Montana Real Time Network

Montana State Library ($4,000,000)

Program Description

Modeled after similar networks in Washington and Utah, Montana Tribal Nations, the Montana Department of Transportation (MDT) and the Montana State Library (MSL) desire to create a statewide Montana Real Time Network (RTN), a series of Continually Operating References Stations that provide centimeter grade location data in real time. Once established, the network will generate revenue through subscriptions to the network. Establishing a statewide RTN saves time and money on all infrastructure projects, including those planned with American Rescue Plan (ARPA) Act dollars. Without an RTN, surveyors spend 20% to 25% of their day setting up survey equipment. By saving this time, construction and engineering firms can make up annual subscription investments in just a few days. Funds generated from the network

subscription cover ongoing operating costs as well as related state location reference/control costs.

Currently operating in pockets established with grant funds around Montana, existing stations support surveying needs for infrastructure projects and precision agriculture. Additionally, an RTN is a prerequisite for the adoption of autonomous vehicles.
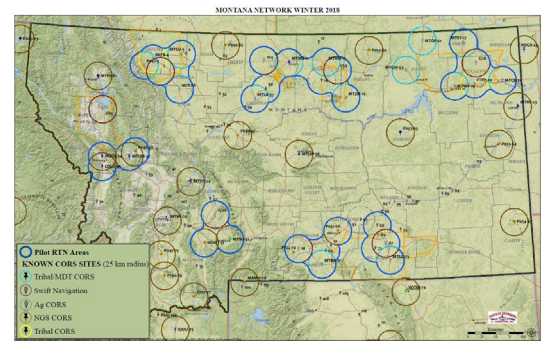
Figure 1: Montana Real Time Network Stations, 2018

Funding	
Total OTHER ARPA Funds	$4,000,000
Total	**$4,000,000**
Estimated Costs	
CORS ($25,000 ea for hardware and installation)	$4,000,000
Total	**$4,000,000**

Required Resources

As currently appropriated in House Bill 2, MSL will spend $926,000 of existing state special revenue over the biennium to coordinate the development of a statewide RTN. In part, this work involves seeking grant funds to procure up to 160 stations estimated by MDT to complete the statewide RTN. ARPA funds provide an opportunity to procure and install stations immediately, without having to seek external funding over time.

Objectives and Measurable Outcomes

The purpose of this project is to complete a statewide RTN for Montana. As a result of the COVID-19 pandemic, capital and infrastructure projects were put on hold. With investment through ARPA targeted to support projects including water and sewer systems and broadband deployment, use of an RTN can save as much as 25% on surveying costs for infrastructure projects.   Ensuring infrastructure projects are shovel-ready puts people to work and helps Montana recover more quickly from the COVID-19 pandemic. Maximizing the use of modern technology stretches investment dollars, creating more opportunities for increased investment and recovery.