County of Santa Barbara

Countywide Information Technology Strategic Plan

Fiscal Years 2019-20 through 2022-23

Table of Contents

Executive Summary

A strategic technology plan aligns technology services and supporting infrastructure with anticipated future business needs. The importance of this plan rises as technology becomes increasingly more embedded in the services that Santa Barbara County provides. This Countywide Information Technology Strategic Plan (the Plan) for Fiscal Years 2019-20 through 2021-2023 is the vision for countywide information technology (IT) of the members on the planning committee. It represents our goals and objectives over the next three years. Embedded in the plan are enterprise and cross-departmental projects, major service area strategies, and new approaches to improve services. Our collaborative effort in creating this document represents our commitment to continuous improvement and innovation and the important role that technology plays in the County today.

The 2019-2023 Plan consists of different goals that are aligned with the County of Santa Barbara's Renew 22 initiative. New goals include not only IT centric efforts but also organizational structure and IT workforce development.

The County's IT Governance program consists of a tiered structure consisting of the Executive Information Technology Council (EITC) supported by the Policy Committee focused on countywide policies and the Standards Committee that focuses on Enterprise Architecture and technology standards. This structure facilitates the creation and vetting of needed policies and standards which are then endorsed by an executive body.

Thomas Gresham
Assistant Director – General Services, Information and Communications Technology

Strategic Planning Committee

This message would not be complete without special recognition to the Information Technology Planning Committee members for their considerable efforts, patience, time, and expertise in developing the plan:

- Jose A. Alvarez, IT Manager, District Attorney
- Sean Boal, IT Manager, Social Services
- Virginia Butterfield, Technical Support Manager, General Services
- Stephen Crafton, IT Engineering Supervisor, General Services
- Darrin Eisenbarth, IT Manager, Public Health
- Thomas Gresham, Assistant Director, General Services
- Nemie Holman, IT Manager, Sheriff
- Gilbert Malcolm, IT Manager, Public Works
- John Matis, Chief Information Security Officer (CISO), CEO/Risk Management
- Patrick Miller, Network Technicians Supervisor, General Services
- Matt Murray, IT Operations Supervisor, General Services
- Aimee Strub, IT Manager, County Clerk-Recorder-Assessor
- Andre Monostori, Solutions Architect Manager, General Services
- Larry Lowman, IT Manager, Public Works
- Marshall Ramsey, Division Chief, Behavioral Wellness
- Laura Manning, IT Customer Support Supervisor, General Services
- Deepak Budwani, Chief Financial and Administrative Officer, Public Defender

Information Technology Vision and Mission

Vision Statement – To become a partner and innovator in support of our County's Mission.

Vision Narrative – The County of Santa Barbara fulfills its mission with the support of Information Technology. In order to realize the full potential of our contribution, we will become a trusted partner helping to shape and support the County's Mission.

Information Technology employees are enthusiastic and highly motivated. We enjoy our work; we are well trained, respected, and empowered. We benefit from a culture of safety and security, and there is proliferation of spirit. The work we accomplish is exceptional. We are appropriately placed to be successful. Our training is balanced between technical and personal development. We embody professionalism.

We recognize that all the work the County does is interconnected, interdependent and cumulative. By providing cost effective and efficient Information Technology services we will allow County programs to focus on the business of delivering public services effectively. We have anticipated the future and are strategically positioned to provide innovative business solutions to our client programs. We are the trusted partner for the county community, helping them collaborate and coordinate their programs, integrate information and share resources such that opportunities are not missed.

Throughout our County, Information Technology employees understand and appreciate that our residents are the ultimate customer. In providing exceptional service, guidance, and expertise to County Departments we ensure that the constituents of Santa Barbara County benefit and County Programs flourish.

Mission Statement – Our mission is to deliver and support technology to improve the quality and effectiveness of government services which benefit the County and its constituents.

Santa Barbara County Guiding IT Principles

1. Our ultimate goal is to provide citizens, the business community, and County employees with timely, convenient access to appropriate information and services.

2. Business needs drive information technology solutions.

3. Leverage technologies to make new business methods a reality.

4. When making technology investments, be forward thinking in terms of long-term system lifecycle requirements.

5. Implement leading-edge, not bleeding-edge technologies.

6. Develop the County IT workforce through a balanced investment in education and mentoring to support current and future technology needs.

7. Promote flexibility, inter-operability, cost effectiveness through the use of open (vendor-independent) standards, minimizing proprietary solutions.

