2016-17 22i: Technology Readiness Infrastructure Grant (TRIG) Legislative Report

January 2017

MICHIGAN
Department of **Education**

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Foreword

In 2011, the drive to move away from paper-pencil assessments had begun across many states in the nation and Michigan was no exception. Along with the work of moving schools to online assessments, Michigan's educators were faced with the challenge of how to support student achievement in more effective and efficient ways. The two biggest issues faced were a lack of technological infrastructure and innovative capacity available to schools.

Therefore, in 2012, the Michigan Legislature set forth a vision and provided funding to prepare Michigan schools for the transition to online state assessments. This vision gave the Michigan Department of Education (MDE) the ability to administer a comprehensive competitive grant program that would meet the need to test online, as well as build the foundation for supporting student achievement through a statewide technology infrastructure.

During the 2012-13 school year, the Technology Readiness Infrastructure Grant (TRIG) program was deployed. The unique and collaborative design guaranteed the legislative vision would be met and educators would soon have the infrastructure needed to support student achievement. The grant was structured to provide long-range efforts that built a sustainable, systematic infrastructure of ubiquitous access, actionable data, and personalized learning for students and educators across Michigan.

Also, as part of the TRIG design, collaboration across the educational community at all levels, federal, state, regional and local was and is a key contributor to success. The MDE is thankful for the collaborative partnerships that have been fostered with the Department of Technology, Management and Budget (DTMB), Center for Educational Performance and Information (CEPI), the Michigan Association of Intermediate School Administrators (MAISA), and a wealth of individuals that provide a vast array of expertise and statewide representation on the TRIG Steering Committee, Consortia Advisory Committees, Statewide Activity Advisory Committees, and work groups. The collaborative partners have supported and carried out the work of this grant. The success that has been seen and is addressed in this legislative report could not have been accomplished without them or the financial support of the Michigan Legislature. These and other key stakeholders are referenced throughout the report.

"Through great statewide collaboration, the Technology Readiness Infrastructure Grant built a foundation that supports our shared vision of making Michigan a top ten education state in the next ten years."
- Superintendent Brian Whiston

For over four years, the TRIG program has continued to plan, implement, evaluate, and continuously improve the multiple components of the grant program to move toward ubiquitous access, actionable data, and personalized learning. The work includes building a sustainable fiber infrastructure and regional data hubs, all of which are designed to lower costs, increase access to technology, and provide reliable high-quality data. It includes the development of bulk purchasing models for hardware and software to advance student access to technology. It also includes professional development for educators to support student learning. This report will illustrate the hard work, dedication, collaboration, and success in meeting the charge given by the Legislature and ourselves. It is an honor to provide this legislative report to the Michigan House and Senate Appropriations Subcommittees on State School Aid and Department Budget and to the House and Senate Fiscal Agencies.

Executive Summary

In 2012, the Michigan Legislature charged the Michigan Department of Education (MDE) to develop a competitive application process and method of grant distribution for the purpose of getting school districts ready for online growth assessments. From the vision and support of the Legislature, the leadership of the MDE and their partners, and the collaborative efforts of educators across the state, Michigan has been able to successfully test students online. The TRIG program supports a technology rich environment that accelerates, amplifies, and expands the impact of effective practices that support deeper and personalized learning. It increases opportunities for all students while affording traditionally underserved populations equitable access. The TRIG program built the infrastructure upon which Michigan will become a Top 10 State in 10 Years.

The continued support from the Michigan Legislature, over the past four years provided **$160,000,000** of grant funds that are being used to create a framework that supports the interaction between learners, educators, strategic partners, and the systemic infrastructure. This framework provides the successful implementation of online assessments and "Any Time, Any Place, Any Way, Any Pace" learning, as well as providing direct and indirect savings to districts totaling more than **$252,000,000.**

This report strives to inform the Legislature and other key stakeholders of the impact on the **56** Intermediate School Districts (ISDs), **530** Local Education Agencies (LEAs), and **169** Public School Academies (PSAs), representing over **1.4 million** students. This report will provide a summary of information regarding the goals, objectives, and outcomes of the 2015-16 funded activities, as well as give a brief synopsis of information regarding the history, structure, and past funded statewide activities. It will demonstrate that the TRIG program met the legislative charge of becoming a test-ready state. It must be shared that Michigan like many other states made the choice to move to online testing, but where other states failed, Michigan prevailed.

With the aid of the legislative vision and funding, the TRIG program has successfully prepared Michigan schools to transition to online state assessments by:

- Providing **$75,700,000** in funds directly to schools for technology readiness efforts.
- Putting over **590,000** devices in the hands of students and educators across the state and in the process saved schools over **$87,000,000.**
- Deploying five regional data hubs that supports the data of **85 percent** of Michigan students.
- Leveraging E-Rate discounts for internet access and Wi-Fi in the amount of over **$66,000,000** in 2015 for both schools and libraries.
- Working to connect K-12 networks to a statewide intranet for secure, efficient transfer of educational content, collaboration and online assessment.
- Creating a K-12 series of social studies resources that align to the Michigan Grade Level Content Expectations (GLCEs) and saving districts an estimated **$15,000,000**.
- Offering over **100** courses of high-quality supplemental online professional development for teachers.

Ultimately, Michigan's success is measured by the **96 percent** of students and school districts that tested online during the 2015-16 school year and additional trending data illustrates a projected increase of students testing online for the 2016-17 school year.

Purpose of the Report

State Aid School Act, Public Act 85 of 2015, House Bill 4115, Section 22i(8) states,

> "No later than January 1, 2017 the department shall consolidate and prepare a summary from the total project reports from each grantee under this section to include measurable outcomes based on grant objectives. The report shall include a summary of compiled data from each grantee to provide a means to evaluate the effectiveness of the grant project."

This report meets the legislative mandate by addressing each of the 2015-16 grantees' outcomes under the findings section for the purpose of evaluating the effectiveness of the grant project by providing detailed information on the fiscal agent, objectives, outcomes, funding, and sustainability.

Introduction

The Technology Readiness Infrastructure Grant (TRIG) provided the conduit for the State of Michigan to begin the preparation of schools and students to not only be assessed online, but also to learn in the ever changing global environment.

"Students are much better prepared to handle realistic situation with computers. Now students are much more independent, and are able to focus less on the "technology" part of learning and more on the actual learning."
-Mr. Gordon Anderson, Spanish Teacher, Fowlerville Community Schools

The charge by the Legislature, through a competitive grant program that required collaboration, led to the great vision we as a state work towards now: *to empower every student in Michigan to excel at next generation assessments, to leverage technology for learning, and to achieve lifetime success in a global economy.*

The MDE, as the entity charged with the administration of these funds, planned and implemented a grant program with the help of its key stakeholders, Department of Technology, Management and Budget (DTMB) and Center for Educational Performance and Information (CEPI) that established a foundation to effectively leverage technology for teaching, learning, and assessing by ensuring the implementation of the International Society for Technology in Education (ISTE) essential conditions. This grant program has not only met the first condition by setting a shared vision, but has also:

- empowered leaders across the state;
- created an implementation planning system that all stakeholders could follow;
- progressed the state forward in offering equitable access;
- increased access to skilled personnel;
- engaged educators in ongoing professional learning;
- offered a stronger network of technical supports;
- created access to more digital curriculum resources;
- provided students with access to student-centered learning opportunities;
- planned for assessment and evaluation;
- engaged communities across the state;
- generated support policies for technology; and
- fostered support for additional policies and initiatives at multiple levels to support the fidelity of the integration of technology into learning.

This report will detail what the grant program accomplished in order to meet the legislative charge, the State Board of Education's criteria, and address the necessary conditions for leveraging technology for learning.

History of TRIG

The TRIG program was funded from fiscal year 2012 to fiscal year 2015. However, it should be noted that the life of the TRIG program has a greater span, due to legislative work, project language, section 18(a) of state aid, and our diligence to ensure sustainably of the infrastructure built; TRIG is still moving forward. Below is a timeline that reflects key milestones over the past four and half years. It is imperative to understand the key milestones that led to the final year of funding. It will reflect the continuous improvement and a sustainability processes that has built a road to success and sustainability.
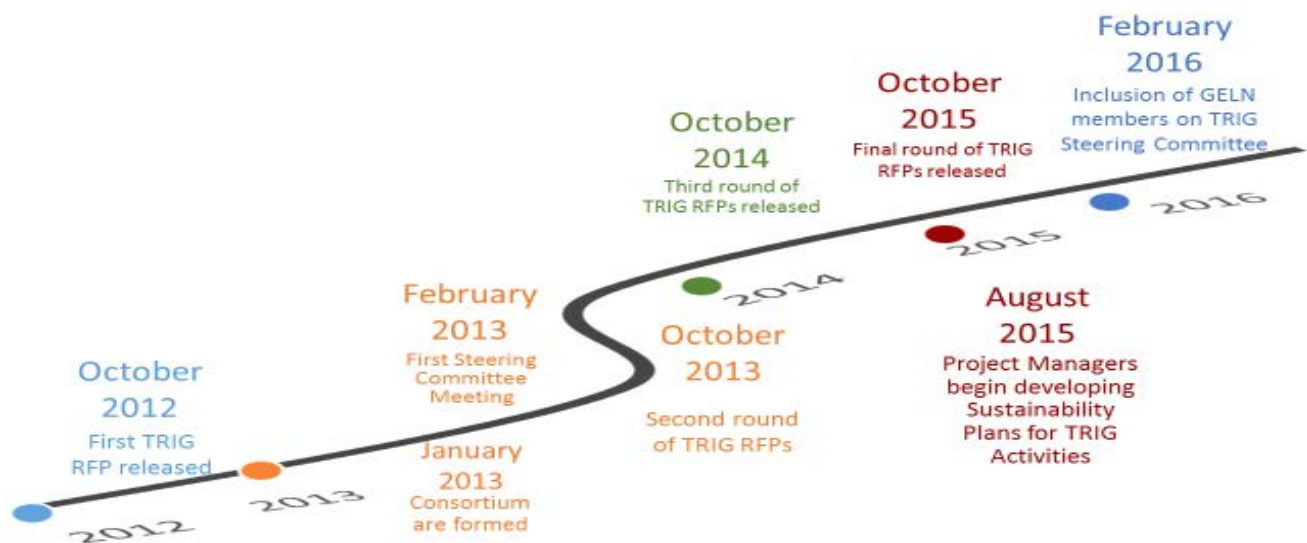
Key milestones for the projects for the final year of TRIG are reflected below.
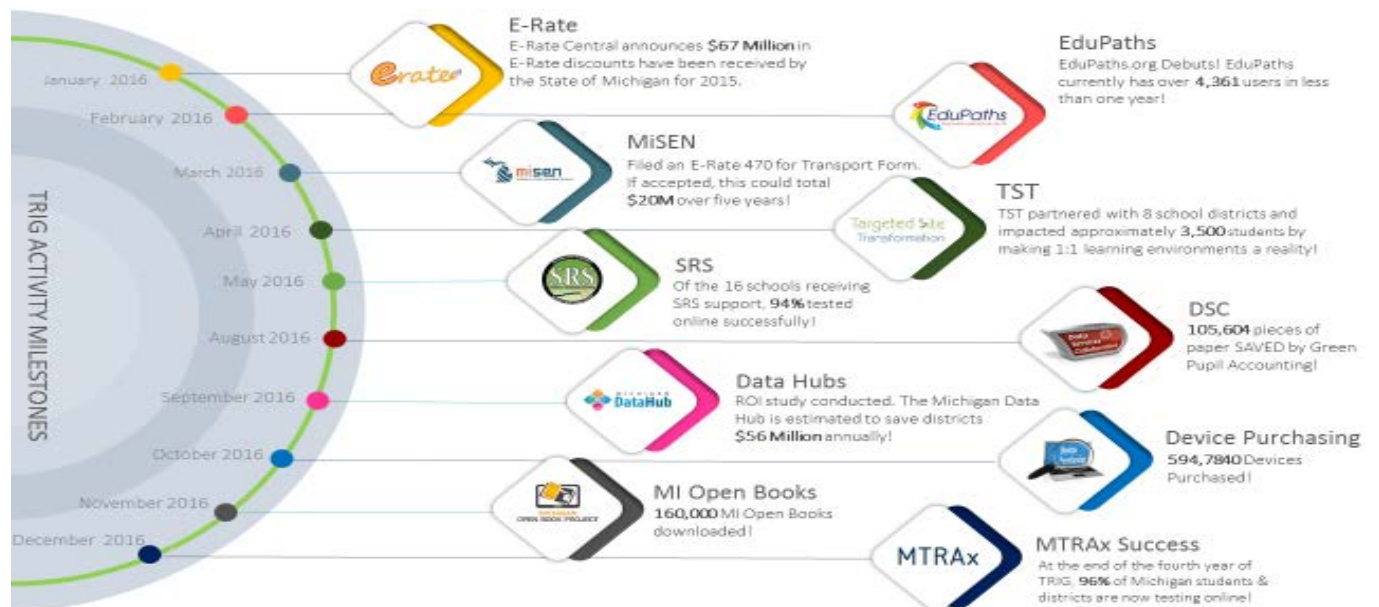
The TRIG statewide evaluators have also been able to illustrate the continuous improvement of the overall grant in key areas, such as: communication, process, cost efficiencies, impact, return on investment, and a continued vision for the future in the 2013-2014 and 2015 annual reports, which can be found at: http://www.techplan.org/technology-readiness/.

It is also important to understand the historical funding patterns. Below is a chart that shares the amount of funds that were awarded each year for each category of the TRIG program.

		2012-13 Allcoation	2013-14 Allocation	2014-15 Allocation	2015-16 Allocation
District Participation		$19,692,246	$13,685,107	$14,541,400	$11,250,000
Consortium Leadership		$1,213,154	$1,284,242	$1,327,065	$0
Statewide Activities					
Genesee ISD	State Education Network	$1,250,000	$10,484,652	$3,500,000	$0
Wexford-Missaukee	Data Integration	$395,000	$1,675,000	$2,000,000	$2,200,000
Cooper Country	Device Purchase	$343,000	$7,149,900	$6,000,000	$9,250,000
Wexford-Missaukee	E-Rate	$269,776	$950,000	$350,000	$300,000
Wexford-Missaukee	Operations Office/Strategic Readiness Supports	$855,224	$1,275,000	$6,200,000	$500,000
Kent ISD	MTRAx	$1,164,152	$1,265,348	$500,000	$0
Genesee ISD	Classroom Readiness	$3,000,000	$3,000,000	$2,000,000	$0
Wexford-Missaukee	Assessment and Curriculum	$50,000	$300,000	$600,000	$0
Kalamazoo RESA	Data Service Collaboratives	$0	$2,500,000	$2,250,000	$0
Genesee ISD	Targeted Site Transformation			$2,000,000	$0
EAA/DPS/Wayne RESA	Urban School Readiness	$3,648,000	$0	$37,500	$0
Genesee ISD*		$18,115,348	$5,000,000	$0	$0
	Totals:	$49,995,900	$48,569,249	$41,305,965	$23,500,000

*=Accounts for SEN Build in 2012-13 and the Whole School Technology Transformation Pilot in 2013-14.

For the life of the TRIG program, a total of **$159,949,513** has been allocated by the MDE. The current collective TRIG program estimated total direct, indirect, cost-savings, and value-add impact has been calculated at over **$252,000,000**.

Consortia Leadership and Statewide Activities are required to complete a final program and financial report in the format of a PowerPoint presentation that provides MDE and partners with updated program and fiscal progress. An accumulative TRIG program and financial PowerPoint presentation for each of the closed grant funding cycles can be found at http://www.techplan.org/technology-readiness/.

TRIG Structure

To meet the needs of all educational stakeholders and meet the essential conditions necessary to successfully leverage technology for teaching, learning, and assessment, the TRIG was structured into three components:
- district participation,
- consortia leadership, and
- statewide activities.

These components represent both a grant distribution method and a collaborative program implementation model that challenged the existing educational technology system in order to reshape it, providing all the opportunity to succeed. The development of this structure differs from past Michigan educational grant programs in that it sought to establish a comprehensive model, which supported educational technology needs across the state in a collaborative manner. Collaboration between the districts, consortia, and state-level activities has been extremely effective in building capacity and momentum in carrying out the goals and tasks of this grant. Outcomes that demonstrate the effectiveness of the TRIG structure are summarized below, as well as under the Findings-Statewide Activity section. Addendum A is a graphic representation of the grant structure. It identifies the statewide representation, the flow of communication, the decision making process, and the accountability structure.

District Participation invited eligible local education agencies (LEAs), public school academies (PSAs), and intermediate school districts (ISDs) to apply for direct funding at a per pupil rate. Participation funds were awarded to districts, who agreed to the following requirements based on the legislative and State Board of Education grant criteria:

1. The district agrees to limit participation funds spending for technology readiness efforts.
- *Online/Digital Assessment, including universal diagnostic screening tools*
- *In-building wireless connectivity*
- *Network services (e.g. additional bandwidth, content filtering)*
- *Computer/device purchasing*
- *Technology readiness for instruction and data collaborations that support online assessment readiness*

2. The district agrees to be represented in the TRIG sponsored statewide Form 470 bids for E-Rate funding and consider using the awarded vendors, although districts will not be bound to purchase from the bid. The district agrees to apply for all of its eligible E-Rate Priority 1 service(s) where such participation is economically advantageous to the district.

3. The district agrees to participate in any surveys or data collection processes sent out by the MDE or the TRIG Operations Office to inform the work of the various activities (maximum of three total per fiscal year).

4. The district understands that its ISD must also agree to these requirements for the district to receive participation funds.

Addendum B provides a list of the 2015-16 District Participation recipients. The list can also be found at http://www.techplan.org/technology-readiness/. A copy of the grant Request for Proposals (RFP) for the TRIG District Participation Award can be found at http://www.techplan.org/downloads/pdfs/2015-16_trig_rfp_20151016_120620_1.pdf.

Consortium Leadership invited LEAs, PSAs, and ISDs to apply for funding by submitting a proposal to act as leaders of regional consortia and statewide activities. Regional consortia fostered the engagement and collaboration of all Michigan schools, streamlined communications, leveraged existing capacity statewide, and ensured that the diverse needs of Michigan's schools were met.

The five awarded consortium leads are:

- Greater Michigan Educational Consortium (Genesee ISD)
- Intra-Michigan Consortium (Wexford-Missaukee ISD)
- Kent ISD Consortium (Kent ISD)
- Rural Northern Michigan Consortium (Copper Country ISD)
- Southwest Michigan Consortium (Kalamazoo RESA)

Consortium leadership was created to provide long-term value and improve the educational technology landscape in Michigan. Consortium leadership activities include projects in connectivity, professional learning, curriculum, and data management. This component of the grant structure was not funded in the 2015-16. However, the consortia model has proven to be of great value for communicating and collaborating statewide. It has provided capacity to ensure the work is implemented in effective and efficient means that have supported measures of success, such as:

- 100 percent of TRIG participating districts completed their tech-ready data collection in the Michigan Technology Readiness Assessment Tool (MTRAx)
- 100 percent of TRIG participating districts completed the TRIG State Survey,
- 100 percent of ISD's participated in TRIG,
- 96 percent of LEAs participated in TRIG, and
- 57 percent of PSAs participate in TRIG.

Statewide Activities invited eligible applicants to lead statewide activities designed to address the essential conditions necessary to address the goals of the grant by building a statewide technology infrastructure. As a deliverable of the statewide activities grant application, applicants were required to partner with external partners to provide services, build capacity, and work towards sustainability. Applicants proposed a means by which to carry out the goals and tasks of each activity to meet the overall goal of the grant. The chart below identifies each of the statewide activities and the grant goal that they meet.

Goal	Activity
Developing and implementing collaborative purchasing arrangements for statewide network services and personal learning and assessment devices.	Device Purchasing, Data Service Collaboratives, E-Rate
Establishing sustainable, cost-effective collaborations of technology and data related services to assist schools and districts to become "test ready."	Device Purchasing, Data Integration, Data Service Collaboratives, E-Rate, MTRAx, Michigan State Education Network (MiSEN), Strategic Readiness Supports
Building the capacity of educators at ISDs, public school districts, and public school academies to effectively plan and implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning.	Assessment and Curriculum (MiOpen Books), Classroom Readiness (EduPaths), Strategic Readiness Supports (SRS), Targeted Site Transformation (TST)

The TRIG Administration Statewide Activity is not shown in the chart above, because this activity supports all three goals. The TRIG Administration Activity, also known as the TRIG Operations Office was established for the purpose of providing the leadership, monitoring, coordination, and ultimately the administration of the TRIG program. The collaborative implementation model used to plan, implement, evaluate, and continuously improve the program is coordinated by the amazing partnership between the TRIG Operations Office and the MDE. The implementation model also addressed shared decision making by establishing a TRIG Steering Committee that represents statewide views and subject matter expertise. Addendum C provides a list of the TRIG Steering Committee members. The list can also be found at http://22itrig.org/steering-committee/.

It is the comprehensive makeup of the TRIG Structure that provides:
- autonomy for local districts through the per pupil funding,
- capacity for regional initiatives to be implemented with fidelity and in the appropriate context through the consortium funding and structure, and
- expertise and collaboration needed to plan, implement, and provide high-quality statewide activities.

Purpose of TRIG

Public Act 85 of 2015 stated the legislative purpose of TRIG, which was for the development or improvement of districts' technology hard infrastructure, the shared services consolidation of technology and data, and for the coordination and strategic purchasing of hardware and software in preparation for the delivery of assessments through online models. This legislation afforded the education community the resources to prepare for online testing requirements.

The State Board of Education approved grant criteria to further the vision of the grant structure to meet the technical needs of local districts and preparation of teachers in using technology for testing and in the classroom.

"The word test can sound alarms in any student's mind. The word online assessment can sound even worse if students haven't spent time learning in an online environment. TRIG prepared teachers and students to work online so that the tests weren't so challenging. We didn't test the ability to do the work online; we tested student learning and content knowledge."
-Linda Forward, Director, the MDE, Office of Education Improvement and Innovation

TRIG continues to prepare Michigan schools for online assessment and learning by implementing the following three goals:

1. Developing and implementing collaborative purchasing arrangements for statewide network services and personal learning and assessment devices.
2. Establishing sustainable, cost-effective collaborations of technology and data related services to assist schools and districts to become "test ready."
3. Building the capacity of educators at ISDs, public school districts, and public school academies to effectively plan and implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning.

Findings

District Participation

In order to successfully implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning the MDE completed a competitive grant process utilizing the standard grant methods. The grant applications for both district participation and statewide activities were administered via the Michigan Electronic Grants System Plus (MEGS+). The request for applications sought to fund sustainable and collaborative statewide applications to help every district develop a technology readiness plan and make the best investments for delivering online assessments and "Any Time, Any Place, Any Way, Any Pace" learning. The MDE sought to support districts and ISDs in moving from building technology infrastructure to implementing technology infused instruction.

"The ability to do research, projects, show videos, differentiate reading and math, and inquiry projects has transformed my classroom this year."
-Ms. Amy Cook, Marquette Area Public Schools 4th Grade Teacher

Fiscal Agent: Addendum B provides a list of the 2015-16 District Participation recipients. The list can also be found at http://www.techplan.org/technology-readiness/.

Funding:
- *2015-16 Award:* $54,168,753
- *Total Project Award:* $11,250,00
  (33.87 percent of the total TRIG Legislative Allocation)

Goals: The goal of the districts was to become test- and tech-ready through direct funding. Districts were required to demonstrate need for technology by completing an updated technology readiness planning process and make the best investments for delivering online assessments and "Any Time, Any Place, Any Way, Any Pace" learning.

Outcomes: Districts demonstrated their technology needs and test-readiness through the submission and utilization of MTRAx data. One hundred percent of the TRIG participating districts completed the MTRAx data collection in December of 2015. A voluntary data collection window concluded on December 16, 2016. It should also be noted that the MTRAx tool is always available to districts and provides them data about their device and network environment to gauge readiness for online testing at the building, district and ISD level based on predetermined criteria for the requirements for online testing (e.g., number and specification of devices available, network bandwidth and others). It also provides on-demand data and reporting capabilities, as well as a 'sandbox' tool to allow districts to model the impact of hypothetical changes to their environments and see the impact of those changes on their readiness status. The next page shares a sample district readiness report.

Allendale Public Schools
Ottawa Area ISD

LEVEL 9 Overall Readiness   **LEVEL 9** Network Readiness

OVERALL READINESS

Michigan Department of Education Guidelines for Overall District Technology Readiness for Online Testing

To be considered OVERALL TECHNOLOGY READY FOR ONLINE TESTING the district must meet each of the following criteria:

- The district must be rated Network Ready for Testing: If the district is the Internet Service Provider for its schools, then there must be adequate district Internet bandwidth available to accommodate all simultaneous users from all schools across the district for the duration of the testing window. If the district is not the ISP then to be considered network ready all the schools must be rated as Network Ready for Online Testing.
- All schools must be rated as Technology Ready for Online Testing.

