

**MiNOC:
Evaluating the Feasibility of Expanding
the K12ETA Cooperative Agreement
to Provide Equitable Information Technology
Services to Surrounding Regions**

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Executive Summary



Feasibility of Creating the Michigan Network Operations Center (MINOC)

MiNOC Feasibility Study Executive Summary

Consolidation of Service Opportunity

Evaluating the Feasibility of Centralizing Network Operations and Engineering Services for Michigan’s 56 Intermediate School Districts (ISDs), 537 school districts, and 293 public school academies (Districts) at the statewide or regional level.

Feasibility Summary

To provide increased value to ISDs and Districts through reliable network access and consistency in service delivery, K12ETA has established a successful, fiscally feasible model for shared network operations and is well-suited for expansion in the region.

K12ETA is demonstrating a sustainable model for a shared Network Operations Center (NOC) as well as expansion of full service.

K12ETA is making reliable, shared network engineering services accessible to other educational entities across the region at **\$30.00/student**. The K12ETA design offers greater savings to ISDs and Districts who already participate in full service agreements. Estimates show feasibility for full service at \$30/student plus \$75,000 per year for dedicated technician support. The ability to consider statewide application of shared NOC services becomes feasible after a significant investment in standardization of infrastructure is made.

Economies of scale allow regional collaborations to offer competitive salaries and dedication to task through an engineering team approach, providing superior retention and recruitment opportunities.

The core driver on R.O.I. in Network Operations shared services is achieving significant value-added services and cost savings/**ROI of 3.6%**.

Recommendation

The expansion of the K12ETA services to additional Districts. This serves as a model for other regions, resulting in: *Equitable Access, Enhanced Network Reliability, Leveraged Shared Services, Improved Staff Retention, and Increased Value.*

This recommendation will accompany an estimate of the required consolidation funding, a proposed implementation plan, and budget estimates for accomplishing the work. Recommendations also include additional research into Tier 4 statewide engineering as a potential solution for additional unmet needs. K12ETA MiNOC will leverage existing statewide support structures within MiCloud, MiSecure, and MiSEN for server management, secure transport, and cybersecurity services to enhance the disaster recovery and digital transformation efforts for districts.



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Current State of Instructional Technology Services in Rural Michigan Schools

If you're like most people today, from the time you log in to your computer in the morning until you log off for the day, you have come to expect that it just works. Beyond checking the battery charge, you probably spend little time or effort on any given day concerning yourself with either your computer's dependability or your network connectivity. Using a computer is a natural, ever-present part of your daily workflow. And it has to be for you to be a productive, successful member of our increasingly digital-reliant interconnected world.

The same is true for those engaged in teaching and learning in the 21st century.

Whether developing classroom curriculum, sharing teacher resources, or uploading the latest student test scores for state reporting, educators in urban and suburban ISDs and LEAs can count on reliable technology services and network operations as a foundation for their students' success.

For a moment, imagine how you feel during those rare times when you can't easily connect to WiFi while working in a new-to-your computer location, or your work is interrupted because an application suddenly needs to update for some reason. Annoying inconveniences, right?

Now imagine you're a teacher in a rural Michigan school who can never truly count on your classroom computer or network connection for the day's instruction, and you once again need to quickly pivot at the last minute from a thoughtfully planned, immersive digital experience to a hastily put together traditional classroom-bound lesson.

Or, imagine you're a school principal frustrated that, yet-again, the network is unavailable for M-STEP testing because a switch went down. Your frustration is compounded when you find that your district IT service technician isn't available, or doesn't have the expertise needed to assist you because they are a CTE student in training, or left the position last month for a higher paying, less stressful job in private industry and a replacement has yet to be found or may not be found for months to come. Not only are your teachers and students unable to connect to the internet in the classrooms, but school safety is at risk because your phone system is out, you can't lock your doors, and the security cameras aren't functional and will be of no assistance to law enforcement in the event of an emergency.

This is the practical reality routinely experienced by 40% of Intermediate School Districts (ISDs) and 44% of Local Education Agencies (LEAs) in rural regions throughout Central and Northern Michigan.



This study evaluates the feasibility of

- a) establishing a shared network engineering service across multiple counties**
- b) expanding the current regional K12 Educational Technology Association (K12 ETA) collaborative to create a regional network operations center (MiNOC), and**
- c) establishing a Statewide NOC.**

The MiNOC study addresses the current need to deliver reliable network operations enabling rural ISDs to provide secure, individualized learning opportunities as well as consistent, modernized services to their teachers and students, no matter the user's geography, background, or life circumstances.

Introduction

Currently, 40% of Intermediate School Districts (22 ISDs) and 44% of Local Education Agencies (358 LEAs, better known as school districts and public school academies), mainly in rural regions throughout Michigan, do not have access to dependable technology services or reliable network connections. This means, roughly 630,000 students across the state are not benefiting from reliable access to the most up-to-date technology resources or technology-enhanced education as their urban and suburban peers. As a result, they face the potential of falling further and further behind in their ability to compete for future certifications, college, and career opportunities.

This study evaluates the feasibility of establishing the Michigan Network Operations Center (MiNOC), a centralized, multi-region ISD collaborative, that will ultimately deliver effective, efficient, equitable classroom technology services and consistent network connectivity 24/7, with minimal down time and rapid response to challenges.

The Michigan Network Operations Center (MiNOC) Feasibility Study aims to address the significant challenges faced by Michigan Intermediate School Districts (ISDs), Regional Educational Service Districts (RESD), Public School Districts (Districts), and Public School Academies (also Districts) regarding the equitable provision of network operations and technology services.

The initial recommendation is to offer expansion of the current [K12 Educational Technology Association](#) (K12 ETA) IT service and support cooperative from the current four ISDs and 21 LEAs in Central and Northern Michigan to include an additional four ISDs and 31 LEAs from Clare, Gladwin, Gratiot, Isabella, Missaukee, Mecosta, Osceola, and Wexford counties.

The MiNOC study evaluates the increased value, predictable benefits, operational enhancements, and potential cost savings of expanding the K12 ETA to offer both network operations and full-service IT support. This is a regional solution that could



serve as a model for other regions in the state, with the possibility of a statewide collaboration to serve all students across the state of Michigan.

A. Guiding Tenets of MiNOC Regional Collaboration Feasibility Study

The guiding tenets of the MiNOC feasibility study include:

- 1. Promote Equitable Access:** Ensure that all rural ISDs and LEAs have equitable access to high-quality network operations and IT services, bridging the ever-widening gap between rural and urban/suburban educational technology resources.
- 2. Enhance Network Reliability:** Centralize network operations to provide standardized platforms, modernize network architecture, reduce outages, and improve the stability and reliability of network services across participating ISDs and LEAs.
- 3. Leverage Shared Services:** Utilize shared services to pool resources, leverage the expertise of more experienced engineers, provide on-the-job training and mentoring while enhancing infrastructure, thereby creating economies of scale for local districts and maximizing the efficiency of IT service delivery.
- 4. Improve Staff Retention:** Address high staff turnover by offering competitive wages, creating a supportive work environment that reduces role fatigue and allows areas of expertise to flourish, enhancing job satisfaction among network/system engineers, and drawing on a larger talent pool from a broader geographic footprint.
- 5. Increase Value:** Conduct a thorough cost-benefit analysis to identify potential cost savings through economies of scale, shared personnel, optimized resource allocation, and reduced redundancy in network operations.

The entire logic model can be found in the [Appendix B: Logic Model](#).

B. Context

ISDs and Districts struggle with high staff turnover, loss of technical expertise, and increased network outages, primarily due to the inability to offer competitive wages. On top of that, network/system engineers are overextended because they are pulled away from their primary duties to address emergent issues or are directed to work on other critical projects that are better suited for technicians or help desk personnel.

