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Missouri State Auditor

Missouri Vocational Enterprise Program

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CITIZENS SUMMARY

Findings in the audit of the Missouri Vocational Enterprise Program

Background	The Missouri Vocational Enterprise Program is established in Sections 217.550 through 217.595, RSMo. According to state law, the purposes of the program include (1) the "training and employment of offenders in such job skills and tasks that will afford them the most favorable opportunities practicable for gainful employment upon discharge" from the Department of Corrections (DOC), and (2) the production and provision of goods and services as practicable to state entities, state employees, political subdivisions, and not-for-profit agencies. In addition, state law includes a program goal that "all general population offenders shall learn a skill or service and are employed."
Inadequate Programmatic Oversight	The DOC does not perform adequate planning and oversight of the Missouri Vocational Enterprise Program to ensure the program is achieving its statutory purpose. The DOC Director has not filled key vacancies on the Advisory Board of Vocational Enterprises Program and Advisory Board meetings have not been held as required by state law, leaving the DOC with little guidance or input on the program. Further, DOC officials have not established performance measures to track the effectiveness of the program, or developed a strategic plan to guide operational and programmatic decision making.
Programmatic Decisions Have Not Been Consistent With the Program's Statutory Purpose	Programmatic decisions have not been consistent with the program's statutory purpose to train and employ offenders in favorable opportunities for gainful employment upon discharge from incarceration. Program facilities are concentrated in institutions with longer expected remaining sentence years, hiring practices favor long-term offenders, a significant portion of short-term offenders do not have access to the program, program facility relocation decisions were not consistent with the DOC's own criteria for making such decisions and were not documented, and a significant portion of offenders in the program are employed in a job skill forecasted to decline in the number of workers in the near future.
Improvements Needed in Cost Tracking and Product Pricing Processes	Current procedures to track manufacturing costs and allocate indirect expenses are not adequate and do not provide administrators adequate cost information regarding facility locations or allow for informed programmatic decisions. In addition, incomplete cost information has resulted in product pricing that does not ensure amounts charged for products adequately cover the costs for those products.

Financial Practices and Controls	Program officials have not performed periodic comparisons of program selling prices to current market prices, the program has accumulated significant levels of raw materials on hand, and sales forecasts have not been used to budget and plan program operations.

In the areas audited, the overall performance of this entity was Fair.*

*The rating(s) cover only audited areas and do not reflect an opinion on the overall operation of the entity. Within that context, the rating scale indicates the following:

Excellent: The audit results indicate this entity is very well managed. The report contains no findings. In addition, if applicable, prior recommendations have been implemented.

Good: The audit results indicate this entity is well managed. The report contains few findings, and the entity has indicated most or all recommendations have already been, or will be, implemented. In addition, if applicable, many of the prior recommendations have been implemented.

Fair: The audit results indicate this entity needs to improve operations in several areas. The report contains several findings, or one or more findings that require management's immediate attention, and/or the entity has indicated several recommendations will not be implemented. In addition, if applicable, several prior recommendations have not been implemented.

Poor: The audit results indicate this entity needs to significantly improve operations. The report contains numerous findings that require management's immediate attention, and/or the entity has indicated most recommendations will not be implemented. In addition, if applicable, most prior recommendations have not been implemented.

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Honorable Michael L. Parson, Governor
and
Anne L. Precyth, Director, Department of Corrections
and
Steven Martin, Administrator, Missouri Vocational Enterprise Program
Jefferson City, Missouri

We have audited certain aspects of the Missouri Vocational Enterprise Program (program) in fulfillment of our duties under Chapter 29, RSMo. Due to the importance of rehabilitating Missouri's incarcerated population for re-entry into society, this program is of significance to Missouri residents. The program was established under Sections 217.550 through 217.595, RSMo. It provides many state and local entities with goods and services produced and performed by the offenders employed by the program. The objectives of our audit were to:

1. Evaluate whether the program fulfills its statutory mandate.
2. Evaluate internal controls over significant management and financial functions of the program.
3. Evaluate the economy and efficiency of certain management practices and procedures, including certain financial transactions related to the program.
4. Evaluate the program's financial condition.

We conducted our audit in accordance with the standards applicable to performance audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform our audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides such a basis.

For the areas audited, we identified (1) deficiencies with the program fulfilling its statutory mandate, (2) deficiencies in internal controls, (3) the need for improvement in management practices and procedures, and (4) no concerns with the program's financial condition.

The accompanying Management Advisory Report presents our findings arising from our audit of the Missouri Vocational Enterprise Program.

Scott Fitzpatrick
State Auditor

Missouri Vocational Enterprise Program
Introduction

Background

The Missouri Vocational Enterprise Program (program) is established in Sections 217.550 through 217.595, RSMo. According to state law, the purposes of the program include (1) the "training and employment of offenders in such job skills and tasks that will afford them the most favorable opportunities practicable for gainful employment upon discharge"[1] from the Department of Corrections (DOC), and (2) the production and provision of goods and services as practicable to state entities, state employees, political subdivisions, and not-for-profit agencies.[2] In addition, state law includes a program goal that "all general population offenders shall learn a skill or service and are employed."[3]

State law includes clear language regarding various aspects of program operations and planning. The DOC is responsible for operating the program and the DOC Director is responsible for general supervision over planning, establishment, and management of all vocational enterprise operations.[4] Additionally, the DOC Director decides at which correctional center each vocational enterprise shall be located.[4] The Division of Offender Rehabilitation Services (DORS) within the DOC oversees the program while the Missouri Vocational Enterprise (MVE) operates the program. DOC employees comprise the MVE civilian workforce.

State law establishes an Advisory Board of Vocational Enterprises Program (Advisory Board).[5] Statute requires the 10-member board to include 3 members representing manufacturing interests and 3 members representing organized labor. The DOC Director appoints the board members. The Advisory Board provides the DOC Director advice and counsel on planning for the program and makes recommendations concerning the services to be provided, the items to be manufactured, and the economy and efficiency of the manufacture of these items.[6]

The MVE employs offenders within the state prison system producing goods and performing services for state agencies, other not-for-profit entities, and current and retired state employees. Goods produced by the offenders include office furniture, clothing, license plates, and signs; while services include laundry and engraving.

According to the MVE website,[7]

[1] Section 217.560(1), RSMo.
[2] Section 217.560(2), RSMo.
[3] Section 217.595.5, RSMo.
[4] Section 217.550.1, RSMo.
[5] Section 217.555.1, RSMo.
[6] Section 217.555.3, RSMo.
[7] <https://docservices.mo.gov/mve/>, accessed November 16, 2022.

> "the objective of the MVE is to develop personal responsibility in offenders through the development of diverse training programs. This enhances their employability and opportunity for success while incarcerated and upon release. MVE's most important goal is a successful offender that returns to society and is able to gain meaningful employment due to the training that was received while incarcerated."

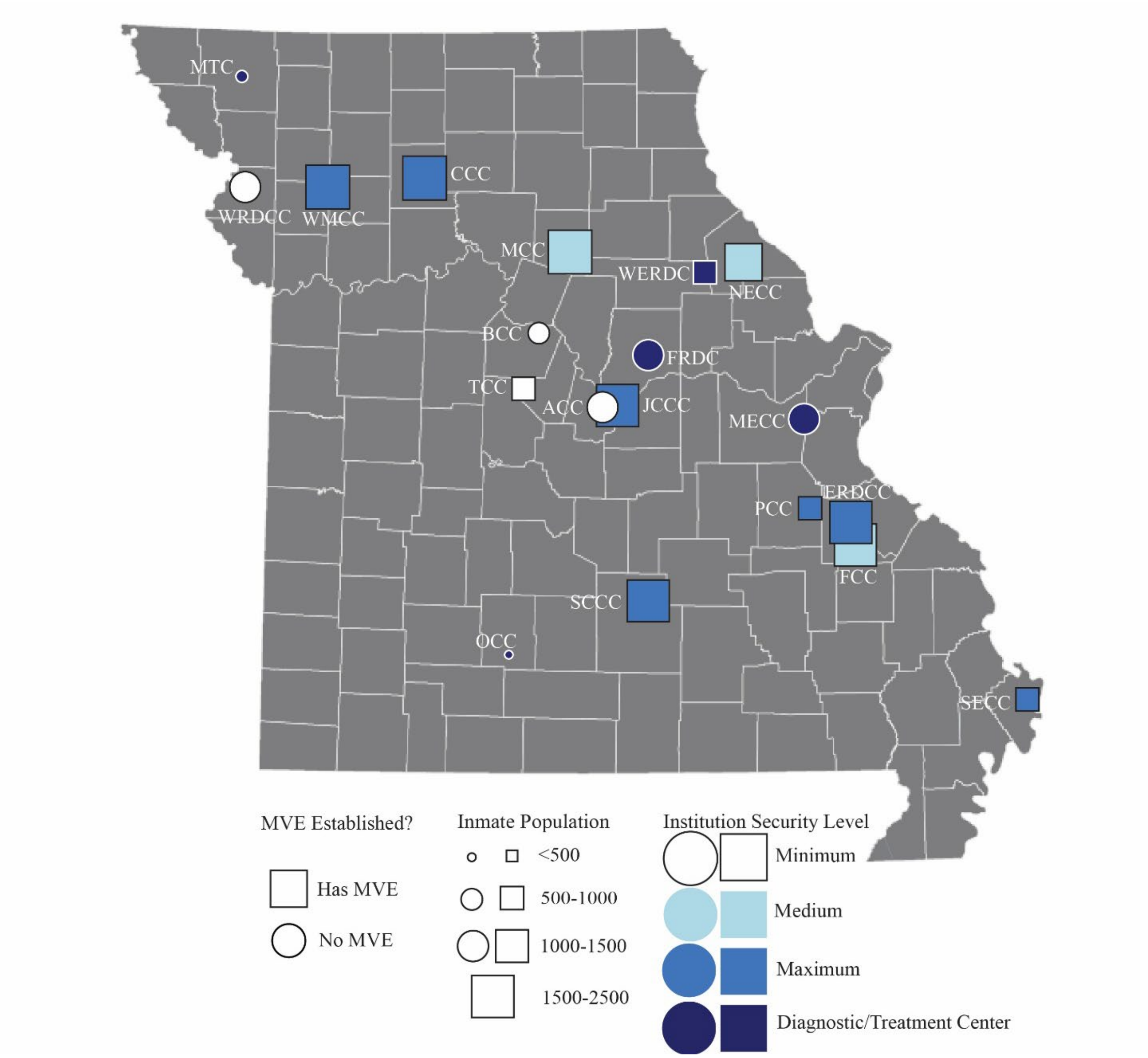
Figure 1 lists each institution, the security level, the number of offenders housed in the institution, the number of MVE facilities located in the institution, and the number of offenders employed by the MVE facility(ies) as of June 30, 2021.

Figure 1: Listing of facilities with security level, offender population, number of MVE facilities, and the number of offenders employed in the MVE program(s).

Institution	Acronym	Security Level	Offender Population	Number of Program Facilities	Offenders Employed
Algoa Correctional Center	ACC	Minimum	1,032	0	N/A
Boonville Correctional Center	BCC	Minimum	783	0	N/A
Chillicothe Correctional Center	CCC	Maximum	1,302	1	49
Eastern Reception, Diagnostic & Correctional Center	ERDCC	Maximum	2,346	1	24
Farmington Correctional Center	FCC	Medium	2,203	2	109
Fulton Reception & Diagnostic Center	FRDC	Diagnostic	1,391	0	N/A
Jefferson City Correctional Center	JCCC	Maximum	1,836	7	270
Moberly Correctional Center	MCC	Medium	1,698	3	201
Missouri Eastern Correctional Center	MECC	Diagnostic	1,063	0	N/A
Maryville Treatment Center	MTC	Treatment	246	0	N/A
Northeast Correctional Center	NECC	Medium	1,378	1	40
Ozark Correctional Center	OCC	Treatment	285	0	N/A
Potosi Correctional Center	PCC	Maximum	835	1	27
South Central Correctional Center	SCCC	Maximum	1,531	1	50
Southeast Correctional Center	SECC	Maximum	893	1	64
Tipton Correctional Center	TCC	Minimum	727	2	33
Women's Eastern Reception, Diagnostic & Correctional Center	WERDCC	Diagnostic	673	1	5
Western Missouri Correctional Center	WMCC	Medium	1,368	1	20
Western Reception, Diagnostic & Correctional Center	WRDCC	Minimum	1,475	0	N/A
	Totals:	19	23,065	22	892

Source: Prepared by the State Auditor's Office (SAO) using information provided by the DOC.

Figure 2: Map of facilities, offender population, and security level by institution



Source: Prepared by the SAO using information provided by the DOC.

