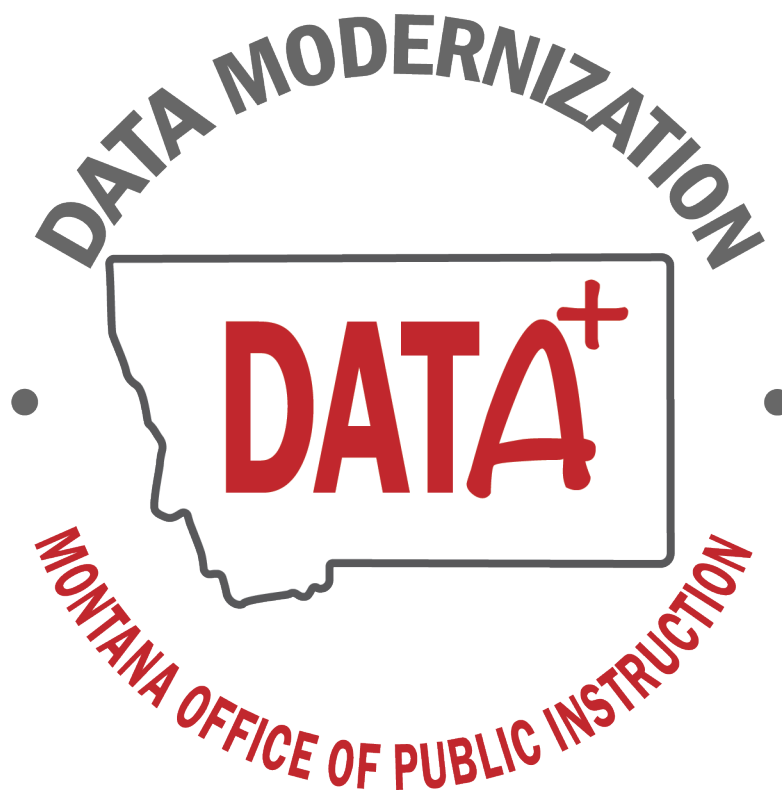




Montana
Office of Public Instruction
Elsie Arntzen, Superintendent



Educational Data Integration

October 21, 2024

Office of Public Instruction

**HB [367](#) OPI Data Modernization Status
and Overview Report**



Superintendent Elsie Arntzen
October 21, 2024

To:
Legislative Finance Committee
Education Interim Committee
General Government Budget Committee
Education Budget Committee

Subject: Progress Update on Office of Public Instruction Educational Data Integration: Costs, Timeline, and Goals

I am pleased to provide the Office of Public Instruction (OPI) Data Modernization Legislative Report for October 2024, which includes information on our progress since August 26, 2024. This is the eighth legislative report for this project as required by [HB 367](#). This project has been in progress now for over a year, and we anticipate that final sign-off will happen within the next 10-12 months.

The Montana Information and Data Analytics System, or MIDAS project will transform Montana's educational landscape through the implementation of innovative dashboards. These dashboards will reflect current student data in ways that are easy to read, comprehend, and take action on. This follows our many efforts to innovate student education in the state.

During the last reporting period, we completed the test dashboard for a single district. This has allowed us to move forward with loading the dashboards for all schools. As of October 21, 2024, data from all districts is coming into the dashboard system, and analytics are being populated. We also completed the custom connector analysis and mapping for how districts using PowerSchool will sync their data to the data lake. We are moving forward with building VPN connections for districts using PowerSchool as their SIS to ensure ease of access and timely data for all schools, regardless of SIS.

OPI and the vendor are committed to providing the best product for schools, teachers, and families. We are making progress while ensuring that the solution will address current needs to provide valuable and timely information. This will better inform decision-making, leading to better outcomes for schools and students. We have continued to make progress over this reporting period, including in the following workstream items:

- Load data into Student Analytics from IC State Edition (1 District): 100% complete.
- Load all District Data and Complete Dashboard Work: 51% complete.
- Security Setup and configuration for Analytics and Insights: 59% complete.
- Assessment Load for Dashboard: 3% complete.
- Community Engagement Implementation: 10% complete.

The OPI team is dedicated to transparency and communication with all external stakeholders. We participate in weekly office hours for district superintendents. Additionally, our team continues to give updates to technology staff, the Board of Public Education, and the legislature. OPI has continued monthly meetings with the School Implementation [Steering Committee](#), and is thankful for their invaluable contribution throughout this project.

