



Montana Real Time Network

Interim Budget Committee – Section E Report
June 1, 2024

Also available online as a digital report: <https://arcq.is/bu5SH>

June 2024 Progress Update

Montana State Reference Network (MTSRN) [began accepting subscriptions April 2024](#). As of June 6, 2024, the network has secured 46 paid subscribers. Customers that completed their subscription before June 1 received an early-bird rate of \$1,200 for the first year, a \$300 discount.

For a self-sustaining network, the MTSRN will require a minimum of 500 subscribers, which MSL anticipates achieving by 2029. To make progress toward this five-year goal, MSL secured a one-year contract with Real Marketing Solutions (RMS) with the following priorities:

- Conduct a campaign to cultivate and maintain relationships with existing MTSRN contributors and users with the intent of converting them to MTSRN subscribers,
- Develop and execute targeted outreach and communication strategies about MTSRN to attract new contributors and subscribers,
- Tell the story of MTSRN. Promote general awareness of the network and its impact on other Geospatial programs offered by MSL.

MTSRN Objectives

Objective 1: Establish RTN administrative office and bring pilot network under Montana direction.

Status: Complete

- RTN coordinator hired: December 2021.
- MTSRN Extended Pilot launch date: March 2022.
- Status reporting: [MTSRN status map published online](#), ongoing status reports to key stakeholders. **Most recently, staff presented information about the MTSRN at the 2024 Montana Association of Registered Land Surveyors (MARLS) Annual Conference (March 20-22) and Big Sky GeoCon (April 15-April 18). Montana State Library published a new MTSRN webpage: [Montana State Reference Network \(mt.gov\)](#).**

Objective 2: Develop and implement a subscription-based funding model.

