Montana State Library
Program Budget Deep Dive

The Montana State Library provides information, resources, and guidance to organizations, communities, and residents of Montana to help them expand their knowledge and empower their decisions. Our leading-edge data and applications help those seeking answers about Montana's government, natural resources, heritage, land ownership, and more while our vital services improve public libraries and provide reading materials to those with disabilities.

Vision:

All Montanans have access to information and library services sufficient to their needs.

Mission:

The Montana State Library helps all organizations, communities and Montanans thrive through excellent library resources and services.

Strategic Pillars:

Foster partnerships

Because partnerships are necessary to ensure that Montanans thrive. Through partnerships, MSL and those we serve will continue to move Montana forward.

Secure sufficient and sustainable funding

So that we have the funds and capacity to meet the expectations of our partners and Montanans and because we are an innovative, forward thinking, and fiscally responsible organization in fulfilling our mandates and meeting the expectations of our partners and Montana Citizens

Create a useful information infrastructure

So that Montanans have the information and library services they need to understand and influence change in their community and so that others follow Montana's model of open, transparent, cooperative information management practices

Key take aways

- MSL's information is reliable. We collect it from public sources.
- Our work saves Montana taxpayers money.
- MSL adds value and helps people be self-sufficient.
- Like a librarian at your local library who helps you find the book you need, MSL staff help Montana citizens find the information they need.

- Like libraries that share their collections, MSL shares our information with anyone who needs it.
- Yes, our programs are always changing but we do it in a thoughtful way.

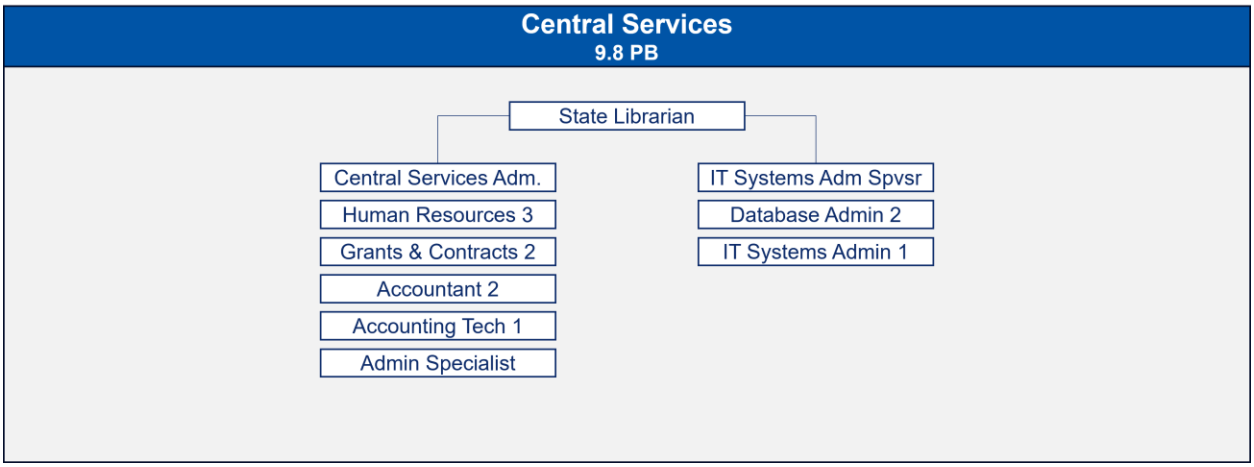
Much of MSL's impact comes from personal interactions with our key partners. We attend and present at conferences of statewide organizations, offer in person and online trainings, and meet one-on-one with individual and groups. These personal interactions are critical to our success and so we measure our outreach activities:

Outcomes and key performance measures
Outreach dashboard

Functional Programs

Central services

Central Services				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	01100 General Fund	849,541.27	858,560.30	(9,019.03)
	02046 Coal Sev. Tax Library	53,750.00	53,279.93	470.07
	02094 Digital Library Services	53,746.54	53,273.05	473.49
	02779 Montana Land Information	150,836.20	(948.15)	151,784.35
	03018 LSTA	43,738.82	0.00	43,738.82
62000 Operating Expenses				
	01100 General Fund	927,010.70	788,730.69	138,280.01
	02046 Coal Sev. Tax Library	0.00	13,110.12	(13,110.12)
	02094 Digital Library Services	5,409.93	16,146.48	(10,736.55)
	02779 Montana Land Information	49,008.08	0.00	49,008.08
	03018 LSTA	57,152.68	57,152.68	0.00
	08038 Montana State Library Trust	0.00	(651.14)	651.14
66000 Grants				
	01100 General Fund	0.00	946.69	(946.69)
	08038 Montana State Library Trust	127,000.00	124,348.86	2,000.00
69000 Debt Service				
	01100 General Fund	165,240.00	165,240.00	0.00
		2,482,434.22	2,129,189.51	352,593.57



State Library Commission

The role of the State Library Commission is to set forth policies and funding priorities that empower the State Library to meets its mission and statutory obligations and to advocate for the State Library and the Montana library and information communities whenever possible.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(1) give assistance and advice to all tax-supported or public libraries in the state and to all counties, cities, towns, or regions in the state that propose to establish libraries, as to the best means of establishing and improving those libraries;

(2) maintain and operate the state library and make provision for its housing;

(3) (a) accept and expend in accordance with the terms of a grant any grant of federal funds that is available to the state for library purposes;

(b) accept, receive, and administer any gifts, donations, bequests, and legacies made to the Montana state library. Unless otherwise provided by the donor, gifts, donations, bequests, and legacies must be deposited in the Montana state library trust established in **22-1-225**.

(4) make rules and establish standards for the administration of the state library and for the control, distribution, and lending of books and materials;

(5) serve as the agency of the state to accept and administer any state, federal, or private funds or property appropriated for or granted to it for library service or foster libraries in the state and establish regulations under which funds must be disbursed;

(6) provide library services for the blind and for individuals with physical disabilities;

(7) furnish, by contract or otherwise, library assistance and information services to state officials, state departments, and residents of those parts of the state inadequately serviced by libraries;

(8) act as a state board of professional standards and library examiners, develop standards for public libraries, and adopt rules for the certification of librarians;

(9) designate areas for and establish federations of libraries.

Activities and cost drivers

The State Library Commission meets in-person at least six times per year and more frequently online for additional work sessions. In addition to staff time to prepare for and administer meetings, costs incurred include Commission travel and per diem.

Central Services

Central Services staff provide accounting, human resources, and information technology assistance across the agency, as well as general administrative support.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Financial dashboard
Human Resources dashboard
Quarterly contracting report
Information Technology help desk tickets

Federal reporting

Montana | Institute of Museum and Library Services
Montana State Library LSTA Grants to States Program Implementation Evaluation FFY 2018 - FFY 2022

Summary information

MSL's work is made more efficient thanks to the support and productivity of our central services team. This team provides budgeting and accounting, human resources, procurement and grant management, and information technology services. MSL is committed to being a well-run organization and a desirable employer where employees have the resources they need to do their work well. Our success is evident in low turnover which never exceeded historic averages around 5%, even when other state agencies were seeing turnover at 25 or 30%. Recruitments, when necessary, result in multiple qualified applicants minimizing the time when positions are vacant to weeks, not months. MSL has not experienced a failed recruitment in years.

MSL manages numerous grants and contracts with state, federal, and private sector partners. Staff works effectively with the Department of Administration, State Procurement Services Division to facilitate procurements and negotiate successful contracts that benefit our key stakeholders.

Though we are a relatively small agency, MSL has a significant IT footprint to meet our extensive data management and processing needs. Our three IT staff manage, maintain and support roughly 105 active computer endpoints, 22 servers, 160 individual SQL databases, and about 700 terabytes of data. This is possible, in part, because our server architecture is housed at the State of Montana data center. While the physical hardware and networking is supported by State Information Technology Services Division (SITSD) staff, but they delegate daily support for this architecture to agency staff. MSL IT Staff also managed 215 individual support requests over the last six months.

Cost-effectiveness

Thanks to central services leadership, MSL was one of the first agencies to be fully digital in accordance with Governor Gianforte's "100% Digital" directive. Though difficult to measure, being paperless, saves time and money when facilitating workflows that historically relied on time-consuming, paper-based processes such as routing contracts or warrants for signature.

Digital workflows also mean that MSL is fully capable of managing remote and hybrid work which served MSL well during the COVID 19 pandemic and when MSL's building was flooded in 2022 forcing employees to work from home again.

MSL has had remote workers since the late 1990s. Havin remote employees that work and live in communities across the state allows MSL to work more closely with our partners and to better understand and respond the regional differences in Montana. Because approximately 30% of MSL's workforce is remote, MSL is able to save money on rent.

As we continue to seek opportunities to be cost-effective as an agency, MSL staff are beginning to explore how artificial intelligence (AI) can make routine tasks like writing reports and contracts more efficient.

Opportunities for efficiencies

Like most small agencies in state government, MSL does not have a security officer. MSL has suggested to SITSD that they provide more comprehensive IT security services for our agencies, increasing security across our systems in a model that is more cost effective.

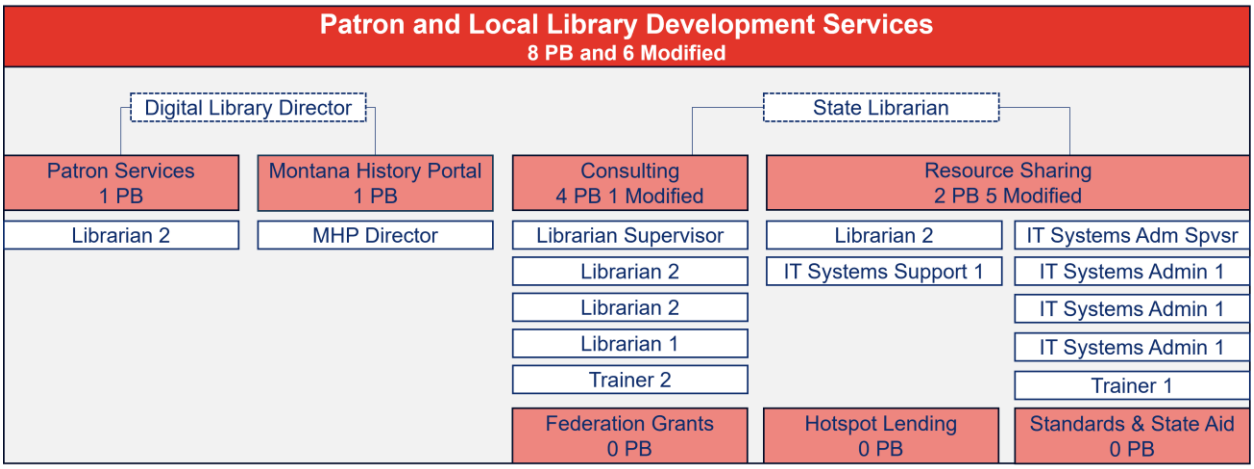
Similarly, consideration should be given to how SITSD prioritizes and rolls out new applications and system upgrades. SITSD currently requires agency staff to comply with their deadlines, often on short notice, without consideration for agency priorities. For example, over this past summer, SITSD required agencies to support the rollout and migration of three separate systems. With just three IT staff, the time and effort this work necessitated meant MSL's plan to deploy new hardware was completely put on hold. Computer hardware sitting unused is a waste of expense and hardware warranty.