My office continues to be an active participant in the Education and Workforce Data Governance Board and its working groups. We appreciate the contributions of our partner agencies in guiding this Board to improve data sharing and research opportunities.

In this report, you will find the OPI's ongoing goals for this project, more detailed information on our progress, and the identification of our next steps to continue to move forward.

Please feel free to visit our [website](#) to see the most recent progress throughout the implementation of this project. We welcome your ongoing commitment to our shared goals.



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Introduction Educational Data Integration

In this reporting period, PowerSchool and OPI have continued to work through Milestone 4a: Deployment of Connected Intelligence and Milestone 5a: Base deployment of Analytics and Insights modules. Data from the State Edition of Infinite Campus is being replicated into Connected Intelligence (data lake), and the schedule has been arranged to ensure that the data is being refreshed at a time that will allow schools to see the most up-to-date information. PowerSchool completed the test of the dashboard build with one district and has since loaded all districts into the dashboard system. Currently, the dashboards are being fitted to ensure that labels are correct and to customize dashboard views for users. OPI and PowerSchool are finalizing a state security solution to allow districts to use single sign-on (SSO) to access their dashboards once they go live. We are working together to build user role groups to govern accessibility to certain data elements. GEMS replication has started to develop the public-facing dashboards (Community Engagement). State assessment data is being test-loaded into the dashboards. The Kalispell district completed its VPN connection, and OPI is connecting with the other districts requiring a VPN to get those connections deployed. Additionally, the steering committee with schools across the state continues to meet to provide feedback and guidance on the project.

Data Modernization Vendor Partner Role

PowerSchool and the Office of Public Instruction (OPI) continue to meet weekly with progress reports on this project and the project managers meet bi-weekly. The vendor has assisted with the state SSO security solution of Analytics and Insights and worked collaboratively with all parties on the Virtual Private Network setup process. OPI completed the initial training for their team members and steering committee members for the Analytics and Insights platform on September 9, 2024. The vendor's expertise and involvement demonstrate their dedication to making the project a success and they are crucial in helping Montana's education system transition to modernized data management, in line with House Bills [367](#) & [949](#).

Partnership Foundations

PowerSchool has forged a strategic partnership with Snowflake to establish a robust data lake through their Connected Intelligence product. The connector is set up to allow Connected Intelligence to replicate the data from the State Edition of Infinite Campus into the data lake, which in turn will feed Analytics and Insights and its modules. PowerSchool is working diligently to create a resilient and agile infrastructure that enables efficient data utilization, sharing, and analysis to ensure the success of Montana's data modernization project.

Contractual Framework

OPI and its vendors established a Contract and Statement of Work to clarify responsibilities, expectations, and deliverables. This framework is broken into seven milestones, with milestones 4 and 5 having two sub-milestones. The milestone and delivery schedule are provided in this report.

Unified Direction

OPI and PowerSchool worked together to set clear goals for program management. The team meets weekly with project status updates and the Project Managers from both organizations meet regularly to touch base. The aim is to improve services, streamline IT and data interactions, make better use of data for everyone involved, cut costs, boost security, and improve overall governance.



Preparation and Solutioning

Work has been ongoing for the implementation of Analytics and Insights and its deployment to schools. We have identified the pertinent databases to replicate to make sure that we are utilizing Analytics and Insights at its full capacity based on the data currently being collected. This includes GEMS longitudinal data and student assessment data. PowerSchool has completed the mapping of all the data for the dashboarding and is now populating and fitting dashboards. Once mapping is complete, OPI will check the data before the solution is deployed for schools to utilize. Additionally, the work has started to map data from districts that use PowerSchool as their Student Information System (SIS) to then be able to build the connector to pull the data into Connected Intelligence. Kalispell successfully deployed their VPN connection, which will serve as a mapping tool for other districts. The following PowerSchool districts will require a Virtual Private Network (VPN): Belt, Billings, Great Falls, Kalispell, Polson, and Ronan. OPI and PowerSchool are in the beginning phases of getting Community Engagement, the public dashboards, deployed.

