Michigan.gov

IT Investment Fund Benefits Management

Category:	Business Process Innovations
State:	Michigan
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The IT Investment Fund Governance model that was implemented in FY 2013 to ensure taxpayer dollars are spent efficiently continues to be successful. The IT Investment Fund program has to date awarded funds for 116 projects for the enhancement of 73 IT systems supporting 15 state agencies.

The purpose of the IT Investment Fund Governance model is to oversee the following activities:

- Evaluation and validation of investments in IT Investment Fund projects.
- Management of risk in both project execution and decision-making, thereby preserving financial resources and ensuring value propositions are realized.
- Definition and measurement of fund performance; this includes the initiation of activities and introduction of change as required to address organizational performance deficiencies that impact the fund.

The State of Michigan's IT Benefits Management initiative emerged from a critical need to enhance the strategic alignment, governance, and realization of benefits from the IT Investment Fund program.

Michigan faced a challenge in ensuring that IT investments were aligned with strategic goals and objectives and delivered tangible benefits. Historically, IT investments were managed project-by-project without a standardized framework for assessing their long-term strategic impact or measuring their benefits post-implementation. This approach often resulted in missed opportunities for optimization, lack of transparency in investment outcomes, and challenges in demonstrating the value of IT projects to stakeholders.

The IT Benefits Management initiative was conceived to address these gaps, offering a structured approach to IT investment management that emphasizes strategic alignment, accountability, and measurable outcomes. The process to measure benefits covers a 5-year window after completion of a project and starting in Spring of 2022, the IT Investment Management board had enough data to start analyzing the efficacy of approach.

By implementing a benefits management framework, Michigan aimed to ensure that these investments were not just expenditures but strategic assets that contribute to the state's priorities, such as enhancing customer experience, ensuring effective government, and maintaining efficient management practices.

This initiative stands out for several reasons:

- **Comprehensive Benefits Management:** The initiative establishes a structured process for identifying, measuring, and reporting the benefits realized from IT investments. This process provides a clear understanding of the impact of these investments, covering both financial and non-financial benefits. It employs human-centered design principles to enhance the digital user experience and evaluates benefits up to five years post-project to ensure long-term success.
- **Data Transparency:** The results of the benefits management measurements are publicly available, promoting accountability and transparency.
- **Stakeholder Engagement:** The governance of the IT Investment Board includes diverse cross-agency membership, including representation by the State Budget Office. This board reviews and approves the full scope of initiatives, including benefit plans, and is responsible for reviewing the benefits' results.

The challenges addressed by Michigan's IT Benefits Management initiative are not unique to the state. Across the country, state governments are grappling with the need to ensure that IT investments deliver real value and support strategic objectives. This initiative aligns with universal priorities such as enhancing government accountability, improving resource allocation, and increasing public access to and engagement with state services. It also responds to state and federal mandates focusing on transparency, efficiency, and effectiveness in government operations.

The initiative resonates with the State CIO Top Ten Priorities, particularly in areas like digital government, enterprise IT governance, budget and cost control, and security and risk management. By providing a scalable and adaptable framework for IT benefits management, Michigan offers a model that other states can emulate, addressing common challenges and priorities in public sector IT management.

IMPLEMENTATION

The State of Michigan set out to redefine its IT investment management and benefits realization approach, leveraging the Department of Technology, Management, and Budget's (DTMB) strategic frameworks and policy directives. The initiative, conceived to enhance the strategic alignment of IT investments with state goals and ensure the realization of measurable benefits from these investments, was innovative and necessary.

Roadmap

The roadmap for implementing this initiative was planned, involving several key phases:

    I.   **January 2021 – Benefits Measurements Collection:** Development of the measurement process and measurements for the IT Investment Management Fund projects began in 2021. The measurement began with the ITIF projects that had closed in FY17.

    II.   **August 2022 - Stakeholder Engagement and Training:** To ensure alignment and buy-in, the initiative sought to engage stakeholders across various levels. The State provided additional overview of the process and provides opportunities for questions at the start of the IT Investment request process including the requirements for benefits plans. DTMB offers further support with subject matter experts to assist state agencies in development of benefit plans.

