Michigan Technical Education Center (M-TEC) Activities

Continued

Proposed Activities	BDN	GRCC - Holland	HFCC	KVCC	Kellogg CC	LMC	NMC	OCC	GRCC - Grand Rapids	Kirtland CC
Die Construction										
Lathe Training										
Milling										
Precision Grinding										
Metallurgy and Heat Treat										
Die Casting										
Computer Numerical Control (CNC)		*				*	*		*	
Computer Aided Design (CAD)	*	*		*		*	*			*
Computer Aided Manufacturing (CAM)							*			
Machinist						*				*
Stamping, Punching, Rollforming									*	
Metal Forming									*	
CAD / CAM Programming		*								
CNC Programming						*				*
CNC Tool Management										*
Drafting and Design							*			
Blue Print Reading										
Robotics					*		*			
Instrumental Technology					*					
Welding					*				*	
Rigging										
Industrial Sheetmetal					*					
Manufacturing Production		*								*
Manufacturing Principles									*	
Manufacturing / Industrial Technology				*	*		*			
Industrial Millwright / Maintenance Mechanic					*	*				
Electro - Mechanical Maintenance Technician							*			
Industrial Pipefitting					*					
Industrial Controls							*			
Industrial Automation										
Pneumatics / Hydraulics										
Electrical Controls										
Plastics Technology				*	*		*			
Injection Molding										
Extrusion										
Blow Molding										
Polymers										
Quality Improvement Programs:										
Quality	*					*	*			
Metrology										
Process Improvement									*	
Introductory Statistics										
Quality Auditor										
Lean Manufacturing										
ERP										
MRP										
Six Sigma Program										
Statistical Process Control (SPC)					*				*	
Management Related Programs:										
Management Development	*									
Team Skills										
Managing Multiple Tasks										
Group Dynamics										

This summary continued on next page.

<u>Mott CC - Howell</u>	<u>Macomb CC</u>	<u>MMCC</u>	<u>Montcalm CC</u>	<u>SC4</u>	<u>SMC</u>	<u>LCC</u>
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Summary of Grant Applicants' Proposed Michigan Technical Education Center (M-TEC) Activities

Continued

Proposed Activities	BDN	GRCC - Holland	HFCC	KVCC	Kellogg CC	LMC	NMC	OCC	GRCC - Grand Rapids	Kirtland CC
Organization Skills										
Worker Safety	*									
AMA Certificate in Management							*			
Material Handling and Distribution										
Environmental Programs:										
Water Purification / Environmental Technology	*									
Harvesting Operations	*									
Paper and Printing Technology Programs:										
Paper and Printing Technology				*						
Information Technology Programs:										
Information Technology				*						
PC User Support Technician								*		
Applications Technician								*		
Network Technician								*		
Geometric Tolerancing										
Database Systems Technician										*
Operating Systems Technician										*
Computer Electronic Systems							*			
Cisco Networking							*			
A+ Certification							*			
Network / Help Desk Support							*			
Other Network Administration Opportunities							*			
Word								*		
Windows							*	*		
Internet							*	*		
Microsoft Access							*	*		
Excel							*	*		
Health Care Programs:										
Allied Health				*						
Diagnostic Imaging										
Patient Care - Technical										
Patient Care - Nursing										
Lab Technician										
Cardio Pulmonary Technician										
Physical Therapy Assistant										
Occupational Medicine Assistant										
Remedial and Employment Skills Programs:										
Remedial Math										*
Remedial Writing										*
Remedial Reading										
Employment Skills					*					*
Communication										
Soft Skills										
Team Building										
Computer Literacy										
Problem Solving										
Critical Thinking										
Coping Skills										
Technical Skills										
Professionalism										

Source: Community colleges' M-TEC grant applications as provided by DLEG.

Mott CC - Howell	Macomb CC	MMCC	Montcalm CC	SC4	SMC	LCC
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GLOSSARY

Glossary of Acronyms and Terms

BDN	Bay de Noc Community College.
CC	Community College.
CDBG	Community Development Block Grants.
DLEG	Department of Labor and Economic Growth.
effectiveness	Program success in achieving mission and goals.
Focus: HOPE	A civil and human rights organization in Detroit, Michigan, whose programs include a food program for eligible mothers, children, and senior citizens; education and training programs; community and economic development initiatives; and children's day care.
GF	General Fund.
goal	An intended outcome of a program or an agency to accomplish its mission.
GRCC	Grand Rapids Community College.
HFCC	Henry Ford Community College.
KVCC	Kalamazoo Valley Community College.
LCC	Lansing Community College.
LMC	Lake Michigan College.
MEDC	Michigan Economic Development Corporation.
MJC	Michigan Jobs Commission.

MMCC	Mid Michigan Community College.
MRF	Michigan Renaissance Fund.
M-TEC	Michigan Technical Education Center.
NMC	Northwestern Michigan College.
OCC	Oakland Community College.
outcomes	The actual impacts of the program.
outputs	The products or services produced by the program.
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 indicator	Information of a quantitative or qualitative nature used to assess achievement of goals and/or objectives.
performance standard	A desired level of output or outcome.
reportable condition	A matter that, in the auditor's judgment, represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.
SC4	St. Clair County Community College.
SMC	Southwestern Michigan College.
workforce development boards	Local agencies charged with implementing the Michigan Works! system of integrated services for employers and job seekers.