Financial Outlook: Project Expenditures & Future Projections

3-Year PowerSchool Contract Cost by Milestones: Including Implementation, Hosting, Licensing, Professional Services, Maintenance & Operation

Note: Recurring cost encompasses the ongoing costs associated with software and technology solutions utilized in the Montana OPI data modernization project. These costs include software licensing, release management, infrastructure hosting, and data integration. It also incorporates annual price increases, which may be influenced by factors like inflation and expanded usage.

Contract Term 1 - By Milestone	One Time	Recurring	Total	Delivery Date	Completed
Milestone 1				9/8/2023	
PS Consulting Services	\$73,728.00		\$73,728.00		✓
AWS Consulting Services	\$300,000.00		\$300,000.00		✓
Subtotal			\$373,728.00		
Milestone 2				9/15/2023	
PS Consulting Services	\$2,304.00		\$2,304.00		✓
AWS Consulting Services	\$20,000.00		\$20,000.00		✓
Subtotal			\$22,304.00		
Milestone 3				9/22/2023	
PS Consulting Services	\$3,456.00		\$3,456.00		✓
AWS Consulting Services	\$17,500.00		\$17,500.00		✓
Subtotal			\$20,956.00		
Milestone 4				November 2024	
PS Provisioning Services	\$18,000.00		\$18,000.00		
Subtotal			\$18,000.00		
Milestone 5					



PS Customization Services	\$774,000.00		\$774,000.00	June 2025
PS Provisioning Services	\$230,956.00		\$230,956.00	
CI - Annual Subscription		\$1,351,498.81	\$1,351,498.81	
UI - Annual Subscription		\$1,231,331.42	\$1,231,331.42	
Subtotal	\$1,004,956.00	\$2,498,795.25	\$3,503,751.25	
Initial Term Discount		(\$1,000,000.00)	(\$1,000,000.00)	
Total (Contract Term 1)	\$1,489,944.00	\$1,498,795.25	\$2,988,739.25	July 1, 2023
Post-Deployment	One Time	Recurring	Total	
Annual Term 2		\$2,633,114.41	\$2,633,114.41	July 2024
Annual Term 3		\$2,733,172.76	\$2,733,172.76	July 2025
Contract Total (All 3 Terms)	\$1,489,944.00	\$6,865,082.42	\$8,295,843.48	

Educational Data Integration Payment Schedule

The 3-year term fixed cost project entails creating a payment schedule table that incorporates several key columns to manage the Educational Data Integration project expenses effectively. The table includes:

- 1. Subscription & Deployment Service Cost:** This column captures the initial fixed cost for the project, covering subscription fees and deployment services for each year of the project.
- 2. Annual Increase %:** This column represents the annual percentage increase in costs, reflecting any anticipated inflation or adjustments over the three-year period.
- 3. Annual Increase \$:** This column calculates the dollar amount increase for each year based on the percentage specified in the previous column.
- 4. Subtotal:** This column provides the total cost for each year, accounting for both the initial cost and any annual increases.
- 5. Managed Services:** This column includes any additional costs associated with managed services or ongoing support throughout the project's duration.
- 6. Subtotal:** Similar to the previous subtotal, this column sums up the costs for each year, including managed services.
- 7. Invoice Total:** The final column computes the overall project cost by summing up all expenses over the three-year term, providing a comprehensive view of the project's fixed expenses.



3-Year Annual Payment Schedule

Payment Settlement Date	Subscription & Deployment Service Cost	Annual Increase %	Annual Increase \$	Subtotal	Managed Services	Annual Increase %	Annual Increase \$	Subtotal	Invoice Total
Initial 3 Yr Term 7/1/23 – 6/30/26									
7/1/2023	\$2,929,556.31								\$2,929,556.31
7/1/2024	\$2,304,507.44	1.9%	\$43,786.97	\$2,348,364.41	\$284,750.00			\$284,750.00	\$2,633,114.41
7/1/2025	\$2,348,364.41	3.8%	\$89,237.85	\$2,437,602.26	\$284,750.00	3.8%	\$10,820.50	\$295,570.50	\$2,733,172.76
Total Contract Amount									\$8,295,843.48
Optional Contract Term 7/1/26 – 6/30/28									
7/1/2026	\$2,437,602.26	3.8%	\$92,628.89	\$2,530,231.14	\$295,570.50	3.8%	\$11,231.68	\$306,802.18	\$2,837,033.32
7/1/2027	\$2,530,231.14	3.8%	\$96,148.78	\$2,626,379.93	\$306,802.18	3.8%	\$11,658.78	\$318,460.66	\$2,944,840.59

 Paid Invoice

Note: The 2024 payment to PowerSchool was approved for payment based on a thorough review of deliverables and progress made to this point. That information is substantiated through the progress outlined in the Table of Milestone Delivery Schedule, Project Timeline, and the sign-off acceptance of milestones 1-3.