    III.   **October 2022 - State of Michigan Investment Management policy:** The project was integrated into the broader strategic vision of enhancing IT governance across the state, with an explicit aim to move the State of Michigan forward in supporting policy 1352.00 – the Investment Management Methodology. This policy underscores the state's commitment to ensuring that IT investments are not just expenditures but strategic assets that deliver real value to the state, its agencies, and, ultimately, its residents.

    IV.   **November 2023 - Reporting of Benefit Results:** This past year was the first time the State of Michigan IT projects had completed benefits to report. Collaborating with the State's IT governance and IT Investment board, we began reviewing data and adopted a reporting approach to communicate investment value. The reports are published to the public and legislature for transparency and accountability.

C-2: Projects Measuring Benefits

Project	Benefit Plan Status	Non-Financial Benefits Summary	Financial Benefits Summary	Planned Benefits To Date ($)	Realized Benefits To Date ($)	Planned vs Realized Benefit Variance %	Project Finish	Planned Benefit Finish	Significant Variance Explanation
TREA - E (DWT-169) SAP Fix and Finish	Behind	Behind	Behind	$264,875,376	$209,064,372	-21%	5/24/2021	FY25	Behind: Reduced risk of non-compliance realized due to increase in compliance but realized benefit dollars less than planned.
MDOS - QVF Refresh	On Track	On Track	On Track	$20,017,424	$20,017,424	0%	1/24/2020	FY25	On Track
CIP - Cybersecurity Framework Program	On Track	On Track	Ahead	$17,125,000	$22,380,000	31%	10/2/2024	FY29	On Track
MDOC - Corrections Offender Management System (COMS) Project	On Track	On Track	On Track	$10,938,354	$11,153,009	2%	10/31/2025	FY30	On Track
TREA - E (DWT-045) MTO User Experience Optimization	Ahead	Financial Only	Ahead	$6,879,960	$14,561,185	111.6%	9/6/2017	FY22	Ahead: Realized Benefits higher than Planned Benefits because returns received were greater than returns expected

The project management approach was holistic, considering not just the immediate objectives but also the long-term strategic impact of the initiative. Key elements included:

- **Iterative Criteria Refinement:** The project selection criteria underwent several iterations based on feedback and initial findings, reflecting a responsive and flexible project management style.
- **Collaborative Framework Development:** The evaluation criteria and benefits management framework were developed collaboratively, involving input from sponsors, governance bodies, and other stakeholders to ensure relevance and alignment with strategic goals.
- **Training and Coaching:** The project management approach emphasized training and coaching for benefit owners and other stakeholders. This focus ensured that the teams involved were compliant and fully equipped to effectively engage with the benefits management process.

The success of this initiative was defined not just by establishing a benefits management framework but by the tangible improvement in the strategic alignment of IT investments and the realization of benefits. Key success criteria included:

- **Enhanced Strategic Alignment:** The initiative aimed to ensure that all IT investments were closely aligned with the strategic objectives of the State of Michigan and its agencies, enhancing the effectiveness and efficiency of government operations.
- **Measurable Benefits Realization:** A critical measure of success was demonstrating measurable benefits from IT investments, including cost savings, improved service delivery, and enhanced operational efficiencies.
- **Scalability and Sustainability:** The benefits management process developed through this initiative needed to be scalable and sustainable, capable of being applied across various projects, and adaptable to future strategic shifts.

Michigan has set a precedent for sustainable and impactful IT investment management, laying a foundation for continued success and innovation in serving the citizens of Michigan.

Stakeholders

The initiative was a multi-stakeholder effort, reflecting the broad impact and strategic importance of IT investment management across the state:

- **Legislators and Agency Executives:** Provided oversight and strategic direction, ensuring the initiative aligned with broader governmental priorities and mandates.
- **DTMB and Agency Staff:** Were crucial in developing and implementing the benefits management framework, contributing both strategic insights and operational expertise.
- **IT Governance Boards:** Played a key role in the selection and evaluation process, bringing a high level of scrutiny and strategic consideration to the projects.
- **Benefit Owners:** Engaged directly in the process, from the initial selection to the measurement of benefits, ensuring that projects delivered tangible value.