“...it's difficult because staffing engineering help has been pretty difficult and I've got a lot of relatively new staff in my engineering group. I've got my senior engineer [who is] really good. But it seems like the newer staff that we are getting....have not necessarily been in a leadership position in



the past. And so I've got a senior engineer and...he is quickly burning himself out because he's doing the 24/7 thing and trying to respond to every problem.”

- Mid Michigan ISD Technology Director

This is especially true in rural regions:

- Of the 56 ISDs, 22 (40%) service the rural regions of Michigan.
- Of the 879 Local Education Agencies, 358 (44%) are considered rural.

As a result, 22 ISDs and 358 LEAs find themselves in a precarious position, because when networks go down, learning stops.

“... when that lead switch goes down, they [the schools] are down, and I have to send somebody....We have [district], which is almost to the state line. By the time you drive somebody there, the schools have been down for an hour or more....we need to build redundancy into everything.”

- Rural Michigan Assistant Superintendent

Consistent messages across all three qualitative data collection methods include that Michigan ISDs and LEAs struggle with increased network outages due to:

- high IT staff turnover
- loss of technical expertise and institutional knowledge

These issues leave ISDs and Districts vulnerable to extended network outages and potential cyber attacks.

Service outages have become more common in rural areas due to the rapid loss of technical expertise and institutional knowledge during periods of high IT staff turnover, resulting in longer and more widespread downtime. Attrition of this nature is often rooted in role fatigue for over-worked network/system engineers, as well as the inability of K-12 entities – especially in rural communities – to afford the competitive wages that encourage role longevity or entice new IT recruits. (Private sector IT professionals earn 2-3 times more in salary and benefits than those in the education sector.)

“Our higher pay scale and broader geographic footprint allows us to tap into a larger, more attractive recruitment pool. And, our farm team approach to developing talent encourages our staff to grow, specialize, and focus on areas of passion and interest. They feel engaged and challenged, and have better work-life balance, so they want to stay.”

- Josh Hayes, CTO of K12 ETA



C. Challenge

The MiNOC feasibility study evaluated the potential barriers and enablers of consolidating and/or supplementing existing Network Operation Center service to increase service effectiveness and equitable network access for four Michigan ISDs and 31 school districts. This initiative aims to enhance network reliability, improve resource utilization, and reduce operational costs across participating districts. However, the feasibility study must address several critical challenges:

- 1. Diverse Infrastructure:** School districts in Michigan vary significantly in terms of their existing network infrastructure, which can range from outdated and fragmented systems to modern, integrated solutions. Assessing these diverse infrastructures' compatibility and integration potential is crucial for successful centralization.
- 2. Funding and Resource Allocation:** Securing sufficient funding for the centralized NOC's initial setup, ongoing operations, and potential upgrades poses a significant challenge. The study must identify sustainable financial models and potential funding sources to support the MiNOC's long-term viability.
- 3. Stakeholder Buy-In:** It is essential to gain the support and collaboration of all stakeholders, including school district administrators, IT staff, and school board officials. The study must explore strategies to address concerns about control, data security, and the perceived loss of autonomy among individual districts.
- 4. Technical Expertise and Training:** It is critical to ensure that the centralized NOC is staffed with skilled IT professionals and that local district staff receive adequate training on new systems and processes. The study must outline a comprehensive training and professional development plan to build the necessary expertise.
- 5. Data Security and Privacy:** Centralizing network operations raises data security and privacy concerns. The study must assess the potential risks and develop robust security protocols to protect sensitive student and administrative data in compliance with state and federal regulations.
- 6. Scalability and Flexibility:** The feasibility study must consider the MiNOC's scalability to accommodate future growth and technological advancements. Future systems should be flexible enough to adapt to the evolving needs of school districts and emerging technologies.
- 7. Operational Continuity:** Ensuring seamless transition and minimal disruption to network services during the implementation phase is a significant challenge.



The study must develop a detailed implementation plan with contingency measures to maintain operational continuity.

Scope of Work

Early into the work of this feasibility study, it was determined to focus on expanding existing services to underserved ISDs and Districts in several rural regions of Michigan. We evaluated the potential benefits, cost savings, and operational improvements of expanding the existing operations of the following Cooperative Agreements of **K12ETA**, operated by Wexford-Missaukee ISD.

A. Full-Service: ISDs and Districts Considered

The results of our analysis determined that Clare-Gladwin RESD and the districts are well-suited to join the [K12ETA](#) cooperative agreement, operated by Wexford-Missaukee ISD, as a full-service IT services consolidation with K12ETA.

- | | | | |
|-----------------------------------|-------------|---------------|----------------|
| 1. Clare-Gladwin RESD
(CGRESD) | 5 Districts | 388 Educators | 6,689 Students |
|-----------------------------------|-------------|---------------|----------------|

* A [Detailed Scope](#) can be found in the Appendix.

B. Full Service: ISDs and Districts also Considered

The following ISDs and Districts were also considered with results stated in the Appendix in case there is interest in future collaboration:

- | | | | |
|--|--------------------------------------|---------------|-----------------|
| 1. Cheboygan-Otsego-Presque Isle (COP) ISD | 11 Districts | 470 Educators | 7,363 Students |
| 2. Clinton County ISD (CISD) | 8 Districts | 540 Educators | 10,658 Students |
| 3. COOR ISD | 4 Districts
unserved by
K12ETA | 310 Educators | 4,604 Students |
| 4. Manistee ISD | 7 Districts | 576 Educators | 5,955 Students |
| 5. Mecosta-Osceola ISD (MOISD) | 7 Districts | 357 Educators | 7,855 Students |
| 6. Montcalm Area ISD (MAISD) | 10 Districts | 610 Educators | 12,094 Students |
| 7. Wexford-Missaukee ISD (WMISD) | 2 Districts
unserved by
K12ETA | 250 Educators | 4,147 Students |

8. West Shore ESD	4 Districts unserved by K12ETA	130 Educators	4,551 Students
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* Actual educator and student count may vary.

C. Shared Service Network Operations Service Only: ISDs and Districts Considered

The following ISDs and Districts were included in study to determine the feasibility of strengthening their network services by providing a centralized Network Operations only (a [Detailed Scope](#) is the Appendix):

1. Clare-Gladwin RESD (CGRESD)	6 Districts	388 Educators	6,626 Students
2. COOR ISD currently served by K12ETA	4 Districts	310 Educators	4,604 Students
3. Gratiot-Isabella RESD (GIRESD)	12 Districts	711 Educators	11,644 Students
4. Mecosta-Osceola ISD (MOISD)	7 Districts	357 Educators	7,855 Students
5. Wexford-Missaukee ISD (WMISD) currently served by K12ETA	2 Districts unserved by K12ETA	250 Educators	4,551 Students
6. West Shore ESD (WSESD) currently served by K12ETA	4 Districts unserved by K12ETA	130 Educators	4,147 Students

D. Out of Scope

The following items were considered out-of-scope for determining MiNOC feasibility:

- 1. E-Rate Eligible Services:** We do not include any analysis of the ability to apply E-Rate discounts on MiNOC services. E-Rate is a FCC Universal Services Fund program that provides schools and libraries with discounts on internet access, telecommunications, and internal connections. Discounts range from 20% to 90% depending on the level of poverty and the urban/rural status of the population served. It is common for Michigan ISDs and Schools to apply for E-Rate discounts on eligible services as a consortia (there are several E-Rate consortias in the study ISDs).