Finally, while we may have similar software needs to other agencies, given the relative size of our program, our needs are often less complex and can be met by cheaper off the shelf solutions. On multiple occasions, however, the state has chosen to invest in much more costly solutions that meet the requirements of larger agencies requiring more complexity. While we support statewide software planning and acquisitions, in our experience this approach sometimes results in high IT costs for MSL that are out of the agency's control or that our needs are simply unmet.

Patron and local library development services

MSL helps MT libraries be better so that everyone has access to great libraries.

Account	Fund
61000 Personal Services	
	01100 General
	02046 Coal Sev
	02779 Montana
	03018 LSTA
	06021 MT Shar
62000 Operating Expenses	
	01100 General
	02046 Coal Sev
	03018 LSTA
	06021 MT Shar
66000 Grants	
	01100 General
	02046 Coal Sev
69000 Debt Service	
	02046 Coal Sev
	06021 MT Shar
Total	



Patron Services

MSL provides personalized support to state employees, citizens with research questions, and the blind and low vision community.

Patron Services				
Account	Fund	Budget	Actual	Balance
61000 Personal Services				
	01100 General Fund	130,270.55	129,794.98	475.57
62000 Operating Expenses				
	01100 General Fund	169,040.00	18,662.19	150,377.81
	03018 LSTA	50,000.00	96,525.57	(46,525.57)
Total		349,310.55	244,982.74	104,327.81

Talking Book Services

With support from the National Library Service for the Blind and Print Disabled (NLS) MSL offers free library services to Montanans who cannot read standard print due to a visual, physical, or reading disability. The program aims to improve patron quality of life and offer ease of access to reading materials so that patrons have opportunity to educate themselves and become informed voters connected to society, make informed and healthy decisions to be productive in the workforce, and contribute to society.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(6) provide library services for the blind and for individuals with physical disabilities;

Activities and cost drivers

Work plan

Outcomes and key performance measures

Talking Book Services dashboard

Federal reporting

LSTA Grants to States, State Program Report - Talking Book Services

Summary information

MSL's talking book services supports just under 2,000 Montanans in 53 Montana counties. These patrons log approximately 40,000 circulations each quarter.

Key partners include the Montana School for the Deaf and Blind, public libraries, the Montana Association for the Blind, the National Federation of the Blind, Public Health's Blind and Low Vision Services, and other institutions such as nursing homes that serve similar populations.

Based on census data, we currently serve a fraction of patrons who may be eligible for these services. While approximately 40% of Montanans have library cards, fewer than 2% of blind and low vision Montanans are MSL talking book patrons. Significant and ongoing outreach efforts are needed to reach this vulnerable population.

For several decades MSL has recorded unique Montana titles, not available through the NLS, such as the Montana constitution, Montana Outdoors and Montana, the Magazine of Western History. Our current focus is capturing unique tribal stories. Earlier this year staff traveled to both the Rocky Boys and Blackfeet Reservations to record stories from tribal elders.

Cost-effectiveness

In 2022 MSL contracted with the Utah State Library to provide circulation, readers' advisory services, and some recording support while MSL retained responsibility for outreach services. Contracting for this service saves MSL $202,000 annually and allows MSL's limited staff to use their time more effectively.

Patrons benefit from more ready access to recorded titles thanks to Utah's digital circulation model. Circulations increased 97% since we executed the contract with Utah.

MSL is also expanding our recording capabilities. Historically, any unique Montana titles were recorded by MSL staff and volunteers in in-house recording studios. In the past year, MSL has leveraged recording studios in Browning, MT and Salt Lake City, UT as well as portable recording equipment made available through the NLS to record new materials. This flexible and more

streamlined approach to the recording program will allow more Montana materials to be recorded at a lower cost than in the past.

Research Resources and Reference Services

MSL provides research and professional development resources for state employees and contractors as well as for Montana library staff.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(7) furnish, by contract or otherwise, library assistance and information services to state officials, state departments, and residents of those parts of the state inadequately serviced by libraries;

Activities and cost drivers

Work plan

Outcomes and key performance measures

Research Resources dashboard

Summary information

MSL takes advantage of a partnership with the Treasure State Academic Information & Library Services (TRAILS) consortium to leverage the buying power of academic libraries to drive down the cost to provide Montana state employees and library professionals access to costly academic journals, databases and other research. Additionally, in partnership with the Montana Department of Transportation, MSL offers an e-book collection of professional development titles for State employees. Through this collection, MSL has been able to offer follow-up reading lists for conferences and trainings offered by the State of Montana.

Cost-effectiveness

Under a memorandum of agreement, we pay TRAILS $42,000/year which gives state employees access to research resources such as JStore and Science Direct. In total, state employees have access to more than 72,000 journals, publications and e-books which they can research on their own. This self-service access saves MSL staff time that would otherwise be spent requesting research articles through interlibrary loan. If we were to procure these resources on our own, the total cost would be more than $700,000 plus the cost of staff time for procurement and contract negotiations and management.

Opportunities for efficiencies

MSL currently lacks the resources to effectively promote these research resources to state agencies and to investigate opportunities to leverage these collections to prevent duplicative procurement of information resources that may exist in other agencies. Maximizing promotion of these resources may save other agencies time and money.

Consulting

Our consultants provide professional training, strategic planning and continuing education certifications to your local library staff and library trustees. This helps Montana's libraries maintain a baseline of service regardless of budget or location.

Consulting				
Account	Fund	Budget	Actual	Balance
61000 Personal Services				
	01100 General Fund	39,059.94	44,940.87	(5,880.93)
	02779 Montana Land Informa	125,634.29	7,331.99	118,302.30
	03018 LSTA	368,311.94	386,954.72	(18,642.78)
62000 Operating Expenses				
	01100 General Fund	46,000.00	11,049.71	34,950.29
	03018 LSTA	125,818.28	156,831.13	(31,012.85)
Total		704,824.45	607,108.42	97,716.03

Consulting services

MSL provides consulting services, continuing education opportunities, and learning programs for library employees across Montana. These resources, training sessions, and professional development opportunities help library staff meet the needs of their patrons and create thriving opportunities for their communities.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(1) give assistance and advice to all tax-supported or public libraries in the state and to all counties, cities, towns, or regions in the state that propose to establish libraries, as to the best means of establishing and improving those libraries;

(9) designate areas for and establish federations of libraries.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Library Consulting dashboard

Services to Libraries help desk dashboard

Federal reporting

LSTA Grants to States, State Program Report - Consulting Services

Summary information

Three consulting librarians provide one-on-one library support and training to library boards, and library staff. Consulting inquiries from libraries include strategic planning, budgeting and financial management, recruitment, policy development, facilities management, and general library services. With support from consultants, libraries are better able to meet Montana's public library standards ensuring that libraries are working to build stronger communities. The consultants also provide staff support to six library federations.

Cost-effectiveness

Most of Montana's rural communities lack expertise in matters necessary to the successful operation of Montana libraries. By providing consulting services through MSL, we are better able to assure that libraries and local governments across the state receive consistent information, training and support they would not receive otherwise. Additionally, MSL partners with the Montana State University Local

Government Center to leverage and enhance, rather than duplicate, training and information offered by that organization.

Continuing Education

MSL's continuing education coordinator administers a program to track continuing education (CE) credits and to award certifications to library directors, staff, and trustees. Additionally, the coordinator assesses the training needs of Montana library professionals, and identifies, designs, offers and evaluates CE opportunities to meet those needs.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(8) act as a state board of professional standards and library examiners, develop standards for public libraries, and adopt rules for the certification of librarians;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Continuing Education & Certification dashboard

Federal reporting

Summary information

Librarianship is an ever-evolving profession with changes driven by increases in the number and types of information resources and technologies and the changing needs in our communities. As such, CE for library professionals is necessary to keep up with the demands of the job. According to public library standards, library directors are required to maintain current certification from the Montana State Library. Library directors maintain their certification by earning 60 CE credits every four years. Additionally, library boards are required to complete three CE hours annually. The MSL certification program, which was most recently reviewed in 2022, requires continuing education in four categories, Collection Management and Technical Services, Library Administration, Library Services to the Public, and Technology. Decisions about which specific CE courses to take are left to the local library to ensure that CE best meets the current needs of that library and community.

MSL offers continuing education through in-person trainings, live webinars, and web-based, self-paced courses. MSL hosts a learning platform to organize and provide access to continuing education and to evaluate the effectiveness of the CE we offer. MSL also administers a web-based system for library professionals and trustees to track CE credits and to request certification from MSL.

Cost-effectiveness

Rather the duplicating effort, MSL targets its CE offerings on those matters that are most unique and relevant to Montana and directs Montana library professionals and trustees to CE offered by national organizations and vendors where appropriate to address CE needs that are not necessarily unique to Montana. (Note, MSL canceled its membership in the American Library Association in 2022 and no longer promotes ALA training offerings).

Opportunities for efficiencies

As part of a larger effort to improve administration of MSL Access to Services, Programs, and eNetworks (ASPeN) application, MSL is investigating off the shelf solutions to replace our current, custom built CE and certification tracking system.

