City of Austin Office of the City Auditor

Audit Highlights January 2021

Citywide Pagers



Objective

Is the City's use of pagers necessary and cost effective?

Background

In 1999, the City determined it needed a more reliable and effective way to communicate in emergencies. The City formed a coalition with regional partners to contract for an interagency pagerbased communication system. That contract has evolved to include other services offered by the vendor, Spok, Incorporated (Spok). These services include a Wireless Messaging System (WMS) so users can communicate via pager, text messaging, email, and a smartphone application.



In early 2020, the City had 4,389 overall WMS accounts with 1,638 pagers. The current emergency communications contract ends in 2022. The City needs to review the current services and determine how to best meet the needs of its departments and regional partners.

What We Found

The City has not effectively managed pagers, resulting in unnecessary spending and possibly impacting the City's ability to communicate in an emergency.

Pagers have not been managed effectively:

- We identified 14 departments with at least 90 active pager accounts for employees who left City employment between 2011 and 2019. The City appears to have spent about \$13,000 by not closing these accounts.
- Many pager users appear to not use or need their pagers. Survey responses from staff with an active pager account showed:
 - o 14% said they do not have a pager;
 - o 31% did not know the current location of their pager or reported it was not working (dead batteries was the most common reason);
 - o 66% could accomplish their work tasks without a pager; however 33% reported using their pager daily; and
 - o 41% appear to use their pager once a month or less, which is consistent with data analysis shown in Exhibit 1 (see next page).
- Four departments recently eliminated or reduced their use of pager devices. However, the cost of pagers is relatively low and replacing them with other devices may result in increased communication costs, overall.
- We spoke with some of the City's regional partners who indicated they do not typically use the WMS to communicate with the City.
- At least three City departments purchased systems that include a wireless messaging service and use that for internal communications.

The WMS may not effectively connect employees in an emergency:

- Not all departments are connected to the WMS and some users who are connected may not be using their pager or it may not work.
- The one-way nature of the City's pagers may limit their usefulness since the devices can recieve messages, but cannot send them.

Citywide Pagers

What We Found, Continued

Number of Pages Received	Number of Accounts	Percent of Accounts	Annual Pager Cost
0	270	16%	\$14,634
Between 1 and 5	421	26%	\$22,788
Between 6 and 20	236	14%	\$12,798
Between 21 and 150	204	12%	\$11,016
Between 151 and 500	137	8%	\$7,398
Between 501 and 1,000	131	8%	\$7,047
More than 1,000	239	15%	\$12,906
Total	1,638		\$88,614

Exhibit 1: Over a Five-Month Period, 42% of City Pager Users Received One Page a Month or Less

SOURCE: Auditor analysis of Spok records, June 2020.

NOTE: Does not include messages sent via a group code. Reporting limitations in the current system prevent the City from knowing how many, if any, of those messages were received.

Additional Observations

We made two additional observations. First, some pager records may not be retained in accordance with the City's records control schedules. The City's current contract for wireless messaging services does not contain adequate information about records retention requirements.

Second, many City employees are issued more than one communication device to perform their job duties. While some redundancy may be needed, there may be room for departments to reduce the number of devices provided to staff.

What We Recommend

We issued three recommendations to the Homeland Security and Emergency Management (HSEM) Director and the Chief Information Officer:

- The HSEM Director and Chief Information Officer should work with City departments and the vendor to reconcile current, needed accounts with those billed to the City.
- The HSEM Director should work with the City Manager's Office and other stakeholders to assess the City's emergency communication needs, determine how to best meet these needs, and work to implement identified solutions.
- The Chief Information Officer should work with stakeholders to develop and provide guidance that clearly defines expectations for managing the City's communication systems and devices.