2. **E-Rate SPIN:** However, in the Appendix, we do include additional analysis on the feasibility of several Intermediate School Districts (ISD), currently operating as E-Rate Service Providers, making a transition away from providing E-Ratable services and MiNOC advantages. Additionally, we explore the costs of making that transition.
3. **SPIN** (Service Provider Identification Number) is a unique identification number assigned to each service provider that participates in the E-Rate program. The SPIN is used by schools and libraries to identify the external vendors from whom they purchase eligible services.

E. Project Goal, Guiding Tenets, & Funding Recommendation

1. Goal and Guiding Tenets

This Feasibility Study was designed to evaluate the potential benefits, operational enhancements, and operational cost savings of expanding the K12 ETA Cooperative Agreement to provide network operations and full-service IT support for the rural ISDs and their Districts included in the study. The study ascertained whether the proposed expansion will adhere to the guiding tenets of the MiNOC proposal:

- **Promote Equitable Access:** Ensure that all rural ISDs and Districts have equitable access to high-quality network operations and IT services, bridging the gap between rural and urban/suburban educational technology resources.
- **Enhance Network Reliability:** Centralize network operations to reduce outages and improve the stability and reliability of network services across participating ISDs and Districts.
- **Leverage Shared Services:** Utilize shared services to pool resources, expertise, and infrastructure, thereby reducing individual district costs and maximizing the efficiency of IT service delivery.
- **Improve Staff Retention:** Address high staff turnover by offering competitive wages, creating a supportive work environment that reduces role fatigue, enhancing job satisfaction among network/system engineers, and drawing on a larger talent pool from a broader geographic footprint.
- **Achieve Cost Savings:** Conduct a thorough cost-benefit analysis to identify potential cost savings through economies of scale, optimized resource allocation, and reduced redundancy in network operations.

2. Funding Recommendation

Based on the feasibility determination, this report recommends expanding K12ETA to the ISDs and Districts included in the study as a model for other regions, and provides an estimate of the required consolidation funding. This recommendation will accompany a proposed implementation plan and budget estimates for accomplishing the work as required by Section 12.c of the 2023-24 Michigan School Aid Act.

K12ETA: Demonstrated Success

K12ETA (<https://www.k12eta.org/>) operates as a full-service IT cooperative agreement operated by Wexford-Missaukee ISD.

Mission: Providing technical support services to increase the quality and availability of computing resources in a cost-effective manner that supports innovation and transformation from a traditional approach to teaching and learning to a technology-enhanced model that better meets the needs of students.

To achieve this mission, the Educational Technology Association (K12ETA) will sustain a highly trained and proficient staff, well-versed in ISD and district operating systems, applications, and hardware, through ongoing training and professional learning communities. The ETA will ensure a secure infrastructure that upholds the integrity of the electronic data collected, stored, retrieved, and utilized. The ETA will continuously assess the needs of the districts to position them for successful service delivery while providing efficient, effective, reliable, timely, and courteous service to all users.

A. Services

K12ETA currently provides the following services:

- **Network Services:** Internet connectivity, firewall management, and network management and security.
- **Technical Services:** authentication management, account and device management, and device break/fix services.
- **Cybersecurity Services:** threat detection and response, security audits and assessments, and incident response and recovery.
- **Hosting, Data & Voice Services:** cloud hosting solutions, data storage and backup, and VoIP (Voice over Internet Protocol) services.
- **Technology and Network Consulting:** strategic technology planning, network design and optimization, and technology implementation and integration.

A [Detailed List of Services](#) can be found in the Appendix.

Please note that K12 ETA offers these services as:



- **Full Service:** comprehensive support and management for all aspects of the service line, including contracted technology leadership.
- **Partial Service:** support for one or more service lines, such as network services, which may or may not require joining the cooperative.
- **À la carte:** individual services selected based on specific needs, not requiring joining the cooperative.

B. Existing Footprint

The following ISDs and Districts are K12 ETA’s current ISD and District partners:

- Crawford-Oscoda-Ogemaw-Roscommon ISD (C.O.O.R. ISD).
- Manistee ISD and four of its five Districts.
- West Shore ESD and its nine Districts.
- Wexford-Missaukee ISD and all nine Districts.

A detailed list of K12 ETA’s [Existing Footprint](#) is provided in the Appendix.

C. Staffing

The K12ETA staff is led by Josh Hayes, CTO. The staff count consists of:

Personnel	Count	FTE
Asst. Superintendent	1.0	100%
Technology Coordinator	1.0	100%
Network Administrator	2.0	100%
Computer Technician II	1.0	100%
Computer Technician I	18.5	100%
Instr. Consultant Special Projects	1.0	100%
Data Support Specialist	1.5	100%
Pupil Accountant (paid by WMISD)	1.0	100%
Total K12ETA Staff	27.0	

A breakdown of [ETA Staffing Costs](#) are provided in the Appendix.

D. Revenues & Pricing

WMISD operates K12 ETA as a nonprofit cooperative agreement with its member districts while providing some services to non-member districts. Most services are provided as a fix-fee service agreed to before the start of the service school year. WMISD maintains a fund balance for K12 ETA based on the differences between revenues and expenditures.

1. Revenues

2021-22 School Year: \$2,131,677



- Fund balance:	\$47%
- +/-	+9% ¹
2022-23 School Year:	\$2,196,184
- Fund balance:	+\$43%
- +/-	-4%
2024-25 School Year:	\$2,396,606
- Fund balance:	+\$37%
- +/-	-3%

2. Pricing

K12 ETA has achieved the ability to quote services in the following manner based on serving 4 ISDs and 30 Districts:

District Network Services (only)

\$30 per student with 3% anticipated increase per year.^{2,3}

Full-Service District Technology Support

\$75,000 multiplied by the FTE of technicians requested by the district.
+\$30 per student with 3% anticipated increase per year.²

ISD/ESD Full Service Technology Support

\$50 per student, based on the entire ISD/ESD student count, with 3% anticipated increase per year.²

Custom District/ISD Transition Support Plan

100% of the current technology personnel budget until a staff change at the district, which is negotiated on a case-by-case basis.

Notes

1. The substantial increase in fund balance was a result of lower expenditures related to COVID. Those funds were used to increase staff salaries in later years.
2. K12ETA has implemented a 3% cost of living increase into their service contracts to eliminate the draws against the fund balance, which remains at 37% of annual revenue.
3. K12ETA Network Services \$30/student fee divides evenly between Internet Connectivity (approximately \$15/student) and Engineering Services (approximately \$15/student).

3. Example of Potential K12ETA Savings

Beginning in the 2019-20 school year, Baldwin Community Schools decided to join K12 ETA for full-service technology services, resulting in significant Year 1 cost savings:

Year	Expense	Savings
2018-19	\$121,000	(baseline)
2019-20	\$77,500	+\$43,500
2020-21*	\$141,300	-\$19,700
2022-23*	\$141,500	-\$19,500
2023-24*	\$125,100	-\$3,900
2024-25	\$89,600	+\$31,400

* Baldwin used increased COVID-related funding for additional classroom technology and requested an additional technology support specialist. In 2023-24, the district determined additional support was no longer needed.

Needs Assessment

To validate the need (i.e., demand) for the proposed expanded Network Operation Center (NOC) and Full-Service IT offerings in rural Michigan, the MAISA Consolidation Feasibility Study team conducted a Needs Assessment. The assessment consists of surveys, focus groups, interviews, and thorough analysis of ISD technology services and associated their fiscal burdens.

A [Detailed Soar Analysis](#) can be found in the Appendix.

Financial Analysis

The MAISA Consolidation Feasibility Study team conducted the following cost analysis on K12ETA, and ISDs and Districts under consideration for consolidation. We determined current costs and potential savings. We also calculated Total Cost of Ownership (TCO) and Return on Investment (ROI).

