



To: Dr. Charles Johns
Board of Education

From: Mr. Joel Reyes
Dr. R.J. Gravel

Date: Monday, February 27, 2023

Re: Two-way Radio Infrastructure and Communications Platform, Equipment, and Software Purchase

Recommendation

It is recommended that the Board of Education approve the purchase of a two-way radio infrastructure and communications platform, equipment and software from United Radio at the cost of \$182,264.47.

Background

As part of the District's ongoing improvements of our security systems, Mr. Reyes worked with the building leadership teams to conduct a comprehensive assessment of the current two-way radio infrastructure and communication platform. Through this process areas of vulnerability were identified. For example, the current system does not support district-wide communications which is critical in the event of an emergency. Additionally, the manufacturer does not fully support the current system which makes repairs both costly and difficult and also prevents the system from receiving necessary software updates.

To resolve these concerns and improve the efficiency and security of day-to-day and emergency communication across the district, the administration is seeking approval for a three-part replacement plan outlined below.

1. Upgrade the two-way radio infrastructure and communication platform.
 - a. Upgrade to broadband onsite/offsite required to allow mobile gateway connectivity.
 - b. Remove the capability of all FCC-designated at-risk radios to communicate on the current radio system.
 - c. Addresses repeater issues identified at Glenbrook South.
 - d. Prepare comprehensive documentation of the radio infrastructure to be maintained by the technology services department.
2. Purchase (135) two-way radios (125 Motorola XPR3500e and 10 Motorola ION)
 - a. Replace aging radios with Motorola-supported radios, including firmware updates.
 - b. Eliminate all FCC-designated at-risk radios with two-way radios to communicate on the current radio system.
 - c. Standardizes two-way radios to two models and one phone application.
3. Purchase of (20) WAVE push-to-talk mobile/radio application licenses.
 - a. Allows push-to-talk mobile-to-radio communications on our District radio communication system when an LTE or Wi-Fi signal is available.

- b. Capable of using radio communications off-site away from District repeaters.
- c. Allows for a “true all call,” which combines channels based on predetermined groups to allow communication over dedicated frequencies.

On Tuesday, January 24, 2023, a request for quotation (RFQ) was sent to four vendors. Two vendors responded to the RFQ and submitted complete quotes, summarized in Table 1 below.

Table 1

Two-way Radio Infrastructure, Equipment, and Software Purchase Quote Responses

| Vendor | Radio Infrastructure | (135) Radios w/Programming and Updates | (20) Push to Talk Licenses | Total Cost |
|-----------------------|-----------------------------|---|-----------------------------------|-------------------|
| United Radio | \$65,716.47 | \$103,005 | \$13,543 | \$182,264.47 |
| Communications Direct | \$72,329.40 | \$107,150 | No Quote | \$179,479.40 |

After reviewing the proposals received, the administration recommends the selection of United Radio’s quotation for \$182,264.47. This project will be funded through ESSER III funds which were previously allocated to this project.