Revenues and expenditures from program operations are accounted for in the Working Capital Revolving Fund and state law requires all program earnings be retained in the fund.[8] The following table summarizes program financial information for the year ended June 30, 2021:

Figure 3: Summary program financial information, year ended June 30, 2021

Gross Revenues	$ 20,414,252
Cost of Goods Sold	(11,499,299)
Operating Expenses	(12,322,080)
Loss on Operations	$ (3,407,127)

Source: Prepared by the SAO using information provided by the DOC.

See Appendix B for additional summary financial information for the 5 years ended June 30, 2021.

Scope and Methodology

The scope of our audit included, but was not necessarily limited to, the year ended June 30, 2021.

To determine if the program is fulfilling its statutory mandate, we obtained an understanding of relevant legal provisions related to the program. We interviewed appropriate DOC officials to obtain an understanding of the planning and oversight performed by the DOC and of program operations as they relate to the program's purpose. Based on this understanding, we focused audit procedures and analyses on evaluating the remaining years of sentence of offenders in the program, the location of program facilities, the evaluation of jobs skills being trained, and job placement of enrolled offenders.

State statute includes specific language related to the program's purpose, including that the program shall provide diverse training and employment opportunities to offenders to allow for gainful employment upon discharge. As such, our methodology included procedures to evaluate the DOC's tracking of offender job placement, the remaining years of sentence for incarcerated offenders, the location of program facilities, and the job skills currently included in the program.

To evaluate how the remaining years of sentence of offenders is considered during strategic and operational decision making, we obtained a listing as of June 30, 2021, of each offender by institution with the anticipated release date and an indication if that offender was employed by the program. We incorporated the remaining years of sentence when evaluating the location of the facilities as of June 30, 2021, and when evaluating the relocation analysis performed by the DOC to support the institutions selected for 2 recent facility relocations. In addition, we incorporated the remaining years of sentence

[8] Section 217.595, RSMo.

when evaluating operational decisions made by the MVE, including any preference given when hiring offenders based on the estimated remaining years of sentence.

To evaluate the location of program facilities, we interviewed appropriate DOC officials, and reviewed information provided by the DOC regarding the institutions that do and do not have a program facility, including each institution's security level and the number of and expected remaining years of sentences of the offenders. Additionally, we analyzed which offenders do and do not have program facilities in their institutions.

To evaluate how the DOC assesses potential job skills to include in the program, we interviewed appropriate DOC officials and reviewed statewide long-term industry projections produced by the Missouri Economic Research and Information Center (MERIC)[9] to determine if the demand for workers in the jobs and skills taught to the offenders is expected to increase or decrease between 2020 and 2030 in Missouri. This information was compared to the jobs and skills currently being trained in existing program facilities.

To evaluate job placement of enrolled offenders, we obtained an understanding of efforts made by the DOC to monitor the success of offenders in obtaining gainful employment, including attempts to employ offenders prior to release.

To evaluate and assess internal controls considered significant to the audit objectives, we interviewed key DOC and program personnel and reviewed policies and procedures to obtain an understanding of the practices of pricing the goods sold, allocating indirect costs, maintaining raw good inventory levels, forecasting sales, determining break even sales amounts, and accounting for variances between estimated and actual expenses and revenues.

To evaluate the economy and efficiency of certain management practices and procedures, we evaluated the DOC's procedures for recovering its costs in the product pricing and tested DOC's methodology to determine the viability of its calculations. We evaluated the overhead ratio needed for the program to break even, calculated by the DOC, and tested the methodology to determine the viability of the DOC's calculations. We evaluated the dollar amount of raw goods on hand by factory to determine if the on-hand amounts were excessive. We analyzed program procedures for forecasting sales, accounting for variances, determining the break-even point in sales, and allocating

[9] MERIC is the research division of the Missouri Department of Higher Education and Workforce Development and was formed in 2001. MERIC provides analyses of the state's economic trends, targeted industries, and labor markets to policymakers and the public. See website at <https://meric.mo.gov >, accessed December 27, 2022.

indirect expenses for reasonableness. We also reviewed pricing for program products and attempted to compare the program's prices to market prices for comparable items.

To evaluate the program's financial condition, we reviewed balance sheets and income statements prepared by DOC officials for the 6 years ended June 30, 2022. We corroborated key financial amounts to reports prepared by other entities. Additionally, we analyzed the June 30, 2022, ending cash balance in terms of months of cash on hand to cover cost of goods sold, overhead expenses, and total expenses.

We performed sample testing using haphazard and judgmental selection, as appropriate. The results of our sample testing cannot be projected to the entire population from which the test items were selected.

1. Inadequate Programmatic Oversight

The Department of Corrections (DOC) does not perform adequate planning and oversight of the Missouri Vocational Enterprise Program (program) to ensure the program is achieving its statutory purpose. In addition, the Advisory Board of Vocational Enterprises Program is not functioning as intended by statute, leaving the DOC with little guidance or input on the program. Further, the DOC has not developed a strategic plan to guide operational and programmatic decision making, and has not established performance measures to determine the effectiveness of the program. As a result, the DOC cannot demonstrate that the program is achieving its statutory purpose. Rather, key decisions made by DOC personnel have been made without sufficient consideration of the program's purpose and without sufficient guidance from appropriate stakeholders as intended by statute.

1.1 Ineffective Advisory Board

The DOC Director has not filled key vacancies on the Advisory Board of Vocational Enterprises Program (Advisory Board) and the DOC Division of Offender Rehabilitation Services (DORS) has not held Advisory Board meetings as required by state law. As a result of the vacant positions and lack of required meetings, DOC officials are not receiving guidance from external employment industries when making key strategic decisions.

Required Advisory Board positions vacant

During the four years ending June 30, 2022, only 1 of the required 6 external industry positions on the Board was filled. A DOC official indicated it has been difficult finding individuals to fill the vacancies.

State law requires the DOC Director to appoint members to the Board.[10] State law further requires the Director of DORS (or a designee) to serve as the chairman of the Board, and requires the Board to consist of the MVE administrator, 3 external members representing organized labor, 3 external members representing manufacturing interests, 1 member with education and experience in criminology, and 1 member with education and experience in vocational rehabilitation.[10] During our audit period, only 1 of the 3 required labor positions have been filled, and none of the 3 required manufacturing positions were filled. These 6 external industry member positions are to help ensure the program's success in fulfilling its statutory purpose of increasing employment opportunities for offenders post-release.

Advisory Board not meeting as required by statute

The DORS Director, who serves as the chairman of the Board, has not ensured the Board meets as frequently as required by state law. While statutorily the Board is required to meet quarterly,[11] the Board only met a total of 4 times during the 4-year period of July 1, 2018, and June 30, 2022. No specific reasons were provided regarding why these meetings were not held.

[10] Section 217.555.1, RSMo.
[11] Section 217.555.2, RSMo.

According to Section 217.555.3, RSMo, one of the statutory purposes of the Advisory Board is to provide the Director of the DOC "advice and counsel on proper planning" for the program. A fully functioning Advisory Board would provide input to inform program decisions and help ensure the program is meeting its statutory purpose and goal. The issues identified in Management Advisory Report (MAR) finding numbers 2 and 3 would benefit from the input of a fully functioning board.

1.2 Program performance not measured or reported

DOC officials have not established performance measures to track the effectiveness of the program, and measures of program performance have not been reported to the legislature. While Department budget documents include certain data measures related to program satisfaction and activity measures, such as the number of program participants, these measures do not measure program performance. Establishing measures of performance helps provide evidence to stakeholders that the program is achieving its intended purpose and goal. Such performance measures can also be used to make informed decisions related to program operations. When asked, DOC officials could not indicate why effective performance measures have not been developed.

Establishing baseline performance measures is essential in guiding strategic programmatic decision making and evaluating the program's effectiveness. The National State Auditors Association (NSAA) guidance for audit organizations and government agencies states, "Performance measurement is a critical element of accountability for public resources," and further recommends considering the mission statement, goals, objectives, and the action plan when developing a performance measure process.[12] Additionally, the Government Finance Officers Association (GFOA) recommends, "all organizations identify, track, and communicate performance measures to monitor financial and budgetary status, service delivery, program outcomes, and community conditions."[13]

In the case of the MVE program, Section 217.560, RSMo, states the purpose of the program is to train and employ offenders in job skills that will "afford them the most favorable opportunities practicable for gainful employment upon discharge from the department." Therefore, establishing performance measures related to the number or percentage of program enrollees being gainfully employed after discharge, or a measure of the growth outlook of the skills being trained in the program, would provide the DOC with useful

[12] *Best Practices in Performance Measurement in Government, Developing Performance Measures, NSAA, 2004,* p. 1. <https://www.nasact.org/files/News_and_Publications/White_Papers_Reports/NSAA%20Best%20Practices%20Documents/2004_Developing_Performance_Measures.pdf>, access on December 21, 2022.

[13] Best Practices, Performance Measures, GFOA, 2018, <https://www.gfoa.org/materials/performance-measures>, accessed on December 21, 2022.

information to determine if the program was meeting its statutory purpose. In addition, reporting key performance information to the Legislature would provide public transparency for the program, give the Legislature key performance information when making legislative decisions, and contribute towards the program fulfilling its statutory purpose.

1.3 Strategic planning process not utilized

DOC officials have not developed a strategic planning process to drive program decisions and to help monitor program effectiveness and efficiency. Strategic planning is a comprehensive and systematic management tool that involves identifying goals and risks, developing action plans to meet established goals, monitoring the progress of the action plans, and reassessing strategies to achieve program outcomes. Strategic planning can be a useful tool in guiding operational decision making and evaluating a program's effectiveness.

The GFOA recommends, "all government entities use some form of strategic planning to provide a long-term perspective for service delivery and budgeting."[14] Additionally, the GFOA recommends the strategic planning process include (1) identifying program goals, (2) developing strategies and actions to achieve those goals, (3) measureable objectives, and (4) performance measures to determine if objectives are being met.

DOC officials indicated strategic planning is performed at the department level, but is not specific to the MVE program. According to DOC officials there are data points that are tracked and updated monthly. However, as discussed in section 1.2, these data points track program activity and do not establish program goals or measure program performance.

Effective strategic planning would provide additional guidance to DOC officials when making key decisions. In addition, a strategic planning process would provide a baseline for comparison against future program results and would identify areas of success and opportunities for DOC officials for future decision making. MAR finding number 2 contains information related to program activities that a strategic planning process could track.

Conclusion

The DOC could improve its management of the program with improved oversight of program operations. Ensuring all vacancies on the Vocational Enterprises Advisory Board are filled, and ensuring the Board meets as required by state statute would provide the program with additional governance and oversight. In addition, the development of performance measures and a strategic planning process would allow DOC management to provide the Board with information to make strategic decisions regarding

[14] Best Practices, Establishment of Strategic Plans, GFOA, 2005, <https://www.gfoa.org/materials/establishment-of-strategic-plans>, accessed on December 21, 2022.

program operations and help ensure the program is achieving its statutory purpose.

The remainder of this report contains additional findings and recommendations to improve the program. See MAR finding number 2 for concerns regarding the program fulfilling its statutory mandate, MAR finding number 3 for concerns regarding the economy and efficiency of management practices, and MAR finding number 4 for concerns regarding deficiencies in financial practices and internal controls over program operations.

Recommendations

We recommend the DOC:

1.1 Ensure the advisory board vacancies are filled and meetings are held in accordance with state law.

1.2 Develop baseline performance measures to be used for future evaluation of program success. Work with DORS personnel as necessary to establish appropriate measures and evaluate future program performance. Consider using guidance provided by the GFOA when developing program performance measures.

1.3 Develop a strategic planning process for the program and ensure the plan incorporates appropriate performance measures and performance goals, is considered when making operational decisions, and is periodically reviewed and updated as necessary. Consider using guidance provided by the GFOA when developing the strategic planning process.

Auditee Response

The department's written response indicates it agrees with recommendation 1.1, disagrees with recommendation 1.2, and partially agrees with recommendation 1.3. The department's full response is included at Appendix A.

Auditor's Comment

The department's response to recommendations 1.2 and 1.3 states the department has performance measures included in budget documents. As explained in the finding, the performance measures in the budget documents do not include measures of performance or effectiveness of the program, but rather track program activity, such as the number of inmates in the program and program expenditures. In response to recommendation 1.3 the department states there is not a strategic plan related to the MVE, but there is a department-wide plan that is used to make operational/management decisions. However, this plan does not establish program goals or program performance measures specific to the MVE.

2. Programmatic Decisions Have Not Been Consistent With the Program's Statutory Purpose

Programmatic decisions have not been consistent with the program's statutory purpose to train and employ offenders in favorable opportunities for gainful employment upon discharge from incarceration. Program facilities are concentrated in institutions with longer expected remaining sentence years, hiring practices favor long-term offenders, a significant portion of short-term offenders do not have access to the program, program facility relocation decisions were not consistent with the DOC's own criteria for making such decisions and were not documented, and a significant portion of offenders in the program are employed in a job skill forecasted to decline in the number of workers in the near future.

