



# AUDIT HIGHLIGHTS

## Wireless Network Security

June 10, 2022

Audit No. 2203

### WHY WE DID THIS AUDIT

The audit of *Wireless Network Security* was included on the City Council-approved fiscal year (FY) 2021/22 Audit Plan as a contracted audit of a selected information technology (IT) system or area. This audit's objective was to evaluate the design, implementation, and effectiveness of the City's wireless network security controls.

### BACKGROUND

The City Auditor's Office contracted with an independent IT audit specialist, Berry Dunn McNeil & Parker, LLC (BerryDunn), to perform this work. The scope of the review included a wireless governance review, wireless network vulnerability assessment, and risk assessment.

The City's IT department provides wireless access to the Enterprise network at selected City facilities, as well as non-Enterprise (public) wireless internet access at many City facilities. The audit also reviewed potential risks surrounding wireless devices deployed by other City departments.

### City Auditor's Office

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### WHAT WE FOUND

#### IT Governance, Policies and Procedures

The audit identified the following areas where improvements could be made:

- Hardening standards for wireless network components have not been formalized.
- Clarifications and refinement of the definitions and policies for enterprise and "public" wireless networks are needed.

#### Technical Review

No significant issues were identified in the vulnerability assessments. Security, encryption, and authentication protocols were at the acceptable levels for enterprise class wireless networks, and penetration testing performed was unsuccessful. Detailed findings and recommendations were provided to the IT department and are not detailed in this public report due to the sensitive nature of the information.

### WHAT WE RECOMMEND

We recommend the IT department:

- Formalize its wireless network hardening standards.
- Clarify and refine its definitions of enterprise and "public" wireless networks.
- Implement recommended improvements to enhance the technical configuration.

### MANAGEMENT RESPONSE

The department agreed with the recommendations and plans to implement changes by the end of calendar year 2023.