Total Number Of Students to Be Tested:
1313

Sittings Per Student:
4

Greatest Testing Window Days:
20

Grade	Students
Third Grade	181
Fourth Grade	197
Fifth Grade	200
Sixth Grade	195
Seventh Grade	174
Eighth Grade	173
Eleventh Grade	193

1 - 7 displayed , 7 in total

The current State Readiness Report is shown below. It displays the accumulative district readiness scores measure of each district's network readiness combined with the readiness status of buildings in that district, with overall readiness scores of 7 or higher indicating that a district is ready for online testing. In order to achieve a "ready score" of 7 or higher, a district must have a Network Readiness score of 7 or higher, and all buildings within that district must have Overall Readiness scores of 7 or higher.
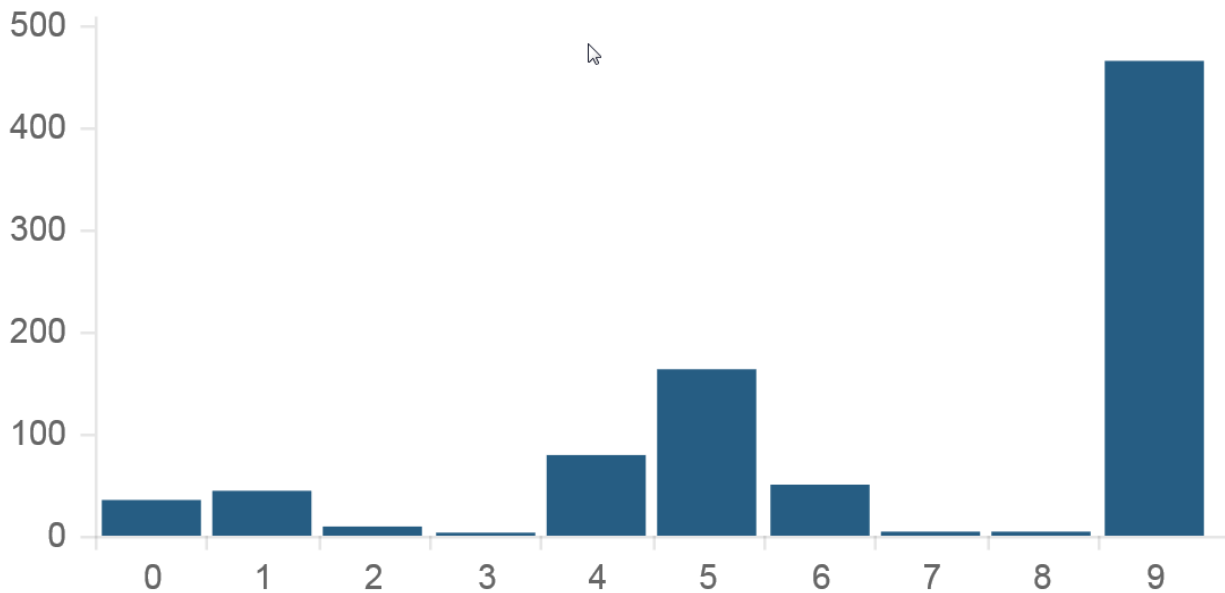
The TRIG districts agreed to participate in any surveys or data collection processes sent out by the MDE or the TRIG Operations Office to evaluate the effectiveness of the program and

to inform the work of the various activities. There was a maximum of three total surveys per fiscal year. In an effort to reduce data collection burdens on district, the MDE and the TRIG Operations Office coordinated efforts and only issued one TRIG State Survey per year. The survey provided valuable evaluation results that demonstrate the effectiveness of the TRIG program in supporting districts to become test-ready. The graph below illustrates that 68 percent of districts reported that they felt more ready or significantly more ready to test online than the year prior.

M-STEP Readiness

Category	Percentage
Significantly Less Ready	1%
Less Ready	1%
About the same	31%
More Ready	56%
Significantly More Ready	12%
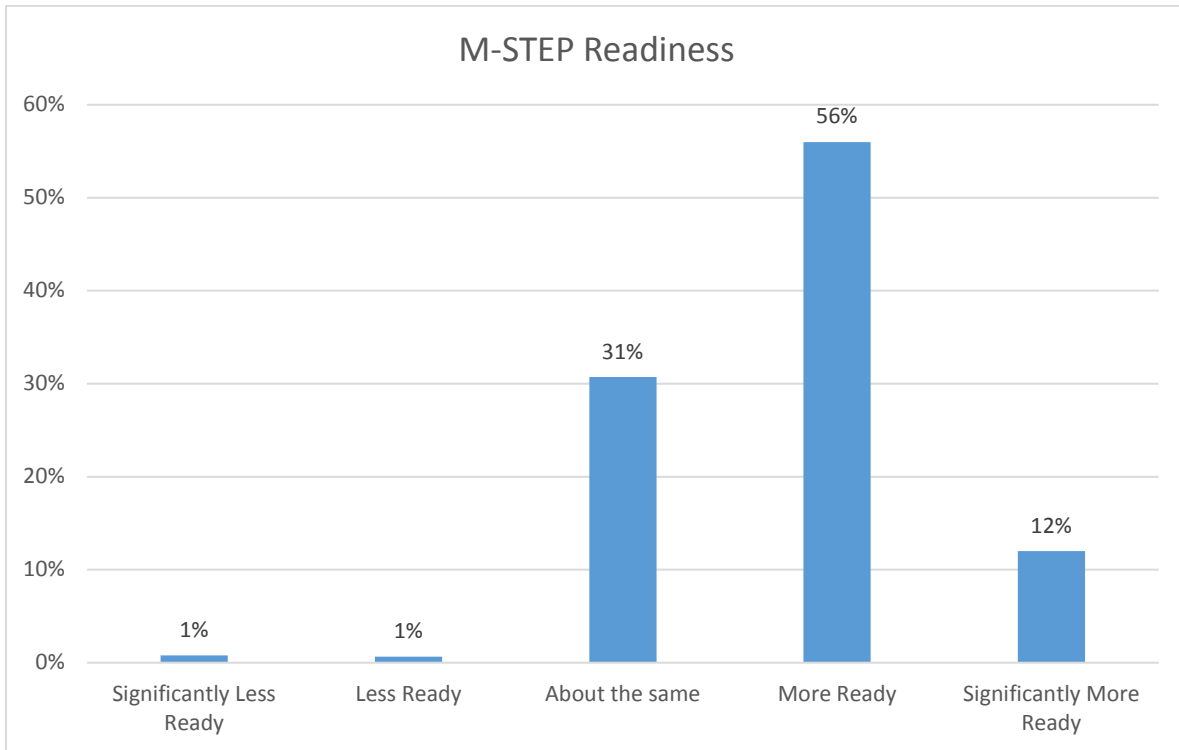
The chart above reflects that some districts still feel less than ready. According to data from the MDE, Office of Assessment and Accountability there were 96 districts in 2016 that requested and were granted a waiver to administer paper-pencil assessments. The TRIG stakeholders reviewed the data that is presented below from the State Survey to identify the challenges districts still face in order to support districts in meeting the goal of testing online by 2018. The State Survey results can be found at: http://22itrig.org/downloads/documents_and_resources/2016_trig_state_survey_data_5_26_2016__sf_2_2.pdf or is attached as addendum D.

Challenges that Interfere with District Readiness for Online Assessment

■ 2016 ■ 2015

Category	2016	2015
More information about onlline assessment from MDE	13%	22%
No challenges, we are ready for online testing	28%	13%
Greater student technical competencies related to…	23%	44%
Greater student technical competencies related to…	30%	34%
Longer testing windown	17%	27%
Additional bandwidth (all types)	24%	31%
Teacher professional development related to the use…	31%	44%
Teacher professional development related to online…	26%	53%
Additional test ready devices	43%	59%

The MDE, Office of Assessment and Accountability has shared that only 72 districts have requested a waiver for online testing for the 2016-17 school year. This decrease is further evidence that the TRIG program is effective.

Another key indicator of the effectiveness of the TRIG program is the increase in the percentage of districts that did test online. Below is a graphical representation of the increase in districts that tested online in 2015 and 2016. Based on the waiver request data from the MDE, Office of Assessment and Accountability, it is anticipated that 98 percent of districts will be testing online during the 2017 testing window.

Test Readiness

Year	Value
2014	?%
2015	83%
2016	96%
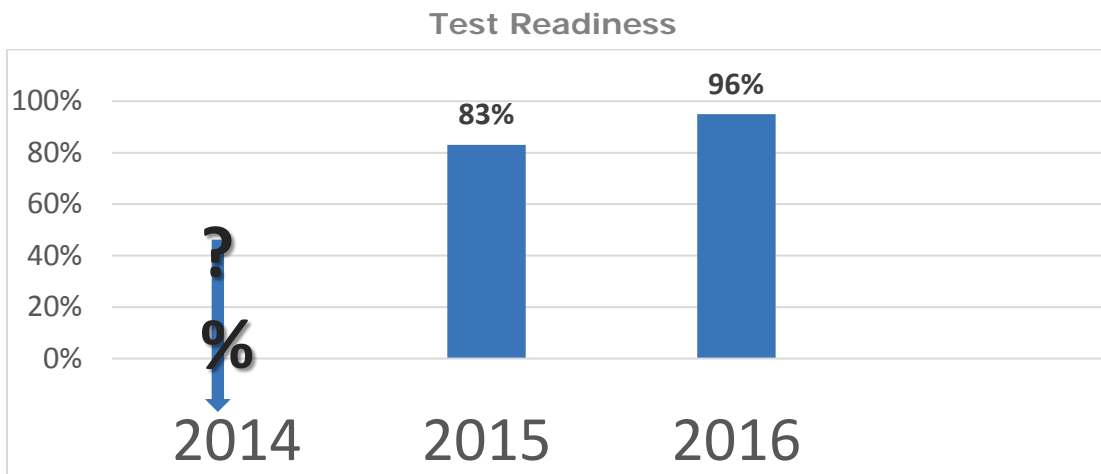
In the final year of the TRIG District Participation funding, districts that choose to participate received $7.84 per pupil to be spent on technology readiness. Districts were required to spend those funds in five key categories related to technology readiness. Those categories are:

- **Network Services**, which consists of circuits, Wide Area Network (WAN) Interconnects, WAN Access to data centers housing instructional and assessment resources, and Internet service capacity upgrades.
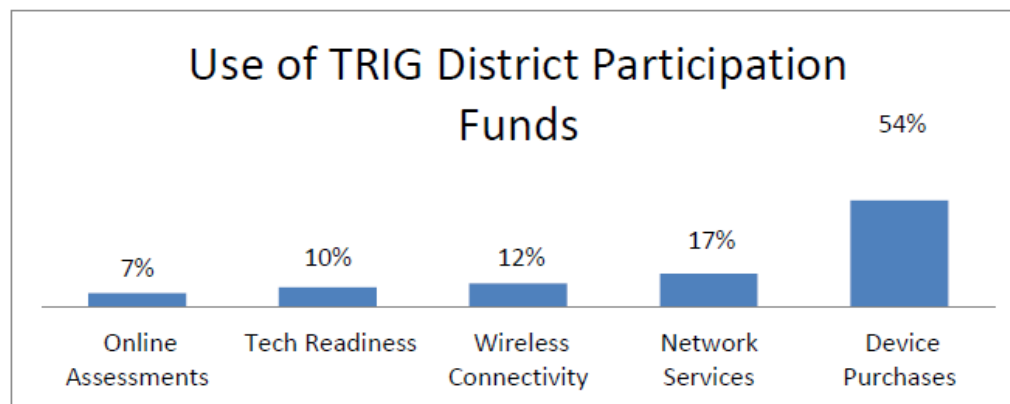- **Computer/Device Purchasing**, which consists of any device purchased through the SPOT tool purchasing process and any device that meets minimum device testing requirements.
- **In-build Wireless Connectivity**, which consists of any hardware to implement or upgrade wireless infrastructure and any in-building wiring necessary to implement or upgrade a wireless network.
- **Online/Digital Assessments**, which consists of licensing for online/digital assessment content and services and purchase license, hardware, etc., for instructional data systems that are used to deliver local or regional online assessments including universal diagnostic screeners.
- **Technology Readiness**, which consists of any hardware to implement or upgrade an infrastructure to support a robust testing environment, any in-building wiring necessary to support online testing, device hardware to upgrade devices for online testing (memory, monitors, keyboards, etc.), and license upgrades to support online testing.

Specific examples of these items can be found on the "How to Spend Your Year Four Funds (4.0)" on the TRIG website at www.22iTRIG under Resources & Links.

Each year districts were required to identify how they would spend their district participation funds. Below is a breakdown of how districts spent their final year of TRIG District Participation funds.

Use of TRIG District Participation Funds

Online Assessments	Tech Readiness	Wireless Connectivity	Network Services	Device Purchases
7%	10%	12%	17%	54%

Administration (TRIG Operations Office)

In order to successfully implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning many investments into the technology infrastructure of K-12 schools were required. The TRIG program launched several vital statewide initiatives that have empowered schools to meet these goals.

Legislative funding for administration supported the creation of the TRIG Operations Office, a structure formed to coordinate and foster collaboration across the statewide projects in order to address access and equity for all students in Michigan. The work of the Operations Office focuses on providing collaboration, communication, and progress monitoring for and between all statewide activities.

Leadership:
Intra-Michigan Consortium (Wexford-Missaukee ISD, fiscal agent)
TRIG Steering Committee with representation from all five of the statewide consortia, MDE, and MAISA
Project Director, Dave Cairy, MAISA

Funding:
- *2015-16 Award:* $1,200,000
- *Total Project Award:* $3,830,224
  (2.3 percent of the total TRIG Legislative Allocation)

Vison: To assemble key stakeholders, build synergy, and work together to support statewide initiatives that help Michigan schools ensure every child succeeds.

Goals: The goals of the Operations Office are to:
- Create sustainable collaborations, which increase the ability of districts to leverage actionable data, maintain reliable technology, and support learning,
- Provide opportunities to increase capacity to deliver personalized learning in districts and classrooms, and
- Increase the capacity of local districts to provide ubiquitous access for "Any Time, Any Place, Any Way, Any Pace" learning.

Objectives and Outcomes: To meet the goals of the Administrative Activity six objectives were identified. Each objective is summarized below including the outcomes achieved.

1. **Provide leadership, communication, and collaboration across statewide activities and consortia.**
   The TRIG Operations Office provided a new operating model for statewide work, which ensured statewide and diverse subject matter expert representation that used a consensus-based decision making process. This model provided all stakeholders an opportunity to advise, lead, and guide the work, build authentic collaboration, seek stakeholder input and address stakeholder needs. The outcome of this structure is the recognition and endorsement of statewide entities such as the MDE and MAISA, as well as continued leadership across the state through the five TRIG regional consortiums.

2. **Develop partnerships, provide oversight, and support communications channels across the state.**

   It has been imperative that the TRIG Operations Office communicate to the field in a continuous, consistent, and intentional way. This has been done by:
   - utilizing the consortia to convey information to the districts within them;
   - disseminating consistent messaging through a weekly newsletter, Twitter, conference booths and presentations; as well as
   - employing the expertise of the TRIG Communications Advisory Group comprised of communications staff from each consortia.

   By combining these resources, the grant information has reached an astounding amount of administrators, educators, and ultimately students, which has increased the number of partnerships and supported the means necessary to oversee the TRIG Program. Key date points that demonstrate the achievement of this deliverable over the past year include:
   - 3,800 subscribers have received 50 issues of the TRIG weekly newsletter
   - 12 presentations have been made, plus monthly MAISA Board meetings and updates to the GELN Membership
   - 28 formal partnerships have been formed and many more informal partnerships have been established
   - 10 open public steering committee meetings have been held
   - 100 percent response rates was received for the TRIG State Survey
   - 10 Consortia Fiscal Meetings with the Consortia Leader, ISD Superintendent, Project Managers, TRIG Operations Office Staff, and MDE
   - 75 percent of the Statewide Activity Advisory Committee Meetings were attended by the TRIG Operations Office Program Director

   Addendum E the 2015-16 TRIG Annual Report addressed additional outcome data points related to the objectives and outcomes of the TRIG Administrative Activity.

3. **Monitor and facilitate progress toward meeting deliverables across all activities.**

   The TRIG Operations Office is unique in the level of support it provides for the grant's Statewide Activities. From weekly calls with the Activity's Project Managers to monthly face-to-face meetings, the TRIG Operations Office and the Project Managers have a two-way street of support. As each activity is distinctive in its needs, levels of support ramp up and reduce as needed by the activities.

   Consistent monitoring is also a way in which the TRIG Operations Office has been able to accomplish its objectives. With this arrangement to observe, the TRIG Operations Office has been able to identify possible challenges in some cases, before they arrive. Monitoring of the activities has involved an array of efforts, including participating in consortia and statewide advisory committee meetings, overseeing the statewide activity monthly reporting, and monitoring the Tech-C Listserv.

4. **Coordinate the sustainability planning and leverage collaborative resources across activities.**

   At the conclusion of the TRIG program the TRIG Operations Office will transition to the MAISA Operations Office to support, monitor, coordinate, communicate and advance all current and ongoing TRIG efforts. During the past year, the TRIG Operations Office coordinated a Sustainability Strategic Planning session with all TRIG Statewide Activities. During the monthly project manager meetings and the

steering committee meetings, sustainability planning check-ins and updates have been conducted. Additional efforts to collaborate on statewide educational initiatives under the MAISA umbrella are already being pursued with the support of key partners such as, the General Education Learning Network (GELN) in relation to the Early Literacy Professional Learning grant. The transition to MAISA Operations Office is already underway, the steering committee has and will expand and diversify over the next year. Additional transition activities include:

- Communicating the transition,
- Securing strategic partnerships,
- Maintaining/growing current relationships,
- Sustaining current TRIG activities, and
- Beginning support for the new MAISA Operations Office activities is moving rapidly toward full sustainability.

5. **Integrate instructional expertise into the current structure to develop more interconnections between instruction and technology.**

In the winter of 2015-2016, the Steering Committee for TRIG added members from each TRIG regional consortia with statewide leadership expertise in curriculum, instruction, special education, and assessment from the General Education Leadership Network (GELN). During this current year, as the direct work of TRIG is completed and efforts are sustained, the makeup of what will be the MAISA Operations Office Steering Committee has become increasingly diverse.

6. **Leverage and expand current partnerships to improve communication and collaboration around technology and instruction.**

The TRIG Operations Office has a successful collaborative model that includes hundreds of educators across a variety of activities and at many levels of involvement. One of the key elements to the TRIG Operations Office and the grant overall has been the collaboration with the MAISA, including their internal partner groups, such as the GELN and the Michigan Educational Technology Leaders (METL). By coordinating efforts, the resulting partnerships with ISDs have provided a strong foundation for access to resources that would not be affordable or feasible otherwise. In addition, the access to MAISA's vast network of school administrators has allowed the communication of grant initiatives to reach a level of pervasiveness rarely seen before. As evidence of this vast network, each TRIG Statewide Activity has demonstrated increased cost savings, return on investment, or a value-add for ISDs and districts.

"MDE isn't a place in space, they're a guide by the side."
-Rhonda Provoast, Curriculum Director, Eaton Country RESA, GELN Member

Another piece of TRIG's collaborative success has been its partnership with the MDE. Through bi-weekly collaboration meetings that include members of the MDE's Division of Assessment Services (DAS), Office of Education Improvement and Innovation (OEII), Office of School Support Services (OSSS), as well as CEPI, and DTMB, this designated time to reflect on the various topics of the grant, has been crucial to TRIG attaining its goals.

Sustainability: As a grant deliverable, sustainability for the TRIG Operations Office includes an established MAISA Operations Office. The framework for the MAISA Operations Office will build on the success and high level of collaboration demonstrated in the TRIG program.

As shared above, the TRIG Operations Office addressed its grant objectives and outcomes by providing administrative support such as collaboration, communication, and progress monitoring for and between all statewide activities. The TRIG Operations Office created a TRIG State Infographic as a key communication tool to share the success of the TRIG program as a whole. The infographic illustrates the ten total statewide activities that are currently supported by the TRIG Operations Office and can be found at: http://22itrig.org/downloads/homepageimage/new_state_of_mi_front_side_of_infographic.pdf. In order to paint an accurate accounting of the outcomes of the TRIG Operations Office and receive an understanding of the complexity of the TRIG Program, a summary of the 2014-15 funded activities is shared on the pages below. These additional activities are key components to building the foundation for supporting student achievement through a statewide technology infrastructure.

Assessment and Curriculum (MiOpen Books)

MICHIGAN OPEN BOOK PROJECT

Vision: Teachers across the state to have access to a fully customizable digital resource, built with the learning needs of 21st century learners in mind.

Accomplishments:
- Developed a K-12 series of social studies resources that align to the Michigan Grade Level Content Expectations (GLECs), which utilize the inquiry arc of the College, Career, and Civic Life (C3) Framework.
- Used research on the needs of digital learners to create interactive content that students can engage with inside the resources.
- Created a content creation and vetting process through a collaboration between subject matter experts and Michigan teachers.

"I love how it has lots of interactive activities, from videos to projects, which help me remember and understand better. They're also fun, and sometimes include fun videos with songs that are catchy and great. It adds depth to Social Studies, instead of an old dusty book that's a couple decades old (No offense, Build Our Nation). Anyway, the digital textbook is great. I rate it 5 stars. It's awesome!"
-Jack Detary, Student at Gardner School, Marysville, MI

Downloads To-Date: 267,505 *(total for the life of the project)*

Cost Savings: $24,072,774.95 *(total for the life of the project)*

Sustainability: As a built-in deliverable of the grant, sustainability includes five years of extended work on the existing titles. This will allow for updates and "bug" fixes as needed with the help of the project manager and the editors. With Michigan being a #GoOpen state, the source files will remain available for downloads across the state forever. This allows districts to modify and update the books on their own when the sustainability window ends. More information regarding the Assessment and Curriculum projects can be found at: http://22itrig.org/activities/assessmentcurriculum/.

Classroom Readiness (EduPaths)

Vision: To provide self-paced, online professional development and increase awareness of statewide opportunities to promote growth for all Educational professionals in the State of Michigan.

Accomplishments:
- Launched the EduPaths website; over 4,360 users with numbers growing daily
- Over 200 courses created by educators for educators
- Establishing and continuing partnerships with statewide educational organizations as well as organizations who will connect self-paced professional learning and webinars
- Applied drill-down analytics through the use of Panorma, to identify professional learning trends in Michigan.

Participations To-Date: 4,360

Value Add:
- Cost and time effective professional learning
- Differentiated professional development
- Creates awareness and direct connections to statewide blended, in-person, and online professional learning from partners
- Free SCECHs for Michigan educators
- Transcripts to demonstrate completion
- Free District Provided Professional Development Opportunities

"I'm really hard on PD and I'm here to tell you – you KNOCKED IT OUT OF THE PARK! Each module was short and concise but rigorous enough that I learned a lot!"
-Dorian Evans, Detroit Public Schools

Sustainability: As a built in deliverable of the grant, sustainability includes 24/7 access to the entire catalog of EduPaths resources for all users. EduPaths will continue to create and connect high quality professional learning modules that positively impact instructional practice and support initiatives and professional growth into the future. More information regarding the Classroom Readiness projects can be found at: http://22itrig.org/activities/classroom-readiness/.

Data Service Collaborative

Vision: *As a meta goal of the TRIG grant, the MDE awarded Kalamazoo Regional Educational Service Agency (KRESA) funding to oversee the creation or expansion of 5 Data Services Collaboratives that support online assessment readiness in Michigan.*

Accomplishments:
- *Science Assessment:* This project organized educators and content subject matter experts from around the state to create next generation assessments for science aligned to the new Michigan Science Standards (MSS).
- *Green Pupil Accounting:* This project improved efficiency and saves resources, while improving data quality in schools by working with local auditors to refine state reporting process. Partnering with MDE, Michigan Pupil Accounting and Attendance Association (MPAA) ensures viability of meeting the goal to serve as the statewide model for paperless auditing.

- *MiCase:* This project through the work of the Michigan Collaborative Administrative Solutions for Education (MiCase) Consortium had begun to develop the MiSuite business office suite, providing a fully web-based Human Resources (HR), Payroll and Financial Accounting (FA) solution for school districts within the MiCase consortium.
- *Technology Collaborative:* This project provided statewide bids for software and technology solutions that schools across Michigan will benefit.
- *Edify:* This project focused on improving and optimizing previous investment for course conversion to meet 21f requirements, development of MSTEP-style assessment question formats, ability to differentiate student lessons for RTI/MTSS, build SAT prep course, and enhance SAT GAP analysis tool.

Cost Savings:
Through a rigors evaluation method, data were collected and analyzed to ensure that each of the Data Service Collaboratives projects had a regional or statewide reach, sustainability measures, and provide a return on investment. Reference the DSC Year 2 Return on Investment chart for the overall return on investment.
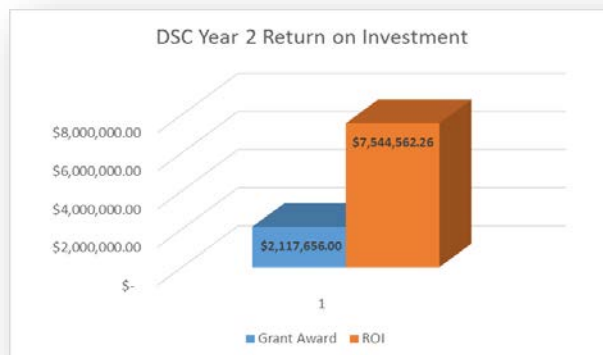
Sustainability:
Sustainability of each of the five Data Service Collaboratives was embedded into their project design as a grant deliverable. More information regarding the Data Service Collaboratives projects can be found at: http://22itrig.org/activities/data-services-collaborative/.

Michigan State Education Network (MiSEN)

Vision: Connect Michigan ISDs, LEAs, and PSAs with the network capacity needed to ensure teachers and students never see bandwidth as a barrier to achieving their goals in the classroom.