As of June 30, 2021, the MVE operated 22 facilities employing 892 offenders (3.9 percent of the DOC incarcerated population) in 12 institutions housing 23,065 offenders.

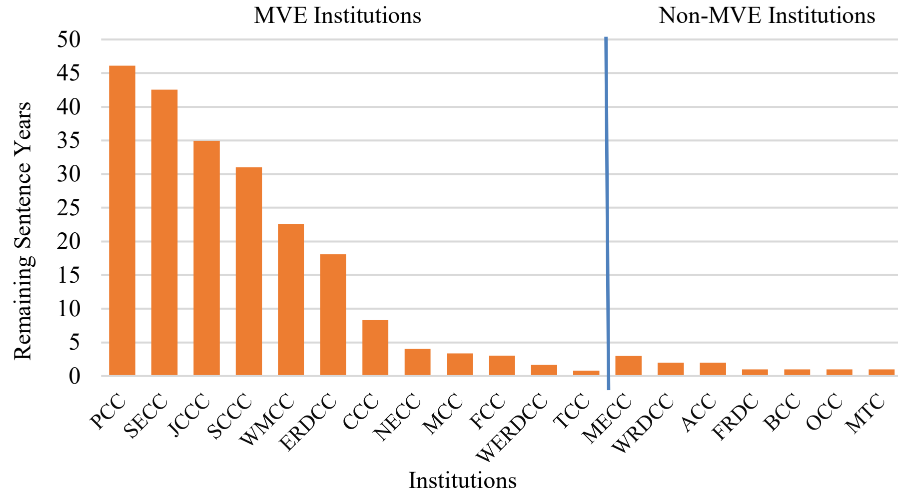
2.1 Program facilities are concentrated in institutions with longer remaining sentences

Program facilities are primarily located in institutions with longer remaining sentences and higher security levels, and a significant number of offenders do not have access to program job skills training, which does not align with the program's statutory purpose of providing offenders with opportunities for employment upon release. Section 217.560, RSMo, states the purpose of the program is to train and employ offenders in job skills that will "afford them the most favorable opportunities practicable for gainful employment upon discharge from the department." Additionally, the DOC recently relocated 2 facilities, and the locations selected by the DOC were not consistent with the criteria a DOC official stated was followed and the criteria established by state statute, and the DOC did not retain any of the relocation analysis documentation to support the decisions made.

Current locations have longer remaining sentences

The institutions selected by the DOC for program facilities significantly favor institutions with longer expected remaining sentence years. Figure 4 shows each institution's average offender expected remaining sentence years, sorted by expected remaining sentence years, grouped by if the institution has a program facility.

Figure 4: Average expected remaining sentence years by institution as of June 30, 2021



Source: Prepared by the SAO using offender expected release data provided by the DOC.

Based on Figure 4, the locations selected by the DOC for program facilities significantly favor institutions with longer expected remaining sentence years. Additionally, all 7 of the 7 institutions with an average remaining sentence years of 8 years or more years have at least 1 program facility. This includes 4 institutions with an average expected remaining sentence years of greater than 30 years. Of the 12 institutions with an average remaining sentence years of less than 5 years, only 5 have an MVE facility.

To better understand the expected remaining sentence years by institution, we classified the expected remaining sentence years into 3 categories: short-term, medium-term, and long-term. We defined short-term to be offenders expected to be released within the next 5 years, medium-term to be offenders expected to be released in more than 5 years and up to 10 years, and long-term to be offenders expected to be released in 10 years or more. Figure 5 shows the number of short-, medium-, and long-term offenders in institutions with and without a program facility as of June 30, 2021.

Figure 5: Offender expected remaining sentence years between institutions with and without a program facility

Term	Expected Remaining Sentence Years	Program Institutions Total[1]	Non-Program Institutions Total[2]	Program Institutions Percentage[3]	Non-Program Institutions Percentage[4]
Short	Up to 5 Years	9,865	5,825	63%	37%
Medium	Between 5 and 10 Years	2,115	325	87%	13%
Long	10 Years or more	4,810	125	97%	3%
Totals		16,790	6,275		

[1] Number of offenders expected to be released by term from institutions with a program facility.

[2] Number of offenders expected to be released by term from institutions without a program facility.

[3] Percentage of offenders expected to be released by term from institutions with a program facility.

[4] Percentage of offenders expected to be released by term from institutions without a program facility.

Source: Prepared by the SAO using offender expected release data provided by the DOC.

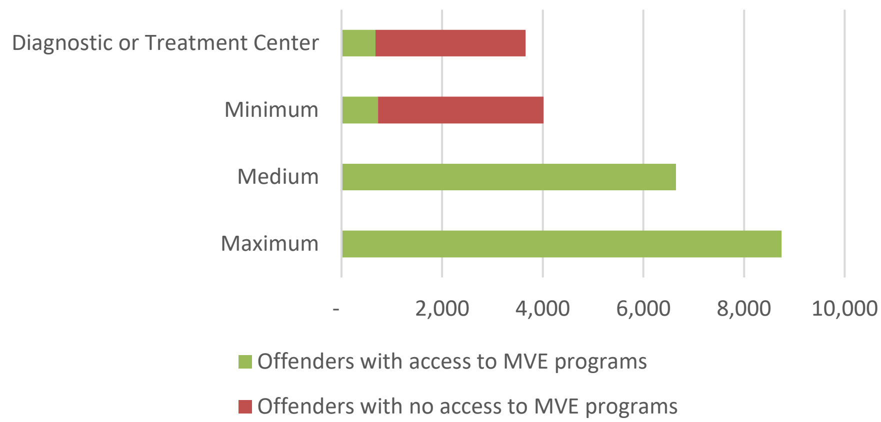
Based on Figure 5, the DOC has favored the institutions with longer expected remaining years of sentence, with 97 percent of the long-term offenders being located in an institution with a program facility, while only 63 percent of the short-term offenders are in an institution with a program facility.

Significant number of lower security offenders without program access

Based on our analysis of facility locations, a significant number of offenders do not have access to program jobs and skills training. Specifically, the majority of the minimum security and diagnostic/treatment center institutions do not have a program facility. The DOC does not have an MVE facility in 3 of the 4 minimum security institutions (75 percent), or in 4 of the 5 diagnostic/treatment centers (80 percent). According to discussions with DOC officials, not all diagnostic or treatment centers would be good candidates for MVE facilities; however, some could, and currently do, house such facilities.

Figure 6 shows the number of offenders, by institutional security level, that do and do not have access to a program facility in the institution where they are incarcerated.

Figure 6: Offender access to program facility by institutional security level



Source: Prepared by the SAO using institution and offender data provided by the DOC.

Based on Figure 6, the majority of the offenders in the minimum security and the diagnostic/treatment center institutions do not have any access to the jobs and skills taught by the program. As a result, those individuals convicted of lessor infractions and subsequently jailed in a lower security prison had a significantly lower chance of participating in the program than those individuals convicted of more serious offenses.

The DOC has also concentrated numerous program facilities in a few institutions. For example, there are 14 program facilities located in 4 institutions, with 7 program facilities in the maximum security JCCC institution, while locating no program facilities in the minimum security ACC institution, which is less than a mile away from the JCCC institution.

Conclusion

The DOC has placed program facilities in institutions with longer remaining sentences and higher security levels. This leaves a significant number of lower risk offenders, with less expected years remaining on their sentences, without access to program jobs and skills training. Focusing program locations in institutions with longer expected remaining sentence years does not align with the program's statutory purpose and goal because many of the offenders expected to be released in the short-term do not have access to the program. Performing a location analysis would allow DOC officials to assess whether current program locations align with the program's statutory purpose of providing offenders with opportunities for employment upon release.

Recent relocation decisions were not documented, were not approved by the Advisory Board, and were not consistent with statutory and DOC criteria

The DOC has relocated 2 program facilities within the past 5 years. While DOC officials stated an analysis was performed for each relocation, they could not provide documentation of either relocation analysis. Additionally, there is no evidence to support that either relocation was reviewed or approved by the Advisory Board. Further, the institution selected in both decisions was not supported by the methodology a DOC official stated was used for the analyses.

The first relocation occurred around July 2019 and involved relocating an office systems factory from the JCCC to the NECC institution. The second relocation occurred around June 2021 and involved relocating a clothing factory from the WERDCC to the MECC institution. DOC officials stated an analysis was performed for both relocations, and the methodology used in the analyses was consistent with statutory language[15] to include consideration of the population of the offenders in the institutions (larger population preferred), the physical distance of the institutions from the original institution (closer location preferred), and the security level of the institutions (lower security level preferred). For the purposes of our analysis we also included 2 additional criteria based on the program's purpose: the percentage of offenders expected to be released within the next 5 years (higher percentage preferred), and the average remaining expected sentence years for each institution (lower remaining years preferred).

Based on our analysis of both relocations, the locations selected by the DOC for the new program facilities had higher security levels, lower offender populations, and were further away from the current locations, all of which are inconsistent with the attributes DOC officials stated were favorable. In addition, the facilities selected had a smaller percentage of short-term sentences, and higher average expected sentence years remaining than other institutions available. Further, our analysis determined the institutions selected by the DOC ranked as the least suitable, or tied for the least suitable, for 7 out of 9 attributes tested for the two relocations. It is unclear how DOC

[15] Section 217.550.1, RSMo.

officials selected these two institutions using their described methodology. When asked, DOC officials could not elaborate why the institutions selected were not supported by their analyses, or why those analyses were not retained.

See Appendix C for additional details of our relocation analysis.

Board's discussion of relocation lacked analysis and alternative locations

Based on the minutes from the September 7, 2018, Advisory Board meeting, the board member representing the MVE mentioned the planned relocation of the JCCC institution factory and indicated the MVE was considering the NECC institution. However, there is no mention of an analysis or any consideration of alternative locations in the minutes. The only board member representing external employment interests was absent from this meeting. In addition, the minutes did not indicate approval of this planned relocation, and did not mention the planned relocation of the WERDCC institution factory.

Section 217.560, RSMo, requires the program to be diversified both as to location and kind. In addition, Section 217.550.1, RSMo, provides criteria for program facility locations, including "offender custody levels, the number of offenders in each correctional center so the best service or distribution of labor may be secured, location and convenience of the correctional centers in relation to the other correctional centers to be supplied or served and the machinery presently contained in each correctional center." While Advisory Board approval is not required by statute, review by the board would provide the DOC with input from parties outside the agency and would provide transparency for such decisions.

2.2 Hiring practices favor long-term offenders

Program personnel have made hiring decisions that result in long-term offenders being over-represented in MVE facilities relative to the populations of the institutions in which they are housed. The favoring of long-term offenders has resulted in approximately 35 percent of offenders employed by the program having more than 10 expected remaining years on their sentences, including 24 percent of program offenders with over 20 expected remaining years left on their sentences. Employing a significant number of offenders with a high number of expected years remaining on their sentences results in fewer program openings available to offenders with shorter terms who will be entering the workforce in the near future. This practice does not align with Section 217.560, RSMo, which states the purpose of the program is to train and employ offenders in job skills that will "afford them the most favorable opportunities practicable for gainful employment upon discharge from the department."

Figure 9 shows the number and percentage of the total offenders employed by the program as of June 30, 2021, by expected remaining years of sentence. As of June 30, 2021, the program employed a total of 892 offenders in 22 program facilities.

Figure 9: Expected remaining years of sentence for offenders in the program

Category	Expected sentence years remaining	Count of offenders expected to be released	Percentage of offenders by expected sentence years
	1 year or less	201	22%
Short	1 year to 2 years	85	10%
	2 years to 5 years	149	17%
Medium	5 years to 10 years	139	16%
	10 years to 20 years	101	11%
	20 years to 30 years	33	4%
Long	30 years to 40 years	19	2%
	More than 40 years	165	18%
	Totals	892	100%

Source: Prepared by the SAO using offender expected release data provided by the DOC.

Based on Figure 9, 318 offenders employed (36 percent) will not be released for at least another 10 years, including 165 offenders employed (18 percent) that are not expected to be released for another 40 years, while 435 offenders employed (49 percent) through the program are expected to be released within the next 5 years.