A. Full-Service IT Service Consolidation: Clare-Gladwin RESD

Clare-Gladwin RESD has successfully provided full-service IT shared services for the RESD and its five service Districts, demonstrating a proven track record for collaboration. CGRESD uses a cost-recovery model for pricing.



1. Clare-Gladwin RESD 2024-25 Cost Estimates

The following represents the Total Cost of Operation (TCO) for CGRESD and its Districts, which CGRESD bills Districts annually after fall count:

<u>Clare-Gladwin RESD</u>	<u>Costs^{1,2,3}</u>	<u>Students</u>	<u>Techs⁴</u>	<u>Per-Student</u>
Beaverton Schools	\$266,026	890	2.00	\$299
Clare Public Schools	\$288,257	1,556	3.00	\$609
Farwell Area Schools	\$333,555	971	2.00	\$214
Gladwin Comm. Schools	\$268,994	1,616	3.00	\$277
Harrison Comm. Schools	\$335,081	1,181	2.00	\$207
Clare-Gladwin RESD	<u>\$276,312</u>	<u>473</u>	<u>8.7</u>	<u>\$234</u>
	\$1,768,224	6,687	20.7	\$264

Notes:

1. CGRESD costing model includes pricing based on the number factors, including the number of devices a District deploys, etc.
2. CGRESD does not break out network operation costs from total costs.
3. CGRESD costs are less recapture of certain capital expenditures.
4. CGRESD essentially assigns 1 classroom-facing technician per-500 students while reflecting the shared technicians, including network and systems administrators, as assigned to the RESD- 8.45. This number includes .45 FTE for Ken Chinavare, CGRESD CTO.

2. K12ETA 2024-25 Pricing Estimates

Using K12ETA's pricing provided on [Page 12](#), the following are the Total Cost of Operation estimates of consolidated services of CGRESD with K12ETA:

<u>Clare-Gladwin RESD</u>	<u>Students</u>	<u>Techs¹</u>	<u>Per-Student²</u>	<u>Per-Tech³</u>	<u>Total</u>
Beaverton Schools	890	2.00	\$26,700	\$150,000	\$176,700
Clare Schools	1,556	3.00	\$46,680	\$225,000	\$271,680
Farwell Schools	971	2.00	\$29,130	\$150,000	\$179,130
Gladwin Schools	1,616	3.00	\$48,480	\$225,000	\$273,480
Harrison Schools	1,181	2.00	\$35,430	\$150,000	\$185,430
Clare-Gladwin RESD	<u>473</u>	1.00	\$334,350	\$75,000	<u>\$409,350</u>
	6,687				\$1,495,770

Notes:

1. CGRESD has 1 technician dedicated to supporting the RESD programs. The remaining 7.45 FTE are central staff for the RESD and five districts.
2. K12ETA full service pricing is \$30/student for the District and \$50/student for the ISD. This pricing estimate uses \$50/student for CGRESD, which would cover the 7.45 FTE shared services staff.

3. K12ETA 2024-25 Adjusted Pricing Estimates

Using K12ETA’s pricing provided on [Page 12](#), we adjusted the Total Cost of Operation to increase the classroom-facing technicians and hold the RESD annual fee the same as current costs to avoid any per-entirety cost increase:

<u>Clare-Gladwin RESD</u>	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>\$75K Tech</u>	<u>Total</u>
Beaverton Schools	890	3	\$26,700	\$225,000	\$251,700
Clare Schools	1,556	4	\$46,680	\$300,000	\$346,680
Farwell Schools	971	2	\$29,130	\$187,500	\$216,630
Gladwin Schools	1,616	4	\$48,480	\$300,000	\$348,480
Harrison Schools	1,181	3	\$35,430	\$225,000	\$260,430
Clare-Gladwin RESD	<u>473</u>	<u>4.7</u>	\$318,257	\$0	\$318,257
	6,687	20.7			\$1,742,177

Notes:

1. Increased assigned district technicians by per-district to accommodate expectations for higher level of current service.
2. Held the RESD charge to \$318,257 or \$47.59/student (current RESD pricing), so no organization’s direct costs increase over CGRESD pricing.

4. Total Cost of Operation (TCO) Comparison

When comparing K12ETA pricing with CGRESD Cost-Recovery Model, we project a 3.6% savings in CGRESD Total Cost of Operation (TCO).

	<u>Students</u>	<u>Techs</u>	<u>Total Cost</u>	<u>Savings</u>	<u>%</u>
CGRESD Cost	6,687	20.45	\$1,768,224		
ETA Adjusted Pricing	6,687	20	\$1,704,677	\$63,547	3.6%
ETA Pricing	6,687	13	\$1,495,770	\$272,454	15.4%

5. Return on Investment (ROI)

- When using adjusted K12ETA Pricing the ROI is **3.6%** considered against one year TCO (\$1,704,677).
- The ROI is **15.4%** when using standard K12ETA pricing, the sharing of staff, and the attrition of head count over time.

B. Full-Service IT Service Consolidation: Additional Districts

For the purposes of compiling a comprehensive consolidation feasibility study, we also calculated the cost for the following districts using K12 ETA pricing:

- Non-participating Districts inside K12ETA’s existing region
- COP ISD and Districts
- Clinton County ISD and Districts



- Gratiot-Isabella ISD and Districts
- Mecosta-Osceola ISD and Districts
- Montcalm ISD and Districts

This pricing can be found in [The Appendix](#).

C. Shared Service Network Operations Service Only: ISDs and Districts Considered

Another approach to providing effective, equitable, and sustainable Network Operation Center (NOC) services would be to form a shared services unit by combining the networking staffs of the seven ISDs participating in this study, reorganizing staff by experience and expertise, training existing staff to assume greater responsibility to meet the need, and augmenting the combined staff with additional staffing as needed.

To simulate this we used the K12ETA (COOR, WMISD, and WSRESA), Clare-Gladwin RESD, Gratiot-Isabella RESD (GIRESD), and Mecosta-Osceola ISD (MOISD) network services information to conduct the following financial analysis.

1. Cost Modeling

Fixed pricing models appear to make it cost-prohibitive for smaller Districts to join. In the recommendation section, we use a per-student pricing model, based on the K12ETA [District Network Services](#) model, to make it more effective in communicating to potential District customers the value-per-student. For the purposes of our financial analysis, we will be using the following pricing:

a. Forecasted Shared Network Operations Center (NOC)

To create an estimate for the ideal NOC to service the seven participating ISDs, we used ETA’s \$30/student pricing x the combined student count (47,343) to set a total budget of \$1,430,796.

Personnel	Count	FTE	Salary	Fringe ^(69%)	Total
NOC Director Sr. Systems Engineer	1.00	100%	\$124,500	\$85,905	\$210,405
Technician 5 Sr. Systems Engineer	2.00	100%	\$124,500	\$85,905	\$420,810
Technician 4 Operations Manager	1.00	100%	\$75,000	\$51,750	\$126,750
Technician 4 Sr. Specialist	3.50	100%	\$75,000	\$51,750	\$443,625
Technician 3	2.00	100%	\$53,750	\$37,088	\$181,675



Application Specialist					
Business Administrator	1.00	50%	\$56,250	\$38,813	\$47,531
Total Count	10.50	Per-Student		\$30	\$1,430,796

* Role definitions are provided in the [Appendix D](#).

b. Aggregated Existing NOC Services

For comparison, we then aggregated the participating organization’s budgets and staffs:

Personnel	Count	FTE	Salary	Fringe	Total
NOC Director Sr. Systems Engineer	3.00	125%	\$118,809	\$74,199	\$252,012
Technician 5 Sr. Systems Engineer	4.00	275%	\$98,261	\$51,701	\$434,354
Technician 3 & 4 Sr. Systems Engineer Application Specialist	7.25	325%	\$69,899	\$37,930	\$741,256
Business Administrator	2.00	60%	\$49,674	\$30,166	\$43,840
Total Count	16.25	Per-Student		\$31	\$1,471,461

* A detailed breakdown by ISD is provided in the [Appendix D](#).

