IT STRATEGY FY19-FY21

Version: 5.2
Date: July 19, 2018
Document Classification: Open Document
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1. EXECUTIVE SUMMARY

On behalf of City Manager, James Keene, and the entire executive leadership team at the City of Palo Alto, I am pleased to present our new, updated 3-year Information Technology (IT) strategy for the fiscal years 2019 – 2021.

Today, technology is playing an essential role in helping every organization to operate and succeed. At the City, particularly over the past few years, smart technology use has become central to how the City functions and how services are delivered to our community. We anticipate the role of technology to increase in the months and years ahead as community expectations increase; as new services such as self-driving vehicles and drones come online; as apps and high-quality online experiences become more commonplace; as data analytics drives better decision making and automation; and disruptive trends such as artificial intelligence and sensor-networks integrate with our infrastructure. The future use of technology is not only essential to improved efficient and effective operations of the City, but it is a requirement for managing the enormous challenges ahead which include responding to transformations in energy use and the effects of climate change.

This FY19-21 IT Strategy reflects a response to many of the current and medium-term needs of the City and was developed in collaboration with stakeholders across the City including all department directors. It is designed around five major goals: (1) Smart City services and capabilities, (2) Customer service, (3) Infrastructure, (4) Cybersecurity, and (5) Data governance. Within each of these goals are more specifics, but it’s important to clarify that the technology work of the City will not be limited to these areas. Major operational activities will continue, and departments will always respond to rapidly emerging needs or changing priorities. In addition, major technology efforts like equipping the new public safety building with updated technological needs or the City’s continued interest in a municipal-owned high-speed Internet offering to the home, will all continue. Some technology efforts will also be reflected in other department strategies. The goals in this IT strategy document are broad areas that can enable the City to meet a wide variety of community needs for the next few years.

We certainly live in exciting and unpredictable times. It’s becoming clear that we are in the opening years of a fourth industrial revolution that will transform the way we live, work, and play over the course of the 21st century. Cities will be at the forefront of this revolution and urban technology will be at the core of both enabling change and responding to change. I believe this IT strategy forms the fundamental basis of ensuring the City generally has the platforms and behaviors to meet the needs of the City in the short to medium term. In doing this we recognize the value of technology, but we also humbly acknowledge its limitations and significant challenges.

Finally, an IT strategy document must never be a static artifact. As circumstances change, so must a strategy. Working with City leaders and the IT department team, I will ensure that our City IT strategy evolves appropriately in the months and years ahead.

Thank you for all your support and for the privilege to serve.

Dr. Jonathan Reichental, Chief Information Officer
July 2018
2. INFORMATION TECHNOLOGY’S VISION & MISSION STATEMENT

Vision

• To build and Enable a Leading Smart and Digital City

Mission

• Provide innovative technology solutions that support City departments in delivering quality services to our community
3. IT STRATEGY AT A GLANCE FY19-21

1. Smart City
   - Digital Services
   - Urban Innovation

2. Customer Service
   - Technical Standards
   - IT Governance

3. Infrastructure
   - Cloud
   - Unified Communications

4. Cybersecurity
   - Training
   - Disaster Recovery

5. Data Governance
   - Strategy
   - Standard Framework
4. IT STRATEGY

4.1. GOAL 1

SMART CITY

**Description:** Support a multiyear roadmap to significantly increase the City’s adoption of digital services and smart city capabilities.

**Objectives:**

4.1.1 - Develop, enhance and provide IT services that will increase the community’s access to mobile services.

4.1.2 - Deploy and maintain enterprise wide platforms and processes for supporting open and participative government to enrich our community.

4.1.3 - Maintain an ongoing program of civic innovation activities in government technology and include broad participation from innovators in the public and private sectors.

4.1.4 - Formalize an Urban Innovation Network to bring together innovators, entrepreneurs and organizations in the local area to collaborate.

4.1.5 - Define and develop metrics to support objectives under this goal.
4.2. GOAL 2

CUSTOMER SERVICE

Description: Enhance IT service delivery in order to provide excellent customer service to all City departments.

Objectives:

4.2.1 - To support high-quality, consistent, and efficient services, IT will organize around a standardized delivery framework based on the Information Technology Infrastructure Library (ITIL) (see appendix 5.1.1 for more information).

4.2.2 - Mature the established citywide IT governance processes based on an industry-recognized model.

4.2.3 - Deploy new tools to support higher quality service and knowledge management.

4.2.4 - Work with the Human Resources department to identify funding, select and deliver ongoing technical training for all City employees.

4.2.5 - Formalize career path and succession planning for the City's technology staff.

4.2.6 - Review and refresh IT position descriptions, roles and responsibilities.

4.2.7 - Baseline current IT capabilities and identify targeted improvements based on a model such as the IT Capability Maturity Framework (see appendix 5.1.2 for more information).

4.2.8 - Define and develop metrics to support objectives under this goal.
4.3. GOAL 3

INFRASTRUCTURE

**Description:** Strengthen the City’s technology infrastructure and communication systems.

**Objectives:**

4.3.1 - Reduce the City’s data center footprint by utilizing a hybrid cloud approach.

4.3.2 - Virtualize and decommission systems as necessary to reclaim office space.

4.3.3 - Implement unified communications to optimize business processes, increase user productivity and collaboration.

4.3.4 - Standardize data storage approach and solutions.

4.3.5 - Execute the 2017 adopted GIS strategy which includes the implementation of the new system and added capabilities.

4.3.6 - Define and develop metrics to support objectives under this goal.
4.4. GOAL 4

CYBERSECURITY

Description: Enhance and improve information security to ensure confidentiality, integrity and availability of information across all City systems.

Objectives:

4.4.1 - Enhance cybersecurity awareness processes throughout the City.

4.4.2 - Implement additional annual cybersecurity training for all City employees.

4.4.3 - Ensure a fully-tested disaster recovery and continuity program for mission critical services.

4.4.4 – Continue to identify and invest in innovative tools in order to appropriately protect City systems and data as conditions dictate.

4.4.5 - Define and develop metrics to support objectives under this goal.
4.5. GOAL 5

DATA GOVERNANCE

Description: Design and formalize a citywide data strategy to leverage the high value of our City data.

Objectives:

4.5.1 - Implement citywide data governance based on a recognized, industry standard framework such as DM-BOK (see appendix 5.1.3 for more information).

4.5.2 - Mature our Open Data initiative to address data-driven decision making.

4.5.3 - Deploy a defined set of citywide data capabilities for departments.

4.5.4 - Define and develop metrics to support objectives under this goal.
5. APPENDICES:

5.1. APPENDIX A: REFERENCE DOCUMENTS

5.1.1. INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY (ITIL)

5.1.2. IT CAPABILITY FRAMEWORK (IT CMF)

5.1.3. DATA MANAGEMENT BODY OF KNOWLEDGE (DM-BOK)

5.2. APPENDIX C: DOCUMENTATION CONTROL

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<td>Sherrie Wong</td>
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<td>Contributors</td>
<td>Jonathan Reichental, IT Staff, Department Directors</td>
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5.3. APPENDIX D: CHANGE RECORDS

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5.6. APPENDIX G: CONTACTS

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