Lifelong Learning

Through MSL's Lifelong Learning program, MSL supports scalable programming opportunities that can be utilized and replicated by libraries around Montana to encourage and support a love of learning through Montanans' lifetimes.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(1) give assistance and advice to all tax-supported or public libraries in the state and to all counties, cities, towns, or regions in the state that propose to establish libraries, as to the best means of establishing and improving those libraries;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Lifelong Learning dashboard

Federal reporting

LSTA Grants to States, State Program Report – Lifelong Learning

Summary information

MSL's lifelong learning coordinator designs and offers scalable learning and programming opportunities and technology solutions to empower lifelong learners to continue to thrive. The primary area of focus is early childhood learning beginning at birth. By emphasizing the skills to grow readers within families and communities, MSL and libraries can make a measurable difference in Montana's reading scores. MSL offers learning opportunities for library professionals, physical and virtual "trunks" with programming ideas that can be easily replicated in local libraries, and a text-based educational tool from Parent Powered to give parents and caregivers the confidence to practice early literacy in the home.

MSL is also partnering with the Montana Arts Council to support a creative aging program. This program brings artists in residence into libraries to teach art in a variety of forms to seniors. Seniors benefit by learning new activities, keeping their interests and minds sharp, and by building new communities which addresses the epidemic of loneliness.

Finally, MSL has ramped up virtual programming opportunities which originated during the COVID 19 pandemic. Almost every month, in a virtual forum, MSL partners with local libraries to host speakers who present on a wide variety of topics of interest to Montanans. Many libraries host "watch parties" during the virtual programs so attendees can share in follow-up discussions about what they've learned. Importantly, the virtual option also allows Montana libraries to provide learning across the geographic divide where it is difficult for Montanans to come to the library.

Cost-effectiveness

77% of Montana's libraries are served by fewer than three FTE. Most of these libraries in are Montana's smallest and most rural communities. Without the scalable support of the lifelong learning program, libraries with such few staff could not be expected to offer high-quality, standards-based learning opportunities for Montanans of all ages, leaving many Montanans and Montana communities behind.

Opportunities for efficiencies

National studies point to the importance of growing readers beginning at birth. MSL would appreciate the opportunity to participate in state-level efforts to study how libraries make a difference in improved reading proficiency.

Resource sharing

MSL operates MT's digital card catalog. If you've ever borrowed a book from another library or downloaded an audio book from the Libby app, then you've used programs that are administered by MSL.

Resource Sharing				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	01100 General Fund	137,133.20	85,486.96	51,646.24
	02046 Coal Sev. Tax Library	0.00	27,955.28	(27,955.28)
	03018 LSTA	272,168.88	267,618.56	4,550.32
	06021 MT Shared Catalog	219,922.72	256,730.97	(36,808.25)
62000 Operating Expenses				
	01100 General Fund	13,260.00	99,373.29	(86,113.29)
	02046 Coal Sev. Tax Library	107,553.00	52,947.94	54,605.06
	03018 LSTA	221,099.19	201,372.84	19,726.35
	06021 MT Shared Catalog	98,870.00	(563,794.12)	662,664.12
69000 Debt Service				
	02046 Coal Sev. Tax Library	100,000.00	100,000.00	0.00
	06021 MT Shared Catalog	171,447.00	595,771.82	(424,324.82)
Total		1,341,453.99	1,123,463.54	217,990.45

Montana Shared Catalog

The Montana Shared Catalog (MSC) is a digital card catalog and library management system that is the foundation from which libraries can offer increasingly efficient library services.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(1) give assistance and advice to all tax-supported or public libraries in the state and to all counties, cities, towns, or regions in the state that propose to establish libraries, as to the best means of establishing and improving those libraries;

(4) make rules and establish standards for the administration of the state library and for the control, distribution, and lending of books and materials;

(7) furnish, by contract or otherwise, library assistance and information services to state officials, state departments, and residents of those parts of the state inadequately serviced by libraries;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Montana Shared Catalog dashboard

MSC Online Catalog dashboard

Services to Libraries help desk dashboard

Federal reporting

LSTA Grants to States, State Program Report - Information Access (Courier, MontanaLibrary2Go, OCLC, Montana Shared Catalog)

Summary information

MSL provides contracting support and system administration for a cloud-based library management system that serves as a digital library catalog for library patrons. This system is shared by 210 Montana public, school, academic, and special libraries. By centralizing system administration, any library of any size can offer high quality library services to their patrons without having to invest in costly procurement and system administration which would be beyond the capacity of most Montana libraries. The shared digital catalog lets library staff efficiently catalog their collections and makes it easy for Montanans to search and request books from libraries across the state.

Montanans served by more than three dozen libraries that have decided to share patron information, can simply place a hold on an item from another library as if that book belonged to their local library. This model is quick and easy for patrons, it saves libraries staff time providing books to patrons, and it means that Montana libraries can use their local collections budgets more effectively by not purchasing as many copies the same books. Instead, libraries can build more specialized collections that meet their patrons' unique interests.

Thanks to the standards-based system, libraries that belong to the MSC are able to easily and efficiently offer other library services like e-books through MontanaLibrary2Go.

Cost-effectiveness

Through its more than 200 member libraries, the MSC offers Montanans state-of-the-art library services at remarkable cost savings. Over 440,000 registered library patrons at public, school, tribal, academic, and special libraries utilize the infrastructure and support the MSC provides. Large libraries like the Billings Public Library pay about $40,000 a year for a system that would otherwise cost them twice that. And Montana's smallest libraries like the Phillipsburg Public Library pay just $1,000 a year for the same system. More importantly, residents of communities like Phillipsburg have access to a library collection that far surpass that which their libraries could afford on their own.

Montanans served by 56 libraries that have decided to share patron information, can simply place a hold on an item from another library as if that book belonged to their local library. This model is quick and easy for patrons, it saves libraries staff time providing books to patrons, and it means that Montana libraries can use their local collections budgets more effectively by not purchasing as many copies the same books. Instead, libraries can build more specialized collections that meet their patrons' unique interests.

Opportunities for efficiencies

Fourteen Montana public libraries find the cost to join the MSC prohibitive. As such they are not able to offer services similar to those available to most Montanans.

MSL staff is also beginning to explore how AI can be used to make routine tasks, like cataloging books, more efficient.

Montana Library Network

Montana libraries that choose to partner with MSL are able to offer cost-effective scalable solutions to meet Montanans physical and digital information needs. Through systems administration and contract management, MSL provides the building blocks to make sure all Montanans have access to the information they need.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(1) give assistance and advice to all tax-supported or public libraries in the state and to all counties, cities, towns, or regions in the state that propose to establish libraries, as to the best means of establishing and improving those libraries;

(4) make rules and establish standards for the administration of the state library and for the control, distribution, and lending of books and materials;

(7) furnish, by contract or otherwise, library assistance and information services to state officials, state departments, and residents of those parts of the state inadequately serviced by libraries;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Resource Sharing dashboard (MontanaLibrary2Go, OCLC, Courier)

Workbook: LibraryNetworks_2025

Services to Libraries help desk dashboard

Federal reporting

LSTA Grants to States, State Program Report - Information Access (Courier, MontanaLibrary2Go, OCLC, Montana Shared Catalog)

Summary Information

In the late 1990s MSL became the first state to negotiate a contract for all libraries in Montana to make use of technology provided by the national organization, OCLC, to catalog library collections and to share their collections with other library patrons through interlibrary loan.

Then in 2002, MSL created the Montana Shared Catalog. This consortium started with 17 founding members and has grown steadily to serve 210 libraries and branches. To date, Montana remains one of the only states to offer a statewide library catalog system.

From there, Montana created a statewide platform for Montanans to download e-books, audiobooks and digital magazines called Montana Library 2 Go. Most Montanans know this service through the popular Libby app. As is the case with the MSC, Montana libraries share a single online platform and digital collection, saving significant staff time and resources. Montanans love the e-resources that they are able to access through Montana Library 2 Go so much that Montana libraries struggle to keep up with demand. Currently Montanans wait an average of 59 days to be able to read an e-book.

While technology makes it simple for Montanans to request books from other libraries, geography and lack of transportation resources remains a significant barrier to the efficient, cost-effective delivery of physical library materials to a significant part of the state. MSL maintains a contract for courier services that supports only 46% of Montana libraries leaving north central and northeastern Montana completed unserved. Libraries currently served saved Montana taxpayers more than $2.5M in FY 24

by sending books via the courier when compared to the cost of postage. By borrowing books rather than purchasing them, Montana libraries saved Montana taxpayers approximately $7.9M. Montana MSL's current contract for courier services expires at the end of June and we are researching options to reach more parts of the state as affordably as possible.

MSL applied our experience with efficient contracting and service delivery to expenditures of COVID funding. In addition to supporting a statewide hotspot lending program, MSL made use of State of Montana contracts to research broadband networking needs in libraries and to hire contractors to upgrade cabling and broadband equipment in 39 Montana libraries. In return, those libraries agreed to increase broadband speeds they offered in their libraries. For some libraries this meant that they increased speeds by as much as 400%.

Cost effectiveness

These successes demonstrate the importance of building opportunities for collaboration and for contracting and administering back-end library services at a statewide scale. Leveraging resources in this way has become the mantra for how MSL provides support to Montana libraries. Our goal is that Montanans, regardless of where they live, have access to the same high quality library services as affordably as possible.

Opportunities for efficiencies

54% of Montana libraries and their patrons are not served by the courier. In two libraries that recently began to receive courier services, patron demand for books from other libraries increased by 4700% and 1300% respectively. The ability to expand courier services statewide would save money and respond to unmet demand as cost effectively as possible.

Montana History Portal

Montana's history belongs to you. MHP's website allows you to discover your Montana story.

Montana History Portal				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	03018 LSTA	176,979.49	171,931.44	5,048.05
62000 Operating Expenses				
	03018 LSTA	95,484.00	53,331.06	42,152.94
Total		272,463.49	225,262.50	47,200.99

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(1) give assistance and advice to all tax-supported or public libraries in the state and to all counties, cities, towns, or regions in the state that propose to establish libraries, as to the best means of establishing and improving those libraries;

(4) make rules and establish standards for the administration of the state library and for the control, distribution, and lending of books and materials;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Montana History Portal dashboard

Services to Libraries help desk dashboard

Federal reporting

LSTA Grants to States, State Program Report – Montana History Portal

Summary information

Much like other resource sharing services, the Montana History Portal (MHP) was originally conceived as scalable platform for libraries to use to manage their collections of digitized content about Montana and to make the collections discoverable by their patrons. MSL manages a contract for a cloud-based service that hosts digital content and allows contributors to organize collections into exhibits that document the history and culture of Montana.