As you can see, by aggregating Existing NOC Services, the seven ISDs have the staff and budget to achieve the forecasted service; however, significant restructuring of staff, norming of titles and pay scales, and standardizing platforms would be necessary to achieve this result.

c. Total Cost of Operation (TCO) / Return on Investment (ROI)

- The Total Cost of Operation of a shared Services NOC is determined to be:

\$1,471,461

- We were not able to determine Return on Investment, although we assumed restructuring costs would be approximately \$3,000,000.

d. Feasibility: Regional Shared Services NOC

Although the study determined that creating a regional shared services NOC is feasible given existing funding levels, during the final analysis, Gratiot-Isabella and Mecosta-Osceola ISDs determined it was not feasible to move forward with a shared service NOC at this time.



- Gratiot-Isabella RESD and Mecosta-Osceola ISDs continue to have the option to participate at a later date if circumstances are such that it is beneficial to all parties.

Recommendation

To enhance the delivery of network operations and IT services across rural Michigan, the study recommends exploring a Clare-Gladwin RESD collaboration with K12 Educational Technology Association (K12ETA) to coalesce the strengths of both organizations, enriching technology offerings and service delivery for all.

- **ROI: 3.6%**

By collaborating with the K12ETA shared service model, CGRESD and the other participating ISDs will ensure equitable access to high-quality IT services, address network reliability issues, and streamline operational costs. The shared service approach leverages economies of scale, allowing districts to pool resources and expertise for improved efficiency.

Added benefits include leeway for technology staff to enhance areas of technological expertise, narrow areas of focus for training and professional development, and capitalize on a wider community of practice that includes strategic professional learning plans. This opportunity allows participating ISDs to build a stronger sustainability and succession plan, and enhances services moving into the future.

This model should be designed to accommodate additional ISDs and districts, such as Gratiot-Isabella RESD and Mecosta-Osceola ISD, who have expressed interest in participating if future funding becomes available.

1. It is feasible for other regions to take a similar approach to K12ETA, but could vary based on local conditions.
2. Financial cost estimates for the other ISDs in [Appendix E](#).

Additionally, it is recommended that consideration be made for forming a statewide Network Operations Center (NOC) to better support ISDs in serving their service districts. This approach has the potential to reduce redundancy, enhance cybersecurity, and provide a consistent level of support for IT infrastructure across districts. The statewide NOC, operated in conjunction with the [Michigan State Education Network \(MiSEN\)](#), would help mitigate staff turnover in other rural ISDs because it is better positioned to provide competitive wages and support structures for network engineers, leading to improved retention and a more sustainable workforce. Alignment with [MiSecure](#) and MiCloud for statewide supported services

will significantly reduce costs and time on task for detailed cybersecurity and cloud hosting support.

- A Statewide NOC option would require more study with a focus on Tier/Level 4 NOC Support.

Finally, to ensure the successful implementation of these recommendations, the study proposes securing implementation funding from the State School Aid Act that governs the award of implementation funding is Section 12.c. The funding would be used to facilitate the standardizing infrastructure, provide training for technical staff, and the norming of pay scales. This will ensure a seamless and effective transition and continuous operation of services during the consolidation process.

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Appendix A: Feasibility Logic Model

The premise of the MiNOC Feasibility Study:

Evaluate the feasibility of consolidating and centralizing both network operations and technology services for Northern Michigan rural ISDs and School Districts to:

- *enhance the quality, availability, and reliability of network and educational technology support services,*
- *ensure data security,*
- *cost containment,*
- *match or lower operational costs incurred by those ISDs and Districts, and*
- *Extending individualized learning opportunities to students in rural communities will foster an environment that supports technological innovation and improved teaching, learning, and academic outcomes.*

1. Inputs

- K12ETA Network and Technology Services offerings, staffing, and pricing model
- K12ETA services offerings, staffing, and pricing model
- Other participating ISDs, such as Claire-Gladwin RESD, and their expertise at providing full-service IT and NOC services to its service districts over the past 20-30 years
- School funding/operational costs of participating ISDs and districts
- Existing technical infrastructure (servers, equipment, software)
- Skilled IT professionals and project management staff
- Articulated partnerships with school districts and regional ISDs
- Facilitation and project management by MAISA

2. Activities

- Assess the current state of network operations and technology services across participating ISDs and districts
- Determine the capacity of expanding K12ETA services to cover participating ISDs and districts
- Assess ISD and district receptivity/resistance to and readiness for consolidation
- Develop stepped resistance mitigation plan
- Compare K12ETA cost structures with operating budgets of participating ISDs and districts
- Develop an implementation plan, including timelines and milestones
- Prepare recommendations and budgetary requirements.

3. Outputs

- Comprehensive feasibility study report
- Centralized network operations design document
- Implementation plan with detailed steps and timelines
- Number of training sessions conducted and staff trained
- Quantity of hardware and software procured and installed
- Established and operational centralized network operations center

4. Short-Term Outcomes

- Improved understanding of current network operations and technology services in rural Michigan
- Increased capacity for managing and supporting district network and technology services needs
- Enhanced IT staff skills, knowledge, and job satisfaction
- Greater IT staff work-life balance and lower attrition
- Broader IT talent recruitment pool
- Initial setup and operational capabilities of K12ETA

5. Medium-Term Outcomes

- Containment of spiraling staffing costs on a regional level
- Improved network and technology services reliability and performance across participating ISDs and Districts
- Streamlined network management and technology services processes
- Increased efficiency in handling network technology-related issues and incidents
- Strengthened collaboration among districts and regional ISDs
- Improved teaching and learning
- Individualized learning opportunities extended to students in rural communities
- *More* equitable education for rural students compared to their urban/suburban counterparts

6. Long-Term Outcomes

- Sustained improvement in network operations and technology services across rural Michigan
- Enhanced educational technology infrastructure for all participating ISDs and districts
- Reduced costs through centralized network management and economies of scale
- Increased student and staff satisfaction with network and technology
- Long-term sustainability and scalability of the MiNOC model
- Improved academic outcomes for rural students

7. Assumptions

- School districts are willing to collaborate and centralize their network operations
- Sufficient funding and resources are secured
- Technical infrastructure can support the centralized model
- Training programs are effective and IT staff are receptive to new processes

8. External Factors

- Changes in state or federal funding or policy priorities for educational technology
- Technological advancements or disruptions affecting network operations
- Policy changes impacting network management and data security
- Variations in district-level priorities and resource availability

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Appendix B: K12ETA Services

A. Existing K12ETA Footprint

* = K12 ETA Member	Network	Tech	Cyber	Hosting
COOR ISD*	X	X	X	X
- Charlton Heston				
- Crawford-AuSable	X	X	X	X
- Fairview			X	
- Houghton Lake			X	
- Mio			X	
- AuSable			X	
- Roscommon			X	
- West Branch			X	
West Shore ESD*	X	X	X	X
- Baldwin*	X	X	X	X
- Gateway to Success*	X	X	X	X
- Hart	X	X	X	X
- Ludington	X	X	X	X
- Mason County Central*	X	X	X	X
- Mason County Eastern*	X	X	X	X
- Pentwater	X	X	X	X
- Shelby	X	X	X	X
- Walkerville*	X	X	X	X
Wexford-Missaukee ISD *	X	X	X	X
- Cadillac			X	X
- Highpoint Virtual	X	X	X	X
- Lake City*	X	X	X	X
- Manton*	X	X	X	X