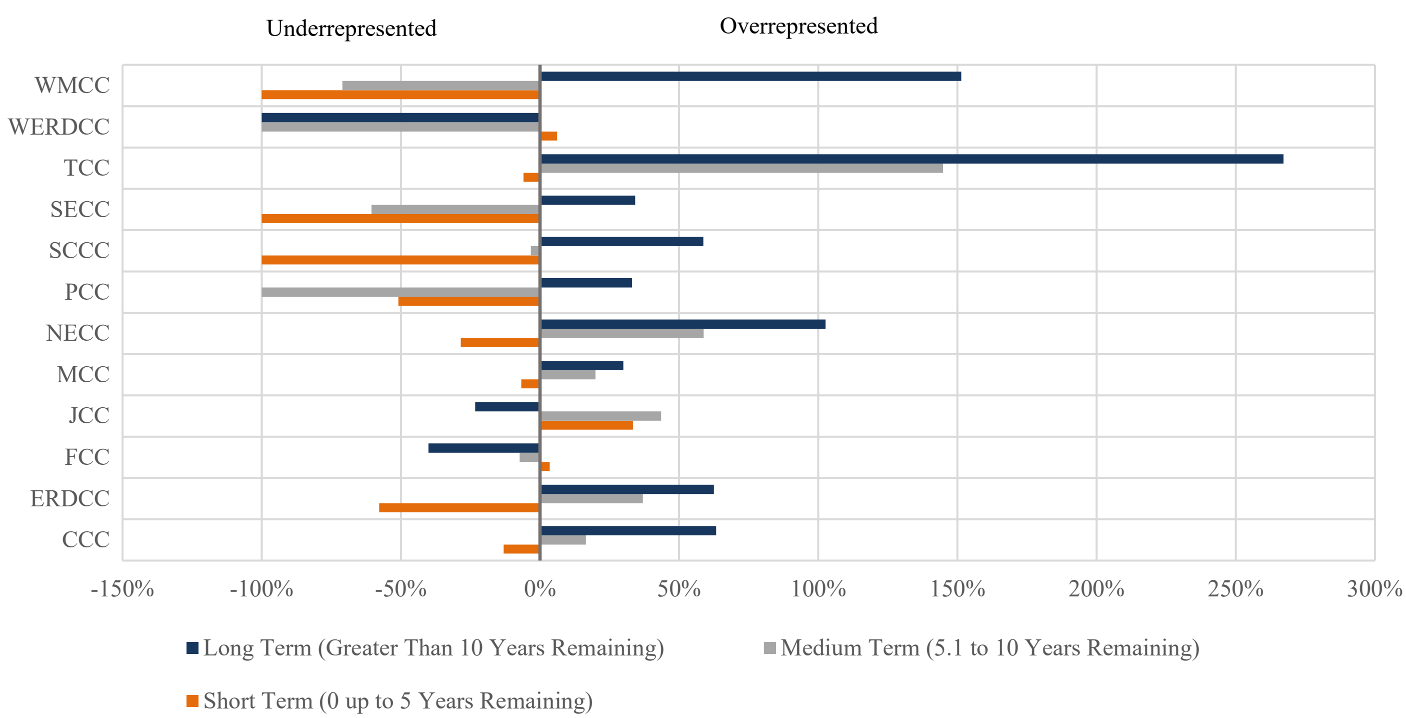
Long-term offenders are overrepresented in MVE enrollment relative to institution populations

An analysis of the offenders employed by the program determined the high number of long-term offenders in the program is not only due to the placement of program facilities in institutions with high populations of long-term offenders (see section 2.1). Rather, MVE hiring practices have resulted in the overrepresentation of long-term offenders in the institutions where MVE facilities are located. Conversely, short-term offenders in those institutions are underrepresented.

To evaluate the representation of MVE offenders in MVE institutions against the general populations of those institutions, we utilized the expected remaining sentence years by offender information provided by the DOC. For each institution, we determined the percentage of the institution's offender population expected to be released within the next 5 years (short term), the percentage expected to be released in more than 5 years up to 10 years (medium term), and the percentage expected to be released in more than 10 years (long term) to establish each institution's base percentage. We then determined the percentage of short-term offenders, medium-term offenders, and long-term offenders employed by the institution's MVE program facility or facilities. We then compared each institutions short-term, medium-term, and long-term base percentages to the short-term, medium-term, and long-term percentages for the offenders employed through the program, and determined the percentage difference between the program's percentages and the base percentages. The result of this evaluation is presented in Figure 10.

Offenders are considered overrepresented when the percentage of offenders employed by the program is greater than the percentage of similar offenders in the institution as a whole. An overrepresented percentage of 100 percent would represent an institution in which the number of offenders employed by an MVE facility are more than double the number of that type of offender in the general population of that particular institution. Offenders are considered underrepresented when the percentage of offenders employed by the program is less than the percentage of similar offenders in the institution as a whole. A percentage of negative 100 percent would indicate the MVE facility does not employ any of the population of that type of offender.

Figure 10: Percentage of program employment representation compared to offender general population.



Source: Prepared by the SAO using institution and offender expected release data provided by the DOC.

Based on Figure 10, the long term offenders are overrepresented in 9 of the 12 institutions with program facilities, and are significantly overrepresented (more than 50 percent) in 6 of the 12 institutions with program facilities. Short term offenders are not significantly overrepresented in any facility. Conversely, the short-term offenders are underrepresented in 9 of the 12 institutions (75 percent). The short term offender population is significantly underrepresented (more than negative 50 percent) in 5 of 12 institutions with program facilities. In 3 of those facilities (SECC, SCCC, and WMCC) the short-term offender population is 100 percent underrepresented, meaning short-term offenders are not used at all for program operations even though these 3 facilities employ a total of 134 offenders. Long-term offenders are significantly underrepresented in 1 of the 12 facilities. This is a result of that facility employing 5 offenders out of the 673 offenders in the facility, and 94 percent of the 673 offenders are short-term offenders.

Majority of program facilities with no openings for offenders

According to DOC officials, 21 of the 22 program facilities (95 percent) were at full capacity, as of June 30, 2021, with the WERDCC clothing facility as the only program facility that was not fully staffed with offenders.

As a result, no positions were available for short-term offenders in the majority of program facilities, and fewer positions will become available in the near future due to the overrepresentation of long-term offenders in the program.

Program personnel indicated while they use the offender's remaining expected sentence years to exclude offenders for remaining sentences that are too short, they do not use the expected remaining years of sentence to exclude offenders for remaining sentences that are too long. Program personnel indicated it takes several months to learn new skills, so it is inefficient to hire offenders with shorter expected remaining years of sentence. Additionally, DOC officials and program personnel indicated offenders with longer remaining expected years of sentence are valuable to the program because there is less turnover with those offenders, and they can be available to train newly hired offenders.

Conclusion

Program personnel have favored long-term offenders with their hiring practices, reducing available positions for those offenders expected to be released in the near future. The majority of the program facilities are also at full-offender employment, further reducing the opportunities for short-term offenders to be employed with the program. Favoring long-term offenders is not consistent with the program's statutory purpose.

2.3 Analysis of industries and skills offered by the program is needed

DOC officials have not performed an analysis of industry demand projections to ensure the program aligns with the skills that are in demand by the private sector. As a result, our analysis of industry projections indicates the industries currently being trained in the program are projected to decline by an average of 12 percent over the next decade. An analysis of the skills being trained in the program is needed to ensure the effectiveness of the program in achieving its statutory purpose. As of June 30, 2021, the DOC operated 7 general industries[16] within the 12 institutions.

[16] These general industries are clothing, consumables, furniture, laundry, license and engraving, metal, and print.

Job skills taught are in industries expected to decline in demand

According to data from the Missouri Economic Research and Information Center (MERIC),[17] 64 percent of offenders hired by the program are being trained in industries projected to have declining demand, including 28 percent of enrollees being trained in apparel manufacturing, which is projected to employ 43 percent fewer individuals over the next decade (the fastest declining industry in terms of individuals employed, according to the MERIC projections). These projections forecast the expected increase or decrease in the number of individuals employed across 194 industries between 2020 and 2030.[18]

We performed an analysis to determine the projected growth or decline for each facility based on the corresponding MERIC data. We then performed a weighted-average calculation based on each facility's percentage of the total offender labor costs for the year ended June 30, 2021, to determine the overall projected growth or decline of the program. See Figure 11 for additional information. If operations remain unchanged, the number of jobs in fields in which offenders are currently training are expected to decrease by a weighted average of approximately 12 percent[19] over the next 10 years.

Section 217.560(1), RSMo, states the purpose of the program includes the training and employment of offenders in such job skills and tasks as will afford them the most favorable opportunities practicable for gainful employment upon discharge from the department. DOC officials indicated the current administration personnel are new to their roles with the program, and the industries selected for the program were chosen many years ago and no current industry analysis has been performed. In addition, industry input is a significant reason industry representatives are required by statute to be included on the Advisory Board. As discussed in MAR finding number 1.1, a functioning Advisory Board that includes all of the 6 required members representing external employment industries would provide DOC officials with additional industry employment perspectives.

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[17] MERIC is the research division of the Missouri Department of Higher Education and Workforce Development and was formed in 2001. MERIC provides analyses of the state's economic trends, targeted industries, and labor markets to policymakers and the public.

[18] Projections can be found at <https://meric.mo.gov/industry/long-term-projections>, accessed on December 15, 2022.

[19] Average is weighted using the percentage of total offender labor costs for each industry.

Figure 11: Comparison of program job skills taught to industry employment projections

Program Factory	Industry Projections 2020-2030	Trending Projection	MERIC Description	Percentage of Total Offender Labor Costs
JCCC Clothing	-43%	Decline	Apparel Manufacturing	13%
FCC Clothing	-43%	Decline	Apparel Manufacturing	5%
CCC Clothing	-43%	Decline	Apparel Manufacturing	6%
MECC Clothing	-43%	Decline	Apparel Manufacturing	3%
TCC Shoe	-43%	Decline	Apparel Manufacturing	1%
MCC Print	-19%	Decline	Printing and Related Support Activities	3%
JCCC Cartridge Recycling	-19%	Decline	Printing and Related Support Activities	1%
MCC Laundry	-7%	Decline	Dry-cleaning and Laundry Services	19%
FCC Laundry	-7%	Decline	Dry-cleaning and Laundry Services	5%
JCCC License Plate	-7%	Decline	Alumina and Aluminum Production	5%
JCCC Sign	-7%	Decline	Alumina and Aluminum Production	1%
PCC Tube Bending	-3%	Decline	Product Manufacturing from Purchased Steel	3%
JCCC Furniture	10%	Growth	Furniture and Related Product Manufacturing	6%
SECC Furniture	10%	Growth	Furniture and Related Product Manufacturing	6%
SCCC Furniture Restoration	10%	Growth	Furniture and Related Product Manufacturing	4%
TCC Chair	10%	Growth	Furniture and Related Product Manufacturing	2%
NECC Office Systems	10%	Growth	Furniture and Related Product Manufacturing	4%
JCCC Graphic Arts	7%	Growth	Specialized Design Services	2%
MCC Metal	4%	Growth	Fabricated Metal Product Manufacturing	5%
JCCC Engraving	4%	Growth	Manufacturing	2%
WMCC Consumbles	4%	Growth	Manufacturing	1%
ERDCC Chemical	2%	Growth	Chemical Manufacturing	3%
Weighted MVE Average	-12%	Decline		

Source: Prepared by the SAO using MERIC long-term industry projections and DOC-provided institutional financial and offender information.

Conclusion

Taking steps to help ensure the jobs and skills for which offenders are receiving training are in demand by the private sector would contribute towards the program fulfilling its statutory purpose. In addition, monitoring the forecasted growth (or decline) in demand for employees in the related industries and job skills taught to offenders would provide additional guidance to DOC officials when selecting job skills for the program. To the extent possible, concentrating short term offenders in the industries with the most significant forecasted growth in demand offered by the program would better align with the program's statutory purpose.

Overall Conclusion

DOC officials have focused program access and hiring decisions on long-term offenders and have taught skills in industries that are projected to employ fewer workers in the near future. These programmatic decisions have not been consistent with the program's statutory purpose to train and employ offenders in favorable opportunities for gainful employment upon discharge from incarceration.

Recommendations

We recommend the DOC:

2.1 Prepare an analysis to determine the preferred locations of program facilities and take steps to begin planning how those location goals can be accomplished. Ensure future analyses to determine the location of program facilities are documented and the methodology used includes the criteria outlined in state law, and obtain input from the Advisory Board prior to making final decisions.

2.2 Develop hiring practices that place an increased emphasis on employing offenders with fewer years remaining on their sentences.

2.3 Periodically review the job skills included in the program, and ensure they align with job market projections. In addition, ensure the Advisory Board is included in the decision making process as it relates to job skills being offered.

Auditee Response

The department's written response indicates it disagrees with these recommendations. The department's full response is included at Appendix A.

Auditor's Comment

The department's response to recommendation 2.1 and 2.2 does not refute any of the facts presented in the report. However, the department's response makes the argument that the program is in compliance with its statutory goal and purpose because 96 percent of all offenders are eventually released from custody, and therefore, the average years of remaining sentence of MVE enrollees should not be a significant consideration in the department's enrollment decision-making process. However, due to the low portion of offender population enrolled in the program, utilizing fewer long term offenders would help maximize the number of offenders receiving training, and be more consistent with the program's statutory purpose.