Accomplishments:
- The SEN establishes the network platform for secure, efficient delivery of online testing content.
- SEN design establishes efficient routes between each ISD and one of the five Data Hubs that provide Data Integration services for districts (through TRIG's Data Integration Activity)
- Completed equipment installation in **49 percent** of ISD locations.
- Completed **8** of the **11** backbone segments that make up the core of the SEN's backbone.
- **48** ISDs authorized participation in a MISEN E-Rate Consortium.
- Provides efficient and secure paths between districts.
- Provides the technological infrastructure for Districts to collaborate

Sustainability: Plans to sustain MiSEN include submission of E-Rate Form 470 for Transport totaling $9.4M in Federal Funds. More information regarding the MiSEN projects can be found at: http://22itrig.org/activities/state-education-network/.

MTRAx

Vision: To establish a state-wide technology readiness planning
process through the deployment of the Michigan Technology Readiness Tool (MTRAx) to all
schools (LEAs, PSAs and ISDs) in the state.

Accomplishments:
- Created a MTRAx application to analyze data about the technology device and
  network environment provided by each district to gauge that district's readiness for
  online testing.
- Provided a continual enhancements to the MTRAx application based on end user
  feedback to improve the functionality and utility of the application
- Prepared 96 percent of Michigan students and districts to successfully test online.

Indirect Cost Savings: $165,040

Sustainability: MTRAx remains a tool for the State of Michigan to collect data for online
assessment and technology readiness. More information regarding the
MTRAx projects can be found at: http://22itrig.org/activities/mtrax/.

Strategic Readiness Supports (SRS)

Vision: To increase the readiness level for online assessment in
Michigan by providing strategic supports designed to sustainably
increase technical and instructional readiness.

Accomplishments:
- Developed and implemented a process that identifies the districts within Michigan
  with the highest need of support required to achieve technology readiness.
- Provided the support needed for the identified highest need districts and buildings to
  achieve test readiness.
- Developed a process to identify districts that can be funded to maximize their long-
  range readiness level statewide

Participation to Date: Of the 39 districts in 2015 who had schools that both applied for a
waiver and did not have the technology needed to complete online testing, 16 applied and
were funded for SRS support. Of those 16 districts only one has filed for a waiver for 2017.

Cost Savings: $5,850,000

Sustainability: As a built in deliverable of the grant, sustainability includes building lasting
human capacity, establishing strong building and district infrastructure, and curating the
process used to support SRS districts. More information regarding the Strategic Readiness
Supports projects can be found at: http://22itrig.org/activities/strategic-readiness-support/.

Targeted Site Transformation (TST)

Vision: The goal of the TRIG Targeted Site Transformation (TST) Activity is to help transform schools into 1-to-1 learning environments where best practices of 21st century instruction and learning can occur.

Accomplishments:
- TST partnered with **8 districts** impacting **3,500** students to ensure:
  - a robust wireless network (for both coverage and density),
  - classroom technology,
  - a mobile device for every student and teacher, and
  - professional development and support for teachers.
- 1:1 Best Practices developed to help key considerations before adoption, during adoption and ongoing support
- 1:1 Professional Development - Using the model that EduPaths has built, TST has identified and built resources for staff and administration as part of a 1:1 adoption
- Many of the TST sites are expanding 1:1 from the selected building to other buildings or the district.
  - Stockbridge Community schools & Marquette Area Public Schools have gone 1:1 in the 2016-17 school year

> *"Having electronic devices has made classroom instruction more effective because it engages the students more, provides teachers with meaningful feedback, and allows us (teachers) to work more efficiently."*
> -Mr. Gordon Anderson, Spanish Teacher, Fowlerville Community Schools

Cost Savings:

Class Technology: $50,534.00

Installation & Support: $14,420.06

Management Support: $28,301.04

Mobile Devices: $306,512.24

PD: $56,428.61

Grand Total: $456,195.95

Sustainability: As a built-in deliverable of the grant, sustainability includes knowledge curation, which includes sharing of best practices, lessons learned, and professional development. More information regarding the Targeted Site Transformation projects can be found at: http://22itrig.org/activities/targeted-site-transformation/.

Data Systems Integration (MI Data Hub)

In order to successfully implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning, Michigan educators need ready access to student data. To achieve this, disparate data systems used by schools across the state need to efficiently and effectively share information. The Data System Integration Activity of TRIG, known as the Michigan Data Hub has created a platform that enables districts to readily share and access data across multiple information systems.

The effective use of data is one of the most important tools that we have to improve education. However, Michigan educational entities find that there are a number of challenges and barriers that make it difficult to use data effectively. School technology staff spend significant time, often duplicating work done elsewhere in the state, attempting to synchronize and transfer data between systems. When this work is not undertaken, or is insufficiently addressed, the results are inaccurate data, inconsistent data, addition of manual efforts required to enter or correct information, and data being unavailable for educator use.

The Michigan Data Hub is the result of efforts to address these challenges. The diagraph below helps to illustrate the multiple functions of the MI Data Hub.
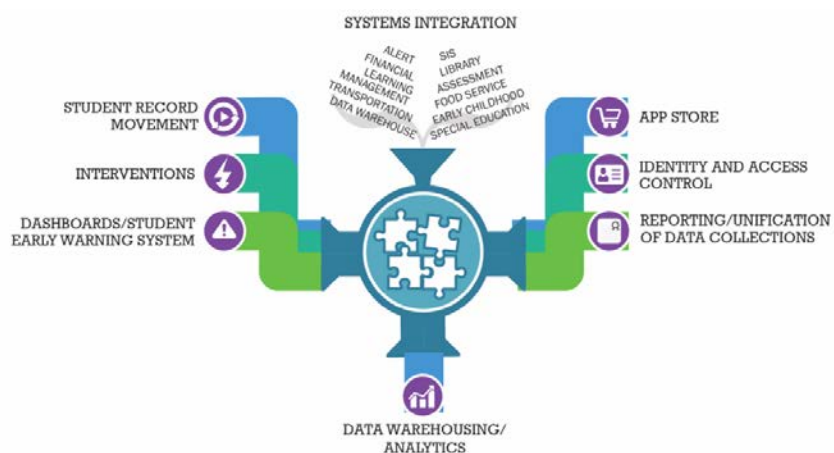
Using a toolkit from the Ed-Fi Alliance, a Texas-based nonprofit, the activity created an information ecosystem where best practices for data integration could be implemented and data could efficiently and securely flow between data systems. The results are tremendous cost savings potential, increased availability of timely and actionable data, and a platform that can be leveraged for future educational initiatives. This work could not have been completed without tremendous participation from a broad cross-section of partners.

Leadership:
Southwest Michigan Consortium (Kalamazoo RESA, Fiscal Agent)
Advisory Committee with members from all five of the statewide consortia
Project Manager, Don Dailey, Kalamazoo RESA

Funding:
- *2015-16 Award: $ 2,200,000*
- *Total Project Award: $6,270,000*
  (4 percent of the total TRIG Legislative Allocation)

Vision: To streamline the use of educational information statewide, through common data and common solutions.

Mission: To develop and implement a Standards-Based Enterprise Data Architecture that facilitates the exchange of information among the stakeholders in Michigan who work to improve student achievement.

Objectives and Outcomes: To meet the mission and vison of the Data Systems Integration Statewide Activity, eight objectives were identified. Each objective is summarized below including the outcomes achieved.

1. **Create the infrastructure to effectively manage the movement of data between data systems used by ISDs, LEAs, PSAs and other educational organizations in Michigan based on common data standards.**
   On December 7, 2015, accounts to all superintendents and tech directors were sent announcing that all 5 data hubs were functional and ready to send/receive data.

2. **Utilize the infrastructure to put in place commonly needed integrations, reducing cost and effort to do that work while increasing data accuracy and usability.**
   Since the project is just now entering the implementation phase, actual cost savings is small, in comparison to the $56,000,000 potential annual savings the Return on Investment (ROI) study shows (see Sustainability below). Since the beginning of the project, the following amounts have gone back directly to districts and ISDs:
   - $419,985 for entering systems inventory and integration status information, completing an ROI survey, and learning how to access the data hubs
   - $16,000 from 4 requests to use data from the TRIG ROI Study survey information. We estimate that it would have taken each requestor 80 hours at $50 per hour to recreate the information.
   - $1,650 for integration of the BrightArrow Alert system, which will alleviate 2 hours per district per year of configuration and management time at a rate of $75 per hour. 11 districts currently use that system.
   - $72,000 direct to ISDs to compensate for staff time involved in the project for advisories and workgroups
   - $28,500 to Oakland Schools and Wayne RESA for development of the connector for the MISTAR SIS
   - $728,064 to ISDs serving as data hub hosts for infrastructure and support
   - $1,863 to ISDs for support time configuring district data systems for data hub integration

3. **Promote the use of a more common set of applications by promoting systems that integrate with the Michigan Data Hub.**
   The Data System Integration Activity is continually meeting this objective as it works to integrate more information systems into the established data hubs format. A detailed list of "Connected Systems" can be found at: http://22itrig.org/activities/data-integration/connected-systems/. The data points bulleted below further illustrate the achievement of this objective, as well as the cost-savings for districts.
   - The five SIS vendors working on the project have each invested about $60,000 to develop connectors for the project, saving **$300,000** in development costs.
   - BrightArrow development of an alert connector consumed 3 24-hour days at an estimated rate of $150 per hour for a savings of **$10,800** for the project.

4. **Promote 100 percent district adoption of the Michigan Data Hub.**
   Currently the MI Data Hub has a team of staff members providing local districts and ISDs training and technical assistance related to the "onboarding" process. This is the process that gets districts signed-up for and integrating their system within the data hub. Currently there are 254 districts signed up to the hubs, representing nearly 43 percent of Michigan's student population. It is anticipated that all districts will be signed up by the 2017-18 school year.

5. **Ensure local control of data, data security and student data privacy.**
   The Data System Integration Activity is very serious about local control of data, data security, and student data privacy. During the "onboarding process" districts complete a Data Hosting Agreement, complete a systems inventory, system configuration and data quality verification process, and determine the usage capabilities they want. Additional documentation regarding the local control of data, data security and student data privacy can be found at: http://22itrig.org/activities/data-integration/faqs/.

   To ensure the security and privacy of student data the Michael and Susan Dell Foundation appropriated **$400,000** for the development of an enhanced security piece that was requested by the MI Data Hub. This piece was added to the Ed-Fi core and saved money that Michigan otherwise would have had to spend.

6. **Utilize the infrastructure to promote the actionable use of data through common reports and dashboards that are consistent statewide.**
   The Data System Integration Activity used the Ed-Fi Alliance toolkit, which saved the initial startup cost of developing databases, data specifications, data integration routines, dashboards, and much more. The fact that the Michael and Susan Dell Foundation poured over **$20,000,000** into this initiative to-date and about **$2,000,000** per year has saved the project a tremendous amount of money. While the grant wouldn't have necessarily spent that amount, it would have spent a significant portion just reproducing what they've done.

   Additionally, development of Ed-Fi improvements by other states has saved approximately **$500,000** per item on six items including early warning system dashboards, early learning insights dashboards, single sign-on, web services, process improvements, and dynamic watch lists for a total of **$3,000,000** of benefit.

7. **Create a governance model to facilitate sustainable operations of the infrastructure in the future, including administration, legal agreements, documentation, staffing, hosting and funding.**
   The Data System Integration Activity has created a sustainable governance model that facilitates sustainable operations through the shared leadership of the five regional data hubs, the oversight of the advisory committee, the development of legal agreements and additional documentation built into the hubs. Additional information regarding the governance model can be found at: http://22itrig.org/activities/data-integration/committees/.

8. **Evaluate future data initiatives at all levels to see if they can be enhanced by using the standardized environment in the Michigan Data Hub.**
   The Data System Integration Activity advisory committee has created a process for review and vetting of future data initiatives that could be enhance by using the standardized environment in the Michigan Data Hub. Additionally, the MDE and CEPI have representation on the advisory committee to ensure that future data initiatives at all levels can be addressed.

The Data System Integration Activity has completed, *The Michigan Data Hub: A Strategic Alignment and ROI Study* that outlines the need for future data initiatives that continue to streamline the use of educational information statewide to support school districts in ways, such as: identifying savings from eliminating duplicate and manual integration efforts; promoting shared tools; validating data early and often; and inspiring best practices while standardizing and partially automating reporting submission processes. Double Line Partners provided the $58,000 to fund the completion of the ROI Study in appreciation of the collaborative work with Michigan.

> *"[TRIG provides] the right information to the right people at the right time and anytime the central office staff saves an hour it's an hour that can be devoted students."*
> -Daniel Vomastek, Portage Public Schools Technology Director

Value Add and Return on Investment: As shared above there are many direct and indirect savings and returns on investment. To-date the total direct savings is: **$1,268,062** and the total indirect savings is: **$23,768,800**.

Sustainability:
A recent ROI Study conducted by Double Line Partners on behalf of the Data System Integration Activity shows that Michigan districts can save more than $56,000,000 annually by using the improvements that have been created in the Michigan Data Hub, which is the main product of the activity. The savings will be achieved by eliminating duplicate effort in data integration, providing shared tools to support ongoing data management tasks, and by streamlining and partially automating compliance reporting submissions. While still in the development and implementation stages, this activity requires a level of external funding to maintain operations. Once fully established, it is anticipated that the need for funding will drop off as districts, ISDs, state agencies, and possibly vendors provide funding for the use they get from the data hubs. For more information regarding the Data Hub Project visit: http://22itrig.org/activities/data-integration/.

Device Purchasing

In order to successfully implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning, students need access to technology. Getting devices into the hands of students is an essential component to achieving the goals of the grant. The Device Purchasing Activity has increased the number of devices in schools by increasing the buying capability of schools through leveraging the power of collective statewide bidding.

The TRIG Device Purchasing Bid, also known as the SPOT Bid, provides lower purchasing prices on mobile learning devices and desktops due to aggregating statewide demand. It has been in place since the spring of 2013. There have been four incentivized purchase windows, one per year since 2013, and two un-incentivized purchase windows. The final TRIG purchase window concluded on October 15, 2016. Our key partner in this activity has been the REMC SAVE Bid Project that has been managing statewide bids for K-12 education since 1990. With REMC's expertise and a few tweaks to the process to accommodate an annual short-term, high-volume bid, the activity has been able to create a repeatable, sustainable activity. The results over the past four years has been significant in terms of savings and number of districts who have been able to increase and enhance the technology used in classrooms on a daily basis in order to improve student achievement.

Over the four years of the TRIG program, the Device Purchasing Activity has enabled districts across the state to purchase over **593,000** devices (with educational list prices totaling over **$333,000,000**) for less than **$201,000,000,** a savings of over 39 percent. Some examples of these savings included:

- Chromebooks normally priced over $200 were less than $150
- Windows laptops normally priced at $750 or more were less than $400
- Desktops normally priced over $1,000 were less than $300

Additionally, TRIG participating districts received an excess of **$26,000,000** in savings on accessories and over **$27,000,000** in incentives. Vendors also provided professional development and other value-adds prized at over **$3,000,000**. Below is a chart that demonstrates the growth of device procurement over the four years of the TRIG program.
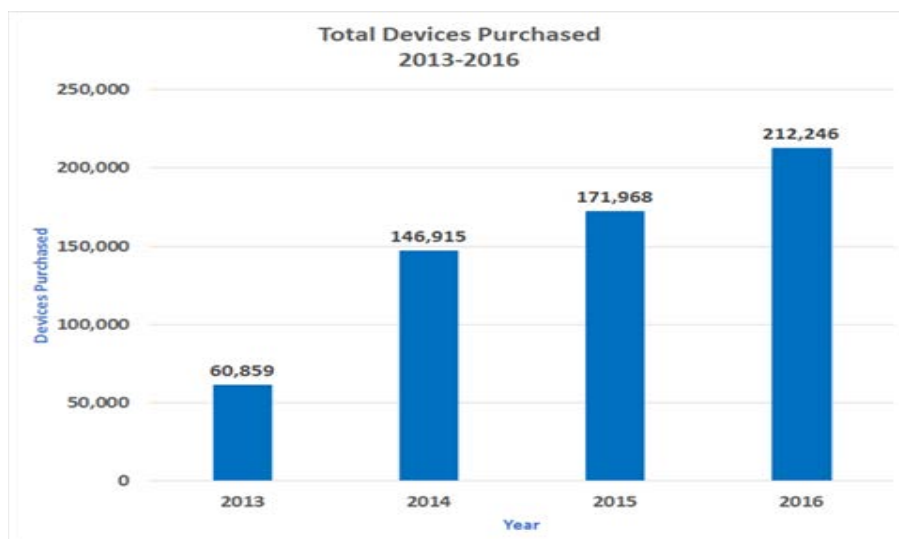
Leadership:
Rural Northern Michigan Consortium (Copper Country ISD, fiscal agent)
Advisory Committee with members from all five of the statewide consortia
Project Manager, Karen Hairston, REMC Contractor

Funding:
- *2015-16 Award:* $9,250,000
- *Total Project Award:* $22,742,900
  (14.22 percent of the total TRIG Legislative Allocation)

Vison: To make instructional technology affordable for all Michigan K-12 districts through a statewide Device Purchasing Program, to ensure districts have the devices necessary to participate in online assessments, and to support the increase used of instructional technology in the classroom.

"When students have equitable access to powerful mobile devices and digital resources, learning doesn't stop at the end of the school day. TRIG Device Purchasing made it possible for schools to acquire the best learning devices to address student and classroom growth while balancing the playing field."
-Sue Swartz, Executive Director, REMC

Goals:
Prior to the TRIG program, there was a lack of statewide educational device standards and procurement policies for desktops and personal learning devices (notebooks and tablets). The primary goal of the TRIG Bid has been to aggregate demand statewide for desktop computers and mobile devices and drive down prices to support on-line testing and the "Any Time, Any Place" initiative. A secondary goal has been to create a repeatable, sustainable process that would meet the bidding requirements for districts so that they would not have to independently go out to bid for device purchases, thereby saving them time and money.

Objectives and Outcomes: To meet the vision and goals of the Device Purchasing Activity three objectives were identified. Each objective is summarized below including the outcomes achieved.

1. **Continue to make instructional technology affordable for all Michigan K-12 districts through a statewide Device Purchasing Program.**
   The Device Purchasing Activity completed another year of device purchasing SPOT Bid, which included the following steps:
   - Allowed districts to forecast their purchases using an online forecasting tool in in the Statewide Purchasing Online Tool (SPOT)
   - Released the Invitation to Bid
   - Evaluated bid responses, recommending and approving awards using an advisory committee
   - Managed the 6-month purchase window
   - Provided support for districts and ISDs during the purchase window
   - Gathered and analyzed vendor reports through an online report system
   - Used the vendor data (supported by district purchase confirmation) to calculate incentive payments
   - Disbursed over 480 incentive checks

- Planed the professional development that links to other TRIG Statewide Activities with the vendors offering professional development as a value-add for statewide impact

Additional information, including a timeline of the process, a list of Device Purchasing Activity Advisory Committee Members, and bid information can be found at: http://22itrig.org/activities/device-purchasing/.

2. **Ensure that all Michigan K-12 districts have the device capacity and capability to participate in online assessment and high quality online learning experiences.**
The Device Purchasing Activity worked with Data Recognition Corporation (DRC), the state online assessment vendor to ensure that the devices bid meet the specifications for testing. Through the vendor bid process and working directly with the MDE and DRC the device on the SPOT bid list met the necessary testing requirements. The SPOT bid was also available to all K-12 districts. Therefore, the Device Purchasing Activity met this objective as well. A list of devices can be found at: http://22itrig.org/downloads/device_purchasing/2016_catalog_cheat_sheet_for_district_planning_v9.xlsx.

3. **Build on the success of the Year 3 Statewide Device Purchasing Program.**
Each year the Device Purchasing Activity Advisory Committee evaluates the process in order to make changes based on the evaluation findings. Based on year three's findings the committee decided to:
- offer a minimum of 25 categories of devices on the bid to provide a range of options that will allow most districts to purchase the necessary devices similar to the brands and models that they are currently using while maintaining the volume necessary in each category to obtain the best vendor discounts. A list of the 25 devices can be found at: http://22itrig.org/downloads/device_purchasing/2016_catalog_cheat_sheet_for_district_planning_v9.xlsx.
- increase the length of the purchasing window to better accommodate the spending cycles of local and intermediate school districts and to accommodate fall enrollment surprises. The window was extended from August 16 to October 15.
- distribute over $9,000,000 in incentives made available by the MDE. Copper Country as the fiscal issued over 480 incentive checks totaling over $9,000,000 this November.
- maintain a sustainable purchasing consortium to continue managing annual statewide bids using only self-generated funds to cover operating costs. The Device Purchasing Activity accomplished this objective by building in an 1 percent administrative fee to the vendors. More information regarding the administrative fee structure can be found under Sustainability.
- achieve a target of 160,000+ devices purchased by Michigan's local and intermediate school districts through this program in a single purchase window. The Device Purchasing Activity met this objective with an astonishing sales of over 212,000 devices.

Cost savings to districts:

For each year of the TRIG SPOT Bid, the total number of devices purchased, total sales, and total savings is tracked. The table below provides the final data for 2013-2016.

	2013	2014	2015	2016	Total
Purchased # Devices	56,994	149,140	174,763	212,247	593,144
# Districts & ISDs purchasing	351	417	463	515	
Total Sales	$30,250,549	$55,067,622	$67,131,191	$73,010,472	$225,459,834
Total Savings (on Devices)	$10,253,804	$34,610,050	$34,187,986	$53,207,480	$132,259,320
Incentives Paid	$4,996,009	$6,999,921	$6,194,314	$9,149,925	$27,340,169
Professional Development Value-Add	$660,000	$552,953	$980,712	$1,074,000	$3,267,665
Budget Allocated	$343,000	$149,000	$0.00	$0.00	$492,000

The chart below illustrates the total savings on devices for the life of the state funded incentivized activity. As this project sustains as an unincentivized project and the life cycle of many devices purchased during the past four years ends, it will be important to continue tracking the technology purchases of districts.
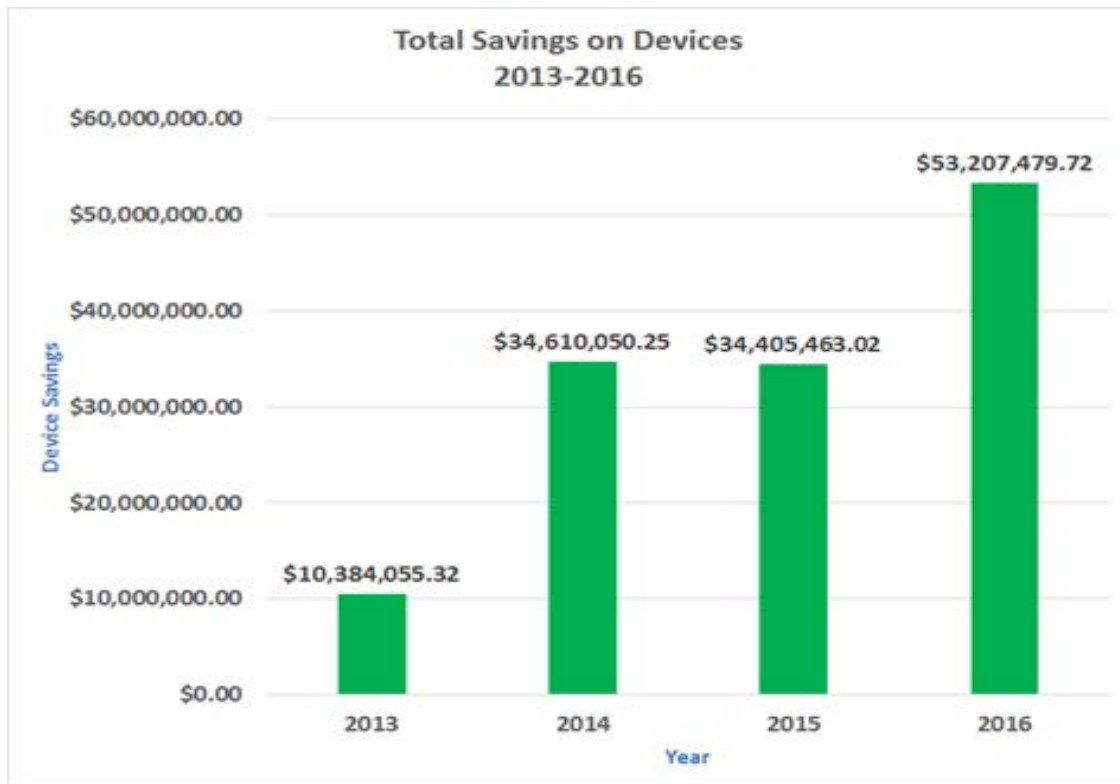
Sustainability:

For the first two years, the Device Purchasing Activity received TRIG funding to cover operating expenses. By charging the awarded vendors a 1 percent administrative fee each year, the activity was self-sustaining. In years three and four, grant funds were not necessary to cover operating expenses. In addition to funding operating expenses for the first two years, TRIG funding has provided $27,250,000 for incentive funding for the four years the activity has been in existence. The incentive funding allowed districts to purchase even more technology and technology-related services (e.g., additional computers, technology related professional development or the services of an instructional technology coach).

Beginning in 2015, this activity has been sustained with the 1 percent administrative fee collected from vendors. The 1 percent administrative fee collected is used to support the operation and management of the TRIG Device Purchasing Program, removing the administration cost to the grant. These administrative fees will continue to roll over annually, providing for sustainability. Given the success of the Statewide Device Purchasing Activity managing a short-term, high-volume bid, our vision is that this should continue as long as district demand warrants the need and it continues to be cost-effective. When the Statewide Device Purchasing Activity ceases to be part of the TRIG program and there are no longer device incentive funds available, the management of this annual statewide bid will be transitioned to the REMC SAVE Bid Project. The REMC SAVE Bid Project staff is well equipped to take on this work as it is similar to what they do every day, as the TRIG process grew out of their pre-existing processes. There will be meetings scheduled as needed to transfer project knowledge, best practices, and lessons learned, as well as project files to the REMC SAVE Bid staff. For more information regarding the Device Purchasing Project visit: http://22itrig.org/activities/device-purchasing/.

