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Memo

To Board of Education

From Kyla Johnson-Trammell, Superintendent
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Board Meeting Date January 11, 2019

Subject Report on Fire Alarm Systems and Future Plans

Background Report to Facilities Committee on Fire Alarm System and Future Plans

When considering Fire Alarm systems it is important to keep a couple of issues in mind:

1. Fire Alarm Code is upgraded every 3 years. At each adoption cycle new features and protocols are required. For example the last code adoption now requires a voice notification in addition to alarm horns to better assist the sight impaired in evacuation.
2. Fire Alarm manufacturers are constantly upgrading their products to meet the code requirements and to provide additional features to improve monitoring and safety.
3. All School Fire Alarm components must be listed with the State Fire Marshal. Listing requires regular retesting of the listed product with UL or similar and as a consequence manufactures regularly lapse the listing of older products once it is no longer viable to produce spare parts for repair.

Prior to the mid 1990's, OUSD had not addressed fire alarm deficiencies in a major way since the Marcus Foster Capital Improvement Program in the 1970's. This program was focused on seismic safety improvements and included fire alarm work when required by the State Architect.

In the 1990's, OUSD passed a local Bond (Measure C) and also participated in the Leroy Green State School Construction program to modernize many schools. The fire alarm work associated with this construction program was limited to the areas of each campus being modernized.

A second round of modernizations followed in the early 2000's. The fire alarm work was similarly piecemealed, resulting in campuses with multiple fire alarm systems of various makes and models. The fire alarm work completed in these first two rounds of modernizations was completed in the most economical way possible to comply with State Architect requirements and Fire Code.

During this same period Buildings & Grounds went through multiple downsizings. This combination of loss of experienced service electricians and increase in complexity and variety of fire alarm systems required some new solutions.

Following these first two round of modernizations, Facilities worked closely with Buildings & Grounds to develop a Fire Alarm design and installation standard to ensure that future fire alarm systems could be monitored and maintained by B&G.

In order to support improved fire alarm maintenance and repair, we have standardized on a single manufacturer (Simplex - recently renamed Johnson Controls), to enable B&G to train and retain qualified staff to repair and maintain increasingly complex and technical systems.

We have also undertaken a design and construction oversight protocol to ensure that new systems are designed and installed correctly. For each fire alarm project or larger project that involves fire alarms, we will also be contracting with the design reviewer and the construction installation monitor for this specialized technical installation.

Over the last twenty five years or so, we may have undertaken multiple fire alarm projects at some sites. A sample scenario would be:

1. First round Mod - New Fire Alarm on Bldg A
2. Second Round Mod - New Fire Alarm on Gym and Bld B
3. Fire Alarm upgrade project - Changing out a complete site to a single manufacturer current code system
4. Portable replacement project (at the same site) - redesign and construction of fire alarm modifications required due to portable replacement.

Planning for Future Fire Alarm System replacements and upgrades is focused on:

1. Replacing components or systems no longer supported by the manufacturer and where no spare parts are available
2. Technology upgrades as required by Fire Code
3. Technology upgrades to support remote diagnostics and troubleshooting to allow most efficient use of Buildings & Grounds Technicians.