The department's response to recommendation 2.3 argues the soft skills learned through the MVE program are transferable to the job market generally. The report does not dispute this, but recommends the department ensure the hard skills being trained in the program align with job market projections.

3. Improvements Needed in Cost Tracking and Product Pricing Processes

Current procedures to track manufacturing costs and allocate indirect expenses are not adequate and do not provide administrators adequate cost information regarding facility locations or allow for informed programmatic decisions. In addition, incomplete cost information has resulted in product pricing that does not ensure amounts charged for products adequately cover the costs for those products. MVE activities are self-sustaining and tracked in a proprietary fund[20] that is used for government activities that involve business-like interactions. As such, appropriate tracking of costs to ensure the revenue generated is sufficient to cover fund expenditures is necessary. Accurate cost information will also allow management to make informed decisions regarding the program.

The program's expenses can be categorized into two groups: direct and indirect. Direct expenses are the costs incurred for manufacturing the item for sale or performing the service. These expenses occur at all 22 program facilities and include costs such as offender labor, materials, and freight. Indirect expenses are the costs incurred to manage the program that are not directly involved in manufacturing a product or performing a service, and are incurred in the program's central offices and warehouses. Indirect expenses include costs such as administrative wages and salaries, benefits, and operating supplies.

The administration function of the program generates minimal revenue and relies on the profit centers to cover the indirect expenses. Based on DOC records, during the year ending June 30, 2021, the administrative function generated $93,901 in revenue and spent $4,623,876 on administrative expenses. These expenses represent indirect overhead costs.

3.1 Indirect expenses not allocated to profit centers

The DOC does not allocate program indirect overhead expenses to the profit centers, or subsequently to the individual program facilities. Historically, indirect overhead expenses have been approximately 21 percent of total expenses. As a result of not allocating these expenses, financial analyses regarding the economic viability of the profit centers and facilities are incomplete and do not accurately reflect program activity. Ultimately, not allocating all expenses to profit centers understates program costs at the profit center and facility level, and results in pricing and product decisions being made with incomplete information.

[20] Proprietary funds are used to account for business-like activities of the government, such as the MVE program, and are generally financed by self-generating revenues. The Working Capital Revolving Fund (WCRF) is the proprietary fund used to account for MVE program activities.

We performed an allocation of the program's indirect overhead to the profit centers and then to the individual program facilities.[21] Performing this allocation allowed us to analyze the effects of DOC officials not allocating indirect overhead.

Indirect overhead expenditures are significant

Indirect overhead expenses represent significant expenses for the profit centers. Based on DOC data, from 2017 to 2021, indirect overhead expenses averaged $5.7 million annually and represented approximately 21 percent of total expenses.

See Appendix D for the amount of indirect overhead expenses and the percentage of indirect overhead to total expenses by profit center by year for the 5 years ending June 30, 2021.

DOC officials and program administrators not alerted to the losses

Since indirect overhead is not allocated, DOC officials only report the operating profit or loss for the profit centers and program facilities.[22] As a result, DOC officials and program personnel are unaware which activities are actually generating a profit or a loss. To determine a more accurate picture of the profit or loss of each profit center, we allocated indirect overhead costs to each profit center and then recalculated the profit or loss for each profit center.

As shown in Figure 12, allocating indirect expenses has a significant impact on the financial performance of the profit centers. For example, based on DOC records, the Print profit center reported an operating profit each year for fiscal years 2019, 2020, and 2021; however, after our allocation of indirect overhead costs, the Print profit center incurred a loss in fiscal years 2020 and 2021. DOC officials indicated they had not seen the true profit/loss calculated for any of the profit centers or the individual program facilities. As a result, program administrators have not had an accurate reflection of the financial performance of individual facilities or profit centers. When asked, DOC officials did not provide an explanation for why they have not historically allocated indirect costs for the program.

Allocating indirect overhead is a core cost accounting function, and is necessary to approximate full costs for the program to determine its break-even point in sales. GFOA guidance recommends "governments allocate their indirect costs," and also states, "certain important management objectives (measuring the cost of government services, establishing fees and charges,

[21] We used the number of offenders in each of the program facilities from DOC-provided annual reports for each fiscal year and used each facility's percentage of the total as the base to allocate indirect overhead.

[22] Operating profit is calculated by subtracting direct expenses from sales.

charging back the cost of internal services. . .) can be served by allocating indirect costs."[23]

Allocating indirect overhead and determining a more accurate calculation of profit or loss by profit center and program facility would provide additional guidance to DOC officials when making programmatic financial and pricing decisions, and would help to ensure program revenue generated is sufficient to cover expenditures, as would be typical of a proprietary fund.

Figure 12: Production centers reported operating profit/(loss) vs. profit/(loss) after allocation of indirect overhead, 3 years ended June 30, 2021

	2021		2020		2019	
Cost/Profit Centers	Reported Profit/(Loss)	After Allocation Profit/(Loss)	Reported Profit/(Loss)	After Allocation Profit/(Loss)	Reported Profit/(Loss)	After Allocation Profit/(Loss)
Overhead Cost Centers	$(4,234,309)	0	(7,078,611)	0	(6,197,283)	0
Consumables	772,924	526,931	917,666	601,647	901,362	597,431
Clothing	814,915	(271,165)	997,458	(1,064,700)	1,238,791	(325,563)
Furniture	(291,391)	(1,488,864)	557,427	(883,405)	1,274,929	112,837
Laundry	(913,078)	(1,757,807)	539,868	(1,447,302)	504,322	(1,542,746)
License & Engraving	1,042,530	531,981	3,845,325	3,213,287	4,552,945	4,070,230
Metal	(354,528)	(855,796)	(135,944)	(730,489)	20,587	(493,415)
Print	51,476	(92,407)	173,366	(30,172)	333,435	114,424
Tire Recycling[1]	(54,774)	0	N/A	N/A	N/A	N/A
Real Estate[2]	(240,892)	0	(157,689)	0	(95,892)	0
Totals	$(3,407,127)	$(3,407,127)	$(341,134)	$(341,134)	$2,533,196	$2,533,196

[1] According to a DOC official, the Tire Recycling Center is closed and not expected to generate additional revenue. Therefore, it should be treated as indirect and allocated to the Profit Centers.

[2] According to a DOC official, the Real Estate Center captures lease revenue and maintenance/custodial expenditures. Therefore, these costs should be treated as indirect costs and allocated to the Profit Centers.

Source: Prepared by the SAO using financial information provided by the DOC.

3.2 Cost information not fully integrated into pricing decisions

DOC officials have not developed procedures to include complete program costs into pricing and product decisions, including both direct and indirect overhead costs. DOC officials use an estimated target overhead ratio range of 20 to 40 percent when making program decisions related to pricing and profitability. This range, which includes both direct and indirect overhead costs, is utilized by DOC officials and program personnel to evaluate if a particular good or service can be profitable at an intended price. However, based on our analysis of program costs, this estimated target overhead ratio

[23] Best Practices, Indirect Cost Allocation, GFOA, 2014, <https://www.gfoa.org/materials/indirect-cost-allocation>, accessed on December 21, 2022.

range has been understated. As a result, program decisions related to pricing and production have resulted in program revenues being insufficient to cover program expenses, resulting in recurring program losses. The program has incurred a loss for the past 3 fiscal years (2020, 2021, and 2022). When asked, DOC officials could not provide any information about how this estimated overhead ratio range had been calculated.

Figure 13: Program losses by fiscal year

Fiscal Year	2022	2021	2020
Revenue	$ 21,911,825	20,414,252	30,346,846
Cost of Goods Sold	(11,363,649)	(11,499,299)	(14,075,649)
Gross Profit Margin	10,548,176	8,914,953	16,271,197
Expenses	(11,922,380)	(12,322,080)	(16,612,334)
Profit / (Loss)	$ (1,374,204)	(3,407,127)	(341,137)

Source: Prepared by the SAO using the program's Annual Reports for fiscal years 2020 through 2022, provided by the DOC.

Overhead rate analysis

To analyze the sufficiency of the estimated overhead ratio range in use by the DOC, we performed an analysis at the program level to determine the overhead ratio needed to break even with the expenses incurred during fiscal year 2021 in Figure 14.

Based on Figure 14, as a whole, the program needed to average an overhead ratio of 52 percent in fiscal year 2021 to reach its break-even point. This overhead ratio exceeds the DOC estimated overhead ratio range of 20 to 40 percent.

Figure 14: Overhead ratio needed to break even at the program level, year ended June 30, 2021

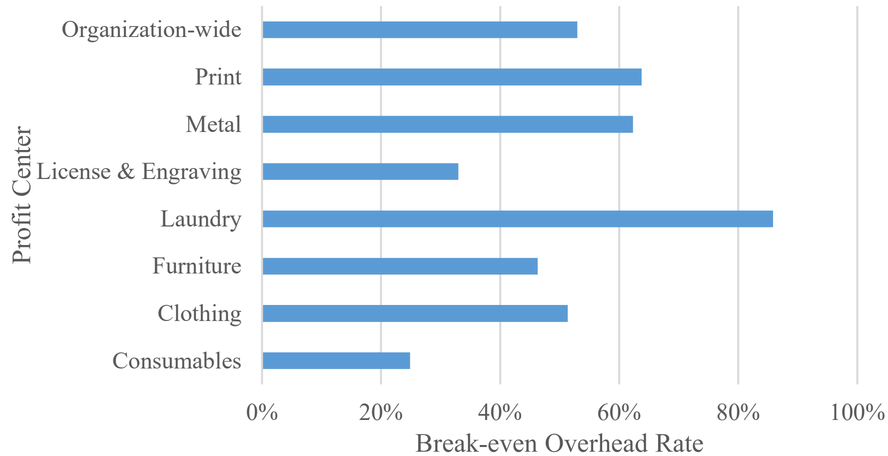
Total Direct Costs[1]	$ 11,499,299
Total Overhead Costs[2]	$ 12,321,372
Sales Needed to Break Even[3]	$ 23,820,671
Overhead Ratio Needed to Break Even[4]	52%

[1] Consists of costs of goods sold, offender labor costs, and adjustments.
[2] Consists of all remaining expenses besides total direct costs. These include civilian salaries, wages, and benefits; and operating supplies.
[3] Consists of direct costs and total overhead.
[4] Consists of total overhead costs divided by sales needed to break even.

Source: Prepared by the SAO using the Income Statement Variance Analysis for fiscal year 2021, provided by the DOC.

The various profit centers require different levels of overhead based on the inputs required to produce goods or services. To evaluate the overhead rate necessary for each profit center to break-even, we performed an analysis of revenues and costs for each of the 7 profit centers using data from fiscal years 2017 to 2021. The methodology used and the detailed analysis for the year ending June 30, 2021, is in Appendix E. This analysis used the allocation of indirect overhead expenses discussed in section 3.1. The results of this analysis are shown in Figure 15.

Figure 15: Average overhead ratio needed to break even, by profit center and organization-wide, fiscal years 2017 through 2021



Source: Prepared by the SAO using the Annual Reports and Summarized Profit and Loss Reports from 2017 through 2021, provided by the DOC.

DOC-provided overhead rate is not economical for the majority of profit centers

As shown in Figure 15, the DOC target overhead rate range of 20 to 40 percent is not sufficient for 5 of the 7 profit centers (71 percent) for the 5-year period from July 1, 2016, through June 30, 2021.

We continued our analysis to determine the overhead rate needed to break even at the facility level for fiscal year 2021. The methodology used and the detailed analysis for the year ending June 30, 2021, is in Appendix F. Based on this analysis, 14 of the 22 program facilities (64 percent) required an overhead ratio greater than the DOC-provided ratio range to break even, while 8 of the 22 program facilities' overhead rates (36 percent) fell within the DOC provided range.

Revised pricing methodology continues to not cover all costs

The DOC revised the methodology used to estimate the costs of producing an item or service in April 2022. The revised methodology was intended to more accurately reflect the costs associated with producing items by using direct materials and labor as the basis for the calculation. The revised methodology also included a 20 percent general markup in an attempt to ensure prices would cover all costs. However, based on our analysis of the new methodology, these calculations continue to exclude some direct and indirect costs of production, and have resulted in revenues insufficient to cover all program costs. The revised pricing methodology was in place for the entirety of fiscal year 2022, and contributed to the $1.4 million program loss for fiscal year 2022.

Conclusion

Using an overhead rate that is less than what is needed to break even results in program personnel selling goods or performing services believing the costs are being recovered by the selling price, when in reality, the transaction results in a loss to the program. This contributed to profit center losses that could have been avoided (see section 3.1, Figure 12). Ensuring all program costs are considered during the product pricing process would help ensure the program is consistently profitable.

Recommendations

We recommend the DOC:

3.1 Design an indirect overhead allocation method, allocate indirect costs, monitor the results, and make changes to the allocation methodology as necessary.