Since the inception of the MHP, MSL has partnered with the Montana Historical Society to contribute content and to the MHP and to make sure that MHP collections are used as primary source materials in the classroom. We accomplish this by both creating curriculums designed to help students explore collections.

More and more, we are encouraging teachers to make content creation and curation an important learning opportunity as well. MSL has trained educators and school groups to build and contribute exhibits to the Montana History Portal, creating fun and rewarding classroom activities that help students learn about Montana History while creating valuable reference resources that also serve as learning materials for others to use. Most recently, a University of Montana Professor worked with his class to create and contribute a collection about Going to the Sun Road in Glacier National Park.

In addition, to serving as an important tool for historical research and genealogy, the MHP supports a variety of popular programs for library patrons and the general public. MSL offers a virtual programming trunk that helps libraries to host a Lego Day event that connects Lego builders with the MHP to recreate images found the in the MHP using Legos. MSL also supports a short story writing contest where authors write stories based on content found in the MHP. The resulting stories are judged and have published in MHP exhibits.

Mobile Wifi Hotspots Lending

MSL lends hotspots to Montanan's library patrons located in areas where broadband internet is too expensive or not available.

Hotspots				
Account	**Fund**	**Budget**	**Actual**	**Balance**
62000 Operating Expenses				
	02046 Coal Sev. Tax Library	400,000.00	414,009.73	(14,009.73)
Total		400,000.00	414,009.73	(14,009.73)

Montana libraries lend hotspots to patrons who otherwise lack adequate internet access.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Hotspot Lending Program dashboard

LSTA Grants to States, State Program Report – Internet Access (Hotspot Lending Program)

Summary information

Montana has historically ranked one of the worst for internet access due to lack of broadband infrastructure and high costs for internet service. Using federal COVID funding, MSL quickly initiated a hotspot lending program at the start of the COVID 19 pandemic to support Montanan's who required internet access to work and learn from home. The Montana State Library owns the hotspots and makes them available to libraries across Montana to lend to their patrons according to local library lending policies.

One-time-only funding this biennium allowed the program to persist to supported continued demand when COVID funding ended. In FY 24 and 25 staff are shifting the inventory of hotspots to areas with the greatest need and ability to administer the program.

A year ago, data began to show that the need for the hotspot program was beginning to lessen however when federal COVID internet affordability funding ended, demand again increased. MSL has two applications pending for federal Digital Equity Act funds to continue the funding for up to another five years.

Cost-effectiveness

MSL makes use of State of Montana term contracts to drive down costs for the hotspots. Additionally, MSL negotiated a contract with Nemont to provide hotspots in northeast Montana, an area poorly served by Verizon and T-Mobile. Nemont agreed to donate the difference in cost for service above what MSL budgeted.

Federation grants

MSL supports six regional library groups by providing trustee training and supporting local and regional initiatives.

Federation Grants				
Account	**Fund**	**Budget**	**Actual**	**Balance**
62000 Operating Expenses				
	02046 Coal Sev. Tax Library	249,000.00	249,000.00	0.00
Total		249,000.00	249,000.00	0.00

Montana is divided up into six regions. Libraries within those regions have formed a federation. It's a formal and informal way to network and improve library services in Montana.

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(9) designate areas for and establish federations of libraries.

22-1-401. Policy. It is the policy of the legislature to encourage the most efficient delivery of library services to the people of Montana. To that end the state should be divided into regions within which libraries desiring to participate in the distribution of such state funding to libraries as may be available from time to time shall organize into library federations to pool resources and information and avoid duplication of effort.

22-1-402. Library federations -- definition.

(1) A library federation is a combination of libraries serving a multicounty, multicity, or city-county area within a federation area designated by the state library commission. Any other public, school, special,

college, or university library or town, city, or county within the federation area may participate in a federation.

(2) The governing body of any library may agree to participate in the federation. The participating entities may retain the autonomy over their respective libraries.

(3) The expense of providing library services for the library federation must be based on funds received from the state or participating libraries.

(4) A participating entity may withdraw from a federation according to the terms for withdrawal provided in the federation's bylaws.

(5) A federation may contract with other federations, libraries, or the state library to provide federation services.

22-1-404. Board of trustees -- coordinator.

(1) In a library federation, there must be a board of trustees, with advisory powers only, appointed according to the federation's bylaws. The state library commission, provided for in 22-1-101, shall adopt rules governing the composition of the federation board of trustees. A majority of the members of each federation board of trustees must be trustees of a public library, as defined in 22-1-326.

(2) The federation membership shall appoint a coordinator of the federation who shall serve as a nonvoting member of the federation board of trustees.

22-1-405. Boards of trustees -- authority -- resolution of disagreements.

(1) The board of trustees of a library federation shall act as an advisor to the participating libraries and their boards of trustees.

(2) Control over the budgets and administrative policies of participating libraries shall remain in their boards of trustees as provided in 22-1-309.

(3) Any disagreement among participants in a library federation regarding the apportionment of funds or grants received from the state library commission shall be resolved by the state library commission.

22-1-412. Purpose. It is the purpose of 22-1-413 and this section to establish a program whereby state funds may be appropriated to the Montana state library commission to provide the benefits of quality public library service to all residents of Montana by developing and strengthening local public libraries through library federations as defined in 22-1-402.

Activities and cost drivers

- Broad Valleys Federation FY 2025 Plan of Service
- Golden Plains Federation FY 2025 Plan of Service
- Pathfinder Federation FY 2025 Plan of Service
- Sagebrush Federation FY 2025 Plan of Service
- South Central Federation FY 2025 Plan of Service
- Tamarack Federation FY 2025 Plan of Service

Outcomes and key performance measures

Federation Grant Report dashboard

Federal reporting

LSTA Grants to States, State Program Report – Match-Only

Summary information

Montana's six library federations meet twice yearly for training and to develop plans of service through which they prioritize how to spend their federation grants to support collaborative library services. In particular, federation meetings represent an important opportunity to support library trustees which is a significant area of focus for MSL.

Cost-effectiveness

MSL has determined that most services, like the MSC, MontanaLibrary2Go, and the Courier, are most effectively delivered at a statewide, rather than regional, scale. However, regional similarities within Montana mean that networking opportunities afforded through federations are important to support trustee training and mentorship and for sharing creative solutions to address regional challenges.

Opportunities for efficiencies

In 2021 and 2022 MSL led a taskforce to consider opportunities for greater impact from library federations. In particular, if funded, delivery of technology support and digital navigators may be a solution best offered regionally.

Public Library Standards and State Aid

MSL distributes funding to MT public libraries that comply with statewide standards set by MSL.

Public Library Standards and State Aid				
Account	**Fund**	**Budget**	**Actual**	**Balance**
66000 Grants				
	01100 General Fund	542,113.00	542,113.00	0.00
Total		542,113.00	542,113.00	0.00

In 2023 the Montana Legislature reauthorized a statutory appropriation to fund state aid to public libraries at the amount of $.50/capita based on the decennial census. To receive state aid, Montana public and accredited tribal college libraries that provide services to the public receive state aid.

Relevant statutes: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(5) serve as the agency of the state to accept and administer any state, federal, or private funds or property appropriated for or granted to it for library service or foster libraries in the state and establish regulations under which funds must be disbursed;

22-1-326. State aid to public libraries.

(1) As used in 22-1-326 through 22-1-331, "public library" means a library created under Title 7 or under 22-1-301 through 22-1-317 or an accredited tribal college library that provides services to the public.

(2) As provided in 22-1-325 through 22-1-329, the commission shall administer state aid to public libraries and public library districts created and operated under part 7 of this chapter. The purposes of state aid are to:

(a) broaden access to existing information by strengthening public libraries and public library districts;

(b) augment and extend services provided by public libraries and public library districts; and

(c) permit new types of library services based on local need.

(3) Money appropriated for the purposes of this section may not be used to supplant general operating funds of recipient public libraries or public library districts. The commission may withhold a distribution to a library or district that receives less support from a mill levy or local government appropriation than its average for the preceding 3 fiscal years if the decrease may reasonably be linked to money received or expected to be received under 22-1-325 through 22-1-329.

22-1-327. State aid -- per capita -- per square mile.

(1) The commission shall distribute grants to public libraries and public library districts on a per capita and per square mile basis.

(2) The total amount of annual per capita and per square mile funding to public libraries for each fiscal year is the base amount of 50 cents multiplied by the total number of residents of the state as determined by the most recent decennial census of the population produced by the U.S. bureau of the census.

(3) The amount determined under subsection (2) is statutorily appropriated, as provided in 17-7-502, from the general fund to the commission for distribution as state aid to public libraries. (Subsections (2) and (3) terminate July 1, 2029--sec. 4, Ch. 621, L. 2023.)

Activities and cost drivers

Annually public libraries self-report whether they meet public library standards and/or request deferrals if they are unable to meet a standard for a particular reason. To receive a deferral, libraries must state how they intended to meet the standard within a specified period of time. Staff time is administering the reporting system, answering questions about the standards, and reviewing and considering requests for deferrals.