8. Implement countywide solutions to reduce redundancy, duplication and create efficiencies.

9. Commit to a unified cybersecurity model with shared responsibility to network governance.

Plan Overview

- Goal 1: Enable the delivery and consumption of quality IT services

- Goal 2: Define, innovate, invest and implement in appropriate technology

- Goal 3: Develop and maintain IT skills across the County in alignment with changing technology

- Goal 4: Stress Security and Compliance Awareness as part of everyday business

- Goal 5: Effect an Organizational Realignment to enable the Countywide Technology Strategic Plan

The Plan

This strategic plan is organized into five main goals. Each goal has supporting objectives. These objectives are the approaches being taken to achieve the overall goals. County individual initiatives (projects) will be tied to the objectives within this plan as they are evaluated for merit by their alignment not only to the objectives but also to the objectives within Renew 22 initiative.

Goals = these are broad outcomes

Strategy = the approach taken to achieve a goal

Objective = the measurable step to achieve a strategy

Goal 1: Enable the delivery and consumption of quality IT services

"In order to deliver quality IT services to customers, services must be well designed, standardized and easy to use."

A. Strategy A: Make County services easy to use
1) Objective 1: Deploy standard constituent interfaces which deliver County services that are transparent and intuitive.
2) Objective 2: Modernize internal County interfaces to follow standards for the delivery of services.
3) Objective 3: Automate the standard provisioning of tools and services.
4) Objective 4: Improve availability of County services through any device.
5) Objective 5: Empower County employees to provide services at any place.

B. Strategy B: Adhere to established IT governance policies and standards
1) Objective 1: Publish and communicate established standards and policies in a clear and concise manner.
2) Objective 2: Implement technical auditing mechanisms to verify and track compliance against a published system/software baseline.
3) Objective 3: Provide processes and resources to assist departments in achieving compliance.
4) Objective 4: Document a set of standard operating procedures for project and/or operational resource requests.
5) Objective 5: Establish a standardized set of project deliverables in support of requested solutions.

C. Strategy C: Ensure continual service improvement through planning, execution, feedback and assessments
1) Objective 1: Establish a regularly occurring review of existing service catalogs.
2) Objective 2: Identify and track key performance indicators (KPIs) to monitor trends and make corrections.
3) Objective 3: Establish standardized methodologies for resolution of deficiencies into project plans.

Goal 2: Define, innovate, invest and implement appropriate technology

"IT services must leverage proven and industry-supported technology underpinned by fair and transparent cost allocation models."

Strategy A: Accurately identify and track IT spending across the County
1) Objective 1: Standardize department tracking and coding of IT expenditures and labor within financial management systems.
2) Objective 2: Establish actionable financial reporting capabilities to identify and optimize funding and investment efforts.

Strategy B: Deploy IT services strategically
1) Objective 1: Adhere to IT Governance.
2) Objective 2: Define and maintain guidelines for the use of technology.
3) Objective 3: Align technology with the County's overall vision, strategic plan and budget.
4) Objective 4: Maintain technology lifecycle including anticipating and planning for system obsolescence.

Strategy C: Review and improve existing IT vendor contracts
1) Objective 1: Build long-term strategic contract vehicles for the procurement of IT services in support of County IT efforts.
2) Objective 2: Benchmark similar contract efforts with peer organizations.
3) Objective 3: Review and update existing contracts to incorporate expectations in business performance and deliverables.

Strategy D: Manage the funding of IT projects
1) Objective 1: Develop and Implement a funding mechanism to support future deployments of multi-department and countywide IT services.
2) Objective 2: Establish a countywide funding mechanism to provide investment resources toward efforts to grow and/or transform IT services that may include multi-year efforts and financial resources.

Strategy E: Employ a formal IT project management methodology
1) Objective 1: Define and document standard project management practices for all stages of a project's lifecycle.
2) Objective 2: Develop a project management resource library to share standards and best practices that can be utilized for County IT projects.

Goal 3: Develop and maintain IT skills across the County in alignment with changing technology

"Investment in the County's IT workforce is needed to establish the skills and knowledge necessary in support of current and evolving technology."

Strategy A: Identify and maintain required skills to support IT services and initiatives
1) Objective 1: Perform an IT Skills Assessment and Gap Analysis of countywide IT personnel.
2) Objective 2: Apply identified training gaps and implement corrective action through an IT workforce training program.

Strategy B: Improve employee engagement
1) Objective 1: Assess engagement of IT personnel.
2) Objective 2: Expand IT networking opportunities.
3) Objective 3: Define an IT Supervisors Group to enhance engagement by applying findings derived from an engagement assessment.

Strategy C: Recruiting and retaining
1) Objective 1: Review and apply recommendations from the IT Comp and Class study.
2) Objective 2: Define a recurring assessment schedule of IT workforce compensation.
3) Objective 3: Develop an IT mentorship program.
4) Objective 4: Leverage the Renew 22 Modern Workspace Initiative to facilitate flexible work environments.

Strategy D: Develop succession planning
1) Objective 1: Leverage the IT Skills Assessments, IT Inventory, and Employee Engagement Assessment to identify gaps in support coverage.
2) Objective 2: Develop a plan to address gaps in order to provide appropriate coverage of IT systems.

