



CITY OF CONCORD

REPORT TO MAYOR AND THE CITY COUNCIL

FROM: Daniel L. Andrus, Fire Chief
DATE: April 27, 2018
SUBJECT: Report from the Fire Chief on a Radio Fire Alarm Boxes and

Recommendation

The Fire Department requests that the Council accept this report and approve the attached resolution.

Background

The Fire Department plans to begin replacing the mechanical fire alarm boxes in the City with radio fire alarm boxes. Radio fire alarm boxes provide greatly enhanced functionality, are compliant with national codes, require less maintenance and offer a considerable savings to the end user (a purchase and installation price of \$1,200 to \$1,700 versus \$3,000 to \$7,000 for a mechanical box).

The City's current fire alarm system has been in service since 1880 and is a key part of the City's public safety infrastructure. There are currently 482 master fire alarm boxes in the City. Twenty one of these devices protect City facilities and the other 461 are privately owned. The activation of a building fire alarm system connected to a master fire alarm box results in the immediate transmission of an alarm to the City's fire communications center and to fire stations. This significantly reduces the time required to respond to an incident. The radio box system preserves all of these advantages and permits other signals to be received as well. It also increases coverage to areas that are outside the reach of the current system, allows Internet connectivity, reduces reliance on a technology that has reached the end of its life and may soon be discontinued by the manufacturer and reduces the need for emergency service units to take time from training and other activities to do "plug ins" and "plug outs."

The new system will also reduce costs for the City. Infrastructure maintenance costs for fire alarm cable will be reduced and circuit outages will no longer interrupt service and require callbacks on overtime. Annual master box testing, which is often done on overtime if there are other projects, will be eliminated.

The attached resolution reflects the de-authorization of the portion of CIP #561 related to the Form Four digitizing equipment used to decode signals from mechanical boxes. This equipment is no longer needed with radio boxes. It also reflects the repurposing of part of CIP#305 related to communications equipment. Together, these changes provide \$52,000 for the startup costs of the transition to radio boxes, including installing receiving equipment in the communications center.

Discussion

The Fire Department will advise the City Council of any significant developments with regard to this new program and will have additional information during the budget review process.