Core Features of the Vendor Products

PowerSchool Products

1. **Analytics and Insights** will assist Schools and OPI with data analytic tools:
 - Facilitate schools in making data-informed decisions to enhance student outcomes.
 - Provides technical and data analytic tools.
 - Early warning system using artificial intelligence/predictive analytics to identify at-risk students.

2. **Community Engagement** will enhance OPI's ability to publicly display:
 - Demographic information
 - Enrollment / Attendance
 - Statewide assessment data
 - Graduation and dropout
 - School expenditures data

3. **Connected Intelligence** will facilitate and enhance data sharing with:
 - Data lake technology
 - Data collection and integration tools
 - Data governance tools for data sharing

These applications for data modernization bring forth a range of compelling advantages, including centralized data lake construction for consolidated data storage, improved analytics and data visualization capabilities, and fortified data security measures.



Table of Milestone Delivery Schedule

Milestone #	Deliverable	Delivery Date	Completed
1	Draft Assessment Document	September 8th, 2023	✓
2	Montana Review & Feedback of Assessment Output	September 15th, 2023	✓
3	Delivery of Assessment & Future Solution Document	September 22nd, 2023	✓
4	Organizational Change Management	November -December 2023	✓
4a	Infinite Campus Connector to Data Lake	February 20th 2024	✓
4	Connected Intelligence Application Initial Deployment (with State Infinite Campus data)	March 29, 2024	✓
4a	PowerSchool Connector to Data Lake	March-November, 2024	
4b	PS SIS Integration Analysis	April 24, 2024	✓
5	Analytics and Insights Application Deployed	November-December 2024	
5	Analytics and Insights OPI Customer Education	May 2024-September 2024	✓
5	Analytics and Insights Customer Education	May 2024-February 2025	
5	Analytics and Insights Training Deployment	September 2024-February 2025	
4a	PS SIS Custom Connector Build	August 2024-February 2025	
4a	PS SIS Integration for Hosted Districts: Replicating data into Connected Intelligence	August 2024-February 2025	
4a	Set up VPNs for On-Premise PS SIS Districts	August 2024-February 2025	
6	Post Deployment Assessment	June 2025	
7	Solution Acceptance & Final Project Sign-Off	July 2025	

Project Timeline

Date	Activity	Status
April 07, 2023	Request for Proposal Release	Completed
June 20, 2023	Vendor Tentative Award	Completed
June 30, 2023	Contract & Statement of Work Executed	Completed
July 20, 2023	Project Kick-off Meeting (PowerSchool & OPI)	Completed
July 24-27, 2023	Organizational Change Management Executive Interviews	Completed
August 9-10, 2023	Cloud Assessment Workshops	Completed
August 14-31, 2023	Application Assessment Workshops	Completed
August 24, 2023	Organizational Change Management Assessment Report	Completed
September 1, 2023	Maturity Assessment Report	Completed
September 22, 2023	Commercial off the Shelf Solution, Architecture & Deployment Strategy	Completed



October 31, 2023	OCM Stakeholder Engagement Plan	Completed
February 20, 2024	Connection and replication of data from Infinite Campus to Connected Intelligence (CI)	Completed
March 29, 2024	Connected Intelligence initial data load verified and begin mapping for ongoing replication	Completed
April 24, 2024	Complete Custom Connector Analysis for PowerSchool Districts (Both on Premise Districts and PS cloud-housed districts)	Completed
April 30, 2024	Ongoing replication of Infinite Campus State Edition into Connected Intelligence	Completed
May 2024-September 2024	Analytics and Insights Customer [OPI] Education	Completed
May 2024-July 2024	Build Custom connector for PowerSchool Student Information System (SIS) replication into CI	In Progress (70%)
January-November 2024	Connection from on-premises PowerSchool Districts to Connected Intelligence (6 VPN connections)	In Progress (10%)
March 2024-November 2024	Analytics and Insights Base Module	In Progress (63%)
September 2024-February 2025	Analytics and Insights Training Implementation	In Progress (5%)
August 2024-November 2024	Replication of all PowerSchool Districts data into CI	In Progress (5%)
April 2024-February 2025	Risk Analysis Module (pending Analytics and Insights initial deployment)	On Hold
April 2024-February 2025	Student Readiness Module (pending Analytics and Insights initial deployment)	On Hold
April 2024-February 2025	Community Engagement Module	In Progress (10%)
April 2024-November 2024	Replication of Additional Data Sources into Connected Intelligence	In Progress (15%)
November 2024-April 2025	Customizations of Dashboards	Not Started
June 2025	Post Deployment Assessment	Not Started
July 2025	Solution Acceptance & Sign-Off	Not Started