* = K12 ETA Member	Network	Tech	Cyber	Hosting
- Marion*	X	X	X	X
- McBain			X	X
- Mesick*	X	X	X	X
- Northern MI Christian*	X	X	X	X
- Pine River*	X	X	X	X

K12ETA Staffing Costs

The following table provides the total staff expense for K12ETA:

Personnel	Count	FTE	Salary	Fringe	Total
Asst. Superintendent	1.0	100%	\$140,552	\$97,068	\$237,620
Technology Coordinator	1.0	100%	\$104,120	\$77,930	\$182,050
Network Administrator	2.0	100%	\$166,734	\$126,470	\$293,204
Computer Technician II	1.0	100%	\$51,465	\$44,456	\$95,921
Computer Technician I	18.5	100%	\$840,389	\$675,963	\$1,516,352
Instr. Consultant Special Projects	1.0	100%	\$73,266	\$54,288	\$127,554
Data Support Specialist	1.5	100%	\$100,094	\$86,954	\$187,048
Pupil Accountant (paid by WMISD)	1.0	100%	\$65,581	\$50,553	\$116,134
	27.0				\$2,755,883

The following table provides an estimate of total staff expense for **K12ETA**

Network Services Staffing Costs only:

Personnel	Count	FTE	Salary	Fringe	Total
Asst. Superintendent	1	50%	\$70,276	\$48,534	\$118,810
Technology Coordinator	1	50%	\$70,276	\$38,965	\$109,241
Network Administrator	2	100%	\$166,734	\$126,470	\$293,204
Pupil Accountant (paid by WMISD)	1	30%	\$19,674	\$15,166	\$34,840
	3.3				\$556,095

B. Detailed List of K12ETA Services

1. Network Services

- Active Directory forest
- Backup/disaster recovery services
- Building access management
- Google management
- Fiber/Connectivity
- Firewall/NAT
- Internet access
- Network management
- Network security (802.1x)
- Regional cloud storage
- Server management
- Surveillance
- Web content filtering
- Wireless network management
- Wireless connectivity (P2P links)

2. Technical Services

- Authentication management (SSO)
- Account management
- Device Management
- Device Break/Fix
- Directory and authentication
- Email list management
- Google Workspace management
- Helpdesk
- Inventory
- Lunch Software
- Notification Systems
- Onsite technical support
- Remote technical support
- Password management
- Print accounting
- Technical support
- Transportation software
- Student online monitoring
- Website management

3. Cybersecurity Services

- Vulnerability Scan
- Disaster Recovery and Incident Response Plan
- Multi-Factor Authentication
- MDR Monitoring and Phish Testing



- Training Video Creation

4. Hosting, Data & Voice Services

- Virtual servers (i.e., student information, finance, library circulation)
- Website
- Directory and authentication/account rostering/sync
- Data Hub Support
- Pupil Accounting and SIS Support
- SIP services (dial tone)
- VoIP services (PBX) and IP fax

5. Technology and Network Consulting

- Bond consulting
- Technology consulting
- Technology integration specialist
- USF technical assistance

Please see the [2024-25 K12 ETA Service Matrix](#) for a detailed breakdown of services per ISD and District.

Appendix C: Consolidated Network Services

A. Roles, Responsibilities, and Salary Ranges

The following are NOC roles, responsibilities, and salary ranges based on current salaries in the proposed region:

Title	Salary Range
<i>NOC Director:</i>	\$104,000 - \$145,000
Interfaces with ISD and District leadership, leads and manages the NOC team, including making team hiring/firing and compensation decisions/recommendations. Can serve as Sr. Design Engineer when needed, leading design, implementation, and optimization of complex network infrastructure. They are responsible for strategic decisions, high-level troubleshooting, and mentoring junior engineers. Their role includes overseeing the security and scalability of the network across multiple districts.	
<i>Sr. Systems Engineer</i>	\$104,000 - \$145,000
Leads the design, implementation, and optimization of complex network infrastructure. They are responsible for strategic decisions, high-level troubleshooting, and mentoring junior engineers. Their role includes overseeing the security and scalability of the network across multiple districts.	
Systems Engineer	\$65,000 - \$100,000
Manages the day-to-day operations of the network infrastructure, including the configuration, monitoring, and maintenance of network equipment like routers, switches, and wireless access points. They ensure the network runs smoothly and troubleshoot any issues that arise.	
Network Operations Manager	\$100,000 - \$120,000
Oversees daily operations of the Network Operations Center, ensuring network infrastructure is stable, performance is optimized, and issues are promptly resolved. Manages the NOC team, staff scheduling, coordinates incident responses, and ensures service levels are met.	
Network Engineer	\$60,000 - \$85,000
Handles complex hardware and software issues, providing advanced troubleshooting and support for district staff. This role often involves resolving escalated tickets, supporting application issues, and coordinating with other	

Title	Salary Range
technical teams for more challenging problems. Tech 3 also mentors junior technicians and ensures best practices are followed.	
NOC Office Coordinator	\$45,000 - \$67,500
Provides administrative and financial operational support for budgeting, resource allocation, vendor management, and compliance. May assist with handling staff scheduling, performance reporting, and supporting strategic planning efforts.	

B. Individual ISD NOC Staffing & Budget

1. K12ETA

Personnel	Count	FTE	Salary	Fringe	Total
NOC Director	1	50%	\$140,552	\$97,068	\$118,810
Technician 5 Sr. Systems Engineer	1	50%	\$140,552	\$77,930	\$109,241
Technician 3 & 4 Sr. Systems Engineer Application Specialist	2	100%	\$83,367	\$63,235	\$293,204
Business Administrator	1	50%	\$39,348	\$30,332	\$34,840
Total Count	5	Per-Student (19,600)		\$28	\$556,095

2. Clare-Gladwin RESD

Personnel	Count	FTE	Salary	Fringe	Total
NOC Director					
Technician 5 Sr. Systems Engineer	1	100%	\$80,020	\$65,276	\$145,296
Technician 3 & 4 Sr. Systems Engineer Application Specialist	3.25	100%	\$58,966	\$38,629	\$317,184
Business Administrator					\$0
Total Count	4.25	Per-Student (6,687)		\$69	\$462,480

3. Gratiot-Isabella ISD

Personnel	Count	FTE	Salary	Fringe	Total
NOC Director	1	50%	\$115,875	\$75,528	\$95,702
Technician 5 Sr. Systems Engineer	1	100%	\$97,470	\$63,597	\$161,067
Technician 3 & 4 Sr. Systems Engineer Application Specialist	1	100%	\$62,264	\$49,854	\$112,118
Business Administrator					\$0
Total Count	3	Per-Student (12,203)		\$30	\$368,887

4. Mecosta-Osceola IS

Personnel	Count	FTE	Salary	Fringe	Total
NOC Director	1	0.25	\$100,000	\$50,000	\$37,500
Technician 5 Sr. Systems Engineer	1	0.25	\$75,000	\$0	\$18,750
Technician 3 & 4 Sr. Systems Engineer Application Specialist	1	0.25	\$75,000	\$0	\$18,750
Business Administrator	1	0.1	\$60,000	\$30,000	\$9,000
Total Count	4	Per-Student (8,000)		\$11	\$84,000

Appendix D: Qualitative Analysis

Detailed MiNOC Soar Analysis

The MAISA Consolidation Grant Team conducted SOAR Analysis with 32 members of Michigan Educational Technology Leaders (METL) group on May 16, 2024, representing ISD and RESD technology leaders from across the state.