E-Rate

In order to successfully implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning, schools need access to low cost, high speed Internet connectivity. The growing demand for more Internet bandwidth necessitates that schools leverage their collective buying power through statewide bid responses to lower the overall cost for connectivity. The E-Rate Activity has lowered the costs of Internet connectivity for schools across Michigan through the posting of a collaborative E-Rate bid. Since 2012, when applicants first filed their TRIG applications, there was a sense that it would impact the cost of E-Rate discounted services in Michigan. This became evident based on bid interest and responses from the E-Rate vendor community through responses to statewide E-Rate bids.

E-Rate is a federal discount program on telecommunications services for schools and libraries. The E-Rate Activity provides multiple E-Rate supports to assist applicants with leveraging the most federal funds. Supports provided include communications, training, technical assistance, and problem resolution. The E-Rate Activity posts a statewide Form 470 to alleviate district administrative burden. External partners include the MDE, MAISA and its Operations Office, Library of Michigan (LOM), E-Rate Central, MISEN, statewide education organizations, Connect Michigan, ISDs that serve constituent districts, the E-Rate consultant community, and advisory members from each TRIG consortium.

Leadership:
>   Kent ISD Consortium (Kent ISD, Fiscal Agent)
>   Advisory Committee with members from all five of the statewide consortia
>   Project Manager, Ann-Marie Mapes, MDE Consultant

Funding:
- *2015-16 Award:* $300,000
- *Total Project Award:* $1,869,776
  (1.2 percent of the total TRIG Legislative Allocation)
- Additional funding:
  - $25,000 Library of Michigan Contribution
  - $66,000,000 E-Rate Funding Commitments for Funding Year 2015 *(This funding process is fluid as applications go through Program Integrity Assurance, audit, and Commitment Adjustments (COMAD). The totals typically become more firm about 2 years out.)*

Vision: Reduce local district cost, effort, and risk; while increasing access to Internet bandwidth for Michigan students.

Objectives and Outcomes: To meet the vison of the E-Rate Statewide Activity five objectives were identified. Each objective is summarized on the following pages including the outcomes achieved.

1. **Refine the Statewide TRIG E-Rate Activity and establish E-Rate compliant bids and/or Master Contracts.**
   a. The E-Rate Activity intentionally partnered with the MDE. The MDE dedicated a portion of a consultant Full Time Equivalent (FTE) to assist with project coordination of the activity. The E-Rate Activity strategically targeted the E-Rate consultant community, which handles approximately 50 percent of the state's applications. This relationship allowed for a successful E-Rate application window despite the introduction of a new online application system that posed a myriad of challenges. The partnership between the consultant community and the E-Rate Activity continued to grow, as the activity added two consultant representatives to its Advisory Committee. The E-Rate Activity Advisory Committee roster displays the addition of new members and can be found at: http://22itrig.org/activities/e-rate/advisory-committee/. This resulted in increased stakeholder participation, input, and alignment of training needs.
   b. The E-Rate Activity engaged a new partner, LOM, to better use state funds and contract with one training provider, as well as include libraries in communications, technical assistance, and problem resolution. The partnership resulted in a monetary contribution from the LOM, the addition of a LOM E-Rate point of contact, and an additional local public library representative on the E-Rate Advisory, as well as strengthening the relationship of community anchor institutions.
   c. The E-Rate Activity continues to explore the establishment of State Master contracts through a partnership with MISEN.

   "The TRIG E-Rate Activity has helped us "navigate the new." The hands-on fall training last year in the new EPC application system helped us get ready for the application window and feel more in control of a process that was new and bumpy for all involved."
   -Sheryl Cormicle Knox, Technology Director, Capital Area District Libraries

2. **Leverage cumulative purchasing power and provide participating TRIG districts with highly competitive pricing for connectivity.**
   a. The E-Rate Activity posted a statewide Form 470 for Internet Access and Transport. Applicants were able to reference the statewide bid responses as additional responses to an applicant's own Form 470.
   b. Statewide Form 470 for Internet Access and Transport can be utilized by all district and libraries for competitive bids.
   c. The E-Rate Activity continues to work with MISEN to explore ways to leverage bulk purchasing opportunities.

3. **Encourage participating TRIG districts to use statewide USF Form 470(s), reducing bidding, legal, and service costs.**
   a. The Statewide Form 470 was included in monthly talking points, the TRIG Weekly Update, the Michigan E-Rate Forum weekly newsletter, and shared with the LOM's listservs.

4. **Ensure participating TRIG districts have the connectivity and support structure to successfully complete the 2015-2016 online high stakes assessment(s).**
   a. The E-Rate Activity presented to MISEN regarding E-Rate eligibility, and partnered with MISEN to move forward on pursuing E-Rate funding to address connectivity and support structure building for the state intranet backbone to facilitate online testing. Instigated E-Rate process for MISEN, a potential savings of more than $9 million dollars that can be repurposed to support MISEN sustainability.

   "In the last several years the E-Rate Activity of TRIG has served a key role in dramatically dropping broadband rates across the state. The collaborative supports that the E-Rate Activity has provided have been invaluable in an ever-changing filing environment."
   -Lori Leugers, E-Rate Consultant, TeleComp Solutions, LLC

5. **Ensure that the needs of all stakeholder districts are considered throughout the implementation of TRIG.**
   a. The E-Rate Activity established a State of Michigan official email address for problem resolution and technical assistance.
   b. The E-Rate Activity created a two-way listserv for E-Rate specific conversation and E-Rate community based supports.
   c. The E-Rate Activity engaged in feasibility discussions with Strategic Readiness Support schools that were considering infrastructure upgrades.
   d. The E-Rate Activity held weekly conference calls (lasting one to two or more hours) during the application window to address stakeholder concerns.

   "The inception last year of regular conference calls from Michigan E-Rate consultants plus the ability to share information through the listserv has been absolutely invaluable for consultants who help schools and libraries navigate through the process to receive funding."
   -Marie Zuk, E-Rate Consultant, Convergent Technology Partners

   e. The E-Rate Activity provided in-depth, in-person, in-state training on E-Rate Modernization Orders.
   f. The E-Rate Activity provided hands-on technical assistance.
   g. The E-Rate Activity was the state's recognized resource for E-Rate information and training to prevent funding denials, audits, and Commitment Adjustments (COMAD).

Sustainability:
The State Budget Office for fiscal year 2017 granted the MDE one fully funded FTE dedicated 100 percent to provide E-Rate support to districts. Building upon the TRIG E-Rate Activity success and the TRIG consortia structure, the E-Rate Advisory will continue to inform the direction which the state needs to take in order to best coordinate and support E-Rate applicants. Additionally, the State of Michigan is working to explore ways to leverage funding that is not being currently tapped. The additional FTE at the MDE will provide capacity for the state to provide ongoing, dedicated support for communications, training, technical assistance, and problem resolution.

On an ongoing basis, the TRIG E-Rate and SEN activities are collaborating to facilitate strategies to lower circuit transport and IA costs for schools across Michigan. The following efforts are in place:
- Connect ISDs to an E-Rate statewide backbone (completion: 6/1/17) to reduce digital transport circuit costs
- Post Form 470s for E-Rate IA bids (10Gb-40Gb) for ISDs and ISD Consortia to purchase from for school year 2017-18
- Post Form 470s for E-Rate IA bids for small/independent school districts, PSAs and libraries to use as a response to their own Form 470 for school year 2017-18

For more information regarding the E-Rate Project visit: http://22itrig.org/activities/E-Rate/.

Next Steps

The MDE and our TRIG collaborative partners: DTMB, CEPI, MAISA, and the TRIG Steering Committee members, seek to build on the success of the TRIG model and create a framework to continue educational collaboration using an efficient and accountable region model to accomplish work statewide. These efforts will ultimately improve teaching and learning for every student across Michigan.

The TRIG program in collaboration with other technology coordinated initiatives has built a foundation that supports the increase of student achievement. Building upon this foundation will be essential in addressing the federal Every Student Succeeds Act (ESSA) requirements, as well as continue to support putting Michigan on the map as a premier education state as outlined in the Michigan Top 10 in 10 strategic plan. To continue constructing high-quality educational opportunities the following next steps, which highlight the Top 10 in 10 Focus Areas, must be taken. Building upon the TRIG program foundation can:

"Every day we send 1.5 million Michigan school children to school and 90,000 educators to work without the proper equipment, infrastructure, and support to produce a high-quality, globally competent workforce needed to reinvigorate Michigan. We answered this challenge by designing and implementing the TRIG program, but there is still work to be done."
-William Miller, MAISA Executive Director

1. Boost **Learner-Centered Supports** to provide equitable access to learner-centered education environments that are academically challenging and personalized by:

   - Sustaining TRIG activities that work to close the digital divide, such as the Device Purchasing, E-Rate, MISEN, SRS, and TST.
   - Aligning EduPaths online professional development to focus on **deeper learning**.
   - Linking **deeper learning** to MiOpen digital content.
   - Developing dashboards that align to classroom level instruction to support **deeper learning**, **personalized learning**, and **differentiated supports**.
   - Offering students and teachers access to high-quality educational opportunities, anytime, anywhere, any place, and at any pace through continued support and enhancement of open educational resources (OERs) such as MiOpen Books, EduPaths, and Data Service Collaborative – Science Assessment Project for the purpose of providing **deeper and personalized learning**, accessing **differentiated supports**, and ensuring **aligned curriculum**.
   - Providing the connection to a safe and secure Intranet.
   - Giving teachers access to timely data through the Data Hubs in order to **differentiate** their instructions.
   - Providing educators access to summative and formative assessment data in near or real time, as well as other district level data for decision making through the Data Hubs and MTRAx.
   - Developing student screens within the Data Hubs to support the analysis and review of existing **feedback** mechanisms for learners and educators at all levels.

2. Enrich the **Effective Education Workforce** to ensure that educators are: honored, supported, and offered opportunities to learn and excel in their profession; provided the time, space, and encouragement to collaborate; and receive quality feedback, by:
   - Providing and growing the online Learning Management System (LMS) content with scope ranging from items critical to statewide initiatives to individual teacher selections in conjunction with Individual Development Plans (IDPs) for **current educators**.
   - Collaborating with the MDE, districts schools, educators, and higher education institutions to provide a platform for continuous development of teaching competencies to support practice in the field.
   - Supporting the educator evaluation process with a coordinated online tool to assist **practicing educators and their leaders** in designing a collaboratively developed prescriptive individual development plan to support growth goals.
   - Coordinating, offering, and supporting blended learning, practicum experiences and coaching through **equitable** access to online content for **all educators and leaders**.

3. Strengthen **Strategic Partnerships** that authentically engage all stakeholders, carry forward a shared vision with clear intentions and defined outcomes to ensure that learners receive the greatest benefits by:
   - Aligning sustained TRIG program activities to Michigan's work with the National Future Ready Educational Technology Plan, Michigan's Educational Technology Plan, the Top 10 in 10 Strategic Plan, and the Every Student Succeeds Act (ESSA).
   - Enhancing, using, and leveraging the TRIG structure for achieving authentic collaboration to reach shared educational goals.
   - Maintaining the regional consortium model in order to provide technical assistance, communication, and coordination of educational technology efforts between **Parents, Families, Community Services, Districts, Higher Education, and the workforce**.

4. Enhance **Systemic Infrastructure** that is cohesive, coherent, and aligned for maximum effectiveness for improved student outcomes by**:**
   - Maintaining the aligned TRIG **governance** structure, which includes a steering committee, operations office, MAISA, regional consortia, and activity advisory committees that provide guidance, align multiple efforts, ensure equitable consideration of statewide efforts, offer accountability at multiple levels, and offer regional representation and decision making around complex interdependent statewide efforts.
   - Supporting the **fiscal** determination of appropriate allocations of resources to address priority need and management of financial resources to support appropriate implementation efforts through the TRIG activities such as, E-Rate, Data System Integration, Device Purchasing, and MISEN.
   - Continue to maximize the cost-effectiveness of the TRIG Statewide Activities, such as the TRIG Operations Office, Device Purchasing, MISEN, E-Rate, MiOpen Books, and EduPaths that will directly support Michigan's Top 10 in 10 Strategic Plan.
   - Implementing **quality standards** within the process and practices that support the desired systematic outcomes in the TRIG program such as MISEN and Data System Integration.

- Supporting the disseminating of **Professional Development and Technical Assistance** related to technology initiatives, online assessment, E-Rate Activities, Data Integration, MISEN, through the TRIG Consortia model.
- Providing access to timely, accurate, secure, standardized, and relevant **data** for informed decision making through MTRAx, the Data Hubs, and Data Service Center projects.
- Maintaining a shared **monitoring and accountability** system for the planning, implementation, evaluation, and continuous improvement of technology initiatives.
- Utilizing the multifaceted feedback **communication** structure developed by the TRIG operations office, which ensures consistent messages and that all parties are aware of necessary information and action.

It is our plan to continue our work towards the initial vision of TRIG, *to empower every student in Michigan to excel at next generation assessments, to leverage technology for learning, and to achieve lifetime success in a global economy.* It is the hope of the TRIG community that the infrastructure built today will not only be sustained, but will be the foundation that supports the future of every child in Michigan.

Lieutenant Governor Brian Calley recently stated,

> "*It [Technology] creates new pathways and breaks down barriers for any student, of any ability, at any age. It is amazing to see what these students could do with science and technology. And I cannot wait to see what their future holds.*" (MACUL Student Technology Showcase, December 7, 2016)

We couldn't agree more.

TRIG Structure

Regional Consortia Representing Michigan Schools

GMEC	IMC	Kent	SWMI	Rural

Oversight of MiSEN Efforts Only

Decisions Based on Advisory Input and Alignment to Grant Narrative

MiSEN Board

Vision and Guidance to Activities Set Common Practices

Activity Fiscal Agent

TRIG Steering Committee

Activity Project Manager

TRIG Operations Office MAISA MIEM MDE

Activity Advisory & Workgroups

Support, Monitor Coordinate Communicate

TRIG Activities are developed with oversight and funds awarded by the Michigan Department of Education

Key Stakeholders and Partnerships:
LEAs, ISDs, PSAs, MDE, MAISA, MASA, GELN, REMC, MACUL, MAEDS, MSBO, MPAAA, MASSP, MiSEN MiASCD, MAC, DTMB, CEPI, MSIFN, etc.

- Local districts and ISDs are represented though consortia at the steering and advisory level for each statewide activity
- Dotted lines indicate communication and influence
- Solid lines indicate direct authority or management

Michigan Department of Education
Office of Education Improvement and Innovation
2015-2016 Section 22.i: Technology Readiness Infrastructure Grant

Applicants Recommended for Funding

Applicant	Amount Requested	Amount Recommended
Academic and Career Education Academy	$1,388	$1,388
Academy for Business and Technology	$5,159	$5,159
Academy of International Studies	$1,521	$1,521
Academy of Warren	$4,226	$4,226
ACE Academy (SDA)	$1,223	$1,223
Adams Township School District	$3,544	$3,544
Addison Community Schools	$6,656	$6,656
Adrian, School District of the City of	$23,222	$23,222
Advanced Technology Academy	$9,988	$9,988
Airport Community Schools	$20,055	$20,055
Akron-Fairgrove Schools	$2,242	$2,242
Alanson Public Schools	$2,109	$2,109
Alba Public Schools	$1,058	$1,058
Albion Public Schools	$3,552	$3,552
Alcona Community Schools	$5,723	$5,723
Algonac Community School District	$13,030	$13,030
Allegan Area Educational Service Agency	$1,152	$1,152
Allegan Public Schools	$19,984	$19,984
Allen Academy	$6,946	$6,946
Allen Park Public Schools	$29,823	$29,823
Allendale Public Schools	$20,956	$20,956
Alma Public Schools	$16,605	$16,605
Almont Community Schools	$11,564	$11,564
Alpena Public Schools	$30,600	$30,600
Alpena-Montmorency-Alcona ESD	$361	$361
American International Academy	$3,418	$3,418

American Montessori Academy	$3,763	$3,763
Anchor Bay School District	$47,816	$47,816
Ann Arbor Public Schools	$134,581	$134,581
Arbor Academy	$1,505	$1,505
Arenac Eastern School District	$1,239	$1,239
Armada Area Schools	$14,912	$14,912
Arts Academy in the Woods	$2,830	$2,830
Arts and Technology Academy of Pontiac	$5,370	$5,370
Ashley Community Schools	$2,156	$2,156
Athens Area Schools	$4,383	$4,383
Atherton Community Schools	$7,221	$7,221
Atlanta Community Schools	$2,015	$2,015
Au Gres-Sims School District	$3,026	$3,026
AuTrain-Onota Public Schools	$243	$243
Bad Axe Public Schools	$7,934	$7,934
Baldwin Community Schools	$4,359	$4,359
Bangor Public Schools (Van Buren)	$9,682	$9,682
Bangor Township Schools	$19,725	$19,725
Baraga Area Schools	$3,332	$3,332
Bark River-Harris School District	$5,755	$5,755
Barry ISD	$400	$400
Bath Community Schools	$8,820	$8,820
Battle Creek Area Learning Center	$1,356	$1,356
Battle Creek Montessori Academy	$1,356	$1,356
Battle Creek Public Schools	$36,166	$36,166
Bay City Academy	$3,175	$3,175
Bay City School District	$62,187	$62,187
Bay-Arenac Community High School	$1,364	$1,364
Bay-Arenac ISD	$2,924	$2,924
Beal City Public Schools	$5,425	$5,425
Bear Lake Schools	$2,352	$2,352
Beaver Island Community School	$384	$384
Beaverton Rural Schools	$9,063	$9,063
Bedford Public Schools	$34,966	$34,966
Beecher Community School District	$7,652	$7,652

Belding Area School District	$14,872	$14,872
Bellaire Public Schools	$2,979	$2,979
Bellevue Community Schools	$4,437	$4,437
Bendle Public Schools	$9,314	$9,314
Bentley Community School District	$6,711	$6,711
Benton Harbor Area Schools	$17,272	$17,272
Benton Harbor Charter School Academy	$3,520	$3,520
Benzie County Central Schools	$11,838	$11,838
Berkley School District	$41,693	$41,693
Berrien RESA	$2,987	$2,987
Berrien Springs Public Schools	$29,094	$29,094
Bessemer Area School District	$3,081	$3,081
Big Bay De Noc School District	$1,631	$1,631
Big Jackson School District	$157	$157
Big Rapids Public Schools	$15,359	$15,359
Birch Run Area Schools	$14,802	$14,802
Birmingham Public Schools	$63,253	$63,253
Black River Public School	$7,456	$7,456
Blanche Kelso Bruce Academy	$1,842	$1,842
Blended Learning Academies Credit Recovery High School	$533	$533
Blissfield Community Schools	$9,306	$9,306
Bloomfield Hills Schools	$42,414	$42,414
Bloomingdale Public School District	$9,612	$9,612
Blue Water Middle College	$3,395	$3,395
Bois Blanc Pines School District	$16	$16
Boyne City Public Schools	$10,427	$10,427
Boyne Falls Public School District	$1,152	$1,152
Bradford Academy	$11,901	$11,901
Branch ISD	$2,132	$2,132
Branch Line School	$917	$917
Brandon School District in the Counties of Oakland and Lapeer	$21,348	$21,348
Brandywine Community Schools	$10,608	$10,608
Breckenridge Community Schools	$5,606	$5,606

Breitung Township School District	$13,963	$13,963
Bridge Academy	$5,731	$5,731
Bridgeport-Spaulding Community School District	$12,372	$12,372
Bridgman Public Schools	$7,299	$7,299
Brighton Area Schools	$57,765	$57,765
Brimley Area Schools	$4,053	$4,053
Britton Deerfield Schools	$5,190	$5,190
Bronson Community School District	$8,263	$8,263
Brown City Community Schools	$6,876	$6,876
Buchanan Community Schools	$12,089	$12,089
Buckley Community Schools	$3,371	$3,371
Bullock Creek School District	$14,528	$14,528
Burr Oak Community School District	$2,070	$2,070
Burt Township School District	$196	$196
Byron Area Schools	$7,613	$7,613
Byron Center Charter School	$1,889	$1,889
Byron Center Public Schools	$30,082	$30,082
C.O.O.R. ISD	$627	$627
Cadillac Area Public Schools	$24,241	$24,241
Caledonia Community Schools	$37,326	$37,326
Calhoun ISD	$3,857	$3,857
Camden-Frontier School	$3,983	$3,983
Capac Community Schools	$8,318	$8,318
Capstone Academy Charter School (SDA)	$635	$635
Carman-Ainsworth Community Schools	$39,851	$39,851
Carney-Nadeau Public Schools	$2,164	$2,164
Caro Community Schools	$13,791	$13,791
Carrollton Public Schools	$18,110	$18,110
Carson City-Crystal Area Schools	$7,221	$7,221
Carsonville-Port Sanilac School District	$3,097	$3,097
Caseville Public Schools	$2,407	$2,407
Casman Alternative Academy	$502	$502
Cass City Public Schools	$7,942	$7,942
Cassopolis Public Schools	$7,526	$7,526

Cedar Springs Public Schools	$26,844	$26,844
Center Line Public Schools	$21,239	$21,239
Central Lake Public Schools	$2,242	$2,242
Central Montcalm Public Schools	$13,406	$13,406
Centreville Public Schools	$6,248	$6,248
Cesar Chavez Academy	$18,181	$18,181
Chandler Park Academy	$18,651	$18,651
Charlevoix Montessori Academy for the Arts	$455	$455
Charlevoix Public Schools	$8,122	$8,122
Charlevoix-Emmet ISD	$964	$964
Charlotte Public Schools	$19,310	$19,310
Charyl Stockwell Academy	$8,091	$8,091
Chassell Township School District	$2,015	$2,015
Chatfield School	$3,740	$3,740
Cheb-Otsego-Presque Isle ESD	$925	$925
Cheboygan Area Schools	$13,885	$13,885
Chelsea School District	$19,341	$19,341
Chesaning Union Schools	$11,517	$11,517
Chippewa Hills School District	$16,339	$16,339
Chippewa Valley Schools	$128,772	$128,772
Church School District	$141	$141
Clara B. Ford Academy (SDA)	$941	$941
Clare Public Schools	$11,776	$11,776
Clare-Gladwin Regional Education Service District	$847	$847
Clarenceville School District	$14,324	$14,324
Clarkston Community School District	$65,566	$65,566
Clawson Public Schools	$13,022	$13,022
Climax-Scotts Community Schools	$3,818	$3,818
Clinton Community Schools	$8,357	$8,357
Clinton County RESA	$1,482	$1,482
Clintondale Community Schools	$22,791	$22,791
Clio Area School District	$24,782	$24,782
Coldwater Community Schools	$21,168	$21,168
Cole Academy	$1,607	$1,607

Coleman Community Schools	$5,425	$5,425
Colfax Township S/D #1F	$180	$180
Coloma Community Schools	$12,160	$12,160
Colon Community School District	$4,571	$4,571
Columbia School District	$11,000	$11,000
Commonwealth Community Development Academy	$1,443	$1,443
Comstock Park Public Schools	$15,962	$15,962
Comstock Public Schools	$15,029	$15,029
Concord Academy - Boyne	$1,474	$1,474
Concord Academy - Petoskey	$1,380	$1,380
Concord Community Schools	$5,888	$5,888
Constantine Public School District	$11,023	$11,023
Coopersville Area Public School District	$20,580	$20,580
Copper Country ISD	$737	$737
Cornerstone Health and Technology School	$3,340	$3,340
Corunna Public Schools	$14,818	$14,818
Countryside Academy	$5,198	$5,198
Covenant House Academy Detroit	$4,359	$4,359
Covenant House Academy Grand Rapids	$2,587	$2,587
Covert Public Schools	$2,391	$2,391
Crawford AuSable Schools	$12,450	$12,450
Creative Montessori Academy	$5,904	$5,904
Creative Technologies Academy	$2,305	$2,305
Crescent Academy	$9,087	$9,087
Crestwood School District	$31,093	$31,093
Crossroads Charter Academy	$4,924	$4,924
Croswell-Lexington Community Schools	$17,319	$17,319
Da Vinci Institute	$2,579	$2,579
Dansville Schools	$6,021	$6,021
David Ellis Academy	$2,854	$2,854
David Ellis Academy West	$5,935	$5,935
Davison Community Schools	$44,492	$44,492
Dearborn City School District	$155,459	$155,459
Dearborn Heights School District #7	$20,917	$20,917

Decatur Public Schools	$6,601	$6,601
Deckerville Community School District	$4,665	$4,665
Delta-Schoolcraft ISD	$823	$823
Delton Kellogg Schools	$10,121	$10,121
DeTour Area Schools	$1,035	$1,035
DeTour Arts and Technology Academy	$588	$588
Detroit Academy of Arts and Sciences	$8,577	$8,577
Detroit Achievement Academy	$745	$745
Detroit City School District	$362,459	$362,459
Detroit Community Schools	$6,209	$6,209
Detroit Delta Preparatory Academy for Social Justice	$2,603	$2,603
Detroit Edison Public School Academy	$10,341	$10,341
Detroit Innovation Academy	$2,673	$2,673
Detroit Leadership Academy	$4,398	$4,398
Detroit Public Safety Academy	$1,921	$1,921
Detroit Service Learning Academy	$10,568	$10,568
DeWitt Public Schools	$24,359	$24,359
Dexter Community School District	$27,856	$27,856
Dickinson-Iron ISD	$721	$721
Dollar Bay-Tamarack City Area Schools	$2,705	$2,705
Dove Academy of Detroit	$3,473	$3,473
Dowagiac Union School District	$17,812	$17,812
Dr. Joseph F. Pollack Academic Center of Excellence	$6,742	$6,742
Dream Academy	$2,125	$2,125
Dryden Community Schools	$4,351	$4,351
Dundee Community Schools	$12,105	$12,105
Durand Area Schools	$11,360	$11,360
Early Career Academy	$306	$306
East China School District	$33,422	$33,422
East Detroit Public Schools	$25,151	$25,151
East Grand Rapids Public Schools	$23,167	$23,167
East Jackson Community Schools	$8,436	$8,436
East Jordan Public Schools	$7,032	$7,032
East Lansing School District	$28,475	$28,475