**The percentages in the above table are updated for each report. These percentages are accurate as of October 21, 2024.*

Considerable progress has been made in milestones 4 and 5. Milestone 4 primarily addresses the implementation of Connected Intelligence (data lake). In the last year, CI has been provisioned and established, connectors made, and data replication is occurring. This means that data being collected by the state in our state-level edition of Infinite Campus is being replicated into CI on an ongoing, routine basis. Furthermore, the VPNs for districts using PowerSchool SIS are being built and tested. This will allow for easier data reporting for schools and better replication of their data more cleanly into CI.

Milestone 5 encompasses the implementation of Analytics and Insights and its modules for deployment. This required the setup of CI to begin the bulk of the work. Connectors from CI into Analytics and Insights were built and tested and are currently being implemented. The Montana OPI Analytics and Insights site has been provisioned and data is starting to flow from CI into the dashboards. PowerSchool is testing the data connection using one district, which allows better control over the process and allows the teams to accurately map the data to the dashboards and tables that will populate. PowerSchool has been able to show the OPI project team the dashboards that are currently being deployed with real data being replicated.



Milestone 1-3 Acceptance Criteria

RUBRIC	SCORE	SCORING SCALE	TOTAL
Product exceptionally addresses project requirements / EXCEPTIONAL	4	EXCEPTIONAL	18 – 20
Product significantly addresses project requirements / STRONG	3	STRONG	14 – 17
Product somewhat addresses project requirements / NEUTRAL	2	NEUTRAL	10 – 13
Product minimally addresses project requirements / INADEQUATE	1	INADEQUATE	0 – 9
Product does not address project requirements at all / UNACCEPTABLE	0		

CRITERIA	MILESTONE 1	MILESTONE 2	MILESTONE 3
Does the document show understanding of the problem and its requirements?	3	3	3
Does the document use appropriate data sources?	3	3	3
Does the document identify an accurate and extensive inventory?	3	3	4
Does the document correctly identify problems and outline appropriate solutions?	2	3	3
Will executing/implementing the document be simple or complex? And will the vendor provide adequate support throughout the project?	2	2	2
<i>Simple = Higher Score; Complex = Lower Score</i>			
TOTAL SCORES	13	14	15

With the delivery of the final assessment product on September 23, 2023, milestones 1, 2, and 3 were completed. Each milestone was scored as noted above and the final product was determined to be strong. The final criterion remains at a “2” due to complexity of the project with required customizations.



Current Activities as of October 21, 2024

Workstream	Activity Overview	Outcomes
<p>Connected Intelligence (CI)</p>	<p>The team is working on setting up the connection from GEMS to Connected Intelligence for ongoing replication.</p> <p>OPI is continuing internal conversations to identify additional data sources for replication into Connected Intelligence.</p> <p>Virtual Private Network is being built to connect hosted and on-premise PS SIS districts to Connected Intelligence.</p>	<p>Ongoing replication is occurring for the State Edition of Infinite Campus. Timing of the replication was changed to ensure that schools will see a refresh of data from the previous day.</p> <p>GEMS replication timeline is being developed.</p>
<p>Analytics and Insights</p>	<p>The initial authorization setup was tested and confirmed for the single sign-on solution.</p> <p>Dashboards have been populated with data from all school districts in the state.</p> <p>Once GEMS replication is completed, will begin the implementation of Analytics and Insights Community Engagement module for public-facing dashboards.</p> <p>PowerSchool has updated attendance codes to better fit dashboards and populate information.</p> <p>PowerSchool and OPI moved the replication timing to allow for the most recent data from the source to move into dashboards during nightly replication.</p>	<p>Assessment files are being moved into Analytics and Insights.</p> <p>Solidifying training plan with input from the Steering Committee and other stakeholders.</p> <p>The dashboard environment has been provisioned, including web domain for eventual public access.</p> <p>Dashboard fitting is in progress to ensure all connections and customizations are in place.</p>