Outcomes and key performance measures

In FY 25:

- 70 libraries fully met standards without a need for deferral (81%)
- 15 libraries requested and received deferrals this year (17%)
- 4 tribal college libraries received state aid for the first time
- 1 library did not receive state aid due to lack of compliance with the standards

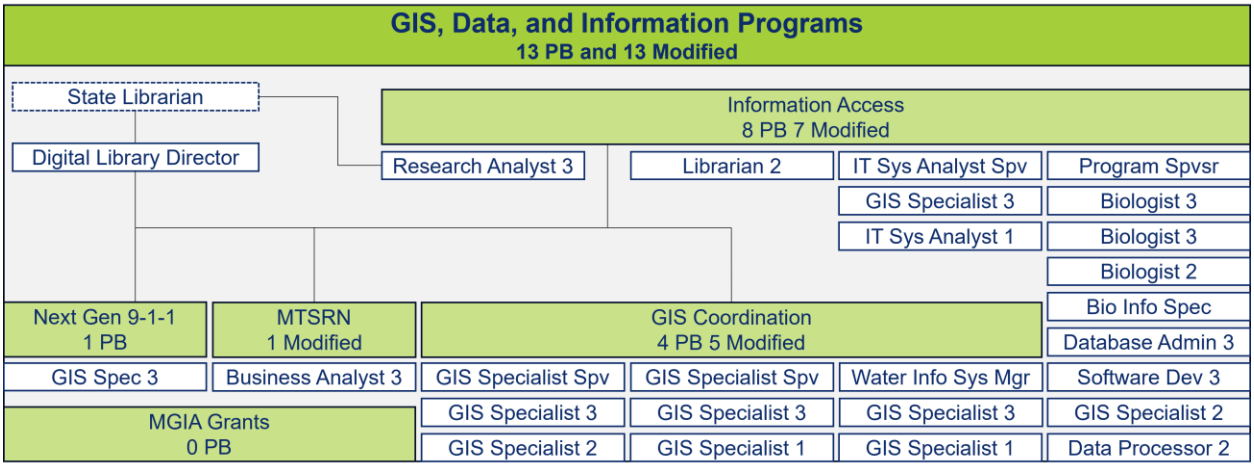
Summary information

100% of state aid funding passes through the state library budget. State aid funding provides approximately 1% of total revenue for Montana libraries. Because these monies are used locally to fund unique library needs, MSL does not track how the monies are expended.

GIS, Data, and Information Programs

MSL gathers knowledge about Montana for Montanans and makes it available at the click of a button

GIS, Data, and Information Programs				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	01100 General Fund	704,430.34	876,064.78	(171,634.44)
	02021 911 Funding	237,715.00	231,112.13	6,602.87
	02026 NRIS State Special	4,160.66	0.00	4,160.66
	02069 SOS SSR	78,000.00	88,058.54	(10,058.54)
	02094 Digital Library Services	342,411.53	331,490.81	10,920.72
	02337 Heritage Program	292,211.39	225,724.76	66,486.63
	02779 Montana Land Information	1,225,663.44	885,140.86	340,522.58
	03268 MTNHP Federal Funds	277,834.05	206,461.40	71,372.65
	03930 NRIS Federal Funds	267,874.60	74,646.83	193,227.77
	08168 MTNHP Private Funds	26,000.00	24,487.75	1,512.25
62000 Operating Expenses				
	01100 General Fund	24,898.00	82,005.47	(57,107.47)
	02021 911 Funding	10,026.00	16,628.87	(6,602.87)
	02026 NRIS State Special	3,050.00	0.00	3,050.00
	02069 SOS SSR	56,000.00	3,511.23	52,488.77
	02094 Digital Library Services	0.00	657.66	(657.66)
	02337 Heritage Program	116,782.62	66,212.29	50,570.33
	02779 Montana Land Information	794,316.99	38,608.34	755,708.65
	03018 IMLS	47,500.00	37,099.00	10,401.00
	03268 MTNHP Federal Funds	109,582.91	62,894.01	46,688.90
	03930 NRIS Federal Funds	105,497.74	7,464.68	98,033.06
	06004 Electronic Government Services	0.00	(58.34)	58.34
	06025 MT State Reference Network-RTN	60,000.00	0.00	60,000.00
	08168 MTNHP Private Funds	4,000.00	4,000.00	0.00
66000 Grants				
	02779 Montana Land Information	250,000.00	198,707.55	51,292.45
69000 Debt Service				
	02021 911 Funding	248,853.00	248,853.00	0.00
		5,286,808.27	3,709,771.62	1,577,036.65



Information Access

You have probably used the Montana Cadastral website or the MT Field Guide. These are among the many online resources MSL provides.

Information Access				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	01100 General Fund	704,430.34	876,064.78	(171,634.44)
	02026 NRIS State Special	4,160.66	0.00	4,160.66
	02094 Digital Library Services	342,411.53	331,490.81	10,920.72
	02337 Heritage Program	292,211.39	225,724.76	66,486.63
	02779 Montana Land Information	701,344.43	447,744.71	253,599.72
	03268 MTNHP Federal Funds	277,834.05	206,461.40	71,372.65
	03930 NRIS Federal Funds	267,874.60	74,646.83	193,227.77
	08168 MTNHP Private Funds	26,000.00	24,487.75	1,512.25
62000 Operating Expenses				
	01100 General Fund	24,898.00	36,818.16	(11,920.16)
	02026 NRIS State Special	3,050.00	0.00	0.00
	02094 Digital Library Services	0.00	657.66	(657.66)
	02337 Heritage Program	116,782.62	66,212.29	50,570.33
	02779 Montana Land Information	408,668.80	22,363.52	386,305.28
	03018 IMLS	47,500.00	37,099.00	10,401.00
	03268 MTNHP Federal Funds	109,582.91	62,894.01	46,688.90
	03930 NRIS Federal Funds	105,497.74	7,464.68	98,033.06
	08168 MTNHP Private Funds	4,000.00	4,000.00	0.00
		3,436,247.07	2,424,130.36	1,009,066.71

Government Information

Relevant statutes: MCA 22-1-212

22-1-212. Administration of state publications depository library program -- rulemaking.

(1) The state library shall administer a state publications depository library program to identify, acquire, catalog, preserve, and provide access to state publications.

(2) The state library may enter into contracts with other libraries to carry out the provisions of the state publications depository library program.

(3) The state library commission shall adopt rules necessary to carry out the provisions of this part.

22-1-213. State publications -- notification and availability requirements. State agencies shall notify the state library of their state publications and shall make their state publications available to the state library as provided by rule. The state library shall, if requested by the agency, reimburse any state agency for state publications required to be made available when the quantity desired will necessitate unreasonable expense to the agency.

22-1-219. Permanent public access to state publications. The state library shall routinely notify depository libraries of recently acquired state publications. The state library shall coordinate with state agencies and depository libraries to ensure permanent public access to state publications.

The state library shall offer state publications that it removes from its collection to the Montana historical society, which shall determine which state publications must be preserved as provided for in 22-3-203.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Government Information dashboard

Summary information

As a State Library, MSL is responsible for ensuring Montana's public right to know by preserving and providing access to state government publications. This statutory responsibility dates to 1967. At that time, agencies were producing print publications. They were required to print additional copies for deposit at the State Library and at libraries around the State. Montanans then had to know that libraries had these documents in their collections and had to physically visit libraries in order to check them out or request them through interlibrary loan. In the 2006, MSL circulated fewer than 2000 print publications.

In 2007, legislation was modernized to requires MSL to provide permanent public access to state government information. This change identified government information as information intended for public distribution regardless of format. Over the next ten years, MSL digitized our historic print collection of state government publications. MSL currently makes more than 32,000 digitized state publications available at no cost online, including the House journal of the first session of the Legislative Assembly of the Territory of Montana from 1864.

We have also been archiving state agency websites since 2007, because posting documents to websites is the modern equivalent of publishing print publications. Our contract with the Internet Archive provides access to a web archive that dates to 1996. Conducting routine, automated web crawls means that we are no longer reliant on agencies to send us print publications. This gives us the assurance that we are meeting our statutory mandate to provide permanent public access to state government information.

Cost-effectiveness

Modernizing the state government depository program saves costs from printing, distributing, housing, and circulating print publications. As is evidenced in use statistics, online self-service access to government information results in far greater access and transparency to Montana government information.

Opportunities for efficiency

Following the 2023 legislature, Montana created an Office of Public Information Requests (OPIR). MSL is working with the Department of Administration to ensure that staff understand and differentiate between requests for public records which should best be managed by the OPIR and requests for public information that would be more efficiently responded to by MSL librarians.

MSL staff is also beginning to explore how AI can be used to catalog and improve discovery of state government information.

Natural Resource Information System

Originally established in 1983 under the Department of Administration, to be a comprehensive program for the acquisition, storage, and retrieval of existing data relating to the natural resources of Montana, the program was legislatively moved to the Montana State Library in 1985 because the

legislature understood the importance of not duplicating the costly collection of natural resource information. Additionally, because this information was public, it was important that this information be in a library where it could be accessed by anyone. Due to the place-based nature of natural resource information, MSL became an early adopter of geographic information system (GIS) software to manage and map the natural resource information in our collection.

To date, MSL is the only State Library to operate a natural resource information system (NRIS). Because our commitment to creating the data one and making it available to all, our program is one of the most complete and highly regarded in the country.

Natural Heritage Program

Relevant statutes: MCA 90-15-302

90-15-301. Establishment of information system.

(1) The library shall establish a planning framework for the implementation of a natural resource information system and shall begin implementation of the plan. This system is to be a comprehensive program for the acquisition, storage, and retrieval of existing data relating to the natural resources of Montana.

(2) The library shall give attention to the following factors and shall prepare any legislation necessary to implement the system:

(a) the categories and types of data to be collected for a natural resource information system;

(b) the format of data collection;

(c) existing sources of relevant data in the public sector;

(d) data acquisition, storage, and retrieval methodologies that are economical and efficient, that minimize or eliminate the duplication of databases, and that use computer networking;

(e) probable costs to agencies furnishing required data and probable costs of managing the data;

(f) probable benefits to be realized by the establishment of a natural resource information system;

(g) operation of the Montana natural heritage program; and

(h) other items of importance to the establishment of a natural resource information system.

(3) It is not intended that the system shall require fieldwork to produce data. The system is intended to facilitate the management of data collected by state agencies in the normal course of their operations.

90-15-302. Natural heritage program.

(1) There is a Montana natural heritage program to be operated by the library. In order to establish the program, the library may contract with an independent contractor or may employ necessary staff. In order to minimize costs, the library or other state agencies may make available state resources and facilities to an independent contractor as part of a contract for services.

(2) The Montana natural heritage program shall be designed to be compatible with similar programs in other states. This program is to be an initial step in the formulation of the comprehensive natural resource information system referred to in 90-15-301 and is to be considered a part of the system.

90-15-303. Interagency cooperation.

(1) State agencies shall cooperate with the library in the planning of the natural resource information system.