Eastern Upper Peninsula ISD	$416	$416
Eaton Rapids Public Schools	$18,965	$18,965
Eaton RESA	$721	$721
Eau Claire Public Schools	$6,531	$6,531
Ecorse Public Schools	$8,569	$8,569
Education Achievement Authority of Michigan	$44,735	$44,735
Edwardsburg Public Schools	$21,482	$21,482
Elk Rapids Schools	$10,208	$10,208
Elkton-Pigeon-Bay Port Laker Schools	$6,985	$6,985
Ellsworth Community School	$2,132	$2,132
Engadine Consolidated Schools	$2,093	$2,093
Escanaba Area Public Schools	$18,840	$18,840
Escuela Avancemos	$2,148	$2,148
Essexville-Hampton Public Schools	$13,218	$13,218
Evart Public Schools	$6,625	$6,625
Evergreen Academy	$557	$557
Ewen-Trout Creek Consolidated School District	$1,615	$1,615
Excelsior Township S/D #1	$353	$353
Experiencia Preparatory Academy	$2,650	$2,650
Fairview Area School District	$2,281	$2,281
Farmington Public School District	$78,651	$78,651
Farwell Area Schools	$10,184	$10,184
Faxon Language Immersion Academy	$855	$855
Fennville Public Schools	$10,631	$10,631
Fenton Area Public Schools	$26,523	$26,523
Ferndale Public Schools	$23,551	$23,551
Fitzgerald Public Schools	$20,509	$20,509
Flat Rock Community Schools	$14,825	$14,825
FlexTech High School	$2,195	$2,195
Flint, School District of the City of	$41,881	$41,881
Flushing Community Schools	$32,034	$32,034
Forest Academy	$1,364	$1,364
Forest Area Community Schools	$3,904	$3,904
Forest Hills Public Schools	$78,180	$78,180
Forest Park School District	$3,410	$3,410

Four Corners Montessori Academy	$2,768	$2,768
Fowler Public Schools	$4,187	$4,187
Fowlerville Community Schools	$22,838	$22,838
Francis Reh PSA	$3,708	$3,708
Frankenmuth School District	$9,871	$9,871
Frankfort-Elberta Area Schools	$3,740	$3,740
Fraser Public Schools	$41,238	$41,238
Freeland Community School District	$14,818	$14,818
Fremont Public School District	$16,699	$16,699
Frontier International Academy	$3,646	$3,646
Fruitport Community Schools	$21,756	$21,756
Fulton Schools	$6,256	$6,256
Galesburg-Augusta Community Schools	$8,020	$8,020
Garden City Public Schools	$31,830	$31,830
Gaylord Community Schools	$24,116	$24,116
Genesee ISD	$8,020	$8,020
Genesee School District	$5,464	$5,464
George Crockett Academy	$2,572	$2,572
George Washington Carver Academy	$4,516	$4,516
Gibraltar School District	$27,612	$27,612
Gladstone Area Schools	$12,395	$12,395
Gladwin Community Schools	$13,187	$13,187
Glen Lake Community Schools	$5,770	$5,770
Glenn Public School District	$251	$251
Global Preparatory Academy	$1,599	$1,599
Gobles Public School District	$6,860	$6,860
Godfrey-Lee Public Schools	$15,429	$15,429
Godwin Heights Public Schools	$17,272	$17,272
Gogebic-Ontonagon ISD	$447	$447
Goodrich Area Schools	$16,801	$16,801
Grand Blanc Academy	$3,105	$3,105
Grand Blanc Community Schools	$65,315	$65,315
Grand Haven Area Public Schools	$49,031	$49,031
Grand Ledge Public Schools	$40,650	$40,650

Grand Rapids Ellington Academy of Arts & Technology	$1,529	$1,529
Grand Rapids Public Schools	$131,202	$131,202
Grand Traverse Academy	$9,165	$9,165
Grandville Public Schools	$43,771	$43,771
Grant Public School District	$14,473	$14,473
Grass Lake Community Schools	$10,145	$10,145
Gratiot-Isabella RESD	$1,686	$1,686
Greater Heights Academy	$2,383	$2,383
Greenville Public Schools	$29,126	$29,126
Grosse Ile Township Schools	$14,849	$14,849
Grosse Pointe Public Schools	$62,759	$62,759
Gull Lake Community Schools	$27,440	$27,440
Gwinn Area Community Schools	$8,130	$8,130
Hale Area Schools	$3,254	$3,254
Hamilton Academy	$1,984	$1,984
Hamilton Community Schools	$21,850	$21,850
Hamtramck, School District of the City of	$23,324	$23,324
Hancock Public Schools	$6,288	$6,288
Hanover-Horton School District	$8,828	$8,828
Harbor Beach Community Schools	$4,085	$4,085
Harbor Springs School District	$6,413	$6,413
Harper Creek Community Schools	$20,996	$20,996
Harper Woods, The School District of the City of	$14,183	$14,183
Harrison Community Schools	$11,000	$11,000
Hart Public School District	$10,482	$10,482
Hartford Public Schools	$10,576	$10,576
Hartland Consolidated Schools	$43,465	$43,465
Haslett Public Schools	$21,325	$21,325
Hastings Area School District	$20,870	$20,870
Hazel Park, School District of the City of	$25,762	$25,762
Hemlock Public School District	$9,486	$9,486
Henry Ford Academy	$4,100	$4,100
Hesperia Community Schools	$7,832	$7,832
Highland Park Public School Academy System	$2,572	$2,572

Hillman Community Schools	$3,716	$3,716
Hillsdale Community Schools	$10,474	$10,474
Hillsdale ISD	$1,403	$1,403
Hillsdale Preparatory School	$1,019	$1,019
Holland City School District	$30,066	$30,066
Holly Academy	$6,107	$6,107
Holly Area School District	$26,240	$26,240
Holt Public Schools	$44,257	$44,257
Holton Public Schools	$6,907	$6,907
Homer Community School District	$8,334	$8,334
Honey Creek Community School	$1,944	$1,944
Hope Academy	$4,045	$4,045
Hope of Detroit Academy	$4,461	$4,461
Hopkins Public Schools	$12,826	$12,826
Houghton Lake Community Schools	$10,286	$10,286
Houghton-Portage Township School District	$10,568	$10,568
Howell Public Schools	$57,091	$57,091
Hudson Area Schools	$7,385	$7,385
Hudsonville Public School District	$51,078	$51,078
Huron Academy	$4,006	$4,006
Huron ISD	$494	$494
Huron School District	$20,164	$20,164
Huron Valley Schools	$73,406	$73,406
ICademy Global	$1,811	$1,811
Ida Public School District	$11,564	$11,564
Imlay City Community Schools	$16,268	$16,268
Ingham ISD	$1,968	$1,968
Inland Lakes Schools	$5,904	$5,904
Innocademy	$2,227	$2,227
Innocademy Allegan Campus	$674	$674
International Academy of Flint	$8,514	$8,514
International Academy of Saginaw	$1,889	$1,889
International Preparatory Academy - MacDowell Campus	$2,822	$2,822
Ionia ISD	$1,129	$1,129

Ionia Public Schools	$23,865	$23,865
Iosco RESA	$776	$776
Iron Mountain Public Schools	$6,946	$6,946
Ironwood Area Schools of Gogebic County	$6,139	$6,139
Ishpeming Public School District No. 1	$6,107	$6,107
Island City Academy	$1,584	$1,584
Ithaca Public Schools	$10,600	$10,600
Jackson ISD	$3,371	$3,371
Jackson Preparatory & Early College	$2,219	$2,219
Jackson Public Schools	$41,764	$41,764
Jalen Rose Leadership Academy	$3,277	$3,277
Jefferson International Academy	$1,882	$1,882
Jefferson Schools (Monroe)	$14,614	$14,614
Jenison Public Schools	$38,479	$38,479
Johannesburg-Lewiston Area Schools	$5,629	$5,629
Jonesville Community Schools	$11,627	$11,627
Joseph K. Lumsden Bahweting Anishnabe Academy	$4,053	$4,053
Joy Preparatory Academy	$2,219	$2,219
Kalamazoo Public Schools	$99,686	$99,686
Kalamazoo RESA	$4,508	$4,508
Kaleva Norman Dickson School District	$4,014	$4,014
Kalkaska Public Schools	$12,356	$12,356
Kearsley Community School District	$24,022	$24,022
Kelloggsville Public Schools	$17,546	$17,546
Kenowa Hills Public Schools	$25,535	$25,535
Kent City Community Schools	$10,529	$10,529
Kent ISD	$31	$31
Kentwood Public Schools	$69,282	$69,282
Kingsbury Country Day School	$1,827	$1,827
Kingsley Area Schools	$11,196	$11,196
Kingston Community School District	$5,104	$5,104
Laingsburg Community Schools	$8,804	$8,804
Lake City Area School District	$8,820	$8,820
Lake Fenton Community Schools	$15,813	$15,813

Lake Linden-Hubbell School District	$3,740	$3,740
Lake Orion Community Schools	$59,412	$59,412
Lake Shore Public Schools (Macomb)	$28,914	$28,914
Lakeshore School District (Berrien)	$21,685	$21,685
Lakeview Community Schools (Montcalm)	$9,087	$9,087
Lakeview Public Schools (Macomb)	$31,979	$31,979
Lakeview Sch. District (Calhoun)	$31,336	$31,336
LakeVille Community School District	$10,114	$10,114
Lakewood Public Schools	$14,818	$14,818
Lamphere Public Schools	$21,474	$21,474
Landmark Academy	$5,880	$5,880
L'Anse Area Schools	$5,151	$5,151
L'Anse Creuse Public Schools	$84,648	$84,648
Lansing Public School District	$86,773	$86,773
Lapeer Community Schools	$41,560	$41,560
Lapeer ISD	$651	$651
Lawrence Public Schools	$4,971	$4,971
Lawton Community School District	$7,801	$7,801
Leelanau Montessori Public School Academy	$815	$815
Leland Public School District	$4,085	$4,085
Lenawee ISD	$1,740	$1,740
Les Cheneaux Community Schools	$1,725	$1,725
Leslie Public Schools	$10,286	$10,286
Lewis Cass ISD	$1,176	$1,176
Life Skills Center of Pontiac	$1,066	$1,066
LifeTech Academy	$1,176	$1,176
Lincoln Consolidated School District	$31,830	$31,830
Lincoln Park, School District of the City of	$38,541	$38,541
Linden Community Schools	$22,234	$22,234
Litchfield Community Schools	$1,929	$1,929
Livingston ESA	$1,897	$1,897
Livonia Public Schools School District	$114,503	$114,503
Lowell Area Schools	$29,839	$29,839
Ludington Area School District	$17,123	$17,123
Mackinac Island Public Schools	$588	$588

Mackinaw City Public Schools	$1,200	$1,200
Macomb ISD	$12,818	$12,818
Macomb Montessori Academy	$1,615	$1,615
Madison District Public Schools	$13,312	$13,312
Madison School District (Lenawee)	$12,544	$12,544
Madison-Carver Academy	$3,983	$3,983
Mancelona Public Schools	$7,550	$7,550
Manchester Community Schools	$8,279	$8,279
Manistee Area Public Schools	$12,238	$12,238
Manistee ISD	$510	$510
Manistique Area Schools	$6,554	$6,554
Manton Consolidated Schools	$7,542	$7,542
Maple Valley Schools	$8,232	$8,232
Mar Lee School District	$2,376	$2,376
Marcellus Community Schools	$6,013	$6,013
Marion Public Schools	$4,273	$4,273
Marlette Community Schools	$7,080	$7,080
Marquette Area Public Schools	$25,355	$25,355
Marquette-Alger RESA	$588	$588
Marshall Academy	$2,023	$2,023
Marshall Public Schools	$19,145	$19,145
Martin Public Schools	$4,398	$4,398
Marvin L. Winans Academy of Performing Arts	$5,049	$5,049
Marysville Public Schools	$21,717	$21,717
Mason Consolidated Schools (Monroe)	$8,781	$8,781
Mason County Central Schools	$10,192	$10,192
Mason County Eastern Schools	$3,614	$3,614
Mason Public Schools (Ingham)	$24,798	$24,798
Mattawan Consolidated School	$30,200	$30,200
Mayville Community School District	$5,057	$5,057
McBain Rural Agricultural Schools	$8,036	$8,036
Mecosta-Osceola ISD	$2,289	$2,289
Melvindale-North Allen Park Schools	$22,148	$22,148
Memphis Community Schools	$6,711	$6,711
Mendon Community School District	$4,571	$4,571

Menominee Area Public Schools	$10,929	$10,929
Menominee ISD	$102	$102
Meridian Public Schools	$10,372	$10,372
Merrill Community Schools	$4,924	$4,924
Mesick Consolidated Schools	$4,876	$4,876
Michigan Center School District	$11,031	$11,031
Michigan School for the Arts	$2,321	$2,321
Michigan Technical Academy	$7,119	$7,119
Mid Peninsula School District	$1,466	$1,466
Midland Academy of Advanced and Creative Studies	$1,607	$1,607
Midland County Educational Service Agency	$2,156	$2,156
Midland Public Schools	$60,760	$60,760
Mid-Michigan Leadership Academy	$2,470	$2,470
Milan Area Schools	$17,099	$17,099
Mildred C. Wells Preparatory Academy	$1,450	$1,450
Millington Community Schools	$9,776	$9,776
Mio-AuSable Schools	$4,108	$4,108
Mona Shores Public School District	$29,886	$29,886
Monroe ISD	$6,201	$6,201
Monroe Public Schools	$45,127	$45,127
Montabella Community Schools	$6,178	$6,178
Montague Area Public Schools	$11,611	$11,611
Montcalm Area ISD	$1,325	$1,325
Montrose Community Schools	$11,360	$11,360
Moran Township School District	$706	$706
Morenci Area Schools	$5,464	$5,464
Morey Montessori Public School Academy	$815	$815
Morley Stanwood Community Schools	$9,102	$9,102
Morrice Area Schools	$4,030	$4,030
Mount Clemens Community School District	$9,024	$9,024
Mt. Clemens Montessori Academy	$2,517	$2,517
Mt. Morris Consolidated Schools	$16,166	$16,166
Mt. Pleasant City School District	$28,569	$28,569
Munising Public Schools	$5,292	$5,292

Muskegon Area ISD	$1,584	$1,584
Muskegon Heights Public School Academy System	$6,421	$6,421
Muskegon Montessori Academy for Environmental Change	$925	$925
Muskegon, Public Schools of the City of	$32,418	$32,418
Nah Tah Wahsh Public School Academy	$1,411	$1,411
Napoleon Community Schools	$10,670	$10,670
Negaunee Public Schools	$12,191	$12,191
New Beginnings Academy	$894	$894
New Branches Charter Academy	$2,289	$2,289
New Buffalo Area Schools	$4,641	$4,641
New Haven Community Schools	$9,980	$9,980
New Lothrop Area Public Schools	$7,307	$7,307
New Paradigm College Prep	$588	$588
New Paradigm Glazer Academy	$1,568	$1,568
Newaygo County RESA	$1,443	$1,443
Newaygo Public School District	$12,583	$12,583
NICE Community School District	$9,055	$9,055
Niles Community Schools	$30,309	$30,309
Noor International Academy	$1,780	$1,780
North Adams-Jerome Public Schools	$2,360	$2,360
North Branch Area Schools	$18,644	$18,644
North Dickinson County Schools	$2,164	$2,164
North Huron School District	$3,567	$3,567
North Muskegon Public Schools	$8,154	$8,154
North Star Academy	$2,101	$2,101
Northport Public School District	$1,247	$1,247
Northridge Academy	$2,807	$2,807
Northview Public Schools	$26,523	$26,523
Northville Public Schools	$58,604	$58,604
Northwest Community Schools	$23,998	$23,998
Norway-Vulcan Area Schools	$5,723	$5,723
Nottawa Community School	$1,027	$1,027
Novi Community School District	$51,054	$51,054

Oak Park, School District of the City of	$37,436	$37,436
Oakland Academy	$1,411	$1,411
Oakland FlexTech Academy	$815	$815
Oakland Schools	$118	$118
Oakridge Public Schools	$16,103	$16,103
Ojibwe Charter School	$760	$760
Okemos Public Schools	$32,904	$32,904
Old Redford Academy	$14,324	$14,324
Olivet Community Schools	$11,736	$11,736
Onaway Area Community School District	$4,916	$4,916
Onekama Consolidated Schools	$3,340	$3,340
Onsted Community Schools	$10,866	$10,866
Ontonagon Area School District	$2,454	$2,454
Orchard View Schools	$19,098	$19,098
Oscoda Area Schools	$9,212	$9,212
Otsego Public Schools	$17,734	$17,734
Ottawa Area ISD	$3,599	$3,599
Outlook Academy	$353	$353
Ovid-Elsie Area Schools	$12,277	$12,277
Owendale-Gagetown Area School District	$1,239	$1,239
Owosso Public Schools	$25,362	$25,362
Oxford Community Schools	$44,429	$44,429
Pansophia Academy	$3,332	$3,332
Parchment School District	$12,920	$12,920
Paw Paw Public School District	$17,342	$17,342
Peck Community School District	$2,901	$2,901
Pellston Public Schools	$4,116	$4,116
Pennfield Schools	$16,911	$16,911
Pentwater Public School District	$2,109	$2,109
Perry Public Schools	$9,855	$9,855
Pewamo-Westphalia Community Schools	$5,214	$5,214
Pickford Public Schools	$3,599	$3,599
Pinckney Community Schools	$25,064	$25,064
Pinconning Area Schools	$10,114	$10,114
Pine River Area Schools	$8,185	$8,185

Pittsford Area Schools	$4,477	$4,477
Plainwell Community Schools	$21,536	$21,536
Plymouth Educational Center Charter School	$4,367	$4,367
Plymouth-Canton Community Schools	$136,126	$136,126
Pontiac City School District	$33,038	$33,038
Port Huron Area School District	$69,133	$69,133
Portage Public Schools	$67,981	$67,981
Portland Public Schools	$16,386	$16,386
Posen Consolidated School District No. 9	$1,811	$1,811
Potterville Public Schools	$6,868	$6,868
Powell Township Schools	$274	$274
Presque Isle Academy II	$235	$235
Public Schools of Calumet, Laurium & Keweenaw	$12,309	$12,309
Public Schools of Petoskey	$22,564	$22,564
Quincy Community Schools	$9,455	$9,455
Rapid River Public Schools	$2,768	$2,768
Ravenna Public Schools	$8,506	$8,506
Reading Community Schools	$6,217	$6,217
Redford Union Schools, District No. 1	$26,907	$26,907
Reed City Area Public Schools	$12,089	$12,089
Reese Public Schools	$6,523	$6,523
Reeths-Puffer Schools	$29,620	$29,620
Relevant Academy of Eaton County	$839	$839
Renaissance Public School Academy	$2,752	$2,752
Republic-Michigamme Schools	$1,105	$1,105
Richfield Public School Academy	$5,198	$5,198
Richmond Community Schools	$11,493	$11,493
River Rouge, School District of the City of	$13,869	$13,869
River Valley School District	$4,406	$4,406
Riverside Academy	$7,503	$7,503
Riverview Community School District	$22,289	$22,289
Rochester Community School District	$117,921	$117,921
Rockford Public Schools	$62,054	$62,054
Rogers City Area Schools	$4,288	$4,288

Romeo Community Schools	$42,030	$42,030
Romulus Community Schools	$23,473	$23,473
Roscommon Area Public Schools	$8,107	$8,107
Roseville Community Schools	$38,596	$38,596
Royal Oak Schools	$38,926	$38,926
Rudyard Area Schools	$5,504	$5,504
Rutherford Winans Academy	$1,662	$1,662
Saginaw ISD	$2,987	$2,987
Saginaw Preparatory Academy	$2,697	$2,697
Saginaw Township Community Schools	$37,757	$37,757
Saginaw, School District of the City of	$50,419	$50,419
Saline Area Schools	$41,764	$41,764
Sand Creek Community Schools	$7,009	$7,009
Sandusky Community School District	$8,052	$8,052
Sanilac ISD	$839	$839
Saranac Community Schools	$7,903	$7,903
Saugatuck Public Schools	$6,648	$6,648
Sault Ste. Marie Area Schools	$17,711	$17,711
Schoolcraft Community Schools	$8,342	$8,342
Shelby Public Schools	$10,506	$10,506
Shepherd Public Schools	$14,339	$14,339
Shiawassee Regional ESD	$1,458	$1,458
Sigel Township S/D #3F	$118	$118
Sigel Township S/D #4F	$220	$220
Sigel Township S/D #6	$63	$63
Sodus Township S/D #5	$525	$525
South Haven Public Schools	$16,558	$16,558
South Lake Schools	$14,912	$14,912
South Lyon Community Schools	$62,885	$62,885
South Redford School District	$27,777	$27,777
Southfield Public School District	$52,222	$52,222
Southgate Community School District	$33,414	$33,414
Sparta Area Schools	$20,658	$20,658
Spring Lake Public Schools	$19,545	$19,545
Springport Public Schools	$7,299	$7,299

St. Charles Community Schools	$7,675	$7,675
St. Clair County RESA	$1,270	$1,270
St. Ignace Area Schools	$4,375	$4,375
St. Johns Public Schools	$23,936	$23,936
St. Joseph County ISD	$996	$996
St. Joseph Public Schools	$22,924	$22,924
St. Louis Public Schools	$8,287	$8,287
Standish-Sterling Community Schools	$12,442	$12,442
Stanton Township Public Schools	$1,333	$1,333
Star International Academy	$12,481	$12,481
Starr Detroit Academy	$7,009	$7,009
Stephenson Area Public Schools	$4,445	$4,445
Stockbridge Community Schools	$11,196	$11,196
Sturgis Public Schools	$25,754	$25,754
Summerfield Schools	$5,339	$5,339
Summit Academy	$3,191	$3,191
Summit Academy North	$15,578	$15,578
Superior Central School District	$2,752	$2,752
Suttons Bay Public Schools	$4,673	$4,673
Swan Valley School District	$14,049	$14,049
Swartz Creek Community Schools	$30,341	$30,341
Tahquamenon Area Schools	$5,629	$5,629
Tawas Area Schools	$9,549	$9,549
Taylor School District	$54,323	$54,323
Tecumseh Public Schools	$22,995	$22,995
Tekonsha Community Schools	$2,031	$2,031
The Dearborn Academy	$3,936	$3,936
The Greenspire School	$784	$784
Thornapple Kellogg School District	$23,685	$23,685
Three Lakes Academy	$760	$760
Three Oaks Public School Academy	$3,152	$3,152
Three Rivers Community Schools	$20,996	$20,996
Timbuktu Academy of Science and Technology	$2,720	$2,720
Traverse Bay Area ISD	$2,877	$2,877
Traverse City Area Public Schools	$77,302	$77,302

Trenton Public Schools	$20,839	$20,839
Tri County Area Schools	$15,539	$15,539
Trillium Academy	$4,931	$4,931
Troy School District	$99,709	$99,709
Tuscola ISD	$1,936	$1,936
Ubly Community Schools	$5,590	$5,590
Union City Community Schools	$8,452	$8,452
Unionville-Sebewaing Area S.D.	$6,021	$6,021
Universal Academy	$5,739	$5,739
Universal Learning Academy	$5,276	$5,276
University Preparatory Academy (PSAD)	$14,590	$14,590
University Preparatory Science and Math (PSAD)	$11,219	$11,219
University Yes Academy	$7,142	$7,142
Utica Community Schools	$220,422	$220,422
Van Buren ISD	$2,916	$2,916
Van Buren Public Schools	$38,110	$38,110
Van Dyke Public Schools	$20,666	$20,666
Vanderbilt Area Schools	$839	$839
Vandercook Lake Public Schools	$9,518	$9,518
Vassar Public Schools	$9,384	$9,384
Verona Township S/D #1F	$180	$180
Vestaburg Community Schools	$4,618	$4,618
Vicksburg Community Schools	$20,886	$20,886
Vista Meadows Academy	$917	$917
Voyageur Academy	$8,193	$8,193
Wakefield-Marenisco School District	$2,281	$2,281
Waldron Area Schools	$2,187	$2,187
Walkerville Public Schools	$2,266	$2,266
Walled Lake Consolidated Schools	$113,100	$113,100
Warren Consolidated Schools	$115,389	$115,389
Warren Woods Public Schools	$25,519	$25,519
Washington-Parks Academy	$10,976	$10,976
Washtenaw ISD	$1,850	$1,850
Waterford Montessori Academy	$1,576	$1,576

