

835610 - Computer Aided Dispatch (CAD) System Replacement

Originating Year:	2021	Project Type:	Public Safety	Department:	290 - Information Technology
Planned Completion Year:	2026/27	Category:	Special	Project Manager:	Kathleen Boutte Foster-Gee

Project Description/Scope/Purpose

The Department of Public Safety (DPS) uses critical software for Computer Aided Dispatch (CAD) and Mobile Computing (Mobile). CAD supports comprehensive dispatching and incident control for law enforcement, fire, and emergency medical services. The current system is reaching end-of-life and will need to soon be replaced with a modernized system that will meet DPS' needs to deliver critical services to the residents of Sunnyvale. The City anticipates this project will occur in two distinct phases.

During the first phase of the project, the selected vendor will utilize a test/temporary instance of the CAD solution to conduct a comprehensive identification and review of all processes affected as described in the requirements matrix. The outcome of this effort will be to determine critical business processes impacted in the and support product configuration and business process engineering; Findings will be documented in a Requirements Traceability Matrix (RTM) along with documentation to identify where the City would be better served by changing its processes to fit "industry best practices" or "product capabilities." The second phase will encompass implementation of the selected solution refined by the findings of Phase 1.

The City completed Phase 1, fit gap, and consequently the Council approved (FY24-0692) additional 2 phases – fit gap and implementation of a RMS from the same vendor. The cost of licensing and implementing the RMS will require additional funding.

Project Evaluation and Analysis

The system replacement is evaluated through a formal Purchasing process. The Department of Public Safety identified requirements. Purchasing published a Request for Proposal and vendors responded with their ability to address the requirements. Assessment of proposals and site visits were conducted to evaluate vendors. The top vendor will be consigned to create a model of the system which must demonstrate that requirements are met before a final contract is entered.

The primary objective of the system is to provide the ability for the dispatchers to accept, track and monitor emergency calls and dispatch public safety personnel to respond to citizen and businesses requests for assistance. As part of the City of Sunnyvale Department of Public Safety disaster recovery and business continuity plan, the proposed CAD system must also reside in an alternate PSAP (Public Safety Answering Point). A PSAP is a call center where emergency calls for police, fire, and ambulance are responded to by Dispatchers. An alternate PSAP is identical to that of the primary PSAP except that it is physically at a different location. The CAD system in the alternate PSAP will only be used when the primary PSAP is unusable. Nevertheless, the alternate PSAP must always be operationally ready. This means that all updates to the CAD system in the primary PSAP must be made to the CAD system located at the alternate PSAP in real time. It is critical that all requirements for this new system are met, because this is a system that cannot fail.

Fiscal Impact

The total 20-year project cost is \$45 million, including staff cost, equipment upgrade, system maintenance, license cross over 20 years. Record Management System (RMS) upgrade implementation and staff cost are \$10 million.

Please refer to the attached document for a detailed cost breakdown.

Funding Sources

Technology and Communication Services Fund

Plans and Goals

SN - Safety and Noise - SN-2: Effective Disaster Preparedness

SN - Safety and Noise - SN-3: Safe and Secure City

SN - Safety and Noise - SN-5: Effective Fire Service Response System

SN - Safety and Noise - SN-7: Effective Emergency Communication Services

SN - Safety and Noise - SN-6: Effective Emergency Response Capability

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	200,595	-	-
2024-25	6,423,399	-	-
2025-26	3,349,400	-	-
2026-27	1,190,700	-	-
2027-28	732,703	-	-
2028-29	1,238,415	-	-
2029-30	1,135,999	-	-
2030-31	1,189,894	-	-
2031-32	1,594,693	-	-
2032-33	1,298,365	-	-
2033-34	1,356,351	-	-
2034-35	1,808,476	-	-
2035-36	1,482,892	-	-
2036-37	3,909,389	-	-
2037-38	3,981,629	-	-
2038-39	2,194,747	-	-
2039-40	1,778,961	-	-
2040-41	1,861,885	-	-
2041-42	1,948,715	-	-
2042-43	2,039,636	-	-
2043-44	2,134,842	-	-
2044-45	2,161,587	-	-
20 Year Total	38,389,282	-	-
Grand Total	45,013,276	-	-