(2) Within the limits of available resources, state agencies shall provide data requested by the library for purposes of the natural resource information system and the Montana natural heritage program. If an agency does not possess requested data or is unable to locate requested data, the agency shall inform the library. It is not necessary for an agency to conduct fieldwork or literature searches to obtain requested data.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Montana Natural Heritage Program dashboards

Summary information

The Montana Natural Heritage Program (MTNHP) is a program of the Montana State Library's Natural Resource Information System. MTNHP collects and organizes a comprehensive repository of information about Montana's species and habit and provides online access to the information through a suite of self-serve applications. Ready access to this information saves Montanans time and money.

MTNHP's Predicted Habitat for Biodiversity, Land Cover, and Wetland and Riparian Mapping layers are informing land development and protection zones when larger Montana cities are creating land use plans as required by Senate Bill 382, the Land Use Planning Act of 2023.

State agencies, including Fish Wildlife and Parks (FWP), the Department of Natural Resources and Conservation (DNRC), and the Department of Environmental Quality, and federal agencies such as the Bureau of Land Management and the Forest Service use MTNHP information to comply with regulatory, planning and reporting requirements. A significant focus right now is to support FWP and their work on the federally required state wildlife action plan.

Though not recognized in statute, MTNHP now manages information on invasive species in Montana, including aquatic invasive species and invasive weeds.

For many years MTNHP have been collecting information about the species and locations of bats found in Montana. This information has been used extensively for siting wind-energy projects and is increasingly important to the management of white-nose syndrome which is decimating bat populations around the country.

MTNHP staff maintains popular applications such as the Montana Field Guide which provide comprehensive information about Montana plants, animals and habitats. In addition to serving as research tools, Montana residents and tourists use download custom field guides to explore areas where they plan to recreate.

In addition to public facing information, MTNHP's Map Viewer application provides comprehensive information used by natural resource managers. This tool is especially important to provide specialists with access to more specific, location-based information about sensitive species such as bald eagles.

Cost-effectiveness

In Montana we hear frequently about species of concern. Proposed listings often result in costly litigation. When listings are made, they are extremely costly because they necessitate that state and federal officials create and implement management plans to restore populations. It is not uncommon for species to be considered for listing simply due to lack of information about the species itself. With adequate information, costly listings can sometimes be avoided. This was the case for a water howellia, a plant that was found to be more widespread in the Seeley Swan than originally thought, thus avoiding listing.

Thanks to forty years of investment in MTNHP's information collections and mapping resources, users can generate Environmental Summary Reports in a matter of seconds. These reports meet Montana Environmental Policy Act reporting requirements to identify species and habitats, such as wetlands, that may be impacted by development. Staff from environmental consulting firms like Westech have previously testified that this service saves them hundreds-of-thousands-of dollars when compared to doing similar work in neighboring states.

MNTHP also partners with Montana's timber industry by maintaining a species location tool and information for supporting timber sourcing that meets Sustainable Forestry Initiative (SFI) certification requirements. Commercial timber mills use this information to source timber that does not impact species deemed critically imperiled or imperiled. SFI certification allows timber to be sold at higher market prices.

Opportunities for efficiency

Due to lack of staff (an invertebrate zoologist), MTNHP is missing information on the distribution and status of invertebrates. We estimate that we are missing information for approximately 8,000 species and we have poor distribution and status information for most terrestrial invertebrate groups. Without staff to collect and manage invertebrate information, resource managers are unable to effectively and proactively manage these species and their habitats. For example, resource managers lack information to conserve pollinators that are important to Montana agriculture, or to take proper control measures on invertebrate agricultural pest species such as grasshoppers. Without this information, Montana risks losing the authority to manage these species and avoid ceding that authority to federal agencies with listings of species under the Endangered Species Act.

Similarly, MTNHP lacks staff (habitat and weed information specialist) to effectively manage information about changes in habitats that are increasingly impacting Montana land cover and wetlands. Examples of changes include the occurrence of wildland fires as well as the increasing number of invasive species. Adequate resources would allow MTNHP to maintain current and comprehensive information on invasive species to support early detection, rapid response, control, prevention, and planning efforts and thus prevent ecological and economic impacts of these invaders. Similarly, mapping the impact of fire would help inform what natural resource managers can do to resist, adapt to, or direct those changes.

Water Information System

Relevant statute: MCA 90-15-305

90-15-305. Water information system.

(1) There is a Montana water information system, to be operated within the natural resource information system referred to in 90-15-301 and that is to be considered a part of the system.

(2) The Montana water information system shall make available and readily accessible, in a usable format, to state agencies and other interested persons, information on the state's water resources, out-of-state water resources that affect the state, existing and potential uses, and the existing and potential demand.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Lidar acquisition status map

Drought status maps and conditions reporting

Summary information

Like the MTNHP, the Water Information System (WIS) is a program of NRIS and is designed to collect, manage and provide access to information about Montana's water resources and water supply and drought status. Also similar to MTNHP, WIS staff work closing with local, state, and federal agencies, to complement their work and make this work for efficient. For example, WIS staff have produced county drought status maps since 2002. This work has been done in partnership with the Natural Resources Conservation Service and serves as an archive of data about drought and water supply status.

When a flash drought occurred in eastern Montana in 2017, WIS staff rapidly launched an online tool that helps Montanans self-report drought impacts in real time. The tool has been expanded to include information about wet and flooding conditions as well. This resource is an important archive of the impact changing weather conditions have on Montana.

The Water Information System has historically been responsible for stewarding Montana's hydrography data, part of the Montana Spatial Data Infrastructure which will be discussed in greater detail below. Hydrography data is data about water and stream flow and, because water flows downhill, hydrography data management is being increasingly informed by elevation data. For this reason, WIS staff coordinated statewide collection of high-resolution elevation data using Lidar technology. Full statewide Lidar has been collected and should be available publicly by the end of calendar year 2025. The work of the WIS to identify funding partners is a model of cooperation between, local, state and federal entities. Montana benefits from access to statewide Lidar, which cost between $30 and $40M to collect, at almost no cost to the State of Montana.

Cost-effectiveness

Use of Lidar data is dramatically more cost-effective for understanding elevation and hydrography on the landscape. For example, the DNRC flood plain mapping program is a key partner for this effort because they rely on Lidar to create map flood plains. Montana citizens can also download Lidar data about their property to challenge a flood plain designation if necessary.

With statewide Lidar data collection nearly complete, MSL is turning its attention to the application of Lidar for other needs. MSL recently completed a contract in Sanders County that used lidar to generate footprints for buildings larger than 100 sq feet and higher than 10 feet tall. The final product is a GIS layer of building footprints for all of Sanders County at the time the Lidar data was collected (2020). Building footprints are of interest to Department of Revenue (DOR) for property assessment, the DNRC for flood-risk mapping, and MSL for the structures and addresses data set.

Opportunities for efficiency

Because landscape change can include changes in elevation, this data must be recollected in different areas in response to certain types of events. Floods, like those that occurred in the area north of Yellowstone Park in 2022, dramatically reshaped the landscape in south central Montana. For the Elevation dataset to remain current, Lidar data needs to be recollected following these types of landscape changes.

Montana Spatial Data Infrastructure

In the 1990s the State of Montana, Department of Administration, began to develop new GIS datasets, including land ownership data that led to the creation of the statewide cadastral dataset, the first of its kind in the country. This work continued through the 2000s with the development of Administrative Boundaries, Structures and Addresses, and Transportation datasets. Over time, it

became evident that there was greater mission alignment and opportunities for efficiencies by consolidating GIS work done at DOA under MSL. As a result, in 2013 the Legislature transferred authority to administer the then Montana Land Information Act from DOA to MSL. This GIS work has largely been focused on the development of the Montana Spatial Data Infrastructure (See Appendix D). This data infrastructure consists of fifteen data themes, mapped at a statewide scale that help people view, explore, understand and analyze Montana's geography and mapped information. The Montana Spatial Data Infrastructure data is informed by federal data standards under the National Spatial Data Infrastructure (NSDI). MTNHP, WIS and Land Information staff lead several of the MSDI themes, MSL partners with other state and federal agencies, and the Montana University System, in the development of the MSDI.

Land Information

Relevant statutes: MCA 90-1-404

90-1-404. Geospatial information -- management -- duties of state library.

(1) The state library shall:

(b) work with all stakeholders, including but not limited to federal, state, local, private, and tribal entities, to prioritize needs and collect, develop, maintain, and disseminate geographic information systems, geospatial information, and geospatial technologies;

(h) coordinate the development of standards for geographic information systems, geospatial information, and geospatial technologies;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Montana Cadastral Application Usage dashboard

Precinct Splits Status | Montana Geo-Enabled Elections

Next Generation 911 GIS Readiness dashboard

Montana Cadastral Adjustments

Summary information

The Land Information program at the Montana State Library is responsible for several MSDI data sets including Mapping Control, Administrative Boundaries, Structures and Addresses, and Cadastral.

Cadastral Parcels and Administrative boundaries are tied to points on the ground (a National Geodetic Survey benchmark, a survey corner, or building address). MSL works closely with partners including the Bureau of Land Management, surveyors and local governments, to communicate the importance of good data creation and sharing data so it can be used consistently for multiple purposes.

The Land Information program coordinates with the Information Products team to bring you the Montana Cadastral web application. The role of Land Information is primarily to maintain the parcel boundary and land ownership information found in that application while our Information Products team ensures the application and the hardware/software it relies upon is working properly.

In support of the Structures and Addresses and Transportation datasets, Land Information has more than 20 years of experience working with local governments to coordinate the collection, coordination, and aggregation of this data. With this background in local government addressing, MSL has led the way in the development of geo-enabled elections and Next Generation 911 as described below.

Cost-effectiveness

A key example of a partnership that may not be well understood is the workflow that exists between local clerks and records, DOR offices, and MSL to update the cadastral dataset. Land-ownership changes recorded at the county level are reported to DOR. This information is used to update the DOR property record card for tax purposes and this information is fed into the cadastral dataset to drive the cadastral application. To improve the alignment of the parcel boundaries in the dataset, MSL collects survey control information in areas of the state with alignment issues. While there is still significant work to be done to improve parcel alignment statewide, a 2009 economic impact study conservatively estimated that the cadastral application results in a $9M annual return on investment.

Opportunities for efficiency

The use of the Address dataset for NG911 and Elections work are a great example of how the GIS partnerships and datasets MSL has developed can be used to improve multiple business processes. Addressing is critical to numerous other state agency business processes. Leveraging the single statewide structures and addresses MSDI dataset for other agency business processes allows the state to leverage this investment for greater benefit and ensures that all agencies using the dataset are using consistent and aligned address data.