Goal 4: Stress security and compliance awareness as part of everyday business

"Fostering an awareness and respect for security and compliance is essential in minimizing risk to the County."

Strategy A: Mandate security and compliance
1) Objective 1: Develop a proactive, countywide security program
2) Objective 2: Implement a cybersecurity auditing program to assess compliance with security frameworks
3) Objective 3: Establish a program to document, track, and report on identified risks for remediation, mitigation or risk acceptance

Strategy B: Build a culture of security awareness and education
1) Objective 1: Develop and provide role-based security training for job-specific functions.
2) Objective 2: Empower Information Security Officers (ISOs), leveraging their subject matter expertise, to provide direction and coordination of training.
3) Objective 3: Identify and assign ISOs to provide specific data compliance training for countywide awareness.

Strategy C: Optimize security architecture and technologies to improve the County's security posture
1) Objective 1: Incorporate a continuous & transparent security mindset into all aspects of our business functions.
2) Objective 2: Apply defense-in-depth, segmentation, least privilege and other risk reducing activities to minimize risk exposure.
3) Objective 3: Create a dedicated funding mechanism to address cybersecurity risk countywide.

Goal 5: Effect an organizational realignment to enable the Countywide Technology Strategic Plan

"The success and sustainability of countywide technology initiatives relies on the ability and willingness of the organization to adapt itself."

Strategy A: Executive Information Technology Council (EITC) will govern IT solutions

1) Objective 1: Develop and maintain tools, processes and procedures for EITC to effect informed decisions.
2) Objective 2: Provide guidance and sequential prioritization of IT initiatives.
3) Objective 3: Establish a methodology for dissemination of information countywide.
4) Objective 4: Define funding stream and department human resource allocation for EITC-approved initiatives.

Strategy B: Deliver appropriate IT solutions based on unique vs common needs

1) Objective 1: Perform and maintain a countywide IT inventory, including people, processes and technology.
2) Objective 2: Prioritize identified solutions for consolidation based on value to the County and the existing systems' lifecycles.
3) Objective 3: Establish a dedicated funding mechanism to provide for approved countywide enterprise solutions.
4) Objective 4: Create awareness of advantages associated with departments pursuing enterprise solutions as opposed to only department-specific needs.

Strategy C: Collaborate and share decision making

1) Objective 1: Promote participation in countywide IT forums, groups and other venues.
2) Objective 2: Define the structure, purpose and member participation for Communities of Interest (CoIs).
3) Objective 3: Leverage Communities of Interest (CoI) to provide a countywide perspective on initiatives to which they are focused.
4) Objective 4: Fostering appointment of cross-departmental team members to design and implement solutions.

Strategy D: Value essentialism and encourage transformational change

1) Objective 1: Develop a process review program in alignment with the Renew 22 initiative to regularly examine existing IT functions.
2) Objective 2: Identify, prioritize and execute on transformational change opportunities, including involvement and ownership from IT personnel.
3) Objective 3: Develop an IT marketing program to acknowledge and celebrate transformational successes including innovation awards and employee spotlights.

Appendix A: Strategic Initiatives

INITIATIVE NAME	ORIGIN(S)	IT PLAN GOAL ALIGNMENT(S)
Complete and Implement the Recommendations from the IT Comp and Class study	• Pre-requisite for the "Operationalize the IT Workforce Training Program" Initiative • Renew 22, Retain RT-2.01	• Goal 3 • Goal 5
Maintain Technology Inventory on a regular basis	• WTC IT Inventory Assessment 2019, Recommendation 6.1.1 • WTC IT Inventory Assessment 2019, Recommendation 6.1.3	• Goal 1 • Goal 4
Implement a countywide IT asset management platform	• WTC IT Inventory Assessment 2019, Recommendation 6.1.1	• Goal 4
Consolidate IT service platforms into one system	• WTC IT Inventory Assessment 2019, Recommendation 6.1.2	• Goal 1
Implement a countywide Identity and Access Management system	• PCMG IT Security Assessment 2019-2020	• Goal 4
Implement Technology to Support a Countywide PMO office	• Renew 22, Redesign RD-2.20	• Goal 1 • Goal 2 • Goal 5
Create a Security Management Program	• EMOTET incident 2018 response • PCMG IT Security Assessment 2019-2020	• Goal 3 • Goal 4
Establish a Managed Security Services contract	• EMOTET incident 2018 response	• Goal 4
Public Safety Radio Network Replacement	• Technology Evolution in the Market	• Goal 1 • Goal 2
Voice over IP Replacement	• Technology Evolution in the Market	• Goal 1 • Goal 2
Identify and Migrate Custom in-house Applications to Commercially Available Software	• WTC IT Inventory Assessment 2019, Recommendation 6.2.2 • WTC IT Inventory Assessment 2019, Recommendation 6.3.1	• Goal 2
Implement a "Whole Person Care" health information exchange system	• California State Department of Health Care Services • Renew 22, Redesign RD-3.02 • Renew 22, Redesign RD-4.05	• Goal 1
Implement Video Arraignment	• Renew 22, Redesign RD-2.04	• Goal 1