<p>Stakeholder Partnerships</p>	<p>OPI is an active participant on the Education and Workforce Data Governance Board. There have been ongoing working group meetings at regular intervals since the March 2024 Board meeting. The OPI participated in the July 30 Board meeting.</p> <p>OPI has continued to hold meetings with the established Data Modernization Steering Committee. This committee has members from schools across the state. The group met on August 28 and again on September 6th for the Analytics and Insights training with OPI.</p> <p>OPI holds weekly Office Hours for district Superintendents on Wednesdays at 10 am; the staff working on the Data Modernization project have been providing updates and are available for questions since May 8th.</p> <p>The OPI hosts a K-12 Data Taskforce meeting on a quarterly basis. During this meeting, which has members from across the state, including legislators, school administrators, teachers, and parents, we routinely provide updates on the MIDAS project.</p> <p>OPI attended the most recent Power Panel, hosted by PowerSchool on October 2. This group gathers PowerSchool partners throughout the country to provide updates and insights from their own projects.</p>	<p>OPI will continue to participate in the Board's working groups to continue the progress of this group and the data modernization project.</p> <p>The Steering Committee has been meeting monthly and is providing valuable insight into the project, including how we can tailor solutions to help with data collection and reporting.</p> <p>Office hours provide the OPI with a way to connect with more district staff and continue to provide updates throughout the summer.</p> <p>The K-12 Data Taskforce provides another avenue for updates on the project and allows us to get valuable feedback from key stakeholders on issues related to educational data.</p>
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Education and Workforce Data Governing Board

The Education and Workforce Data Governing Board most recently met on July 30, 2024. Our office was in attendance and was an active participant in the meeting. We have also been active in the three subgroups established in March 2024:

- Project Design and Implementation Group: responsible for developing the technological processes for the linking and sharing of data across the agencies; defining the specific types of data that must be shared by the contributing agencies (the data dictionary); identifying current state operations and defining future state operations; and respond to any technical issues regarding data transfers, initial matching, or other initial use cases
- Data Governance Group: responsible for developing policies related to the linking and sharing of data; identifying the Board's purpose and goals in those policies; and developing policies for the data requests or MOU agreements in the scope that has been made available
- Data Research Work Group: responsible for developing the education and workforce research agenda; describing how the contributing agencies will work together to improve understanding of the connection of primary and secondary education, higher education, and workforce data

During the meeting, a question was raised about the connection between the State Edition of Infinite Campus and the Connected Intelligence PowerSchool data lake. This question was revisited during the last interim legislative budget committee meeting for section E – Education in September. We maintain our belief that there are limits to what student data our office may collect, which in turn has necessitated a custom connection between the two systems. However, there is no issue with the flow of data between the two systems, capacity or otherwise. There is no need to build any additional, concurrent connections; rather, should the need to collect and display additional data arise, the filter for the data would need to be revised. This would also require that additional dashboard build and fitting occur to display the additional data elements.

Education Data Integration through Data Modernization

Goals and Vision for Montana OPI

Goal 1: Improve Services

Goal 2: Improve IT/Data Workforce Interactions

Goal 3: Increase the Value of IT/Data for Operations and Business Impacted Audiences

Goal 4: Reduce IT/Data and Other Operating Costs

Goal 5: Security Risk Management and Continuity of Operations

Goal 6: Increase Governance Maturity

Addressing Statutory Compliance for Educational Data Integration

The information in the following section has been previously detailed in a prior report, and there have been no changes or updates for this section.

Montana OPI's Approach in the Data Modernization Project

- Montana's OPI is committed to legislative compliance via its Data Modernization Project, aligning with House Bill 367 and 949.
- The project aims to seamlessly integrate systems, enhance insights, provide academic support, ensure security, and facilitate secure data sharing across education.

Integration: Connected Intelligence

- The Data Modernization Project prioritizes Comprehensive Data Integration, in line with House Bills 367 and 949, to consolidate educational data from diverse sources.
- This approach improves data consolidation efficiency and accuracy, meeting legislative requirements effectively.