3.2 Ensure all program costs are considered when making product and service decisions and are integrated into the product pricing process.

Auditee Response

The department's written response indicates it agrees with these recommendations. The department's full response is included at Appendix A.

4. Financial Practices and Controls

DOC officials need to improve financial practices and controls of program operations. Program officials have not performed periodic comparisons of program selling prices to current market prices, the program has accumulated significant levels of raw materials on hand, and sales forecasts have not been used to budget and plan program operations.

4.1 DOC does not perform regular market price comparisons

DOC officials have not established procedures to perform a periodic comparison of program selling prices to current market prices to ensure compliance with state law. Program personnel indicated the current practice is to perform a comparison to market price for products when the product is initially offered and on an as-needed basis, such as when a raw input cost significantly increases due to supply chain disruptions or when market prices change due to external factors. The market price is then documented on the specific item's pricing sheet. MVE program personnel do not document their process for determining the market price, and program policies and procedures do not require a periodic comparison to market price.

Due to the lack of established procedures regarding selling prices, DOC officials do not have assurance the prices charged by the program are comparable to current market prices. Further, Section 217.575(4), RSMo, states, "cost shall not be fixed at more than the market price for like goods and services." Therefore, charging a price above the market price does not comply with state law.

We reviewed pricing for a selection of program products and compared the products' prices to market prices for comparable items. Several products were priced above market prices, while other products were priced below market prices. In addition, we were not able to obtain reasonable comparisons for all items selected for testing, and acknowledge that a comparable market item may not exist for all products manufactured by the MVE. Regular comparisons of active product prices would help provide assurance program prices are consistent with state law. Additionally, since state law[24] requires agencies to purchase goods and services from the MVE unless a waiver certificate is obtained, efforts to ensure prices are not above market and are in compliance with state law are necessary to ensure state funds are used appropriately.

When asked, DOC officials could not provide information as to why the retail price is not compared to the market price regularly, or why price comparisons are not documented.

4.2 Excessive raw materials on hand

DOC officials have not established procedures for monitoring levels of raw materials on hand and have not established benchmarks for the amount of raw materials necessary to be on hand for each type of industry. As a result, the DOC has accumulated significant quantities of raw materials on hand, and had more than 100 days' worth of raw materials on hand in the 20 of the 22 facilities (91 percent) as of June 30, 2021.

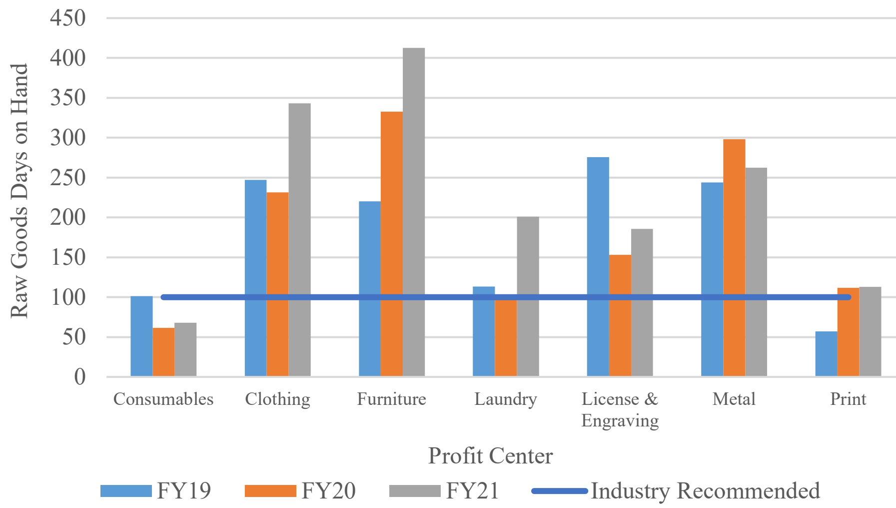
Program personnel primarily used prior year sales to determine the amount of raw materials to purchase, and did not always consider the amount of raw materials currently on hand. With gross revenues decreasing by approximately 30 percent in total from 2019 through 2021, the use of prior year's sales to guide raw material budgets has contributed to the excessive raw materials on hand. Figure 16 shows the days on hand of raw materials, by profit center, by year for fiscal year (FY) 2019 through 2021.

A DOC official indicated the current value of raw materials may include some obsolete raw materials that should be removed, though they could not provide an estimate of the amount of obsolete raw materials. Program personnel indicated procedures were changed during April 2022 to include a review of the current quantity of on-hand raw materials when deciding to purchase additional raw materials going forward.

Allocating program resources towards the accumulation of raw materials is not an efficient use of program resources. Establishing a benchmark for the appropriate amount of raw materials on hand, and ensuring raw materials are ordered when needed would allow the DOC to use program revenues more efficiently.

[24] Section 217.575.2, RSMo.

Figure 16: Days on hand raw materials, by profit center, by year, fiscal years 2019, 2020, and 2021



Source: Prepared by the SAO using financial information provided by the DOC.

4.3 DOC does not forecast sales

DOC officials have not established a process to forecast program sales at the facility or profit center level. DOC officials have indicated they rely on the prior year's sales as their current year's sales forecast. As a result, DOC officials lack comprehensive financial information to make proactive program decisions. For example, sales forecasting would provide DOC officials with more financial information to estimate the proper overhead ratio (see MAR finding number 3.2) and would provide facility administrators with additional information when making raw materials purchasing decisions (see section 4.2).

The GFOA recommends "governments at all levels forecast major revenues." Additionally, the GFOA states, "The purpose of the financial forecast is to evaluate current and future fiscal conditions to guide policy and programmatic decisions."[25] Additionally, forecasting sales at the facility or profit center level is an integral part of determining the overhead ratio needed to break even and other ratios used in the pricing process.

DOC officials indicated while revenue forecasting at the program level is performed as part of the budget process, sales forecasting at the facility level has not been performed in the past, and the officials have not considered forecasting sales. Preparing such sales forecasts would provide the DOC and program officials with additional information with which to base

[25] Best Practices, Financial Forecasting in the Budget Preparation Process, GFOA, 2014, <https://www.gfoa.org/materials/financial-forecasting-in-the-budget-preparation-process>, accessed on December 21, 2022.

programmatic and pricing decisions. In addition, the monitoring of historical revenue trends would help provide a basis for any revenue forecasts.

Recommendations

We recommend the DOC:

4.1 Establish procedures to periodically perform a documented comparison of the selling prices of the goods provided or services performed to the market prices to ensure MVE prices are not above market prices as required by state law. Regarding products for which a reasonable comparison cannot be obtained, the MVE should compare costs to produce those products with the costs of other products for which a comparison is available and apply a similar gross margin to the products for which no comparison is available.

4.2 Established procedures for monitoring levels of raw materials on hand, including establishing benchmarks for the amount of raw materials necessary. In addition, determine if obsolete raw materials exist and take the necessary steps to remove the obsolete raw materials from inventory.

4.3 Prepare a documented sales forecast. Use the sales forecast to better project expense ratios and for other capital and logistical considerations.

Auditee Response

The department's written response indicates it agrees with these recommendations. The department's full response is included at Appendix A.

Michael L. Parson
Governor

Anne L. Precythe
Director

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State of Missouri
DEPARTMENT OF CORRECTIONS
"Improving Lives for Safer Communities"

July 5, 2023

Honorable Scott Fitzpatrick
Missouri State Auditor
Jefferson City, Missouri

We have reviewed the findings from your office's audit of the Missouri Vocational Enterprise Program. Below you will find our responses to the audit findings.

1.1 The Department of Corrections (Department) should ensure the advisory board vacancies are filled and meetings are held in accordance with state law.

Department's Response: MODOC Response: Agree. The Department agrees with the recommendation.

1.2 The Department should develop baseline performance measures to be used for future evaluation of program success. Work with DORS personnel as necessary to establish appropriate measures and evaluate future program performance. Consider using guidance provided by the GFOA when developing the program performance measures.

Department's Response: Disagree. The Missouri Department of Corrections (MODOC) and Missouri Vocational Enterprises (MVE) have performance measures that are included in the annual budget book. These measures are available online and to the general public.

1.3 The Department should develop a strategic planning process for the program and ensure the plan incorporates appropriate performance measures and performance goals, is considered when making operational decisions, and is periodically reviewed and updated as necessary. Consider using guidance provided by the GFOA when developing the strategic planning process.

Department's Response: MODOC Response: Partially Agree. While the Missouri Vocational Enterprises (MVE) does not have a strategic plan specific to their operations, the Missouri Department of Corrections (MODOC) does have a strategic plan and utilizes that plan when making operational/management decisions. Additionally, MVE does have performance measures that are included in the annual budget book. These measures are available online and to the general public.

2.1 The Department should prepare an analysis to determine the preferred locations of program facilities and take steps to begin planning how those location goals can be accomplished. Ensure future analyses to determine the location of program facilities are documented and the methodology used includes the criteria outlined in state law, and obtain input from the Advisory Board prior to making final decisions.

Department's Response: Disagree. The department has and will continue to ensure that factory location determinations are made within the primary goals stated in Section 217.560 RSMo. Additionally, MODOC believes we are in compliance with statutory requirements to provide training and employment for offenders for gainful employment upon release. Ninety six percent of all offenders in MODOC custody are released back into the community. As such, it is imperative that all offenders are offered educational and employment opportunities, regardless of location or security level. In addition to MVE factories and the employment opportunities therein, offenders can also obtain various certifications and technical education that will facilitate employment. Additionally, a 12 year minimum sentence is all that is required to be housed in a maximum security facility. Some apprenticeships and certifications can take more than 3 years to complete. Ultimately, sentence length does not determine an offender's appropriateness to a specific employment opportunity unless they cannot be properly trained in the time that they have remaining on their sentence. These educational and employment opportunities vary from facility to facility. It should be noted that three of the facilities highlighted in the auditor's analysis are Reception and Diagnostic Centers (R&D) and are designed to receive offenders from the county jail to complete the intake process. Once complete, the offenders are ultimately reassigned to another facility for long term housing. These facilities would not be appropriate for MVE operations.

2.2 The Department should develop hiring practices that place an increased emphasis on employing offenders with fewer years remaining on their sentences.

Department's Response: Disagree. Ninety six percent of all offenders in MODOC custody are released back into the community. As such, it is imperative that all offenders are offered educational and employment opportunities, regardless of location or security level. In addition to MVE factories and the employment opportunities therein, offenders can also obtain various certifications and technical education that will facilitate employment. Additionally, an 8 year minimum sentence is all that is required to be housed in a maximum security facility. Some apprenticeships and certifications can take more than 3 years to complete. Ultimately, sentence length does not determine an offender's appropriateness to a specific employment opportunity unless they cannot be properly trained in the time that they have remaining on their sentence. These educational and employment opportunities vary from facility to facility.

2.3 The Department should periodically review the job skills included in the program, and ensure they align with job market projections. In addition, ensure the Advisory Board is included in the decision making process as it relates to job skills being offered.

Department's Response: Disagree. The Missouri Department of Corrections and MVE utilize Department of Labor apprenticeship programs and Bureau of Labor statistics to build programs for offenders. In addition to the hard skills being learned by offenders, offenders who obtain MVE employment are also learning an important set of soft skills. These soft skills are transferrable to any job in the community and increase an offender's likelihood of being successful in the work force. The ability to establish routines, arrive to work on time, give and receive feedback, work within teams, and growth of work ethic are fundamental employment skills that MVE provides to all offenders who work therein regardless of the occupation.

3.1 The Department should design an indirect overhead allocation method, allocate indirect costs, monitor the results, and make changes to the allocation methodology as necessary.

Department's Response: Agree. Currently, many MVE financial processes are completed manually, which carries numerous limitations. Several years ago, the Department and MVE identified the limitations of the manual processes and began the process of procuring a system that would have accomplished several recommendations contained in this audit. However, shortly thereafter, the State of Missouri began planning for a statewide ERP system, to include MVE and its operations. MVE has, since that time, awaited the arrival of the statewide ERP system, which is currently being developed. As such, the Department and MVE are currently in the process of working with the current vendor on the development and implementation of the new state-wide ERP system. It is believed and anticipated that this system, and the additional modules that will be included for MVE, will allow for increased automation and the successful implementation of this recommendation.

3.2 The Department should ensure all program costs are considered when making product and service decisions and are integrated into the product pricing process.

Department's Response: Agree. Currently, many MVE financial processes are completed manually, which carries numerous limitations. Several years ago, the Department and MVE identified the limitations of the manual processes and began the process of procuring a system that would have accomplished several recommendations contained in this audit. However, shortly thereafter, the State of Missouri began planning for a statewide ERP system, to include MVE and its operations. MVE has, since that time, awaited the arrival of the statewide ERP system, which is currently being developed. As such, the Department and MVE are currently in the process of working with the current vendor on the development and implementation of the new state-wide ERP system. It is believed and anticipated that this system, and the additional modules that will be included for MVE, will allow for increased automation and the successful implementation of this recommendation.

