



Mountain Line

3773 N. Kaspar Drive · Flagstaff, AZ 86004 · 928-679-8900 · FAX 928-779-6868 · www.mountainline.az.gov

MOUNTAIN LINE MEMORANDUM

TO: ALL INTERESTED VENDORS

FROM: HEATHER HIGGINS, PURCHASING AND CONTRACTS OFFICER

SUBJECT: REQUEST FOR INFORMATION: TRANSIT BUS TWO-WAY RADIO SYSTEM AND HANDHELD RADIOS

DATE: OCTOBER 10, 2023

Introduction:

The purpose of this RFI is to gather information from qualified vendors and suppliers regarding the availability and capabilities of a robust and reliable two-way radio communication system suitable for our transit bus fleet in Flagstaff Arizona. Additionally, we are also seeking handheld radios for our personnel. The system should provide seamless communication between drivers, dispatchers, and other relevant personnel to ensure safe and efficient transit operations in the unique geographical challenges of a mountainous terrain. There will not be a contract resulting from this RFI, but is intended to provide Mountain Line with sufficient details to prepare a Request for Proposals.

Background:

Our transit agency operates a fleet of buses that provide public transportation services across Flagstaff Arizona. We are seeking a modern two-way radio system to replace our existing communication setup. The new system should be capable of supporting clear and real-time communication in both the urban and forestry areas of our mountain town. Similarly, we require handheld radios for our personnel to facilitate efficient coordination and response.

Functional Requirements - Two-Way Radio System We are looking for a two-way radio system that meets the following functional requirements:

- **Coverage and Range** The system should provide reliable communication across the entire Flagstaff Arizona including areas with potential coverage challenges such as mountainous terrain, urban, and densely wooded areas.
- **Voice Clarity** Clear and noise-free voice communication is essential for effective coordination, especially in areas with potential interference from natural obstacles. The system should minimize background noise and provide high-quality audio.
- **Group Communication** The ability to establish and manage communication groups is crucial. Different user groups, such as drivers, dispatchers, and maintenance staff, should be able to communicate separately and together as needed.

Getting you where you want to go





Mountain Line

3773 N. Kaspar Drive · Flagstaff, AZ 86004 · 928-679-8900 · FAX 928-779-6868 · www.mountainline.az.gov

- **Emergency Communication** The system should include features for emergency alerts and priority communication to ensure the safety of passengers and staff, particularly in challenging mountain conditions.
- **Hands-Free Operation** Drivers should be able to operate the radios without taking their hands off the wheel, ensuring safe driving practices, especially on steep and winding roads.
- **Battery Life** The radios should have a long battery life to last through extended shifts without constant recharging, considering the longer routes and potential challenges of mountainous terrain.

Functional Requirements - Handheld Radios We also require handheld radios that meet the following functional requirements:

- **Portability** The handheld radios should be lightweight and easy to carry for our personnel, allowing them to communicate while on foot or at various locations.
- **Voice Clarity** Similar to the bus radio system, the handheld radios should provide clear and noise-free voice communication.
- **Emergency Features** The handheld radios should have emergency alert capabilities to quickly call for assistance when needed.
- **Battery Life** The handheld radios should have a reliable battery life to last through shifts without frequent recharging.

Technical Specifications Provide technical details about the proposed two-way radio system and handheld radios, including the following:

- **Frequency Bands:** Specify the frequency bands the radios will operate on.
- **Battery Life:** Provide information about battery capacity and estimated battery life during different usage scenarios, considering the demands of mountainous terrain.
- **Durability:** Describe the durability of the radios, including resistance to water, dust, temperature, and physical shocks, essential for withstanding mountain conditions.
- **Encryption:** Detail any encryption protocols available to secure communication, given the potential sensitivity of mountain transit operations.
- **System Scalability:** Explain how the system can accommodate future expansion of the bus fleet and personnel.

Interested vendors are requested to provide the following information in a quick references page:

- **Product overview** or a Demo that provides an outline of your asset management software solution, emphasizing its key features and capabilities relevant to our objectives.
- **Support and Training,** detail the support and training services you offer to assist us in implementing and utilizing the two-way radio system effectively.
- **Cost Structure,** provide an approximate cost structure, encompassing licensing fees, implementation costs, and ongoing maintenance fees.

Interested vendors should send information electronically to purchasing@mountainline.az.gov by 5 pm AZ on November 7, 2023.

Getting you where you want to go