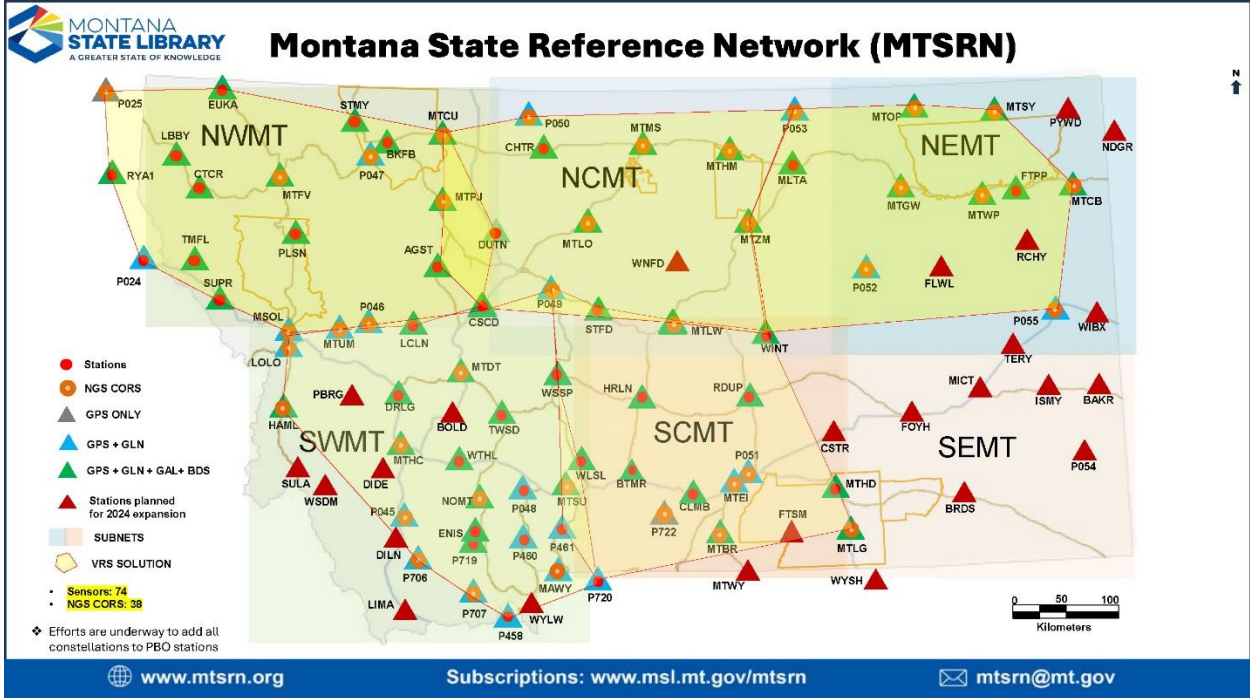
Status: In Progress

- RTN business plan: **MDT coordinated with MSU on a study of business models for Statewide GNSS implementation.** The outcome of that project can be found here <https://www.mdt.mt.gov/research/projects/planning/gnss.aspx> Based in part on the findings of that study, **MSL, in partnership with MDT, has chosen to move forward with a state operated, subscription-based model which was authorized through the passage of Senate Bill 60 by the 2023 Legislature.** In an effort to minimize administrative expenses and to keep subscriptions costs low, there will be limited subscription types, similar to the model successfully implemented in Utah (Utah TURN - <https://gis.utah.gov/products/sgid/cadastre/turn-gps/>). The current subscription rate, beginning July 1, 2024, will be \$1500 per login per year. **As outlined in Administrative Rule 10.102.7003, MSL will evaluate the MTSRN operating costs each biennium to determine if the subscription rate needs to be adjusted.**
- Customers subscribe to the RTN: **The payment portal opened in April, and users can purchase subscriptions. [Educational Use Agreements](#) and [Contributing Organization Agreements](#) are now available.**
- Revenue is generated from the subscription service. **Except in certain circumstances described in administrative rules, effective July 1, 2024, MTSRN users will pay a \$1,500 annual subscription fee, per login, to use the network. Fees maintain the operation of the MTSRN, including the cost for the network and support staff. Users that subscribe before June 1 will receive a one-time discounted rate of \$1,200 to use the network through July 1, 2025.**
- **The five-year goal is to increase the number of paid subscribers to 500 for a self-sustaining network. 46 subscribers as of June 6, 2024.**

Objective 3: Operate the existing network and identify priority coverage areas.

Status: In Progress (Ongoing)

- The number of reference base stations increases to meet Montana's business needs: **74 base stations as of May 2024**, at least **six** additional stations expected to come online in the coming year. **To achieve the goal of statewide coverage, we currently estimate that MTSRN will require a minimum of 131 stations at completion, though this number may be significantly impacted by station placement and other factors related to station performance. MSL projects that 160 stations are a more reasonable target for initial MTSRN network buildout. This number of stations should allow for statewide network coverage with some additional density and redundancy in priority areas to optimize network performance.**
- Establish RTN working group: **MSL has reached out to MARLS leadership for help developing an MTSRN Technical Working Group.**



Montana State Reference Network (MTSRN) as of May 2024. To view a live Sensor Map, visit [Montana State Reference Network – Sensor Map \(mtsrn.org\)](http://Montana State Reference Network – Sensor Map (mtsrn.org))

MTSRN Glide Path*

Year	2024	2025	2026	2027	2028	2029
Stations	80	100	140	160	160	160
Expenses						
Coordinator FTE	\$116,662	\$121,523	\$125,169	\$128,924	\$132,792	\$136,776
Tech FTE	\$-	\$74,880	\$77,126	\$79,440	\$81,823	\$84,278
Platform Hosting Fees	\$80,000	\$192,000	\$224,540	\$237,930	\$237,930	\$237,930
Admin Costs	\$54,320	\$56,000	\$57,680	\$59,410	\$61,193	\$63,028
Other Operating Costs**	\$16,000	\$55,000	\$150,000	\$200,000	\$200,000	\$225,000
Total Expenses	\$266,982	\$499,403	\$634,515	\$705,704	\$713,738	\$747,012
Subscriptions						
Subscription Target	0	100	150	250	350	500
Subscription Cost	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Subscription Revenue	\$-	\$150,000	\$225,000	\$375,000	\$525,000	\$750,000
Revenue Gap						
Revenue Gap	(\$266,982)	(\$349,403)	(\$409,515)	(\$330,705)	(\$188,738)	\$2,988

*Revised 7/3/2024 after feedback from Interim Budget Committee – Section E.

**Other operating costs include outreach funding in FY24/25. During expansion this includes node costs and station purchases for new sites. This will shift to station replacement as buildout slows.