Waterford School District	$74,229	$74,229
Watersmeet Township School District	$1,160	$1,160
Watervliet School District	$11,282	$11,282
Waverly Community Schools	$22,156	$22,156
W-A-Y Academy	$3,246	$3,246
WAY Academy - Flint	$1,882	$1,882
WAY Michigan	$612	$612
Wayland Union Schools	$22,971	$22,971
Wayne RESA	$204	$204
Wayne-Westland Community School District	$91,069	$91,069
Webberville Community Schools	$4,359	$4,359
Wells Township School District	$55	$55
West Bloomfield School District	$43,332	$43,332
West Branch-Rose City Area Schools	$15,798	$15,798
West Iron County Public Schools	$6,617	$6,617
West MI Academy of Arts and Academics	$3,810	$3,810
West MI Academy of Environmental Science	$5,386	$5,386
West Michigan Aviation Academy	$4,226	$4,226
West Ottawa Public School District	$54,613	$54,613
West Shore Educational Service District	$1,168	$1,168
Western School District	$23,089	$23,089
Weston Preparatory Academy	$2,430	$2,430
Westwood Community School District	$16,386	$16,386
Westwood Heights Schools	$10,584	$10,584
Wexford-Missaukee ISD	$941	$941
White Cloud Public Schools	$7,730	$7,730
White Pigeon Community Schools	$5,864	$5,864
White Pine Academy	$580	$580
Whitefish Township Schools	$133	$133
Whiteford Agricultural School District of the Counties of Lenawee and Monroe	$5,339	$5,339
Whitehall District Schools	$16,511	$16,511
Whitmore Lake Public School District	$6,664	$6,664
Whittemore-Prescott Area Schools	$6,562	$6,562
Will Carleton Charter School Academy	$2,634	$2,634

Williamston Community Schools	$14,198	$14,198
Wolverine Community School District	$2,125	$2,125
Woodhaven-Brownstown School District	$40,000	$40,000
Woodland Park Academy	$3,120	$3,120
Woodland School	$1,670	$1,670
Wyandotte, School District of the City of	$36,495	$36,495
Wyoming Public Schools	$34,810	$34,810
Yale Public Schools	$15,131	$15,131
Ypsilanti Community Schools	$30,200	$30,200
Zeeland Public Schools	$46,773	$46,773
Totals	**$11,239,254**	**$11,239,254**

Addendum C – TRIG Steering Committee Member Directory

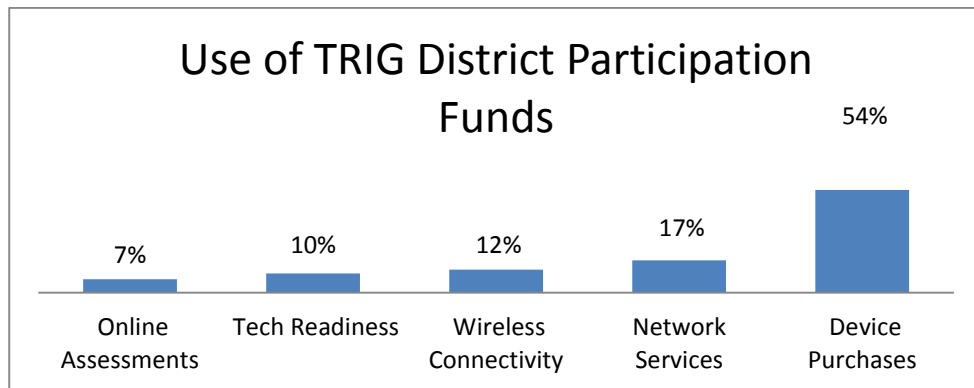| Organization/Contact Person:	E-mail:
Greater Michigan Education Consortium	
Luke Wittum	lwittum@geneseeisd.org
Tammy Evans	tammy.evans@oakland.k12.mi.us
Dennis Buckmaster	buckmaster.dennis@sccresa.org
Rhonda Provoast	rprovoast@eatonresa.org
iMC - Wexford-Missaukee ISD	
Lisa Lockman	llockman@wmisd.org
Tom Johnson	tjohnson@k12eta.org
Kent ISD	
Glen Finkel	GlenFinkel@kentisd.org
Phil Carolan	phil.carolan@lisd.us
Tonya Harrison	tharrison@moisd.org
Rural Northern Michigan	
Tim Davis	davist@charemisd.org
Mike Richardson	mike@remc1.org
Valerie Masuga	vmasuga@eupschools.org
S.W. Michigan	
Brian Schupbach	bschupbach@kresa.org
Tom Harwood	tharwood@kresa.org
Diane M. Talo	dtalo@sjcisd.org
MAISA Representative	
David E. Schulte, Superintendent	schulte@sresd.org
MDE	
Linda Forward	ForwardL@michigan.gov
Amanda Stoel	StoelA@michigan.gov
Dave Judd, MDE - M-Step	JuddD@michigan.gov
Michelle Ribant	ribantm@michigan.gov
TRIG Staff	
Dave Cairy, TRIG Project Director	dcairy@gomasa.org
Jan Vogel, TRIG Project Coordinator	jvogel@gomasa.org
Summer Franck, TRIG Comm Asst/Device PD	sfranck@gomasa.org
Evaluation Consultants:	
Michelle Johnston, FSU	majohnston2018@gmail.com
Karen Mlcek	karenmlcek@gmail.com

2016 TRIG State Survey

Background: *The 2016 Technology Readiness Infrastructure Grant (TRIG) State Survey was completed by* **100%** *of the ISDs (56), LEAs (530) and PSAs (167) that received 4.0 TRIG funds from the Michigan Department of Education. The purpose of the survey is to assist in evaluating the impact of TRIG on district readiness for online assessment and to assist in planning for future technology initiatives statewide.*

The survey was completed by technology and/or curriculum leaders from the districts and is their representation of their technology readiness and impact from TRIG. The survey data is the start of putting the picture together on how technology is used with students in Michigan. Questions 2, 3, 8, and 12 are questions that we have been asked for the last 2 years so we have some historical data.

We want to thank everyone for their time in providing this feedback.

1. Breakdown of how districts spent or will spend the 2015-16 TRIG 4.0 District Participation Funds:

Use of TRIG District Participation Funds

Online Assessments	Tech Readiness	Wireless Connectivity	Network Services	Device Purchases
7%	10%	12%	17%	54%

2. How TRIG has impacted districts: *(Historical data)*

TRIG Impact

■ 2016 ■ 2015

	Test Ready Devices	Networking and Infrastructure	Teacher PD	Other Impact
2016	82%	62%	28%	9%
2015	76%	60%	35%	12%
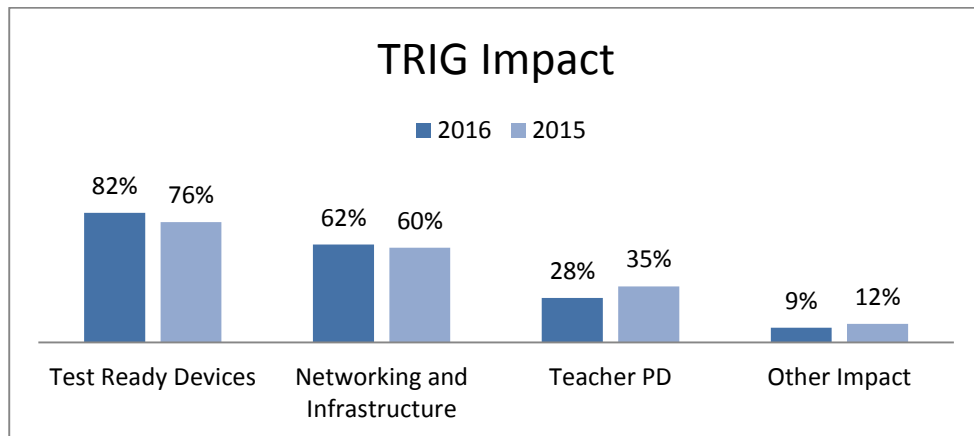
3. Challenges/needs that interfered with district readiness for online assessment: *(Historical data)*

Challenges that Interfere with District Readiness for Online Assessment

Challenge	2016	2015
More information about online assessment from MDE	13%	22%
No challenges, we are ready for online testing	28%	13%
Greater student technical competencies related to the use of technology	23%	34%
Greater student technical competencies related to online testing	30%	44%
Longer testing window	17%	27%
Additional bandwidth (all types)	24%	31%
Teacher professional development related to the use of technology	31%	44%
Teacher professional development related to online testing	26%	53%
Additional test ready devices	43%	59%

■ 2016 ■ 2015

4. The following best describes how districts were prepared for the second year of the M-STEP online assessment compared to year one:
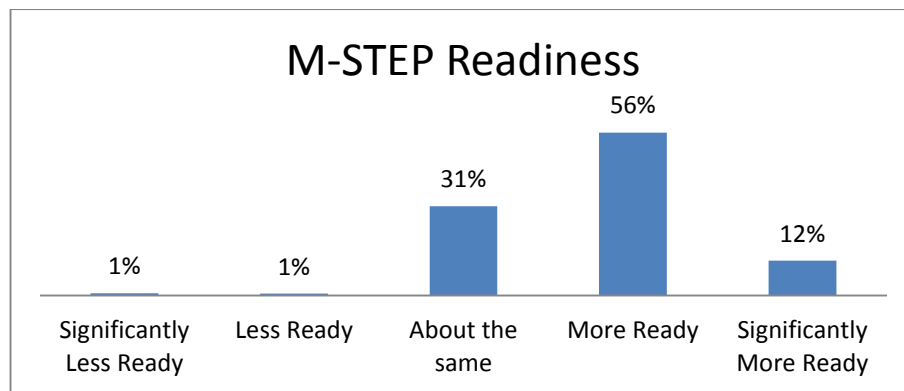
M-STEP Readiness

Significantly Less Ready	Less Ready	About the same	More Ready	Significantly More Ready
1%	1%	31%	56%	12%

5. Supports received from the Technology Readiness Infrastructure Grant (TRIG) that have helped build the capacity of your educators to plan and implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning:

Value of Activity to District

Activity	Moderate to High Value	Low value	Did not use
DISTRICT PARTICIPATION FUNDS	82%	8%	10%
INCENTIVE FUNDS	80%	6%	15%
DEVICE PURCHASING	77%	6%	16%
TRIG OPERATIONS OFFICE	64%	21%	14%
CONSORTIA SUPPORT	58%	18%	24%
E-RATE	53%	19%	27%
MTRAX	48%	40%	12%
DATA SERVICE COLLABORATIVES	44%	17%	39%
ASSESSMENT & CURRICULUM	29%	22%	49%
CLASSROOM READINESS	26%	24%	50%

6. The perceived value or use of Data Integration (Data Hubs) and the State Education Network (SEN) TRIG Activities:

6a - Future - Data Integration

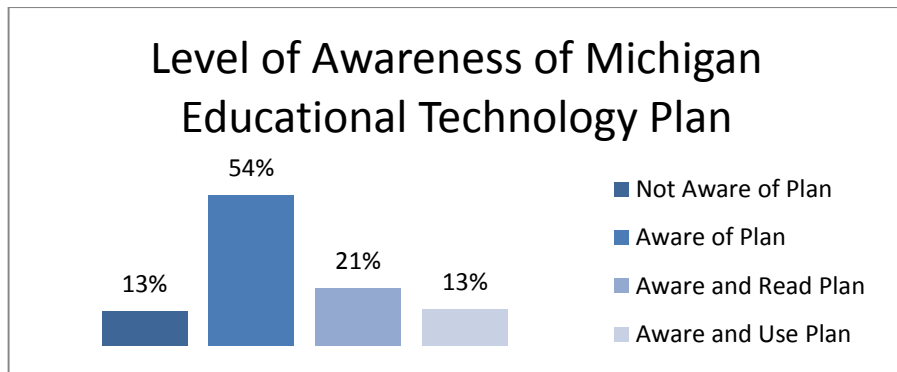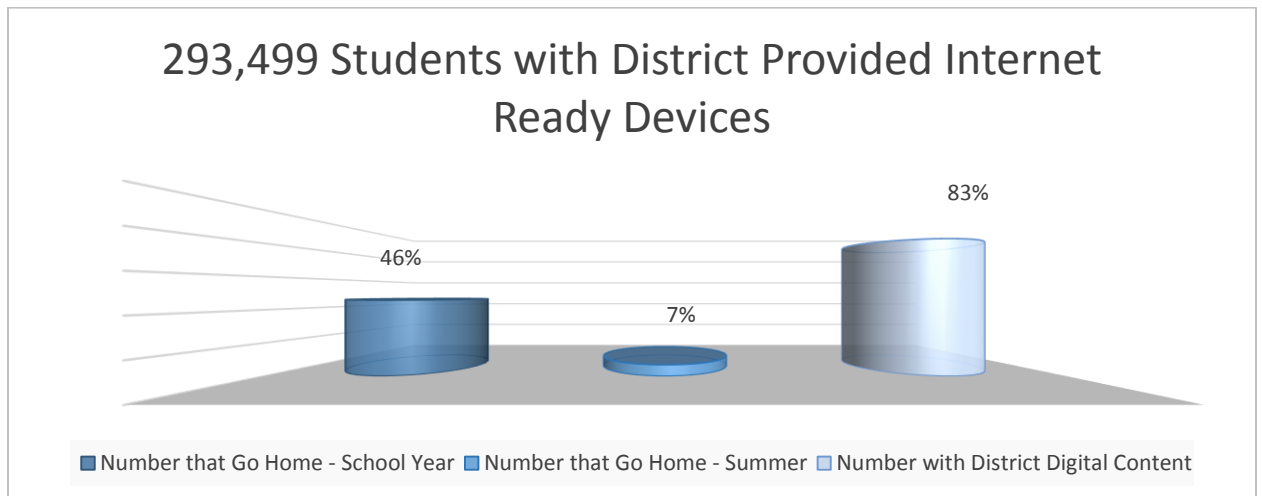|	Value
High value	28%
Moderate value	41%
Low or no value	18%
Unaware of Project	13%

Cont. - The perceived value or use of Data Integration (Data Hubs) and the State Education Network (SEN) TRIG Activities:

6b - Future - State Education Network

- High value: 22%
- Moderate value: 41%
- Low or no value: 24%
- Did not use: 13%
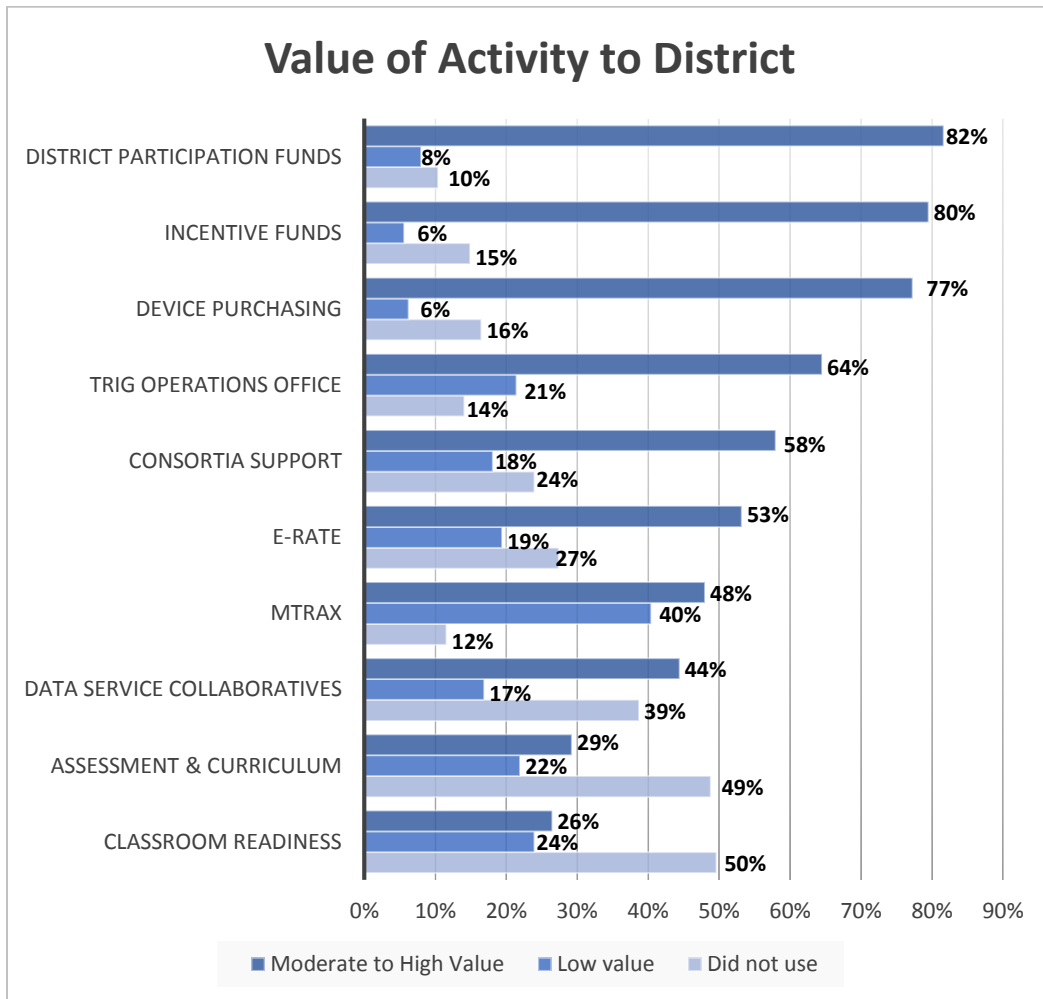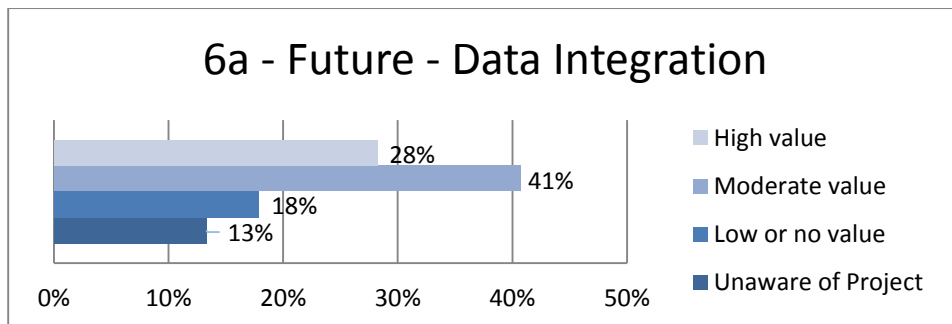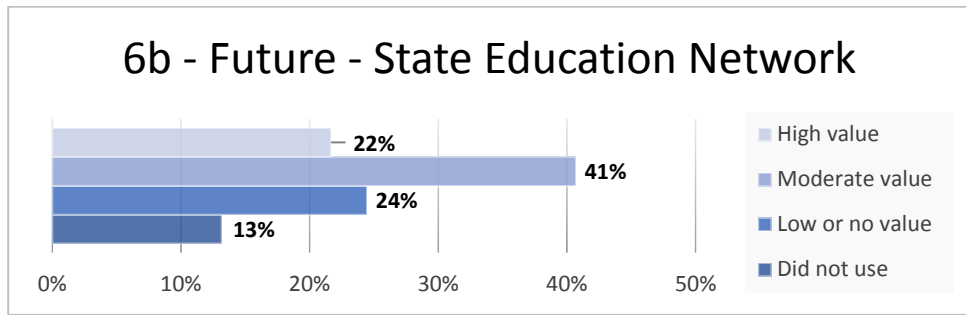
7. The level of awareness of the State of Michigan Educational Technology Plan:

Level of Awareness of Michigan Educational Technology Plan

- Not Aware of Plan: 13%
- Aware of Plan: 54%
- Aware and Read Plan: 21%
- Aware and Use Plan: 13%

8. Data about the number of students in districts with 1:1 devices: *(Historical data)*

293,499 Students with District Provided Internet Ready Devices

- Number that Go Home - School Year: 46%
- Number that Go Home - Summer: 7%
- Number with District Digital Content: 83%

Students with 1:1 Devices:

Number of students reported as having 1:1 devices: **293,499**

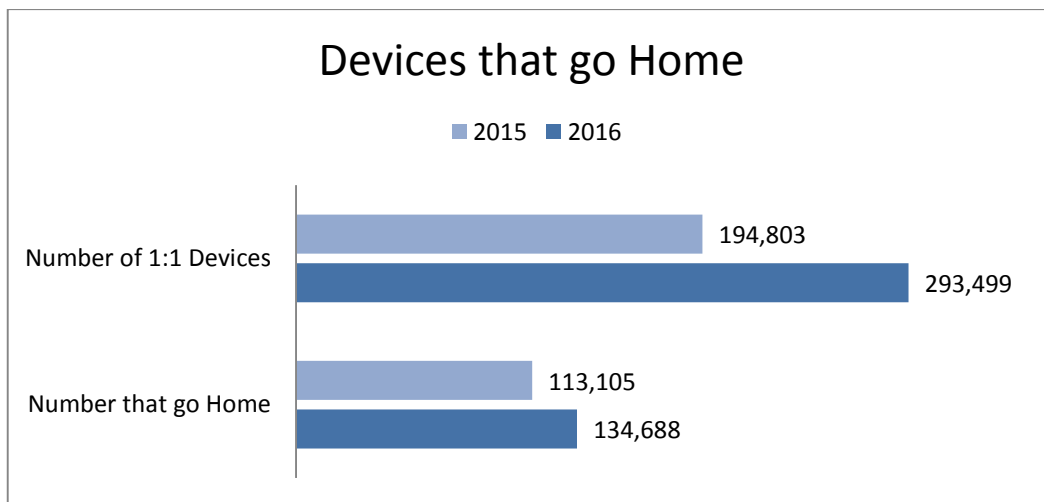*Number of students represented in the TRIG State Survey:* **1,462,833**

Trend data: 1:1 Student Devices

293,499

183,361   197,982   194,803
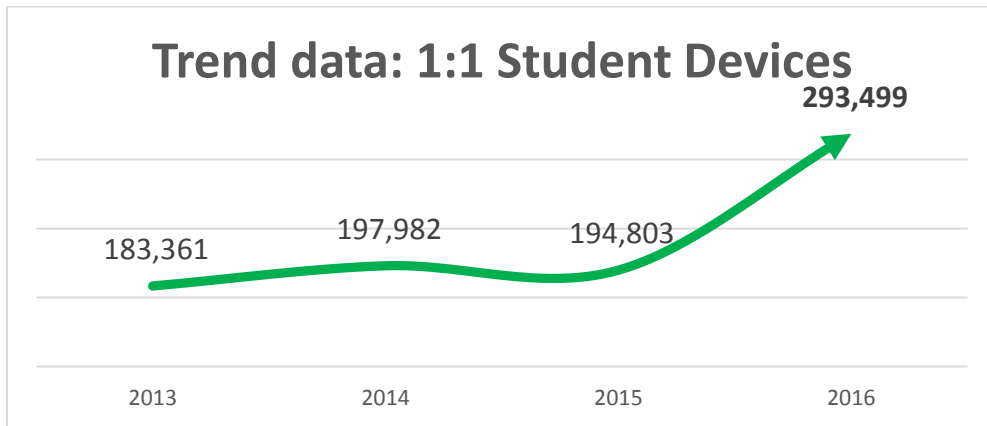
2013   2014   2015   2016

Students with 1:1 Devices: (cont.)