Holistic Student Insights: Analytics and Insights

- Analytics and Insights, in compliance with House Bill 367, offers educators a comprehensive view of student data, enabling a deep understanding of individual student performance and needs.
- This alignment with legislative intent empowers educators to meet compliance mandates and support students more effectively.

Individualized Academic Enhancement: Analytics and Insights/Risk Analysis

- Analytics and Insights and Risk Analysis tools, in line with House Bill 949 objectives, empower educators to utilize student data for personalized academic interventions.
- This approach, focused on identifying at-risk students and customizing interventions, directly supports the bill's intent to enhance student outcomes.

Robust Data Security: Connected Intelligence/Analytics and Insights

- Montana OPI prioritizes data security in alignment with House Bills 367 and 949, leveraging Connected Intelligence and Analytics and Insights.
- Robust security measures, including encryption, role-based access controls, audits, and data protection standards, are rigorously enforced to safeguard sensitive student information and fulfill compliance obligations.

Secure Data Sharing: Connected Intelligence

- The Secure Data Sharing component of the Data Modernization Project aligns with the security provisions of House Bills 367 and 949, facilitating controlled and encrypted data sharing for confidentiality and authorized access.
- Montana OPI's Data Modernization Project not only ensures compliance with legislative mandates but also empowers educators with tools to improve student outcomes, all while maintaining high data security and privacy standards.

Enhancing School Customer Experience for Educational Data Integration

Bridging Legacy & Modernization

- Ensuring a smooth link between existing software and new data modernization infrastructure is vital.
- Maintaining uninterrupted compatibility and coordination between older systems and the new framework is essential. This means addressing differences in data formats, communication methods, and operational procedures to ensure seamless connectivity. This collaboration supports ongoing operations and improves functionality, making the transition to modernized data systems seamless.

Elevating Performance

- Leveraging data modernization to streamline processes, optimize data management, and achieve a new level of operational effectiveness, resulting in improved productivity and resource allocation.

Data Integrity

- The data modernization project strengthens data accuracy and reliability, fostering trust in decision-making processes within educational institutions by ensuring data integrity and consistency, enabling confident, data-informed decisions that enhance educational outcomes and organizational effectiveness.

Reduced Downtime

- The data modernization project streamlines operational processes, minimizing system downtime and disruptions, enhancing efficiency, and promoting a resilient educational environment that supports seamless learning experiences and administrative excellence.



Data Modernization Steering Committee

OPI has put together a [Steering Committee](#) of school representatives to help provide oversight, guidance, and strategic direction for the Data Modernization project. The committee has offered valuable insights into both the current data collection practices and makes informed recommendations to ensure alignment with organizational goals. Their advisory role extends to risk assessment, resource allocation, and resolving issues that may arise during the project life cycle. The committee meets regularly to review project progress and provide guidance. The committee includes subject matter experts in educational data systems, data management, and data analysis along with other high-level stakeholders. Members of the committee have been gathered from across the state. For more information and updates on these meetings visit our [website](#).

Currently, the committee is providing valuable insight to help guide the communications and training plan. The members have been offering guidance on what they feel this project is going to change in their day-to-day workflows. Some steering committee members attended the training provided to OPI on the Analytics and Insights system at the beginning of September. They are also going to be critical in testing the security solution currently in development. Furthermore, schools participating in the steering committee at this time have the opportunity to pilot the PowerSchool custom connections from districts directly into the Connected Intelligence data lake, both through cloud-hosted and on-premise/self-hosted districts through a VPN connection. Kalispell has confirmed their VPN connection setup, and this setup will serve as a blueprint for additional districts in the state that will be utilizing VPN connections to provide better data flow. These districts will continue to provide feedback throughout the project on the security and connection solutions.

Data Modernization Steering Committee Members List:

- Sandra Rivas, District Clerk, Browning Public Schools
- Kevin Patrick, Business Director, Butte School District
- Jill Swanson, Technology Director, Conrad Public Schools
- Julie Asbeck, Business Manager, Fairview School
- Stacy Montgomery, District Clerk/Business Manager, Forsyth Public Schools
- Janelle Mickelson, Business Manager/District Clerk, Helena Schools
- Eric Miletich, IT Coordinator, Kalispell Public School District
- Paul Kozlowitz, PC/Network Technician, Missoula County Public Schools
- Colleen Drury, Business Manager, Scobey Schools

Charting the Course Forward

Navigating the Next Steps in Educational Data Integration

OPI is using the MIDAS data modernization project to prioritize and ensure an educational system that is more efficient, transparent, and responsive to the needs of its stakeholders. The project has made substantial progress since our last report, and we look forward to the ongoing partnership with our vendor, PowerSchool.