Information Products

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(2) maintain and operate the state library and make provision for its housing;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Web analytics dashboard

Montana Cadastral Application Usage dashboard

Summary information

MSL's Information Products team is responsible for maintaining MSL's website and web applications to ensure Montanans have seamless self-services access to the wide variety of online information applications supported by MSL. Over the years, MSL has transitioned from applications developed in-house to commercial off-the-shelf and semi-custom applications that are easier to maintain and upgrade as technology advances.

- The MSL website is built and run on Cascade Content Management System (CMS) which is the state standard web platform and is administered by the State Information Technology Services Division.
- MSL is transitioning away from custom and non-state-standard help desk and request management software to the State's ServiceNow platform. The adoption of ServiceNow creates a seamless helpdesk environment for all MSL patrons, makes MSL workflows more efficient because we utilize a single system, and increases self-service opportunities for Montanans to find the information they need through knowledge bases that are enhanced in response to common patron questions.
- MSL contracted out work to re-write and modernize the Montana Cadastral Application which is now mobile friendly and offers users modern web mapping application tools such as the ability to view aerial imagery for parcels at different points in time.
- Staff are investigating alternatives to our custom-built ASPeN application which serves as the Montana library directory, events management system, and CE and certification management system. MSL seeks a modular system that is more user friendly, has improved customer relations management software, and can interface well with external systems, such as ServiceNow and our learning management system, without the need for extensive custom programming.
- MSL has been providing a set of GIS applications including the Digital Atlas, Data List, and Data Bundler that make GIS data and maps accessible to both GIS professionals and the public. MSL staff will refresh these applications, prioritizing the use of commercial off the shelf tools and standardization with other state agency applications, in the coming year.

Cost-effectiveness

Leveraging state standard application development platforms and following state guidance to replace custom applications with commercial off the shelf options reduces the numbers of software developers and ensures greater compatibility with other agency offerings.

Additionally, MSL's focus on using more modern GIS tools, such as ArcGIS Server software, allows MSL to move away from physically housing data, which is costly and can result in unnecessary data duplication. Instead, this information architecture creates a single point of discovery for GIS data from across state government that allows agencies to focus on using their data for their business functions while MSL offers the same data to support public information requests. This data discovery model aligns well with the Governor's view of a single state of Montana customer experience.

Opportunities for efficiency

MSL's current GIS architecture was spurred by an enterprise technology health check in 2014. It hosts all of the agency's core data, supports day-to-day work, and supports several publicly available applications, most notably the Cadastral application. In 2014, work was done primarily on individual computer workstations with some key datasets hosted by commercial vendors as web map services. Since that time, as cloud computing has matured, important GIS tools have been significantly updated which is driving our need to improve and update our existing architecture. While this was a good

model at that time, the growth of cloud computing is making this model more challenging and less efficient to work in.

A new architecture requires updated GIS server software, flexible, cloud-based, server and workstation deployment models, and sufficient cloud-based storage. Cloud deployment would give us access to a team of GIS experts for architecture support, mitigating the risk we currently face with just one staff person supporting our entire system. This architecture refresh would put MSL in line with other agencies that it supports and collaborates with including DEQ, MDT, and DNRC. In 2022, the State Library completed a Request for Information (RFI) to understand the cost of modernizing the GIS architecture, which was determined to be approximately $750,000.

Data Coordination

Relevant statute: MCA 22-1-103

22-1-103. State library commission -- authority. The state library commission may:

(2) maintain and operate the state library and make provision for its housing;

Activities and cost drivers

Work Plan

Outcomes and key performance measures

MSL Statistics and Dashboards

Public Library Staffing and Salary Survey

Federal reporting

Montana Public Libraries Survey
Montana | Institute of Museum and Library Services
State Library Administrative Agencies Survey

Summary information

Since at least 1992 MSL has been required to submit public library survey information to the Institute of Museum and Library Servies (IMLS) in order to receive federals funds. This work represents one of the earliest efforts from MSL to collect and compile information about services that information investment in MSL and library work across Montana.

In 2016 MSL identified data driven planning as one of our key values and made the commitment to invest in a full-time data coordinator. This position has become an integral part of MSL's ability to both analyze and plan for our services and to communicate the value and impact of our work. The commitment of time and expertise means that MSL is a leader among state agencies in our ability to document and track work plans across the agency and to target, document, and assess our progress towards meeting stated goals.

This position is responsible for ensuring that MSL administers and meets three annual federal reporting requirements, Montana's Public Library Survey to collect, analyze and compare Montana's public library information, MSL's State Program Report to IMLS to report on the expenditures and program outcomes funded through our federal Library Services and Technology Act funding, and MSL State Library Administrative Agencies Survey to collect, analyze and compare information about the nation's state libraries.

This position organizes and collects use metrics for temporary programs such as the hotspot lending program and takes on one-time studies such as a recent public library staffing and salary study to help local libraries make decisions about retention and recruitment of library staff.

Cost-effectiveness

Thanks to the success of this position and the dedication of MSL to data informed administration, MSL is able to make use of data collection and reporting for a variety of purposes including this budget deep dive.

Statewide GIS Coordination

MSL brings the right people to the table to build data and maps that support every facet of private and public commerce.

Statewide GIS Coordination				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	02069 SOS SSR	78,000.00	88,058.54	(10,058.54)
	02779 Montana Land Information	324,929.58	320,980.65	3,948.93
62000 Operating Expenses				
	01100 General Fund	0.00	45,187.31	(45,187.31)
	02069 SOS SSR	56,000.00	3,511.23	52,488.77
	02779 Montana Land Information	185,252.19	566.59	184,685.60
		644,181.77	458,304.32	185,877.45

Relevant statutes: MCA 90-1-401

90-1-401. Short title. This part may be cited as the "Montana Geospatial Information Act".

90-1-402. Purpose. The purpose of this part is to develop a standardized, sustainable method to collect, maintain, and disseminate information in digital formats about the natural and artificial land characteristics of Montana. Geospatial information changes continuously and is needed by businesses, citizens, governmental entities, and others in digital formats to be most effective and productive. This part will ensure that digital geospatial information is collected consistently, maintained accurately in accordance with standards, and made available in common ways for all potential uses and users, both private and public. Through planning and grant making, this part prioritizes consistent collection, accurate maintenance, and common availability of geospatial information to provide needed, standardized, and uniform geospatial information in digital formats.

90-1-404. Geospatial information -- management -- duties of state library.

(1) The state library shall:

(a) serve as the administrator of the account;

(b) work with all stakeholders, including but not limited to federal, state, local, private, and tribal entities, to prioritize needs and collect, develop, maintain, and disseminate geographic information systems, geospatial information, and geospatial technologies;

(c) prepare a geospatial information plan and operate according to the provisions of the plan. The plan:

(i) must be created in consultation with the council;

(ii) may include but is not limited to:

(A) the prioritized needs to collect, maintain, and disseminate geospatial information;

(B) priorities for geospatial coordination; and

(C) priorities for grant awards; and

(iii) must be reviewed and, if appropriate, updated every 3 years.

(d) establish an application process and a granting process that must be used to distribute funds in the account;

(e) review all grant applications;

(f) consider grant recommendations by the council;

(g) monitor a recipient's use of grant funds to ensure that the use of the funds complies with the purposes of this part;

(h) coordinate the development of standards for geographic information systems, geospatial information, and geospatial technologies;

(i) serve as the primary point of contact for national, regional, state, and other GIS coordinating groups for the purpose of channeling issues and projects to the appropriate individual, organization, agency, or other entity;

(j) provide administrative and staff support to the council, including paying the expenses of the council;

(k) annually prepare a budget to carry out the state library's responsibilities described in this section; and

(l) implement the conservation easement information requirements as provided for in 76-6-212.

(2) To fulfill the responsibilities described in subsection (1), the state library or any recipient of funds granted pursuant to this part may contract with a public or private entity.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

GIS Information help desk tickets

Summary information

To most effectively create, manage and share GIS data, MSL needs local, state, and federal partners that actively invest in GIS. Currently seven local governments have established GIS programs and about seventeen state agencies invest in GIS. MSL GIS Coordination staff work closely with governments and agencies to create opportunities for standardization and collaboration. MSL also looks for opportunities to coordinate with partners not currently invested in GIS to make sure that those partners do not miss out on opportunities or new requirements like public safety and elections needs.

MSL leads a multi-sector advisory council to inform the investment in Geospatial data development, coordination and communication. With input from the advisory council, MSL creates a geospatial

information plan to outline internal work priorities and identify priorities for investment through the MGIA grant program.

MSL staff also works closely with counterparts in other states and federal partners to make sure that MSL is following national standards, and that Montana maximizes opportunities for federal resources. For example, it is through these partnerships that MSL was able to complete statewide Lidar collection for Montana.

Over the past year, MSL has invested in ServiceNow to track and respond to GIS information requests. This effort aligns with the use of ServiceNow across the agency. This investment will allow MSL to develop a new GIS knowledgebase that will help GIS staff respond to patron requests and increasingly allow patrons to answer their information requests on their own.

Under the guidance of the Montana Geospatial Information Advisory Council, MSL has invested in a Geospatial Strategic Plan to prioritize the GIS coordination work that is done at MSL. As a result, MSL has created a workflow to develop and approve GIS data standards, an outreach plan to communicate consistently with patrons and partners, and priorities for MSDI data stewards to ensure GIS data are well maintained and meet partners' business needs.

Cost-effectiveness

Thanks to nearly forty years of investment the development of GIS datasets, Montana has a robust collection of Geospatial data that is used across a wide variety of industries to make cost-effective policy and business decisions that enhance the quality of life in Montana. MSL seeks to reduce redundancy by manage this collection so that the information is created once and used for multiple purposes. Examples of the efficiencies this model creates abound. From use of standard address data for both public safely and elections systems to our GIS web services that are used by dozens of public and private sector organizations to drive web applications and industry.