	1:1 Devices	Student Headcount	Percent 1:1
2013	183,361	1,469,254	12%
2014	197,982	1,389,292	14%
2015	194,803	1,499,041	13%
2016	293,499	1,462,833	20%

1:1 Devices allowed to go home:

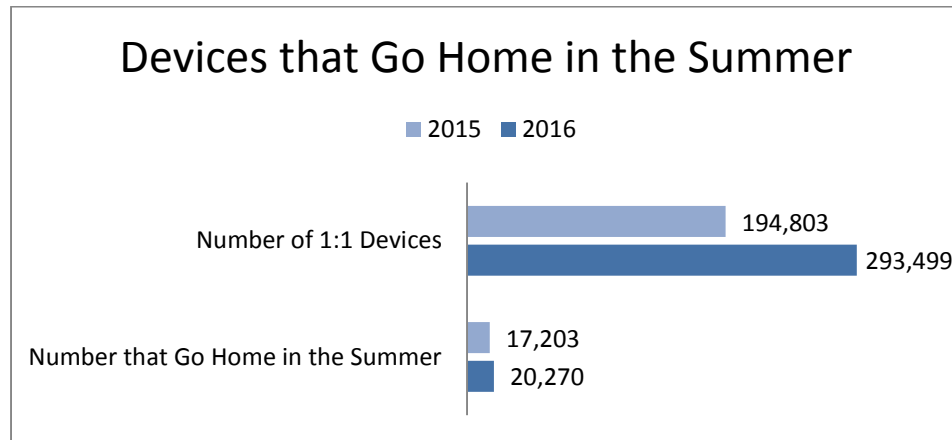*Number of students in the survey that take 1:1 devices home:* **134,688**

Number of students in the TRIG State Survey that have 1:1 devices: **293,499**

Devices that go Home

■ 2015   ■ 2016

Number of 1:1 Devices
194,803
293,499

Number that go Home
113,105
134,688

1:1 Devices allowed to go home in the summer:

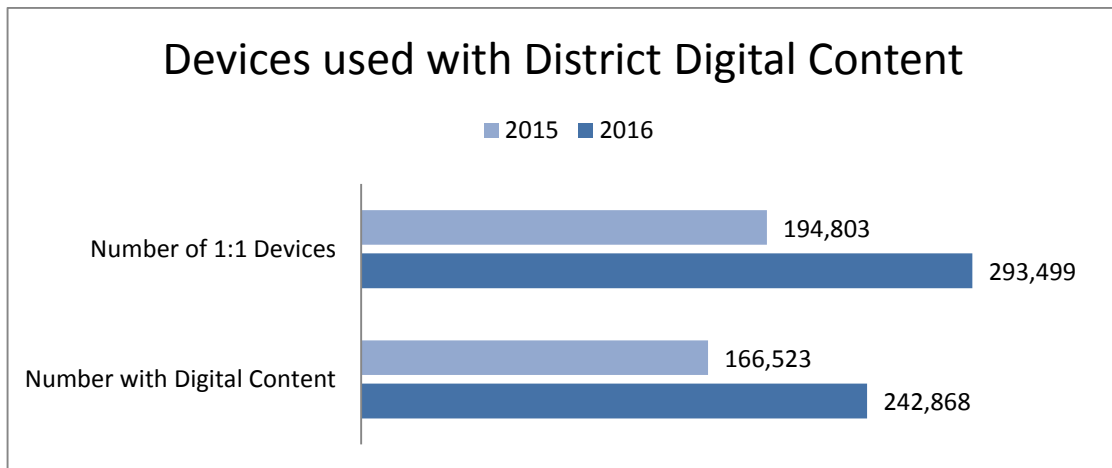*Number of students allowed to take their 1:1 device home in the summer: **20,270***

*Number of students in the TRIG State Survey that have 1:1 devices: **293,499***

Devices that Go Home in the Summer

■ 2015 ■ 2016

Number of 1:1 Devices
- 194,803
- 293,499

Number that Go Home in the Summer
- 17,203
- 20,270

1:1 Devices Used with Digital Content:

*Number of 1:1 devices used with digital content: **242,868***

*Number of students in the TRIG State Survey that have 1:1 devices: **293,499***

Devices used with District Digital Content

■ 2015 ■ 2016

Number of 1:1 Devices
- 194,803
- 293,499

Number with Digital Content
- 166,523
- 242,868

9. The percentage of students that have access to Internet at home:

Percentage of Students with Access to Internet at Home

- 38%
- 2%
- 12%
- 27%
- 21%

■ Don't Know ■ 0-25% ■ 25-50% ■ 50-75% ■ 75-100%
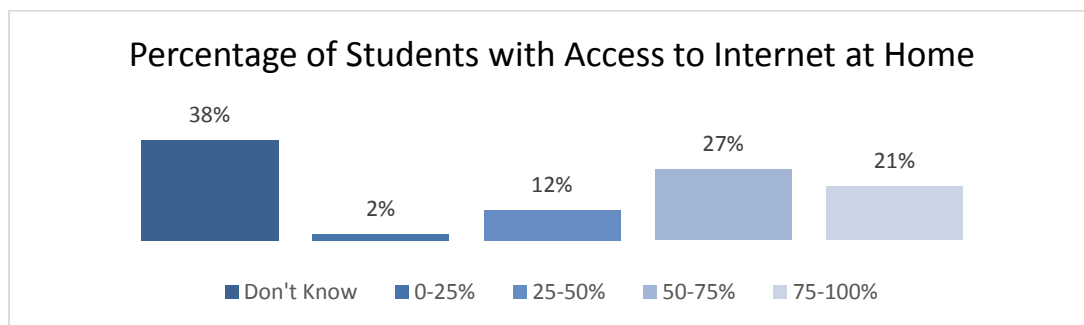
10. It was reported that, **49%** of the districts gave out information on reduced-cost Internet programs for low-income families.
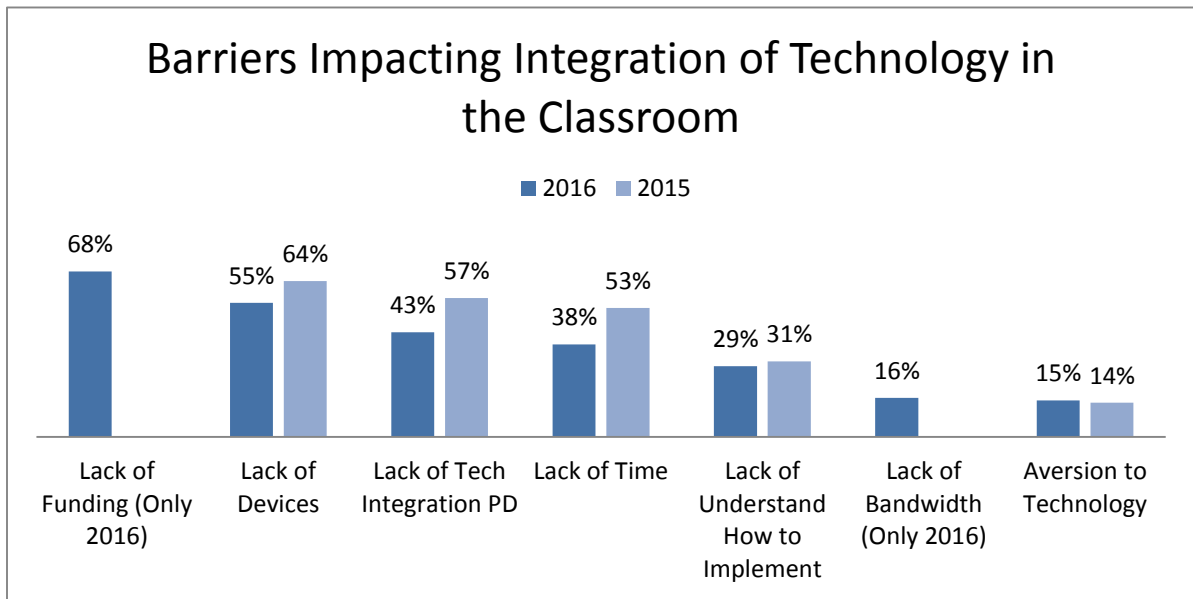
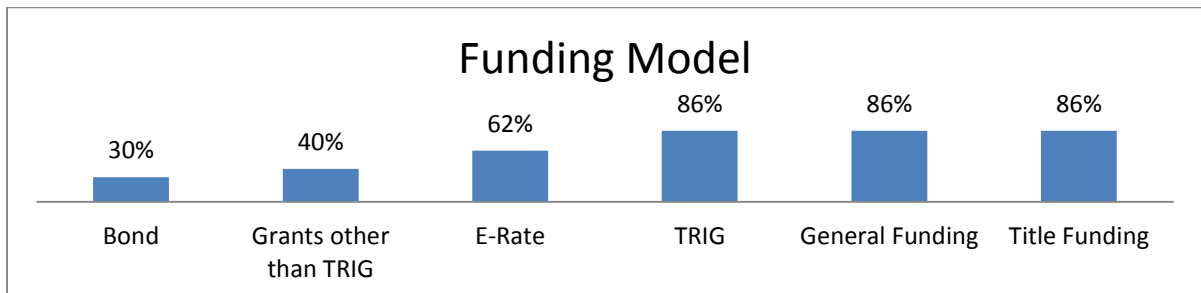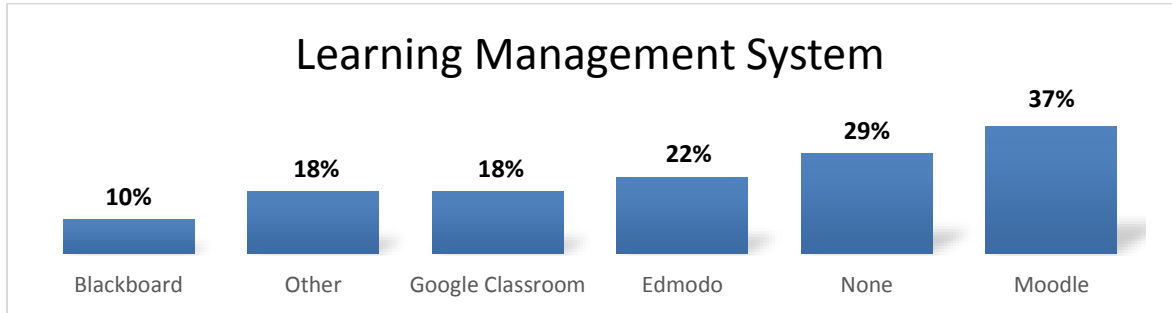11. Districts that offset the cost or provide payment or devices (hotspots) for Internet services:

District Offset Cost/Provide Payment/Devices for Internet Services

- 1%
- 12%
- 85%
- 1%

Legend:
- Yes, to eliminate homework gap
- Yes, if taking online courses
- No
- Don't Know
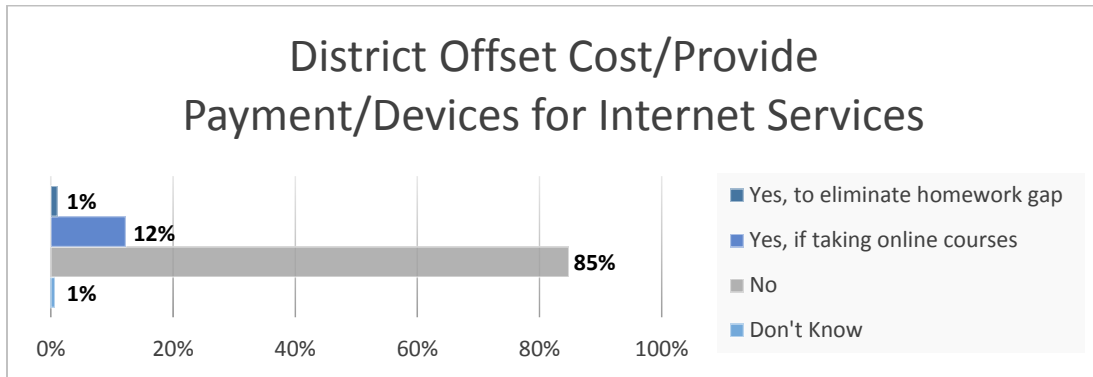
12. Barriers impacting the integration of technology in the classroom: *(Historical data)*

Barriers Impacting Integration of Technology in the Classroom

2016 | 2015

Category	2016	2015
Lack of Funding (Only 2016)	68%	
Lack of Devices	55%	64%
Lack of Tech Integration PD	43%	57%
Lack of Time	38%	53%
Lack of Understand How to Implement	29%	31%
Lack of Bandwidth (Only 2016)	16%	
Aversion to Technology	15%	14%

13. Funding model that districts are using to pay for technology:

Funding Model

Bond	Grants other than TRIG	E-Rate	TRIG	General Funding	Title Funding
30%	40%	62%	86%	86%	86%

14. Learning management systems (LMS) used by districts:

Learning Management System

10%	18%	18%	22%	29%	37%
Blackboard	Other	Google Classroom	Edmodo	None	Moodle

Other:

Adobe Connect	Compass Learning	Edline
APEX, MI Virtual	Classroom and/or Google Classroom	Edgenuity
Compass, Dreambox	Custom developed	
Coursewhere	Echo (New Tech Network)	

15. It was reported that **63%** of the districts have no single library digital platforms. Over **50** different library solutions were identified in the other category:

Library Digital Platforms

0%	1%	2%	5%	28%	63%
Mackin	Hoopla	MyOn	OverDrive	Other	None
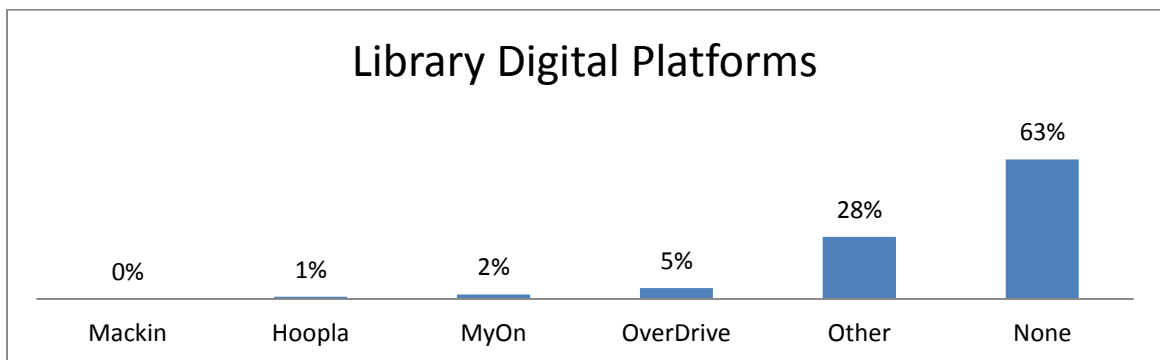
16. It was reported that an estimated ***$1,548,921.00*** was spent on Learning Management Systems and Library software platforms as a state overall.

2016 Annual Report

Empower every student in Michigan to excel at next generation assessments, to leverage technology for learning, and to achieve lifetime success in a global economy.

EXECUTIVE SUMMARY

The Technology Readiness Infrastructure Grant (TRIG) continued to prepare Michigan schools for online assessment and learning by implementing the following three goals:

1. Provide opportunities to increase capacity to deliver personalized learning in districts and classrooms

2. Create sustainable collaborations which increase the ability of districts to leverage actionable data, maintain reliable technology, and support learning

3. Increase the capacity of local districts to provide ubiquitous access for "Any Time, Any Place, Any Way, Any Pace" learning

1,507,743 Students Represented!

TRIG Participation

ISD'S	100%
PSA'S	56%
LEA'S	98%
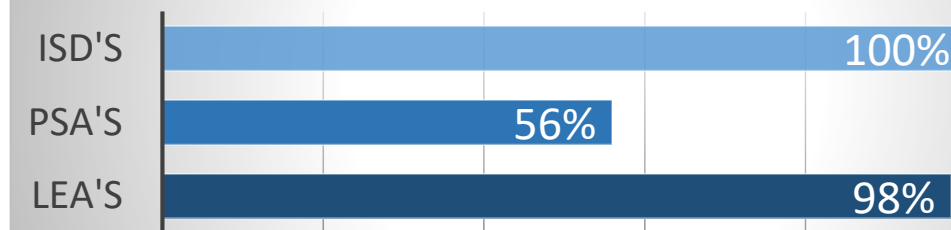
TRIG represented 1,507,743 students, 100% of ISDs (56), 98% of LEAs (530), and 56% of PSAs (169).

Additionally, TRIG expanded its online presence through social media and by offering professional development information and M-STEP Tech support on its website, **22itrig.org**. TRIG also designed additional activities, which aligned to the original six activities, to better serve the ISDs, LEAs, and PSAs:

• Implemented in 2015-2016: *Targeted Site Transformation (TST)* to transform schools into 1-to-1 learning environments and *Strategic Readiness Support (SRS)* to provide customized assistance designed to increase technical and instructional readiness in schools to ensure they are ready for online assessment and learning.

In 2015-2016, the districts participating in TRIG received **$21,325,974.00** through direct funds. These districts also realized **$54,315,828.00** in value-added and indirect savings.

STATEWIDE INDIRECT AND VALUE-ADDED COST SAVINGS TO PARTICIPATING DISTRICTS

- **$640,110:** As a result of *E-Rate,* districts were able to expand their bandwidth

- **$8,419,985:** Savings from *Data Integration* planning, vendor development activities, training, data hubs, and a ROI Survey incentive

- **$278,964:** Savings in planning through *MTRAx*

- **$35,169,291:** Savings through *Device Purchasing* discounts and professional development, as well as **$6,194,314** in direct incentive payments

- **$9,794,035:** Savings for downloading 92,252 digital textbooks developed by *Assessment and Curriculum* and for 7,188 webinar viewings

- **$111,362.00:** Savings resulting from *TRIG Operations* communication, support, & outreach

TRIG OPERATIONS OFFICE

The TRIG Operations Office supports all TRIG activities and collaborates with the Michigan Department of Education (MDE), Michigan Association of Intermediate School Administrators (MAISA), Michigan Association of School Administrators (MASA), and Michigan Institute for Educational Leadership (MIEM) to advance TRIG goals. The TRIG Operations Office personnel publish weekly updates, organize workshops, present at conferences, facilitate informational meetings, update the website, provide outreach to Michigan educational agencies, archive TRIG files, create evaluation templates, convene Steering Committee and Project Manager meetings, and provide budget support.

OPERATIONS PERSONNEL

Dave Cairy	Project Director
Jan Vogel	Project Coordinator
Deb Kopkau	Conference/Communications Coordinator
Summer Franck	Communication/Device Training Coordinator
Kristin Margelot	Project Assistant
Taylor Eastlund	Administrative Assistant

TRIG CONSORTIA

The five consortia advocate for TRIG, lead local and regional implementation of all TRIG activities through effective communication networks, organize the membership to increase participation, and collaborate with other organizations. Representatives of the following five consortia are members of the TRIG Steering Committee.

- Greater Michigan Education Consortium (GMEC)
- Intra-Michigan Consortium (iMC)
- Kent ISD Consortium (Kent ISD)
- Southwest Michigan Consortium (SWC)
- Rural Northern Michigan Consortium (RNMC)
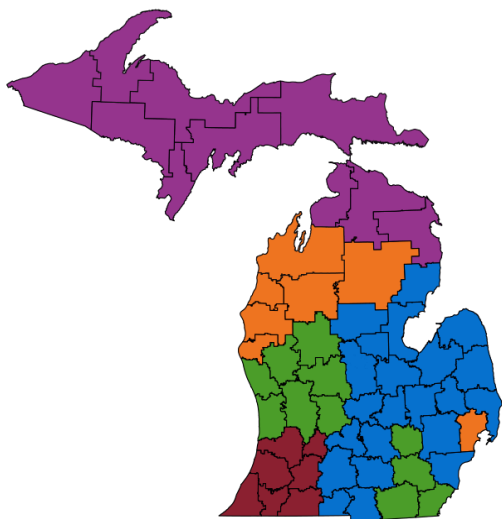
TRIG 3.0 STEERING COMMITTEE

The TRIG Steering Committee advises the TRIG Operations Office and monitors the activities.

Greater Michigan Education Consortium (Genesee ISD   )

- Dennis Buckmaster
- Tammy Evans
- Rhonda Provoast
- Luke Wittum

Rural Northern Michigan Consortium (Copper Country ISD)

- Timothy Davis
- Valerie Masuga
- Michael Richardson

Intra-Michigan Consortium (Wexford Missaukee ISD)

- Lisa Lockman
- Thomas Johnson

Southwest Michigan Consortium (Kalamazoo RESA)

- Tom Harwood
- Brian Schupbach
- Diane Talo

Kent ISD Consortium

- Glen Finkel
- Phillip Carolan
- Tonya Harrison

Non-voting Members

- Linda Forward, Director, Office of Education Improvement and Innovation, MDE
- David Judd, Director, Office of Systems Integration, MDE
- Michelle Ribant, Assistant Director of Office of Education Improvement and Innovation & State Director of 21st Century Learning, MDE
- Amanda Stoel, Department Technician, Office of Education Improvement and Innovation, MDE
- David E. Schulte, MAISA Representative
- Michelle Johnston, Evaluation Consultant
- Karen Mlcek, Evaluation Consultant

TRIG 3.0 PROJECT MANAGERS

The TRIG Activities are interrelated and support district, school, teacher, and student access to resources, data, and learning for online assessment and teaching. Each activity, which focuses on either access, data, or learning, has a project manager, an activity advisory committee, and a specific list of deliverables.

Activity Project Managers

MiOpen Books	**Learning** — Training teachers to effectively use technology to improve student learning	Dave Johnson
EduPaths		Danielle Letter
Targeted Site Transformation		Anthony Buza
Statewide Education Network (MISEN)	**Access** — Access to devices, bandwidth, and content for "Any Time, Any Place, Any Way, Any Pace" learning	David Childs
E-Rate		Ann-Marie Mapes
Device Purchasing		Karen Hairston
Data Integration	**Data** — Resources for schools to assess their readiness for online assessment and learning, and access to data hubs that provide actionable data for teachers	Donald Dailey
Data Services Collaborative		Kevin Bullard
MTRAx		Matthew Lindner
Strategic Readiness Support		Tom Johnson

TRIG ACTIVITIES AND TRIG 3.0 ACCOMPLISHMENTS

ACCESS

Statewide Education Network (MISEN) – SEN is working with E-Rate to ensure that SEN services do not conflict or jeopardize a district's E-Rate filing processes. By the end of May, SEN worked with ISDs on installation equipment to support the core backbone routes for SEN in 20 of the 55 locations. Specifically, SEN has 36% of the ISDs connected and 6 out of 11 segments, representing 54% of the backbone completed.

E-Rate – The E-Rate Activity enhanced E-Rate communications through weekly consultant calls, its forum, and addressing applicant questions electronically. Additionally, its collaborative work with SEN is ensuring that the SEN can progress in establishing the statewide secure educational network. Working with the E-Rate consultant, the E-Rate Activity became proactive, making progress toward its goals in ensuring all Michigan schools and libraries can benefit from the Universal Service Fund (USF) and reduce funding disparities across the state. Lastly, this activity aligns to the National Education Technology Plan.

Device Purchasing – Device Purchasing developed, issued and administered statewide bids for personal learning devices and desktop computers in order to support on-line testing and the "Any Time, Any Place" initiative. The goal is to aggregate demand statewide for these devices in order to drive down the purchase price for these products. The process included the following steps for the Spring 2015 Bid Cycle:
  ➢ Determined how incentives would be allocated
  ➢ Determined bid specifications
  ➢ Ran forecast window to determine statewide demand
  ➢ Issued Invitation to Bid
  ➢ Evaluated bid responses
  ➢ Awarded contracts to selected vendors
  ➢ Opened purchase window from April 15, 2015 to September 30, 2015
  ➢ During this cycle 174,763 devices were purchased by 460 ISDs and districts (LEAs / PSAs)

Strategic Readiness Support (SRS) – SRS identified Phase I, II, and III schools with multiple needs. The majority of schools, LEAs, and public school academies (PSAs) participating in the SRS Activity report that this project helped them engage in technology assessment, teaching, and learning. During evaluation visits to the schools, most respondents discussed changing instructional practices to 21st Century best practice strategies, such as blended instruction. In fact, one LEA superintendent believes that his high school can now be a model for blended instruction. Teachers and coaches from the SRS schools attended a coaching professional learning workshop; on a 10-point scale, 94% of the participants gave the workshop a 10. They wrote about taking their new skills, knowledge, and strategies back to their schools to be teacher leaders who will be better able to transform education at their schools and in their regions. SRS is preparing LEAs and PSAs to meet the MDE Goals and Strategies Top 10 in 10 Years.

DATA

Data Integration – The Data Integration Activity, which is in its implementation phase, is collaborating with SEN and EduPaths to ensure that the three projects effectively accomplish their goals. Through its Project Manager, Advisory Committee, and Workgroup, this activity is communicating with vendors to ensure that they are able to provide connector services through the data hubs. Five of the six student information systems (SIS), eSchoolPlus, MISTAR, PowerSchool, Skyward, and Synergy, are fully integrated into the data hubs, allowing about 90% of the LEAs in Michigan to engage in the data hubs. As of June 2016, Data Integration had five functioning hubs at the consortia, which comprise the Michigan Data Hub. The Michigan Data Hub can now exchange data and benefit districts in the following ways:

1. Saving money through the integration of different data systems
2. Using a common format which facilitates data exchanges across Michigan
3. Promoting common reporting and dashboards for equitable, actionable data
4. Allowing a single-sign on system
5. Having secure collaborations on statewide initiatives
6. Easing access to actionable data for teachers; and
7. Facilitating instructional decision making

	Data Hubs	Agreements
1	Copper Country	7 (7)
2	Kent County	25 (25)
3	Kalamazoo	21 (19)
4	Oakland Schools	56 (53)
5	Wexford-Missaukee	3 (3)

The Data Integration Activity has five live LEAs, 102 districts with log-ins, and 112 accepted agreements at the following five data hubs that represent the TRIG Consortia (on the right).

Data Systems Collaborative (DSC) – Overview of the DSC's five initiatives:

1. The **MiCASE** initiative is complete, on time, and within its budget as 14 districts are either in some stage of implementation with the payroll, purchasing, and accounting. Four of the districts are live.
2. The **Edify** component of this project is on time for completion by mid-July. Teacher gamification and Teacher PD are being worked on. Edify will continue incorporating MI Open Book as it becomes available and has been vetted.
3. The **Green Pupil Audit** procedures and processes were developed with clear instructions for reports and report templates. This project, with its template or the PowerSchool extraction template, provides schools with all the Michigan Pupil Accounting state reports necessary for school count day. Feedback sessions are scheduled.
4. The **Science Assessments** project had a two-day TRIG "dry run" practice event with the Science Math Technology Center administrative team, graduate assistants, an MDE assessment writer, and consultants to prepare for its August writing days. During the dry run, processes were vetted. In addition, this activity is collaborating with an Oakland Schools assessment specialist.
5. The **Collaborative Purchasing** has three projects that have accepted bids for the Spring 2016 grant cycle: Student Information Systems, Data Warehouse, and Library Automation. Student Information Systems received six bid responses. One was not considered for award for insufficiently meeting bid specifications. Two bidders ended negotiations. Three companies were awarded: Aequitas, Edupoint, and SunGard K-12. Data Warehouse received two bid responses. One bid was not considered for award for insufficiently meeting bid specifications and due to high cost. One company, Illuminate Education, was awarded. Library Automation received no bids, which will affect the budget.

MTRAx Activity – MTRAx worked with MDE to identify requirements around a 2016–2017 data collection window, including window dates, compliance considerations, and communications planning. This activity also identified the scope of developing additional enhancements for the MTRAx application based on priorities identified by the MTRAx Advisory Committee. As of spring of 2016, 96% of Michigan students and districts successfully tested online.

LEARNING

EduPaths (Classroom Readiness) – EduPaths reached out to users in many ways to promote communication. Through the use of monthly talking points, weekly updates for Ambassadors, online Smore flyers and through the use of social media, EduPaths currently has over 3,000 users. It uses social media platforms, including Facebook, Google+, and weekly Twitter chats. Currently, over 200 educators are participating in summer professional development to create content. At the end of the fourth quarter, sixty-five EduPaths courses were available for SCECHs. The number of courses available for SCECH credits and number of users increases weekly. EduPaths continues to establish partnerships with statewide

educational organizations in addition to organizations who have self-paced professional learning and webinars. Additionally, it is implementing Articulated Storyline in modules for e-learning and has implemented a flipped model of instruction for summer professional development.