We will continue to align with stakeholders as we make progress on this project. PowerSchool has completed analysis on the custom connector for school districts with self-hosted ("on-premise") PowerSchool Student Information Systems and will be working towards building a connector, after which the plan to build the 6 VPNs to the on-premises districts with PowerSchool will come. Building a better connection for districts utilizing a PowerSchool Student Information System will allow for simplified data reporting throughout the year into the state edition of Infinite Campus.

PowerSchool is also working on the implementation of Analytics and Insights using the data captured from the State Edition of Infinite Campus to Connected Intelligence. They are also mapping the assessment data that



has been loaded separately. The data will need to be put in a data warehouse structure so that the dashboards can be deployed. PowerSchool and OPI will start with pilot districts from the Steering Committee to be able to set up security, access protocols, and early training.

Upcoming Activities and Efforts

- Weekly Project Status Update Meetings with Vendor
- Monthly Data Modernization Steering Committee meetings
- Quarterly K-12 Data Taskforce updates
- Quarterly legislative interim committee meetings
- Quarterly Education and Data Workforce Governing Board meetings
- Other scheduled sub-group meetings as part of our commitment to working with our partners in the Education and Data Workforce Governing Board
- PowerSchool will finalize loading student assessment data into Analytics and Insights
- Continue work on building Virtual Private Network (VPN) connections for additional districts
- Continue testing and replicating data into dashboard tables for all districts
- Complete dashboard fitting and QA
- Finish implementation of the security solution and Configuration of UI for State, District, and School Users
- Custom Connector Build for PowerSchool SIS districts.
- Community Engagement Build and Deployment
- GEMS mapping and analysis is set to begin the week of October 21, 2024.

Sustainability of Project

The Office of Public Instruction is committed to providing the best possible tools for schools, teachers, students, and families. As we move forward with the MIDAS project, it is easy to see the value these products will have for education in Montana. However, there are several factors to be considered as we look to the future:

- HB 630 and HB 367 directed and authorized OPI to use federal dollars for this project.
- The contract signed in June 2023 was for a subscription through June 30, 2026, to finish the build of the project.
- Any other remaining ESSER funds were obligated by September 30th, 2024.
- The ongoing subscription cost for the product is substantive. As outlined on page 6 of this report, the cost is estimated to be over \$2.6 million for FY2027 and over \$2.9 million for FY2028.

Understanding these budget issues, a decision budget package for the 2025 legislative session has been requested to sustain or support this project after the federal dollars are spent. OPI will be conducting formal discussions addressing sustainability and ongoing funding for the project. This includes ongoing subscription costs, staffing from OPI to support schools in using the available products, and any changes that need to be made to the product(s) as the result of changing statutes or rules.

Communication Plan

OPI is committed to providing ongoing communication about this project to all stakeholders. As part of this goal, we maintain the [webpage](#) dedicated to the project with current information. Project overview videos will be posted on the website by the end of the month.

We also provide regular updates in the following venues:

- Weekly Superintendent Office Hours: Wednesdays at 10 am
- Monthly Steering Committee meetings
- Bi-monthly Board of Public Education meetings



- Quarterly Legislative Interim Committee meetings
- Quarterly K-12 Data Taskforce meetings

The data modernization staff provided updates on the project to the Montana PowerSchool User Group meeting on June 18th. The team also presented with PowerSchool at the School Administrators of Montana Administrators Institute meeting on July 24th. During this presentation, a demo of Analytics and Insights was provided, general project updates and current status were shared, and questions were answered from the participating schools.

OPI has maintained communication with the PowerSchool Customer Education team to begin planning district training options that align with feedback we are receiving from our school partners. A formal training plan is in development. We are also going to be planning webinars for districts for additional training opportunities.

Our team is happy to answer any questions you may have about this project. Please reach out to [Julia Caro](#) or [Anna Hoerner](#).

Next Reporting Period:

December 23rd, 2024

Anticipated Future Reporting Periods:

February 24th, 2025

April 21st, 2025

June 23rd, 2025

August 25th, 2025