A SOAR Analysis is a qualitative data collection process used as a strategic planning tool to assess an organization's strengths, opportunities, aspirations, and results. Unlike the traditional SWOT analysis, which focuses on weaknesses and threats, SOAR emphasizes positive and future-oriented aspects. The results:

- **Strengths:** positive attributes or capabilities that an organization or individual possesses, which provides an advantage in achieving goals.
 1. *Established Leadership and Internet Networks*
 - METL (Michigan Educational Technology Leaders).
 - MiCH (Michigan Collaborative Hub).
 - Long-running systems like SEN (Statewide Educational Network) and DataHub
 2. *Statewide Leadership*
 - Recognized as leaders in statewide initiatives and projects.
 3. *Regional Understanding*
 - Group recognizes and addresses the diverse needs of different regions and ISDs.
 4. *Innovation and Vision*
 - Strong innovators with a clear vision for the future of educational technology.
 5. *Partnerships and Collaboration*
 - Robust partnerships, including consortium purchasing models and agreements.
 - Strong relationships with local districts, ISDs, and the Michigan Department of Education (MDE).
 6. *Remote Work Capabilities*
 - Established infrastructure and protocols for effective remote work.
 7. *Existing Shared Services*
 - Proven experience in providing shared services, such as secure connectivity via SEN and cost savings through consortium models.
 8. *Dedication and Expertise*
 - Commitment to serving districts and students.
 - ISD technical expertise and capacity for handling complex projects.
 9. *Success Stories and Reliability*
 - Track record of success stories demonstrating reliability and reduced costs for products and services.

10. Communication Tools

- Effective use of communication tools like Slack and Tech-C for collaboration.

11. Historical Financial Data

- Availability of comprehensive historical financial data to support decision-making.

12. Collaboration Experience & Trust

- Established experience in collaboration, fostering a culture of trust among stakeholders.

- **Opportunities:** external factor or situation that an organization can capitalize on to achieve the stated goals or improve the overall position.

1. Universal Connectivity

- All districts connected to the SEN and DataHub, enabling seamless communication and data exchange.

2. Cloud Services

- Utilizing cloud services to maximize delivery and reduce costs.

3. Statewide SOC/NOC Usage

- Expanding the use of statewide Security Operations Centers (SOC) and Network Operations Centers (NOC).

4. Shared Technical Staffing

- Implementing shared technical staffing models to optimize resources and expertise.

5. Cost and Efficiency Gains

- Achieving cost savings, time efficiencies, and operational effectiveness through shared services.

6. Data Backbone Development

- Strengthening the data backbone to support more robust and reliable service delivery.

7. Leveraging Savings

- Using cost savings to provide additional services and enhance current offerings.

8. Reduction of Redundant Efforts

- De-duplication of efforts to streamline processes and improve efficiency.

9. Focus on Innovation

- Fostering innovation through focused subject matter expertise.

10. Staff Retention and Development

- Enhancing staff retention through shared learning opportunities and professional development.

11. Cybersecurity Improvements

- Leveraging the push for cybersecurity to secure systems.

12. Alternative Staffing Models

- Exploring new staffing models to address challenges and meet evolving needs.



13. New Partnerships

- Scanning the current system for opportunities to form new partnerships.

14. Addressing Staffing Shortages

- Leveraging staffing shortages as an opportunity to restructure and improve efficiency.

15. System Evolution

- Adapting to the continuous evolution of systems and technologies.

16. Design Collaboration

- Increasing collaboration in system design for better outcomes.

17. Funding Opportunities

- Exploring additional funding sources from legislative and foundation grants, especially around support and security needs.

18. Core Technology as Utility

- Establishing minimally viable core technology as a reliable and consistent utility for all users.

19. User Experience

- Ensuring consistent, reliable, and secure user experiences.

20. Collaborative Hiring

- Hiring collaboratively that individual orgs cannot afford alone.

21. Centralized Security

- Enhancing security through centralized systems.

22. Building Staff Expertise

- Growing the comfort, confidence, and expertise of existing staff.

23. Stability and Reliability

- Ensuring stable and reliable operations.

24. Shared Resources and Efficiency

- Promoting efficiency and sharing of resources across networks.

- **Aspirations:** long-term goals or desired future state that an organization or individual strives to achieve. It reflects an ambitious vision or ambition for growth, success, or improvement and serves as a guiding principle for planning and decision-making.

1. Targeted Direct Services

- Providing focused and tailored direct services to meet the specific needs of districts and schools.

2. Shared Services Expansion

- Expanding shared services to optimize resources and expertise across the network.

3. Specialized Skillsets

- Building a large enough technology organization to develop and maintain specialized skill sets.

4. Pools of Expertise

- Creating pools of expertise that can be accessed by all participating districts.

5. *Innovation and Skills Development*
 - Fostering an environment that encourages innovation and continuous skills development.
 6. *Alternative Staffing Models*
 - Implementing innovative staffing models to address challenges and fill open positions efficiently.
 7. *Attracting and Retaining Talent*
 - Offering competitive advantages, such as discounts or benefits, to attract and retain skilled personnel.
 8. *Leveraging TRIG Successes*
 - Building on the successes of the Technology Readiness Infrastructure Grant (TRIG) to advance new initiatives.
 9. *Perception of Local Control*
 - Retaining a positive perception of local control while implementing shared services and solutions.
 10. *Reliable Core Technology*
 - Establishing minimally viable core technology as a consistent and reliable utility for districts, schools, educators, and students.
 11. *Simplification of IT*
 - Simplifying IT management at the local education agency level.
 12. *Collaboration and Unity*
 - Promoting the idea that "we're better together" to encourage collaboration and shared success.
 13. *Reliability and Trust*
 - Being recognized as a reliable and trusted partner for services.
 14. *Leveraging Existing Work*
 - Utilizing existing initiatives and work to build on current strengths and achievements.
 15. *Model Collaboration*
 - Showcasing ISD superintendents who are already collaborating as role models for others.
 16. *Advocacy and Communication*
 - Creating one-pagers and other materials that members can use to advocate for solutions and secure funding for improvements.
- **Results:** measurable outcomes or impacts achieved as a consequence of specific actions, strategies, or initiatives.
 1. *Influential Communication Templates*
 - Developed communication templates that effectively influence legislation and policy.
 2. *Sharing Success Stories*
 - Successfully communicating our story and achievements to stakeholders, highlighting the impact and value of our services.
 3. *Valuable ISD Services*



- Demonstrating that ISDs provide essential services locally, regionally, and statewide, enhancing the educational experience.
- 4. *Student Success*
 - Ensuring students achieve greater success and experience world-class learning opportunities.
- 5. *Legislation Alignment/Engagement*
 - Ensuring legislators are well-informed about the needs and benefits before funding decisions, making it easier to secure support.
 - Achieving legislation that reflects the needs and growth opportunities of the educational community.
 - Regularly sharing successes with legislators, which helps in securing future funding in the state budget.
- 6. *Cost-Effective Ed Tech*
 - Implementing educational technology that meets diverse needs, operates seamlessly, and incurs minimal costs.
- 7. *Improved Funding and Value*
 - Securing better funding and demonstrating strong value, supported by evidence of return on investment (ROI).
- 8. *Service Menu and Practices*
 - Offering a comprehensive menu of services and best practices.
- 9. *Maximum Engagement*
 - Achieving maximum engagement from all stakeholders, including districts, educators, and policymakers.
- 10. *Operational Models*
 - Providing clear operational models for services and practices.
- 11. *Model for Other States*
 - Being recognized as a model for service delivery, with other states seeking to learn from our successful approaches.

Appendix E: Other Regional Costs

A. K12ETA Cost Comparison - Non-Participating Districts

The following are estimated annual costs for districts when using K12ETA pricing for comparison:

Actual student count may vary.