Targeted training and ongoing support initiatives equipped stakeholders with the necessary knowledge and skills to not only participate but also champion the benefits management process, enabling them to make meaningful contributions and drive positive outcomes.
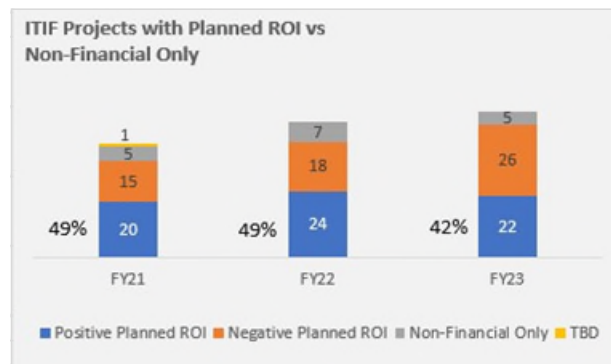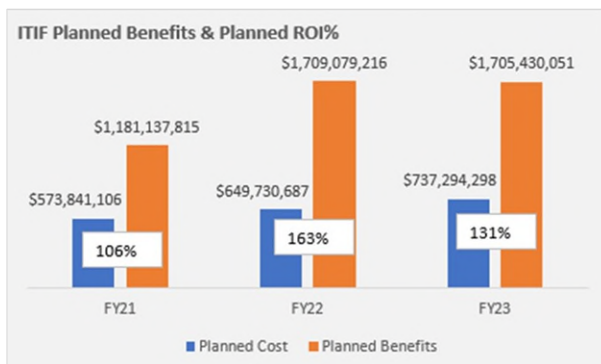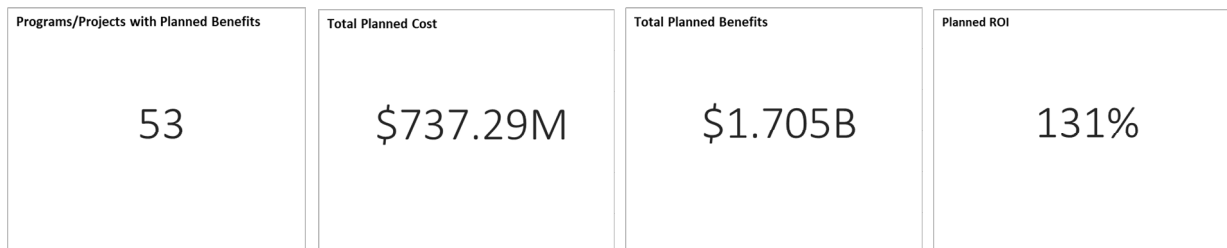
Technical Architecture and Resources

The initiative focused on leveraging existing tools and platforms more effectively within a refined strategic framework. Resources were allocated, balancing the need for financial investment against the potential for significant returns regarding improved efficiency, cost savings, and enhanced service delivery.

IMPACT

Transforming IT Investment in Michigan: A Comprehensive Benefits Realization Initiative

The IT Investment Fund program has awarded funds for 116 projects for the enhancement of 73 IT systems supporting 15 state agencies. The IT Investment Fund portfolio currently contains 53 projects with benefit plans.

Programs/Projects with Planned Benefits	Total Planned Cost	Total Planned Benefits	Planned ROI
53	$737.29M	$1.705B	131%

ITIF Planned Benefits & Planned ROI%

ITIF Projects with Planned ROI vs Non-Financial Only

The process tracks benefits achievement throughout the investment lifecycle, starting from the initial Idea and beyond the completion of the project. Projects with allocations beginning in fiscal year 2017 follow this process.

Michigan Department of Education (MDE)

The MDE State Aid Management System automates the calculation and distribution of State Aid exceeding sixteen billion dollars to K-12 public school districts across the state. The project involved a front-end refresh to replace the outdated technology it was based on. The state aid payments are statutory and imperative for the system to be on a reliable technology with widely available vendor support and programming skill sets.

Although the upgrades provided improved security and reliability which were necessary, it was the user experience the new application provided that had the biggest impact. The per pupil funding formula and the many sections from the State Aid Act involves obtaining data from various Program Offices within MDE and other state agencies. The system interfaces with other data collection systems and State's Accounting System. Considering the numerous steps involved, the users found an increasingly intuitive user interface that guided them with steps to be performed and in the required order. The system responses were clear when steps were completed, and a user would always know where they are in the process and pick up from where they left off. Additionally, many transparency reporting improvements were made so Financial Manager's would also have access to the base data that were used in the various sections and calculations for better understanding requiring lesser calls to the Department.