MI Open Books Project (Assessment and Curriculum) – MI Open Books announced a forthcoming release of new materials. One LEA will be using MiOpen Books extensively. As of July 1, 2016, there were 92,252 downloads of the Year 1 materials. Writing teams completed their work on most of the Third-, Seventh-, and Eighth-Grade Social Studies eBooks and high school-level Civics and U.S. History eBooks. Editors are working on the final usable format, and revisions to the Fourth Grade eBooks will coincide with the release of materials in 2016–2017.

Targeted Site Transformation (TST) – The following five TST sites closed out the year of planning for 2016–2017: Fowlerville Junior High (Fowlerville Community Schools); Star Elementary (Hastings Area School System); Superior Hills (Marquette Area Public Schools); Shelby High School (Shelby Public Schools); and Stockbridge High School (Stockbridge Community Schools). Fowlerville, Hastings, Marquette, Shelby, and Stockbridge also participated in the first year of a 1:1 deployment. Based on need, each site had network infrastructure and classroom technology upgrades, purchased mobile devices and received ongoing professional development and support. Those LEAs are now planning for the 2016–2017 academic year, with most of their emphasis on continued professional development. TST is finalizing Panorama data collection for staff, student and data reports. The post-survey demonstrates growth areas for individual site reviews to help with the 2016–2017 planning. Additionally, TST continues the ongoing work of the initial site reviews for Negaunee, Perry, and Montrose. In 2016–2017, there will be three additional TST sites: Kuehn-Haven Middle School (Montrose Community Schools); Lakeview Elementary School (Negaunee Public Schools); and Perry Middle School (Perry Public Schools). An initial needs assessment is complete, and equipment is being ordered (mobile devices, classroom technology, and network infrastructure) for each site.

Because the TST sites are part of a shared journey to 1:1 teaching and learning, they have connected technology integration practices with experts to share best practices, which adds value to the project and LEA participation.
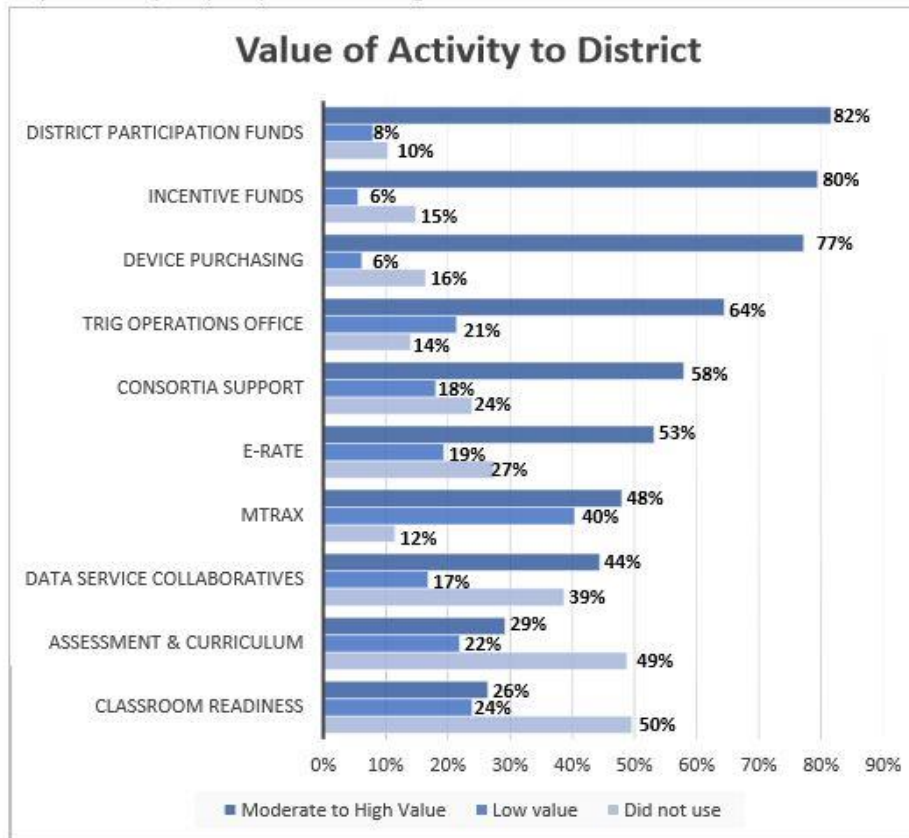
COMMUNICATION

In the focus group, surveys, and interviews - which included a statewide representation of educational leaders and some vendors – all parties addressed the relevance of TRIG communications. Specifically, participants commented about the importance of the TRIG Weekly Updates and TRIG website, (www.22itrig.org), as exemplary communication tools. In addition, respondents reported that TRIG representatives also regularly participated in further communications with the Michigan Department of Education (MDE), Center for Educational Performance and Instruction (CEPI), Department of Technology, Management, and Budget (DTMB), General Education Leadership Network (GELN), ISD Tech Directors, as well as other educational agencies and groups. Lastly, they reported that they have experienced easy and open communication with the TRIG Operations Office, Steering Committee, and Project Managers.

Communication strategies highlighted are:

1. TRIG Talking Points are published monthly to inform superintendents, business officials, technology directors, teachers, and curriculum directors about activity deadlines and progress.
2. TRIG Operations Office published 52 TRIG Weekly Updates for statewide stakeholders providing information about all TRIG activities, M-STEP, professional development, and other educational issues.
3. EduPaths holds weekly Twitter chats for interested audiences on a variety of topics.
4. EduPaths provides weekly online Ambassador Updates regarding professional development opportunities.
5. The E-Rate Forum sends weekly communications to assist district personnel and consultants in clarifying the rules and application process of E-Rate.
6. TRIG Operations Office collaborates with the Communications Advisory Committee quarterly.
7. Weekly TRIG Operations Office meetings are conducted that enhance internal communications.
8. Increased presentations to target audiences such as: MDE, MASSP Membership Committee, MELG Leadership Group, MASA Mid-Winter and Fall Conferences, MACUL 2016 Conference, MDE School Improvement, and the GELN Board.
9. Device Purchasing professional development assistance including electronic flyers, TRIG Website listings, Twitter and TRIG Weekly Update articles.
10. Collecting and sharing TRIG Success Stories with the field.
11. Maintaining the TRIG Press Files, documenting all TRIG-related news articles.
12. Gathering the Quarterly reports with data points from 10 projects and 5 consortia.

13. Facilitating the TRIG Listserv with 3,744 participants
14. Developing and distributing the third TRIG Infographic.
15. Sharing M-STEP communications
16. Managed the TRIG State Survey with a 100% response rate.

5. Supports received from the Technology Readiness Infrastructure Grant (TRIG) that have helped build the capacity of your educators to plan and implement online assessments and "Any Time, Any Place, Any Way, Any Pace" learning:

Value of Activity to District

Activity	Moderate to High Value	Low value	Did not use
DISTRICT PARTICIPATION FUNDS	82%	8%	10%
INCENTIVE FUNDS	80%	6%	15%
DEVICE PURCHASING	77%	6%	16%
TRIG OPERATIONS OFFICE	64%	21%	14%
CONSORTIA SUPPORT	58%	18%	24%
E-RATE	53%	19%	27%
MTRAX	48%	40%	12%
DATA SERVICE COLLABORATIVES	44%	17%	39%
ASSESSMENT & CURRICULUM	29%	22%	49%
CLASSROOM READINESS	26%	24%	50%

■ Moderate to High Value   ■ Low value   ■ Did not use

PROCESS

The TRIG statewide implementation structure of five consortia, a Steering Committee, and Project Managers with activity oversight, works very efficiently. In the survey of the Activity Advisory Committee members, Project Managers and interviews with Steering Committee members, all the respondents commented on the success of the structure in sharing information from the field to TRIG and vice versa. Furthermore, in the focus group, participants spoke about how the structure has helped with statewide implementation. By using this comprehensive structure, TRIG gave all Michigan districts the opportunity to upgrade their technology, while providing a model for any future collaborative projects needing a common, statewide purpose.

To that end, the Steering Committee and Project Managers met jointly with TRIG Operations Office staff, as well as separately. When the Steering Committee and Project Managers met, they continued to support collaborative relationships, such as EduPaths with Data Hubs and E-Rate with the Statewide Educational Network (SEN). When the Steering Committee met separately, they invited specific project managers to give progress reports. In addition, having active GELN participation and representation on the Steering Committee gave TRIG new insights about teaching and learning through technology to use in its transition.

During the Steering Committee's three separate meetings and the Project Managers' two meetings, the TRIG Operations Office staff helped them examine issues around sustainability. The Steering Committee had 98% attendance at its meetings, and there was 60% attendance at the Project Manager meetings. In each case, they developed and reviewed their sustainability plans for future discussions and implementations.

Each consortium met one to three times to support the activities through technical assistance, professional development, and enhanced communications with constituents. The consortia have listservs and workgroups to ensure that all the ISDs and LEAs within their areas have thorough knowledge of the TRIG activities. In interviews, the consortia representatives discussed being conduits of two-way communications from TRIG to the LEAs and the LEAs to TRIG.

The activities with their advisory committees had three meetings each facilitated by the Project Managers. The attendance ranged from 50% to 82%. In the Activity Advisory Committee survey, both the Project Managers and their advisory committee members reported that the meetings were productive for the implementation and management of the projects. These meetings also provided a vehicle for disseminating information about the implementations. Three activities did not have advisory committees.

To ensure that all of the projects are progressing, the TRIG Operations Office staff participated in weekly internal meetings and facilitated weekly Project Manager calls. In addition to working with GELN and the ISD Tech Directors, they are collaborating with Michigan Virtual University (MVU) to support the work of EduPaths (the Classroom Readiness Activity). This MVU connection has the potential for being an important addition to other TRIG connections, which include MDE, GELN, Regional Educational Media Centers (REMC), and Michigan Association of Computer Users for Learning (MACUL).

TRIG Operations Office staff increased its collaboration with MDE and participated in Digital Learning Day 2016. Additionally, TRIG distributed infographics showing its support of the MDE goals and impact on 96% of the districts in Michigan. By using infographics, TRIG Operations improved the communication process by visually representing the impact the activities have on a state-level, ISD-level and district-specific level.

COST EFFICIENCIES

During the focus group and school visit interviews, respondents spoke of cost efficiencies. Specifically, an Upper Peninsula representative spoke about having doubled their broadband for the same cost and about districts saving funds through the SPOT Bid/Device Purchasing Activity. ISD and local school district (LEA) representatives reported similar cost savings. Others experienced savings through TRIG-initiated professional development and anticipated more savings with the implementation of the Michigan Data Hubs.

Specific examples of cost savings include:

1. Free State Continuing Education Clock Hours (SCECHs) for Michigan educators

2. TST schools realized direct cost savings of $115,405.95 for mobile devices, classroom technology (projectors, teacher computer stations), network/wireless equipment, and/or teacher professional development

3. TRIG Operations distributed incentive checks of $915 to 459 LEAs participating in the Data Integration Return on Investment (ROI) study

Other cost efficiencies will emerge through future activity implementations. Furthermore, together the activities are providing more and better services at higher levels of quality without costs.
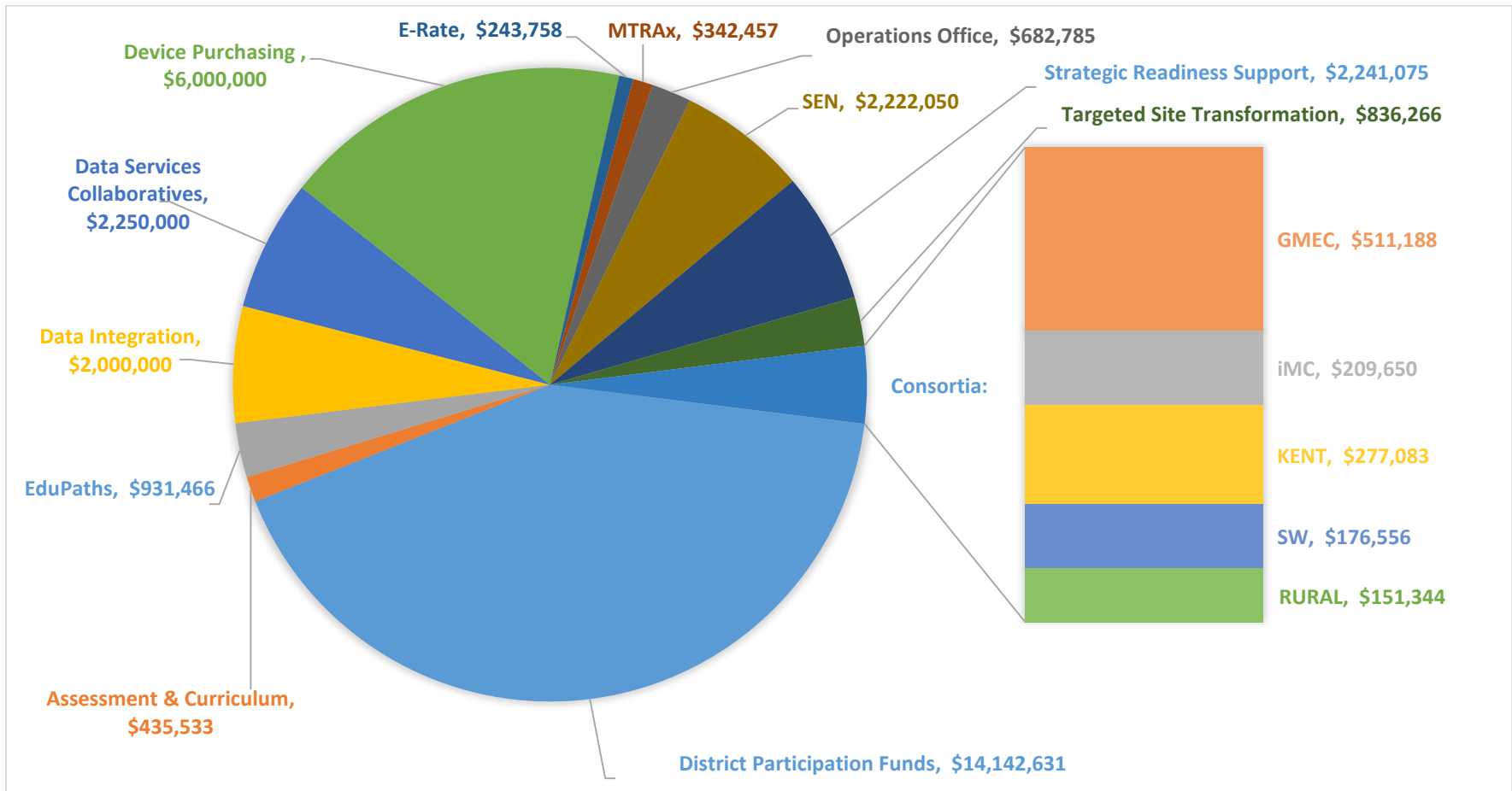
VISION FOR THE FUTURE

1. Prepare for the future transition of TRIG and communicate its importance
2. Promote transformational teaching and learning models
3. Support the E-Rate future vision, which promotes statewide coordination
4. Find ways to expand an SRS-model to provide support to individual LEAs and PSAs
5. Identify strategies for sustaining Michigan Data Hub deployment
6. Monitor Talking Points and TRIG Weekly Updates to ensure that all activities participate in communication strategies, having sufficient coverage
7. Collaborate with MISEN to continue the work of SEN by completing the backbone and collaboration with E-Rate
8. Continue to promote the consortia communication structure as a model for the implementation of statewide initiatives
9. Continue to develop the TRIG Operations Office sustainability plan

TRIG 3.0 BUDGET

3.0 TRIG Awarded Funds			
Description:	**Original Award:**	**Expenditures:**	**Work Project:**
District Participation Funds	$ 1,437,383.00	$ 14,142,631.00	$ 569,044.00
Assessment & Curriculum	$ 600,000.00	$ 435,533.00	$ 164,467.00
Classroom Readiness	$ 3,277,950.00	$ 931,466.00	$ 2,346,484.00
Data Integration	$ 2,000,000.00	$ 2,000,000.00	$ -
Data Services Collaboratives	$ 2,250,000.00	$ 2,250,000.00	$ -
Device Purchasing	$ 6,000,000.00	$ 6,000,000.00	$ -
E-Rate	$ 350,000.00	$ 243,758.00	$ 106,242.00
MTRAx	$ 500,000.00	$ 342,457.00	$ 157,543.00
Operations Office	$ 1,200,000.00	$ 682,785.00	$ 517,215.00
SEN	$ 2,222,050.00	$ 2,222,050.00	$ -
Strategic Readiness Support	$ 5,000,000.00	$ 2,241,075.00	$ 2,758,925.00
Targeted Site Transformation	$ 2,000,000.00	$ 836,266.00	$ 1,163,734.00
TOTAL ACTIVITIES:	**$ 25,400,000.00**	**$ 18,185,390.00**	**$ 7,214,610.00**
GMEC	$ 511,188.00	$ 511,188.00	
iMC	$ 209,650.00	$ 209,650.00	
KENT	$ 278,327.00	$ 277,083.32	$ 1,244.00
SW	$ 176,556.00	$ 176,556.00	
RURAL	$ 151,344.00	$ 151,344.00	
TOTALS CONSORTIA:	**$ 1,327,065.00**	**$ 1,325,821.32**	**$ 1,244.00**
Grand Total:	**$ 28,164,448.00**	**$ 33,653,842.32**	**$ 7,784,898.00**

TRIG 3.0 Expenditures

E-Rate, $243,758

MTRAx, $342,457

Operations Office, $682,785

Device Purchasing, $6,000,000

Strategic Readiness Support, $2,241,075

SEN, $2,222,050

Targeted Site Transformation, $836,266

Data Services Collaboratives, $2,250,000

GMEC, $511,188

Data Integration, $2,000,000

iMC, $209,650

Consortia:

KENT, $277,083

EduPaths, $931,466

SW, $176,556

RURAL, $151,344

Assessment & Curriculum, $435,533

District Participation Funds, $14,142,631

Direct, Indirect, and Value Added Savings: $75,641,802

Description:	Indirect	Direct
Participation Funds		$ 14,711,675.00
Assessment & Curriculum	$ 9,794,035.00	
Data Integration	$ 8,000,000.00	$ 419,985.00
Device Purchasing	$ 35,169,291.00	$ 6,194,314.00
E-Rate	$ 962,176.00	
MTRAx	$ 278,964.00	
Operations Office	$ 111,362.00	
Strategic Readiness Support		$ 3,372,488.00
KENT		$ 218,922.00
SW		$ 46,000.00
TOTAL	$ 54,315,828.00	$ 21,325,974.00
TOTAL Indirect & Direct		$ 75,641,802.00

3.0 TRIG Awarded Funds: $41,476,240

TRIG 3.0 Return On Investment (ROI)

2015-16	$75,641,802
	$41,476,240
2014-15	$76,915,585
	$44,977,373
2013-14	$56,721,118
	$50,000,000

■ Total Return Direct & Indirect Funds   ■ Total Award
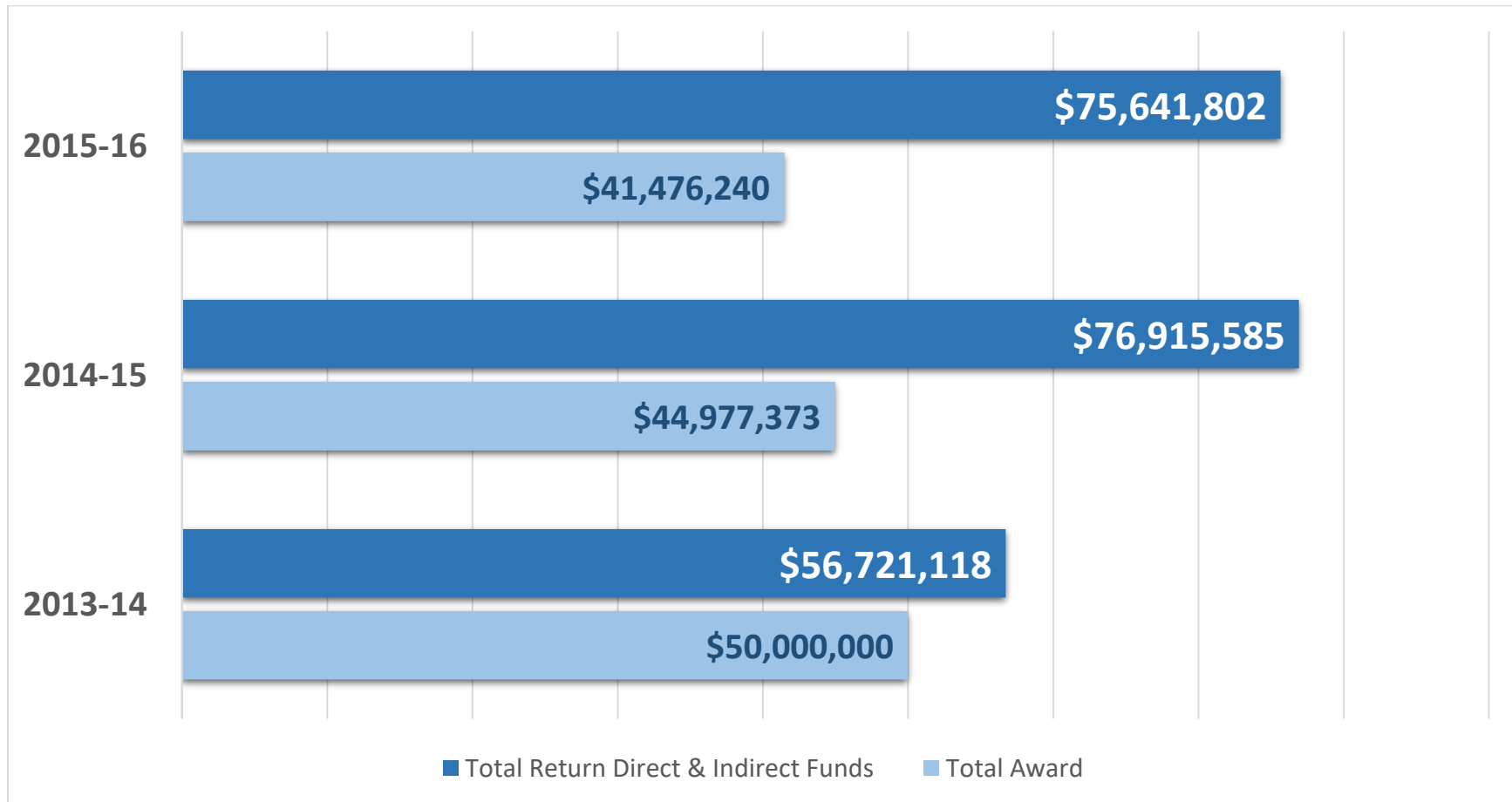
Glossary

BrightArrow Technologies	School Alert System Vendor
CEPI	Center for Educational Performance and Information
COMAD	Commitment Adjustments
Connect Michigan	Connect Michigan is a public-private effort driving broadband expansion across the state
Double Line Partner	Austin, TX based software development company that implements the Ed-Fi Solution
DTMB	Department of Technology, Management and Budget
Ed-Fi Alliance	Austin, TX based non-profit funded by the Michael and Susan Dell Foundation, and provider of the Ed-Fi Data Solution toolkit that is rapidly being adopted as a standard by states across the country.
E-Rate Central	A premiere E-Rate Consulting firm providing support for Michigan E-Rate applicants.
Form 470/USF 470	The Description of Services Requested and Certification Form is an FCC form that schools and libraries complete to request services and establish eligibility
FTE	Full Time Equivalent
GELN	General Education Leadership Network
ISD	Intermediate School District
ISD Tech Directors	Intermediate School District Technology Directors
LEAs	Local Education Agency
LOM	Library of Michigan
MACUL	Michigan Association for Computer Users in Learning
MAEDS	Michigan Association for Educational Data Systems
MAISA	Michigan Association of Intermediate School Administrators
MDE	Michigan Department of Education

Michael & Susan Dell Foundation	A non-profit with a primary focus of addressing urban poverty. Through their support of the Ed-Fi Alliance, they work to improve use of data to improve education.
Michigan E-Rate Forum	Weekly E-Rate newsletter sent to Michigan E-Rate applicants.
MIEM	Michigan Institute for Educational Management
MISEN	Michigan State Education Network
MISTAR	Student Information System product affiliated with Oakland Schools and Wayne RESA
MPAAA	Michigan Pupil Accounting and Attendance Association
MSBO	Michigan School Business Officials
MTRAx	Michigan Technology Readiness Assessment Tool
PSAs	Public School Academies
REMC	Regional Educational Media Center
RESA	Regional Education Service Area
ROI	Return on Investment
SIS	Student Information System
SPOT	Statewide Purchasing Online Tool
SRS	Strategic Readiness Support is one of the TRIG Activities from year 3 funding
TRIG Consortium	Technology Readiness Infrastructure Grant has a structure in place that works with five consortia that represent all of the ISDs and the Districts within those ISDs to connect with them and keep them informed around the TRIG activities.
TRIG Steering Committee	Technology Readiness Infrastructure Grant Steering Committee is the group that represents all five of the consortia, provides guidance to the Operations Office as well as all of the activities to make sure we are representing the entire state with their deliverables.
METL	Michigan Educational Technology Leaders - state ISD technology leaders