Opportunities for efficiency

GIS Coordination staff have been responsible for negotiating the enterprise license agreement for Esri GIS software for the State of Montana for almost 20 years. Use of GIS staff is a costly obligation for MSL that does not meet a statutory responsibility. Despite MSL's desire to extract ourselves from this effort, the degree to which SITSD has been involved in this effort has varied over the years. MSL is happy to provide subject matter expertise to inform negotiations, but GIS software contracts should be negotiated and procured like Microsoft, Adobe, or any other software used across state government. Like other software agreements, the cost for Esri software is funded through SITSD fixed costs. Despite that fact, MSL has been criticized for cost increases for GIS software despite the fact that these costs are increasing due to increased usage by agencies as they realize the efficiencies to be gained through the use of this valuable technology.

State data standards and reduced data redundancy also present opportunities for improved state government efficiency.

The topic of imagery is also becoming increasingly important. Recently a legislative audit suggested that DOR make use of imagery to track new construction for property tax collection and pointed to MSL as a key partner in this effort. MSL makes National Agriculture Imagery Program (NAIP) imagery available which dates back to the early 2000s. While useful for many purposes, like Lidar, the NAIP refresh cycle is not useful for some business cases. Local, state, and federal partners are looking to collect and manage imagery more effectively so that it can be leveraged for multiple purposes. To better understand the need for coordination, MSL led an imagery summit at the end of 2023. Between 70 and 80 stakeholders attended the summit and identified a wide range of use cases that

could be met through a centralized data repository. In addition to property tax evaluation, use cases included permitting compliance verification, water rights adjudication, infrastructure conditions assessments, irrigated lands mapping, and more. Partners are looking to MSL to set standards for imagery collection and to be a hub for shared imagery that can reduce costly duplication and can be made publicly available to save time to complete imagery requests.

Other imagery-related demands, including the management of drone collected imagery are also on our doorstep.

Montana Geospatial Information Act Grant Program

Your local government may have received a grant from MSL to help build data and maps that benefit your community.

Montana Geospatial Information Act Grant Program				
Account	**Fund**	**Budget**	**Actual**	**Balance**
66000 Grants				
	02779 Montana Land Information	250,000.00	198,707.55	0.00
		250,000.00	198,707.55	0.00

Relevant statute: MCA 90-1-401

90-1-404. Geospatial information -- management -- duties of state library.

(1) The state library shall:

(d) establish an application process and a granting process that must be used to distribute funds in the account;

(e) review all grant applications;

(f) consider grant recommendations by the council;

(g) monitor a recipient's use of grant funds to ensure that the use of the funds complies with the purposes of this part;

90-1-412. Geospatial information -- grants.

(1) A state agency, a local government, or a tribal government entity may apply to the state library for funds in the account. All applicants shall complete an application and provide financial information as established by the state library.

(2) The state library may provide assistance to applicants during the application process.

(3) Grants are contingent on the funds being used for the specified purpose.

(4) The state library may make a grant only if the state library determines that:

(a) the grant is consistent with the findings and purposes of this part, because it primarily adds value to Montana's geospatial information;

(b) the grant is primarily intended to be used for collecting, developing, maintaining, and disseminating geographic information systems, geospatial information, and geospatial technologies;

(c) the project for which the grant is made has prospects for achieving success given the current personnel, experience, and resources of the applicant; and

(d) the applicant has a management structure that allows the council to reasonably conclude that the applicant will comply with ongoing reporting requirements and post disbursement monitoring activities established by the council.

(5) The state library shall develop reporting procedures to ensure that awarded grants are used for the specified purposes.

Activities and cost drivers

The MGIA grant program is on hold due to lack of funds

Outcomes and key performance measures

MGIA Grants History Dashboard

Summary information

The MGIA grant program has historically served to support the creation of local GIS data that contributes to the Montana Spatial Data Infrastructure. Due to the sharp decline in MGIA revenue no MGIA grants were awarded in FY 25 and MSL does not anticipate making grant awards for the foreseeable future.

MSL is using this opportunity to conduct an internal review of the MGIA Grant Program. The review will take into account feedback from past recipients. Factors under evaluation include necessary budget, the timing of grant awards, how grant priorities are determined, and how to improve administration of the grant program.

Next Generation 9-1-1

If you've ever had to call 911, you know your location is important for a rapid response. MSL is training your local govt to create information necessary for modern emergency service technology

Next Generation911				
Account	**Fund**	**Budget**	**Actual**	**Balance**
61000 Personal Services				
	02021 911 Funding	237,715.00	231,112.13	6,602.87
62000 Operating Expenses				
	02021 911 Funding	10,026.00	16,628.87	(6,602.87)
69000 Debt Service				
	02021 911 Funding	248,853.00	248,853.00	0.00
		496,594.00	496,594.00	0.00

Relevant statutes: MCA 10-4-310

10-4-310. *(Temporary)* **9-1-1 GIS mapping account created -- source of funding -- use of account.**

(1) There is an account in the state special revenue fund to be known as the 9-1-1 GIS mapping fund.

(2) There must be deposited in the account:

(a) money received from legislative allocations and from transfers made in accordance with 10-4-304(5); and

(b) any gift, donation, grant, legacy, bequest, or devise made for the purposes of subsection (3).

(3) The account may be used only by the state library provided for in 22-1-102 in carrying out its coordination and management responsibilities to collect, maintain, and disseminate GIS land information in the state as it pertains to supporting public safety answering points on the ongoing assessment and improvement of next-generation 9-1-1 GIS data sets.

(4) Before September 1 of each even-numbered year, the state library shall produce a report summarizing the status of GIS readiness in Montana as it pertains to next-generation 9-1-1 GIS, including policy and funding recommendations necessary to advance next-generation 9-1-1 systems. The state library shall provide the report in accordance with 5-11-210 to the energy and telecommunications interim committee provided for in 5-5-230.

(5) Funds in the account are statutorily appropriated to the state library as provided in 17-7-502.

(6) At the end of fiscal year 2031, any unexpended balance in the account must be transferred to the account established in accordance with 10-4-304(1). (Terminates July 1, 2031--sec. 8, Ch. 200, L. 2021.)

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Next Generation 911 GIS Readiness dashboard

Summary information

The State of Montana has actively worked to map structures and addresses as a function of public safety and emergency response since federal funding became available for this purpose following the 9/11 terrorist attacks. MSL's expertise in the data standards necessary to align location information with modern emergency response technology led to updates in Montana's public safety legislation in 2017. Following a study conducted by MSL about Montana's 911 GIS data readiness in 2018, the 2021 Legislature created a statutory appropriation to fund Next Generation 911 data development by local governments. With that funding MSL staff trains local governments to create and update location information that complies with public safety data standards. MSL also administers software as a service contract that allows local governments to check their location information to make sure it meets the standards for public safety data readiness.

Cost-effectiveness

Like the scalable services MSL administers to support Montana libraries, this model maximizes Montana's investment in the creation of location information for public safety and other related purposes by supporting local governments in the creation of this information.

Montana State Reference Network

Modern public and private industries alike require precise location data. MSL offers a subscription service to access this data which saves Montanan's time and money.

MT Spatial Reference Network				
Account	Fund	Budget	Actual	Balance
61000 Personal Services				
	02779 Montana Land Information	199,389.43	116,415.50	82,973.93
62000 Operating Expenses				
	02779 Montana Land Information	200,396.00	15,678.23	184,717.77
	06004 Electronic Government Services	0.00	(58.34)	58.34
	06025 MT State Reference Network-RTN	60,000.00	0.00	60,000.00
		459,785.43	132,035.39	327,750.04

Relevant statutes: MCA 22-1-230

22-1-230. Administration of state reference network -- rulemaking.

(1) The state library shall administer a state reference network to provide real-time geospatial location data from any location within the network.

(2) The state library may enter into contracts with other agencies and the private sector to carry out the provisions of the state reference network.

(3) The state library commission shall adopt rules necessary to carry out the provisions of 22-1-231 and this section.

Activities and cost drivers

Work Plan

Outcomes and key performance measures

Montana State Reference Network Progress Update

Summary information

Montana State Reference Network (MTSRN) is the state-owned real time positioning network (RTN), operated with the cooperation of partners that include tribal nations, the Montana Department of Transportation, Montana State Library, counties, educational institutions and private entities who maintain, operate, or otherwise contribute to its operation. This growing statewide global navigation satellite systems (GNSS) network consists of permanently located global positioning system (GPS) receivers that generate real-time, high-accuracy GPS positioning.

The MSTRN operated as a pilot with the State of Washington beginning in 2019. MSL received one-time monies in 2021 to further develop the MTSRN and in 2023 the Legislature authorize MSL to operate the MTSRN using a subscription-based funding model.

An increasing number of industries in the public and private sector rely on precise location information provided by the MTSRN.

- Transportation departments use it for surveying needs and machine guidance during construction of roads, highways, bridges, and railways.
- Land surveyors use it because it greatly streamlines and simplifies surveying workflows.
- GIS, Planning, and other mapping professionals use RTN because it provides high accuracy positioning of geographic data on a common correction system. This allows for more efficient and effective map creation, analysis and data integration because of consistent data collection and reduction in conversion error.

- Precision agriculture uses highly accurate field maps and RTN-linked guidance systems to increase yield and reduce waste (fertilizer, seed, water, gas, etc.).
- Energy and Utility sectors utilize RTN it for construction of grids and supply lines.
- Mining, including surface and underground mines, use it for better surveying, mapping, and resource extraction.
- Drones and other unmanned vehicles can leverage RTN for better position acquisition and more accurate flight paths.
- Public safety uses it for precise & reliable tracking of pursuits and both ground and airborne emergency support; Highway Patrol can use real time data for more precise fleet management.

Cost-effectiveness

In testimony during the 2023 Legislative Session, the Montana Department of Transportation estimated that they can save $1.5 to $2M annually in surveying costs by utilizing the MTSRN.

Opportunities for efficiency

Realization of the full capacity of the MTSRN is dependent on statewide station network build out.

Because MSL does not have a public information officer, the State Librarian is leading the effort to promote the MTSRN which not a cost-effective use of staff time.

Appendix A: Library Services and Technology Act Plan

Montana State Library Library Services & Technology Act Plan: 2023-2027

Appendix B: GIS Strategic Plan

Montana State Library GIS Coordination Strategic Plan: 2023-2027

Appendix C: Draft Geospatial Information Plan

Montana Draft Geospatial Information Plan

Appendix D: Montana Spatial Data Infrastructure