

Montana Office of Public Instruction  
R372A2000011

Project Title: Montana Innovation through Infrastructure

Project Description: The Montana Office of Public Instruction requests \$3,249,952.18 over four years for implementation of the Montana Innovation through Infrastructure (MITI) project under priority 1 of the *Statewide Longitudinal Data Systems Grant for FY 2019*. Our SLDS is currently approaching its 10th birthday and is reaching the end of its technological lifecycle. Luckily, we have users who believe in and rely on our data, and who seek us out as a resource and partner in serving the students of our state. A revitalization of our data warehouse, and expanded data linkages will ensure that our SLDS remains sustainable and ready to evolve alongside, rather than behind our users. To achieve this vision, we have three goals:

Goal #1: Rebuild the OPI's data warehouse on the CEDS structure. A decade into our SLDS undertaking in Montana, we have a robust K-20 data warehouse, an excellent reputation amongst our users, and support from leadership, partner agencies, and policymakers. Despite these indicators of strength, our data warehouse structure and technology will very soon be unable to meet user needs. It is no longer economically feasible, nor do we have the staffing capacity to continue repairing what needs replacement. Execution of this goal will remedy these challenges and prepare us for the next generation of educational data collection, storage, and reporting.

Goal #2: Establish new data linkages and build data use capacity. For many states, a P20W SLDS is the gold standard. Though Montana does not have statewide preschool, expansion of our SLDS to link labor data is critical if we are to avoid falling behind our peer states. Additionally, tribal college data are not yet integrated into our SLDS because they are not a part of the Montana University System, leaving a gap in equity in our data. Execution of this goal will facilitate data linkage with Montana's Department of Labor and Industry, and will initiate data sharing pilot work with our 7 tribal colleges. This will add missing labor and wage indicators to our SLDS and create a more inclusive and representative demographic dataset.

Goal #3: Update and enhance the sustainability of GEMS data warehouse, linkages, and relationships. As our SLDS approaches the end of its lifecycle, sustainability is received renewed focus at the OPI. We are proud of what a decade of work has done for our SLDS and want to make certain its next iteration is equally as valuable, if not more. As our data warehouse has evolved, we have identified gaps that hinder its sustainability. As we have experienced turnover and reorganization within the agency, we have realized the depth and breadth of our documentation for positions and procedures is inadequate. Execution of strategic documentation, training, and sharing will help our SLDS remain sustainable as we move into its next decade.

Expected outcomes: This project will yield a rebuilt, CEDS-aligned data warehouse and a completed data linkage incorporating labor data into our SLDS. It will establish foundational relationships and pilot data linkages with tribal colleges. Finally, and most critically, this project will produce the technology, tools, documentation, and relationships necessary for Montana's SLDS to meet the needs of our users and ultimately, to better serve our students.