4.1 The Department should establish procedures to periodically perform a documented comparison of the selling prices of the goods provided or services performed to the market prices to ensure MVE prices are not above market prices as required by state law. Regarding products for which a reasonable comparison cannot be

obtained, MVE should compare costs to produce those products with the costs of other products for which a comparison is available and apply a similar gross margin to the products for which no comparison is available.

Department's Response: Agree. Currently, many MVE financial processes are completed manually, which carries numerous limitations. Several years ago, the Department and MVE identified the limitations of the manual processes and began the process of procuring a system that would have accomplished several recommendations contained in this audit. However, shortly thereafter, the State of Missouri began planning for a statewide ERP system, to include MVE and its operations. MVE has, since that time, awaited the arrival of the statewide ERP system, which is currently being developed. As such, the Department and MVE are currently in the process of working with the current vendor on the development and implementation of the new state-wide ERP system. It is believed and anticipated that this system, and the additional modules that will be included for MVE, will allow for increased automation and the successful implementation of this recommendation.

4.2 The Department should established procedures for monitoring levels of raw materials on hand, including establishing benchmarks for the amount of raw materials necessary. In addition, determine if obsolete raw materials exist and take the necessary steps to remove the obsolete raw materials from inventory.

Department's Response: Agree. Currently, many MVE financial processes are completed manually, which carries numerous limitations. Several years ago, the Department and MVE identified the limitations of the manual processes and began the process of procuring a system that would have accomplished several recommendations contained in this audit. However, shortly thereafter, the State of Missouri began planning for a statewide ERP system, to include MVE and its operations. MVE has, since that time, awaited the arrival of the statewide ERP system, which is currently being developed. As such, the Department and MVE are currently in the process of working with the current vendor on the development and implementation of the new state-wide ERP system. It is believed and anticipated that this system, and the additional modules that will be included for MVE, will allow for increased automation and the successful implementation of this recommendation.

4.3 The Department should prepare a documented sales forecast. Use the sales forecast to better project expense ratios and for other capital and logistical considerations.

Department's Response: Agree. Currently, many MVE financial processes are completed manually, which carries numerous limitations. Several years ago, the Department and MVE identified the limitations of the manual processes and began the process of procuring a system that would have accomplished several recommendations contained in this audit. However, shortly thereafter, the State of Missouri began planning for a statewide ERP system, to include MVE and its operations. MVE has, since that time, awaited the arrival of the statewide ERP system, which is currently being developed. As such, the Department and MVE are currently in the process of working with the current vendor on the development and implementation of the new state-wide ERP system. It is believed and anticipated that this system, and the additional modules that will be included for MVE, will allow for increased automation and the successful implementation of this recommendation.

Sincerely,

Valarie Moseley, Director
Division of Offender Rehabilitative Services

Cc: Anne Precythe, Director
Matt Sturm, Deputy Director

The schedule below provides program receipts and disbursements for the 5 years ended June 30, 2021. This information is from Department of Corrections records and is presented for informational purposes.

		2021	2020	2019	2018	2017
Revenues						
Sales	$	20,336,503	30,272,100	30,993,689	27,584,011	28,938,431
Other		77,749	74,746	228,843	466,323	509,152
Total Receipts		20,414,252	30,346,846	31,222,532	28,050,334	29,447,583
Cost of Goods Sold		(11,499,299)	(14,075,649)	(12,615,230)	(13,268,399)	(14,165,061)
Gross Margin		8,914,953	16,271,197	18,607,302	14,781,935	15,282,522
Expenses						
Salaries and Wages		(9,060,973)	(10,794,728)	(9,720,547)	(8,955,618)	(8,712,204)
Fuel and Utilities		(177,007)	(1,324,149)	(1,414,485)	(1,428,870)	(1,429,652)
Operating Supplies		(1,069,366)	(1,898,218)	(2,217,928)	(2,082,782)	(1,911,961)
Administrative Supplies		(129,072)	(203,953)	(208,048)	(197,445)	(210,647)
Other		(1,885,662)	(2,391,286)	(2,513,099)	(2,007,284)	(2,169,836)
Total Expenses		(12,322,080)	(16,612,334)	(16,074,107)	(14,671,999)	(14,434,300)
Profit / (Loss)	$	(3,407,127)	(341,137)	2,533,195	109,936	848,222

We performed an analysis for each of the 2 most recent relocations of MVE facilities. This analysis is discussed in MAR finding number 2.1; however, additional details of our analysis are documented in this appendix.

To evaluate the relocations we used 3 statutory criteria:[26] (1) the security level of the institutions (lower security level preferred), (2) population of the offenders in the institutions (larger population preferred), and (3) the physical distance of the institutions from the original institution (closer location preferred). We also used 2 additional criteria based on the program's purpose: (1) the percentage of offenders expected to be released within the next 5 years (higher percentage preferred), and (2) the average remaining expected sentence years for each institution (lower remaining years preferred).

We selected all institutions within 100 miles of the original institution location to be included in the analysis. Using this geographic limitation, there were 6 alternative locations for Relocation A, and 3 alternative locations for Relocation B. The underlying data for the relocations are included in Figures C1 and C3. We then ranked the alternative institutions with the institution selected for each of the 5 criteria for both relocation decisions. The rankings are included in Figures C2 and C4.

Relocation A involved the moving of a facility from JCCC to NECC.

Figure C1: Relocation A - Institutions Available for Relocation within 100 Miles of JCCC

Institution	Security Level	Population	Distance from JCCC (miles)	% Short Term Sentence[3]	Average Years Remaining[4]
JCCC[1]	Maximum	1,836	0	28%	36
NECC[2]	Medium	1,378	103	70%	4
MCC	Medium	1,698	72	76%	4
TCC	Minimum	727	46	97%	1
ACC	Minimum	1,032	1	91%	2
BCC	Minimum	783	57	98%	1
FRDC	Diagnostic Center	1,391	34	94%	2
MECC	Diagnostic Center	1,063	91	85%	3

[1] JCCC was the original location of the MVE facility.
[2] The NECC was the institution chosen by the MVE for the MVE factory relocation.
[3] Within our analysis we categorized all sentences between 0 and 5 years as "Short Term Sentences."
[4] "Average Years Remaining" denotes the average expected years remaining of offender sentences by institution.

Source: Prepared by the SAO using institution and offender data provided by the DOC and geographic location provided by Google Maps.

[26] Section 217.550.1, RSMo.

Figure C2: Relocation A - Ranking of Categories for Each Applicable Institution[1]

Institution	Security Level[3]	Population[4]	Distance from JCCC (miles)[5]	% Short-term Sentence[6]	Average Years Remaining[7]
NECC[2]	6	3	7	7	6
MCC	6	1	5	6	6
TCC	1	7	3	2	1
ACC	1	5	1	4	3
BCC	1	6	4	1	1
FRDC	1	2	2	3	3
MECC	1	4	6	5	5

[1] The most suitable institution for each category is shaded green and the least suitable institution for each category is shaded orange.

[2] The NECC was the institution chosen by DOC officials for the facility relocation. The remaining institutions were the alternatives we considered in our analysis.

[3] When ranking the security level, we ranked minimum and diagnostic centers as more suitable because these locations are lower security institutions and are preferred due to the nature of the offenses committed by the offenders and the logistics of establishing and operating a facility.

[4] When ranking institution populations, we ranked higher populations as providing higher value to MVE activities due to a larger potential labor population.

[5] When ranking the institutions by distance from the original JCCC location, we ranked geographically closer institutions as more suitable due to less burdensome logistics.

[6] When ranking the percentage of short-term sentences, we ranked institutions with higher percentages of short-term sentences as more suitable due to the statutory purpose of the program to rehabilitate offenders prior to them returning to society.

[7] When ranking the average years remaining, we ranked institutions with lower average remaining sentences as more suitable due to the statutory purpose of the program to rehabilitate offenders prior to them returning to society.

Source: SAO analysis.

Based on the analysis in Figure C2, with NECC ranked last in 4 of the 5 categories, the decision to relocate this facility to NECC is not supported by the established criteria.

Following is the analysis of Relocation B, which involved moving a facility from WERDCC to MECC.

Figure C3: Relocation B - Institutions Available for Relocation within 100 Miles of WERDCC

Institution	Security Level	Population	Distance from WERDCC (miles)	% Short Term Sentence[3]	Average Years Remaining[4]
WERDCC[1]	Diagnostic Center	673	0	94%	2
MECC[2]	Diagnostic Center	1,063	97	85%	3
FRDC	Diagnostic Center	1,391	54	94%	2
ACC	Minimum	1,032	85	91%	2
BCC	Minimum	783	89	98%	1

[1] WERDCC was the original location of the MVE facility.
[2] The MECC was the institution chosen by the MVE for the MVE factory relocation.
[3] Within our analysis we categorized all sentences between 0 and 5 years as "Short Term Sentences."
[4] "Average Years Remaining" denotes the average expected years remaining of offender sentences by institution.

Source: Prepared by the SAO using institution and offender data provided by the DOC and geographic location provided by Google Maps.

Figure C4: Relocation B - Ranking of Categories for Each Applicable Institution[1]

Institution	Security Level[3]	Population[4]	Distance from WERDCC (miles)[5]	% Short Term Sentence[6]	Average Years Remaining[7]
MECC[2]	N/A	2	4	4	4
FRDC	N/A	1	1	2	2
ACC	N/A	3	2	3	2
BCC	N/A	4	3	1	1

[1] The most suitable institution for each category is shaded green and the least suitable institution for each category is shaded orange.
[2] The MECC was the institution chosen by DOC officials for the facility relocation. The remaining institutions were the alternatives considered in our analysis.
[3] The security level of all Diagnostic Centers and Minimum security institutions was ranked equally due to no discernable value distinctions identified between the 2 lowest security levels. Therefore, we were unable to rank the institutions for this attribute.
[4] When ranking institution populations, we ranked higher populations as providing higher value to MVE activities due to a larger potential labor population.
[5] When ranking the institutions by distance from the original WERDCC location, we ranked geographically closer institutions as more suitable due to less burdensome logistics.
[6] When ranking the percentage of short-term sentences, we ranked institutions with higher percentages of short-term sentences as more suitable due to the statutory purpose of the program to rehabilitate offenders prior to them returning to society.
[7] When ranking the average years remaining, we ranked institutions with lower average remaining sentences as more suitable due to the statutory purpose of the program to rehabilitate offenders prior to them returning to society.

Source: SAO analysis.

Based on the analysis in Figure C4, with MECC ranked last in 3 of the 4 categories, the decision to relocate this facility to MECC is not supported by the established criteria.

Appendix D

Missouri Vocational Enterprise Program
Schedule of Indirect Overhead by Profit Center
5 Years Ended June 30, 2021

Indirect Overhead as a Percentage of Total Expenses by Fiscal Year (FY)

Profit Center	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017
Profit Center - Consumables	7.39%	8.05%	7.67%	4.50%	8.60%
Profit Center - Clothing	21.67%	28.79%	28.17%	24.62%	24.86%
Profit Center - Furniture	26.28%	24.98%	18.72%	18.45%	17.05%
Profit Center - Laundry	22.62%	30.49%	29.45%	27.63%	26.77%
Profit Center - License & Engraving	11.90%	14.92%	18.23%	15.68%	9.78%
Profit Center - Metal	23.91%	29.45%	25.61%	25.91%	21.91%
Profit Center - Print	20.29%	21.93%	20.05%	19.76%	15.65%
Program Level (1)	22.19%	23.85%	22.14%	20.04%	18.38%

(1) This is a weighted average and does not equal the average of the Profit Centers above.