Michigan State Police

In 2020, the Michigan State Police (MSP) enhanced the state's facial recognition capabilities. By upgrading the facial recognition algorithm, the project achieved significant outcomes, including reducing server usage from eleven to just two servers, which lowered costs and increased speed and accuracy. This upgrade also led to higher precision in identification and fewer false positives, ensuring greater reliability in the field.

Relocating the servers to the State Emergency Operations Center (SEOC) server room boosted security and system speeds. The project also reduced the man-hours needed for system maintenance and upgrades, allowing the MSP team to focus on critical tasks. Enhanced picture importation and faster generation of reference information further improved the system's efficiency, making it more effective in supporting law enforcement operations statewide.

Labor & Economic Opportunity (LEO)

Bureau of Services for Blind Persons - Systems Modernization Program

ITIF Funding enables the transition from outdated legacy systems to advanced technologies, enhancing the security, flexibility, and usability of the systems to better cater to evolving customer needs. Among the advantages are improved tracking of provided equipment, decreased agency resource expenses for customer support, and enhanced management of funds.

Worker Compensation Computer System (WORCS)

The new system derived numerous benefits from the ITIF funding, notably a $1.898M expense reduction by transitioning away from the mainframe platform onto new technologies. With the project, we enhanced system functionality, minimized redundancy, and strengthened security measures. The critical outcome for LEO was the complete migration from the mainframe to a server-based system, providing the business with heightened flexibility to enhance system capabilities and streamline business functions.

The Michigan Department of Treasury has benefited directly from the IT investment management discipline that the Board established for the IT Investment Fund. Specifically, the Board has created a consistent process that requires us to submit solid business cases and benefit plans up front before being approved to receive the funding. Because we must compete for common dollars against all departments our project proposals are stronger, more complete, and aligned to strategies that matter for our residents and businesses. In short, we are better prepared to be successful, and we are seeing the direct benefits realized as a result. It also has helped improve our internal IT governance process for investment as we have taken a lot of the practices at the Board level and brought them into our other departmental IT projects. Our next generation of leaders are learning what it takes to manage a successful IT investment portfolio.
Corey Grant, IT Investment Board Member, Michigan Department of Treasury

Long-Term Sustainability and Scalability

The IT Benefits Management initiative is not just a short-term project but a long-term strategic approach to IT investment in Michigan.

- Framework for Future Projects: The benefits management process developed through this initiative provides a template for future IT projects, ensuring continued alignment with strategic goals and the realization of tangible benefits.
- Adaptability to Strategic Shifts: The initiative's processes are designed to be flexible, allowing for adjustments in response to shifts in strategic priorities or emerging challenges.

Looking Ahead: The Road Forward

The State of Michigan is committed to building on the successes of the IT Benefits Management initiative, with plans to refine its approach further, expand its application to more projects, and continue enhancing the strategic value of IT investments.

- **Continuous Improvement:** The state is being good stewards of taxpayer dollars from the initiation of the idea but are also flexible to adjust and grow our approach to maximize benefits to residents.
- **Broader Application:** Michigan aims to apply the benefits management framework to a wider array of IT projects across Michigan's departments, maximizing the strategic impact of its IT investments across all state operations and services. Agencies are recognizing the value in seeing the benefits and are beginning to use the benefits realization process for their projects.
- **Pilot Implementation:** A pilot is being developed to expand the Benefits Management process with a new selection method to a subset of DTMB-Enterprise ideas/projects. This pilot aimed to determine the best method criteria and roles for identifying projects that would follow the full Benefits Management process, including measuring benefits post-completion.

Conclusion

The IT Benefits Management initiative sets a new standard for strategic alignment, transparency, and accountability in public sector IT. By ensuring that IT projects deliver measurable benefits aligned with the state's priorities, Michigan is optimizing its IT investments and enhancing the efficiency of state operations and the quality of services provided to its residents. The initiative stands as a model of innovation and strategic governance, showcasing the transformative potential of thoughtful IT investment management in the public sector.