

**2025 Bringing Montana's History Into the Future:
Modernizing MDT's Interpretive Marker System
Data Management Plan**

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Final Data Set: <https://doi.org/10.5061/dryad.69p8cz9h8>

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Data Description

Tabular and text data from fewer than 50 respondents were collected. The survey data was then exported from Qualtrics in CSV format. Forty-nine survey responses were then recorded in an Excel Spreadsheet, as Excel is a readily accessible file format for most users. The file size is 40 KB of data. No information about the respondents' names were included for privacy of individual respondents, as the response is representative of an agency.

Data Documentation

The research team used Qualtrics, an online survey system, to create a survey, collect and store data securely. Qualtrics is a well-established survey software, and MSU has an institutional license to the software.

The data file and the survey instrument were provided to MDT. The survey instrument provides all questions. All content within is the exact information provided by the agency survey respondents. The data may be made public – there are no privacy risks associated with disclosure.

Data Security

For data storage while the project is ongoing, MSU researchers and affiliates utilize the Microsoft OneDrive/SharePoint cloud storage system. This service is an institutional resource and fully compliant with all data policies.

It can also function as a cloud backup system by syncing content between local machines and the cloud. Data stored in OneDrive will be stored in the PI's account and shared as appropriate with other researchers.

MSU OneDrive is access controlled, requires multi-factor authentication, and regular software updates to protect data from unauthorized access, use, disclosure, or destruction.

Data stored in OneDrive will be stored in the PI's account and shared as appropriate with other researchers.

Data Sharing

At the completion of the project, the research team will provide the final data file to MDT via email or by secure upload. MDT may share this data as they choose per their policies. There are no privacy risks associated with disclosure.

Data from this project will also be made available with a Creative Commons Zero designation (<https://creativecommons.org/publicdomain/zero/1.0>) in Dryad Digital Repository (<https://datadryad.org>), a non-profit, community-owned data repository hosted by the California Digital Library. Montana State University is an institutional member of Dryad. All content in Dryad is available for the public to view and download, free of charge, via an online interface, with a permanent digital object identifier (DOI). Data depositors may opt to embargo their content for a limited period of time before it is made public. Dryad ensures that data are discoverable, freely reusable, and citable

(https://datadryad.org/stash/our_mission). The Principal Investigator will upload the data and forward the doi to MDT.

Data Preservation

All data will be preserved locally for five years on the Principal Investigator's OneDrive account. To ensure long-term data understanding, the survey instrument will be retained along with the data.

The final dataset will be uploaded to Dryad by the Principal Investigator once the project is completed. Dryad is built on the University of California Curation Center's Merritt system, which includes preservation infrastructure that follows community best practices. Items are retained indefinitely; data files are replicated with multiple copies in multiple geographic locations and metadata are backed up on a nightly basis; all data files are stored along with a SHA-256 checksum of the file content and regular checks of files against their checksums are made; in case of closure of the repository, reasonable efforts will be made to integrate all content into suitable alternative institutional and/or subject based repositories (see <https://datadryad.org/stash/faq>).

Final Dataset Location: <https://doi.org/10.5061/dryad.69p8cz9h8>

Roles and Responsibilities

ROLES: The Principal Investigator will serve as the Data Owner and Data Steward during the following Lifecycle Stages of the project:

- Collect/Create/Acquire
- Store/Maintain
- Use
- Archive

RESPONSIBILITIES: As per the MSU Electronic Research Data Security Policy, the Principal Investigator (PI) is responsible for ensuring that reasonable standards for data collection, retention, and security are in place for all research projects. The PI, who bears primary responsibility for the overall conduct of the research, is responsible for collection, management and retention of research data and providing access to it including any agency requirements for sharing data.

The PI will adopt an orderly system of data organization and will communicate the chosen system to all members of a research group and to the appropriate administrative person. Research data generated while individuals are pursuing research must be retained by the PI

for a period of three years after submission of the final report on the project for which the data was collected. If the retention requirements specified in other statutes or external agency's regulations are longer, the agency requirements will apply.

Data Management Plan Timeline

Project Duration: April 2024 - October 2025

This Data Management Plan was created to meet the requirements laid out in the DOT public access plan.