1. Remaining COOR ISD Districts (5)

	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Fairview Schools	3103	1	\$9,090	\$75,000	\$84,090
Houghton Lake Schools	1,165	2.5	\$34,950	\$187,500	\$222,450
Mio AuSable Schools	488	1	\$14,640	\$75,000	\$89,640
Roscommon Schools	807	2	\$24,210	\$150,000	\$174,210
West Branch Schools	<u>1,841</u>	<u>4</u>	<u>\$55,230</u>	<u>\$300,000</u>	<u>\$355,230</u>
	4,604	10.5			\$925,620

2. Remaining Wexford-Missaukee ISD Districts (2)

	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Cadillac Public Schools	3,071	6	\$92,130	\$450,000	\$542,130
McBain Rural Schools	<u>1,076</u>	<u>2</u>	<u>\$32,280</u>	<u>\$150,000</u>	<u>\$182,280</u>
	4,147	8			\$724,410

3. Remaining West Shore ESD Districts (4)

	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Hart Public Schools	1189	2.5	\$35,670	\$187,500	\$223,170
Ludington Area Schools	2,063	4	\$61,890	\$300,000	\$361,890
Pentwater Schools	229	1	\$6,870	\$75,000	\$81,870
Shelby Public Schools	<u>1,070</u>	<u>2</u>	<u>\$32,100</u>	<u>\$150,000</u>	<u>\$182,100</u>
	4,551	9.5			\$849,030

4. Manistee ISD and Its Service Districts (5)

	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Manistee ISD					
Bear Lake Schools	318	1.0	\$9,540	\$75,000	\$84,540
Casman Academy	98	0.5	\$2,940	\$37,500	\$40,440
Kaleva Norman D. Schools	473	1.0	\$14,190	\$75,000	\$89,190
Manistee Area Public Schools	1,295	2.5	\$38,850	\$187,500	\$226,350
Onkama Cons. Schools	<u>341</u>	<u>1.0</u>	<u>\$10,230</u>	<u>\$75,000</u>	<u>\$85,230</u>
	2,525	6.0	\$75,750	\$450,000	\$525,750

B. K12ETA Modeling Detailed Scope - Other Regions

The following are estimated annual costs by ISD for modeling the K12ETA model in their area to other regions:

1. Cheboygan-Otsego-Presque Isle (COP) ISD

<u>COP ISD</u>	<u>Student</u>	<u>Tech</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Cheboygan Area Schools	253	1.0	\$7,590	\$75,000	\$82,590
COP ISD	1,475	3.0	\$44,250	\$225,000	\$269,250
Gaylord Community Schools	2,776	5.5	\$83,280	\$412,500	\$495,780
Inland Lakes Schools	641	1.0	\$19,230	\$75,000	\$94,230
Johannesburg-Lewiston Schools	682	1.0	\$20,460	\$75,000	\$95,460
Mackinaw City Public Schools	136	0.5	\$4,080	\$37,500	\$41,580
Onaway Area Schools	525	1.0	\$15,750	\$75,000	\$90,750
Posen Cons. School District	224	0.5	\$6,720	\$37,500	\$44,220
Rogers City Area Schools	18	0.0	\$540	\$0	\$540
Vanderbilt Area School	457	0.5	\$13,710	\$37,500	\$51,210
Wolverine Comm. Schools	<u>112</u>	<u>0.5</u>	<u>\$3,360</u>	<u>\$37,500</u>	<u>\$40,860</u>
	8,005	17.5	\$240,150	\$1,312,500	\$1,552,650

2. Clinton County ISD (CISD)

<u>Clinton County RESA</u>	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Bath Community Schools	1,029	2.0	\$30,870	\$150,000	\$180,870
DeWitt Public Schools	3,200	6.0	\$96,000	\$450,000	\$546,000
Fowler Public Schools	5,100	10.0	\$153,000	\$750,000	\$903,000
Ovid-Elsie Area Schools	1,450	3.0	\$43,500	\$225,000	\$268,500
Pewamo-Westphalia Community Schools	775	2.0	\$23,250	\$150,000	\$173,250
St. Johns Public Schools	<u>3,650</u>	<u>7.0</u>	<u>\$109,500</u>	<u>\$525,000</u>	<u>\$634,500</u>
	15,204	30.0	\$456,120	\$2,250,000	\$2,706,120

3. Gratiot-Isabella ISD

<u>Gratiot-Isabella RESD</u>	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Alma Public Schools	1,844	3.5	\$55,320	\$262,500	\$317,820
Ashley Community Schools	212	0.5	\$6,360	\$37,500	\$43,860
Beal City Public Schools	665	1.0	\$19,950	\$75,000	\$94,950
Breckenridge Community Schools	592	1.0	\$17,760	\$75,000	\$92,760
Fulton Schools	74	0.0	\$2,220	\$0	\$2,220
Gratiot-Isabella RESD	544	1.0	\$16,320	\$75,000	\$91,320
Ithaca Public Schools	312	1.0	\$9,360	\$75,000	\$84,360
Morey FlexTech High School	993	2.0	\$29,790	\$150,000	\$179,790



Mt. Pleasant Public Schools	3,397	6.5	\$101,910	\$487,500	\$589,410
Renaissance Public School Academy	438	1.0	\$13,140	\$75,000	\$88,140
Shepherd Public Schools	1,768	3.5	\$53,040	\$262,500	\$315,540
St. Louis Public Schools	<u>897</u>	<u>2.5</u>	<u>\$26,910</u>	<u>\$187,500</u>	<u>\$214,410</u>
	11,736	23.5	\$234,150	\$1,237,500	\$1,471,650

4. Mecosta-Osceola ISD (MOISD)

<u>Mecosta-Osceola ISD</u>	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Big Rapids Public Schools	2,383	4.5	\$71,490	\$337,500	\$408,990
Chippewa Hills School District	1,788	3.5	\$53,640	\$262,500	\$316,140
Crossroads Charter Academy	290	1.5	\$8,700	\$112,500	\$121,200
Ewart Public Schools	885	2.0	\$26,550	\$150,000	\$176,550
Mecosta-Osceola ISD	442	1.0	\$13,260	\$75,000	\$88,260
Morley Stanwood Schools	988	2.0	\$29,640	\$150,000	\$179,640
Reed City Community Schools	<u>1421</u>	<u>3.0</u>	<u>\$42,630</u>	<u>\$225,000</u>	<u>\$267,630</u>
	8,197	17.5	\$245,910	\$1,312,500	\$1,558,410

5. Montcalm Area ISD (MAISD)

<u>Montcalm ISD</u>	<u>Students</u>	<u>Techs</u>	<u>Per-Student</u>	<u>Tech</u>	<u>Total</u>
Carson City-Crystal Schools	750	1.5	\$22,500	\$112,500	\$135,000
Central Montcalm Schools	1,323	2.5	\$39,690	\$187,500	\$227,190
Flat River Academy	154	0.5	\$4,620	\$37,500	\$42,120
Greenville Public Schools	3,561	7.0	\$106,830	\$525,000	\$631,830
Lakeview Community Schools	1,017	2.0	\$30,510	\$150,000	\$180,510
Montabella Comm. Schools	773	1.5	\$23,190	\$112,500	\$135,690
Montcalm Area ISD	557	1.0	\$16,710	\$75,000	\$91,710
Success Virtual Learning C.	1,806	3.5	\$54,180	\$262,500	\$316,680
Tri County Area Schools	1,685	3.0	\$50,550	\$225,000	\$275,550
Vestaburg Comm. Schools	<u>881</u>	<u>2.0</u>	<u>\$26,430</u>	<u>\$150,000</u>	<u>\$176,430</u>
	10,612	24	318,360	1,764,000	2,082,360