Total Indirect Overhead by Profit Center by Fiscal Year (FY)

Profit Center		FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	Total Indirect Overhead by Profit Center
Profit Center - Consumables	$	(245,992)	(316,019)	(303,932)	(169,659)	(340,969)	(1,376,571)
Profit Center - Clothing		(1,086,091)	(2,062,158)	(1,564,354)	(1,306,378)	(1,204,757)	(7,223,738)
Profit Center - Furniture		(1,197,485)	(1,440,832)	(1,162,092)	(996,749)	(1,038,061)	(5,835,219)
Profit Center - Laundry		(844,737)	(1,987,170)	(2,047,069)	(1,802,632)	(1,507,840)	(8,189,448)
Profit Center - License & Engraving		(510,556)	(632,038)	(482,715)	(589,567)	(397,797)	(2,612,673)
Profit Center - Metal		(501,272)	(594,544)	(514,002)	(445,356)	(382,643)	(2,437,817)
Profit Center - Print		(143,884)	(203,538)	(219,010)	(186,625)	(174,273)	(927,330)
Total Indirect Overhead by Year	$	(4,530,017)	(7,236,299)	(6,293,174)	(5,496,966)	(5,046,340)	(28,602,796)

Appendix E

Missouri Vocational Enterprise Program
Schedule of Overhead Ratio Analysis by Profit Center
Year Ended June 30, 2021

Profit/Cost Center		Gross Revenues (1)	Direct Materials Costs (1)	Direct Labor Costs (2)	Total Direct Costs (3)	Direct Overhead Costs (4)	Indirect Overhead Allocation (5)	Total Overhead Costs (6)	Total Sales Needed to Break Even (7)	Overhead Ratio (8)	Profit/(Loss) (9)	Reported Operating Profit/(Loss) (10)
Overhead Cost Centers	$	23,170	-	(10,318)	(10,318)	(4,234,353)	-	-	-	-	-	(4,234,309)
Profit Center - Consumables		3,855,505	(2,270,929)	(54,685)	(2,325,614)	(756,968)	(245,992)	(1,002,960)	3,328,574	30%	526,931	772,924
Profit Center - Clothing		4,741,308	(2,294,566)	(241,438)	(2,536,004)	(1,390,389)	(1,086,091)	(2,476,480)	5,012,484	49%	(271,176)	814,915
Profit Center - Furniture		3,066,905	(1,774,429)	(266,201)	(2,040,630)	(1,317,666)	(1,197,485)	(2,515,151)	4,555,781	55%	(1,488,876)	(291,391)
Profit Center - Laundry		1,975,921	(194,009)	(187,785)	(381,794)	(2,507,162)	(844,737)	(3,351,899)	3,733,693	90%	(1,757,771)	(913,078)
Profit Center - License & Engraving		4,823,446	(3,027,558)	(113,496)	(3,141,054)	(639,862)	(510,556)	(1,150,418)	4,291,472	27%	531,974	1,042,530
Profit Center - Metal		1,240,457	(704,063)	(111,433)	(815,496)	(779,489)	(501,272)	(1,280,761)	2,096,257	61%	(855,800)	(354,528)
Profit Center - Print		616,809	(216,405)	(31,985)	(248,390)	(316,944)	(143,884)	(460,828)	709,218	65%	(92,409)	51,476
Cost Center - Tire Recycling (11)		-	-	-	-	(54,774)	-	-	-	-	-	(54,774)
Cost Center - Real Estate (12)		70,731	-	-	-	(240,892)	-	-	-	-	-	(240,892)
Totals	$	20,414,252	(10,481,959)	(1,017,341)	(11,499,300)	(12,238,499)	(4,530,017)	(12,238,497)	23,727,479	52%	(3,407,127)	(3,407,127)

(1) Gross Revenues and Direct Materials Costs were obtained from the program's Summarized Profit/Loss Statement for the year ending June 30, 2021, provided by DOC officials.
(2) Direct Labor Costs were obtained by allocating the total offender labor expense to the profit centers based on the number of offenders in the annual report for the year ending June 30, 2021, provided by DOC officials.
(3) Total Direct Costs is the sum of Direct Materials and Direct Labor.
(4) Direct Overhead Costs was obtained from the program's Summarized Profit/Loss Statement for the year ending June 30, 2021, provided by DOC officials, and was calculated by subtracting the offender labor costs from the direct expenses charged to each Profit/Cost Center.
(5) Indirect Overhead Allocation is the SAO calculated amount of the cost centers' Direct Overhead costs allocated to the specific profit center. The allocation was made based each profit center's proportion of the total number of offenders employed in the 7 profit centers, which was obtained from the Annual Report for the year ending June 30, 2021, provided by DOC officials.
(6) Total Overhead Costs is the sum of Direct Overhead Costs and Indirect Overhead Allocation, and only applies to the profit centers.
(7) Total Sales Needed to Break Even is the sum of the Total Direct Costs and Total Overhead Costs, shown as a positive number here, and only applies to the profit centers. This represents the level of sales needed for the profit center to break even based on the expenses incurred during the year ending June 30, 2021.
(8) Overhead Ratio is the Total Overhead Costs divided by Total Sales Needed to Break Even, shown as a positive number. This represents the average remaining margin needed after reducing direct costs from the sales price in order to break even.
(9) Profit/(Loss) is Gross Revenues minus Total Sales Needed to Break Even, and represents each Profit Center's profit or loss after indirect costs have been allocated.
(10) Reported Operating Profit was obtained from the Program Summarized Profit/Loss Statement for the year ending June 30, 2021, provided by DOC officials.
(11) According to a DOC official, the Tire Recycling Center is closed and not expected to generate additional revenue, and therefore, should be treated as indirect and allocated to the Profit Centers.
(12) According to a DOC official, the Real Estate Center captures lease revenue and maintenance/custodial expenditures, and therefore, should be treated as indirect and allocated to the Profit Centers.

Appendix F

Missouri Vocational Enterprise Program
Schedule of Overhead Ratio Analysis by Program Facility
Year Ended June 30, 2021

Activity		Gross Revenues (1)	Direct Materials Costs (1)	Direct Labor Costs (2)	Total Direct Costs (3)	Direct Overhead (4)	Indirect Overhead Allocation (5)	Total Overhead (6)	Total Sales Needed to Break Even (7)	Overhead Ratio (8)	Profit/(Loss) (9)	Reported Operating Profit/(Loss) (10)
Overhead Cost Center 1	$	-	-	-	-	(1,036,022)	-	-	-	-	-	(1,036,022)
Overhead Cost Center 2		-	-	-	-	(36,393)	-	-	-	-	-	(36,393)
Overhead Cost Center 3		23,170	-	(10,318)	(10,318)	(3,040,662)	-	-	-	-	-	(3,040,662)
Overhead Cost Center 4		-	-	-	-	(228)	-	-	-	-	-	(228)
Overhead Cost Center 5		-	-	-	-	(8,539)	-	-	-	-	-	(8,539)
Overhead Cost Center 6		-	-	-	-	(112,465)	-	-	-	-	-	(112,465)
JCCC Consumables		183,017	(51,070)	(8,254)	(59,324)	(88,252)	(37,131)	(125,383)	184,707	68%	(1,690)	35,442
ERDCC Consumables		1,700,887	(932,499)	(25,795)	(958,294)	(317,231)	(116,033)	(433,264)	1,391,558	31%	309,329	425,362
WMCC Consumables		1,971,601	(1,287,360)	(20,636)	(1,307,996)	(351,485)	(92,828)	(444,313)	1,752,309	25%	219,292	312,120
JCCC Clothing		1,437,643	(550,046)	(116,593)	(666,639)	(647,756)	(524,480)	(1,172,236)	1,838,875	64%	(401,232)	123,250
CC Clothing		1,407,071	(724,122)	(52,621)	(776,743)	(184,826)	(236,712)	(421,538)	1,198,281	35%	208,790	445,501
FCC Clothing		1,039,554	(517,041)	(57,780)	(574,821)	(228,557)	(259,919)	(488,476)	1,063,297	46%	(23,743)	236,176
TCC Clothing		519,949	(342,907)	(7,222)	(350,129)	(59,501)	(32,490)	(91,991)	442,120	21%	77,829	110,319
WERCC Clothing		337,091	(160,450)	(7,222)	(167,672)	(269,749)	(32,490)	(302,239)	469,911	64%	(132,820)	(100,330)
SC Furniture		661,975	(407,621)	(53,653)	(461,274)	(270,492)	(241,353)	(511,845)	973,119	53%	(311,144)	(69,791)
TCC Furniture		950,733	(617,747)	(27,858)	(645,605)	(157,013)	(125,318)	(282,331)	927,936	30%	22,797	148,114
SECC Furniture		349,783	(210,571)	(69,130)	(279,701)	(282,260)	(310,975)	(593,235)	872,936	68%	(523,153)	(212,178)
JCCC Furniture		504,188	(229,180)	(69,130)	(298,310)	(394,455)	(310,975)	(705,430)	1,003,740	70%	(499,552)	(188,577)
NECC Furniture		600,226	(309,310)	(46,430)	(355,740)	(213,446)	(208,864)	(422,310)	778,050	54%	(177,824)	31,041
FCC Laundry		442,840	(59,404)	(57,780)	(117,184)	(1,452,530)	(259,919)	(1,712,449)	1,829,633	94%	(1,386,792)	(1,126,874)
NECC Laundry (11)		-	-	-	-	(44)	-	-	-	-	-	(44)
MCC Laundry		1,533,081	(134,605)	(130,005)	(264,610)	(1,054,632)	(584,818)	(1,639,450)	1,904,060	86%	(370,979)	213,839
JCCC License and Engraving (12)		806,967	(602,031)	(26,826)	(628,857)	(169,864)	(120,677)	(290,541)	919,398	32%	(112,431)	8,245
JCCC License and Engraving (13)		3,837,601	(2,363,968)	(65,003)	(2,428,971)	(303,985)	(292,409)	(596,394)	3,025,365	20%	812,236	1,104,646
JCCC License and Engraving (14)		178,878	(61,559)	(21,667)	(83,226)	(166,013)	(97,470)	(263,483)	346,709	76%	(167,831)	(70,361)
PCC Metal		168,133	(123,984)	(27,858)	(151,842)	(206,546)	(125,318)	(331,864)	483,706	69%	(315,573)	(190,255)
MCC Metal		896,490	(501,896)	(83,575)	(585,471)	(535,015)	(375,954)	(910,969)	1,496,440	61%	(599,950)	(223,996)
JCCC Metal		175,834	(78,183)	-	(78,183)	(37,928)	-	(37,928)	116,111	33%	59,723	59,723
MCC Print		616,809	(216,405)	(31,985)	(248,390)	(316,944)	(143,884)	(460,828)	709,218	65%	(92,409)	51,476
CMCC Tire Recycling (15)		-	-	-	-	(54,774)	-	-	-	-	-	(54,774)
CMCC Real Estate (16)		32,535	-	-	-	32,535	-	-	-	-	-	32,535
CMCC Real Estate		38,196	-	-	-	(273,427)	-	-	-	-	-	(273,427)
Totals	$	20,414,252	(10,481,959)	(1,017,341)	(11,499,300)	(12,238,499)	(4,530,017)	(12,238,497)	23,727,479	52%	(3,407,127)	(3,407,127)

See next page for explanation of the footnotes for this appendix.

Appendix F

Missouri Vocational Enterprise Program
Schedule of Overhead Ratio Analysis by Program Facility
Year Ended June 30, 2021

(1) Gross Revenues and Direct Materials Costs were obtained from the Program Summarized Profit/Loss Statement for the year ending June 30, 2021, provided by DOC officials.
(2) Direct Labor Costs were obtained by allocating the total offender labor expense to the facilities based on the number of offenders in the annual report for the year ending June 30, 2021, provided by DOC officials.
(3) Total Direct Costs is the sum of Direct Materials and Direct Labor.
(4) Direct Overhead Costs was obtained from the program's Summarized Profit/Loss Statement for the year ending June 30, 2021, provided by DOC officials, and was calculated by subtracting the offender labor costs from the direct expenses charged to each Profit/Cost Center.
(5) Indirect Overhead Allocation is the SAO calculated amount of the cost centers' Direct Overhead costs allocated to the specific facility. The allocation was made based each facility's proportion of the total number of offenders employed in the 7 profit centers, which was obtained from the Annual Report for the year ending June 30, 2021, provided by DOC officials.
(6) Total Overhead Costs is the sum of Direct Overhead Costs and Indirect Overhead Allocation, and only applies to the facilities.
(7) Total Sales Needed to Break Even is the sum of the Total Direct Costs and Total Overhead Costs, shown as a positive number here, and only applies to the facilities. This represents the level of sales needed for the facility to break even based on the expenses incurred during the year ending June 30, 2021.
(8) Overhead Ratio is the Total Overhead Costs divided by Total Sales Needed to Break Even, shown as a positive number. This represents the average remaining margin needed after reducing direct costs from the sales price in order to break even.
(9) Profit/(Loss) is Gross Revenues minus Total Sales Needed to Break Even, and represents the Facility's profit or loss after indirect costs have been allocated.
(10) Reported Operating Profit was obtained from the Program Summarized Profit/Loss Statement for the year ending June 30, 2021, provided by DOC officials.
(11) The laundry facility did at the NECC did not have activity, so the miscellanous de-minimus costs charged to the facility were included in the Overhead Cost Centers for allocation.
(12) This represents the Graphic Arts Facility at the JCCC.
(13) This represents the License Plates Facility at the JCCC.
(14) This represents the Engraving Facility at the JCCC.
(15) According to a DOC official, the Tire Recycling Center is closed and not expected to generate additional revenue, and therefore, should be treated as indirect and allocated to the Profit Centers.
(16) According to a DOC official, the Real Estate Center captures lease revenue and maintenance/custodial expenditures, and therefore, should be treated as indirect and allocated to the Profit Centers.