Implement an enterprise GIS program	• Renew 22, Redesign RD-3.02 • Renew 22, Redesign RD-4.06	• Goal 1 • Goal 2
Migrate office applications to cloud-hosted platform - O365	• Technology Evolution in the Market • Renew 22, Redesign RD-2.19 • Renew 22, Redesign RD-3.02	• Goal 2
Design and Implement a Countywide IT Service Management Platform	• Renew 22, Redesign RD-2.21	• Goal 2 • Goal 5
Design and Implement a flexible/scalable Multi-Hybrid Cloud as the platform to facilitate Cloud Migration	• Renew 22, Redesign RD-2.19 • Renew 22, Redesign RD-3.02	• Goal 2
Create a Program with Defined Roles & Responsibilities for Managing Sensitive Data	• WTC IT Inventory Assessment 2019, Recommendation 6.1.3	• Goal 4
Operationalize the Workforce Training Program	• Renew 22, Retain RT-2.01	• Goal 3
Redesign the County's web presence	• County Executive Office (CEO)	• Goal 1 • Goal 2
Implement an enterprise business application platform	• Renew 22, Redesign RD-2.10 • Renew 22, Redesign RD-4.02 • Renew 22, Redesign RD-4.08 • Renew 22, Redesign RD-4.09 • Renew 22, Redesign RD-4.10	• Goal 1 • Goal 2
Implement a Customer Relationship Management (CRM) platform	• Renew 22, Respond RS-2.02	• Goal 1 • Goal 2
Implement data classification and lifecycle management	• WTC IT Inventory Assessment 2019, Recommendation 6.2.1	• Goal 4
Implement an Equipment Lifecycle Management Program	• WTC IT Inventory Assessment 2019, Recommendation 6.1.4 • WTC IT Inventory Assessment 2019, Recommendation 6.3.3	• Goal 2
Develop Countywide IT Policies and Standards	• Renew 22, Redesign RD-4.01 • WTC IT Inventory Assessment 2019, Recommendation 6.3.2	• Goal 4
Enhance internal network security safeguards	• PCMG IT Security Assessment 2019-2020	• Goal 4
Rebalance IT human resources Countywide	• Renew 22, Redesign RD-3.02	• Goal 1 • Goal 5

Consolidate department systems into centralized County systems	• WTC IT Inventory Assessment 2019, Recommendation 6.3.4	• Goal 2
Introduce Modern Technology within the Northern Branch Jail	• Renew 22, Redesign RD-2.27	• Goal 2
Modernize Physical Security and Surveillance System	• PCMG IT Security Assessment 2019-2020	• Goal 2 • Goal 4
Support a Clean Commute Program for Teleworkers	• Renew 22, Retain RT-2.02	• Goal 2
Mobile Workforce Development Program for Retention	• Renew 22, Retain RT-2.02	• Goal 2
Develop IT solutions in support of colocation, facility consolidations and service enhancements	• Renew 22, Redesign RD-3.03 • WTC IT Inventory Assessment 2019, Recommendation 6.3.4	• Goal 2
Manage IT Governance for Regional Dispatch	• Renew 22, Redesign RD-1.31 • Renew 22, Redesign RD-3.02	• Goal 1 • Goal 4
Sharing IT Customer Support Services (LAN Administration) to Boost Productivity	• Renew 22, Redesign RD-2.03 • Renew 22, Redesign RD-3.02 • WTC IT Inventory Assessment 2019, Recommendation 6.3.5	• Goal 1 • Goal 3 • Goal 5
Implement Criminal Justice Data Sharing Program	• Renew 22, Redesign RD-2.05	• Goal 1
Implement IT Solutions to support Paperless Initiatives	• Renew 22, Redesign RD-2.06	• Goal 1 • Goal 2
Establish a Security Operations Center (SOC)	• PCMG IT Security Assessment 2019-2020 • Renew 22, Redesign RD-3.02	• Goal 2 • Goal 4
Establish a Network Operations Center (NOC)	• PCMG IT Security Assessment 2019-2020 • Renew 22, Redesign RD-3.02	• Goal 2 • Goal 4
Enhance Internal Network Safeguards to Protect County Information and Assets	• PCMG IT Security Assessment 2019-2020	• Goal 4
Implement FirstNet Radio Services for Cellular Devices	• Office of Emergency Management Initiative	• Goal 1
Develop an Enterprise IT Coop and Devolution Plan	• PCMG IT Security Assessment 2019-2020	• Goal 1 • Goal 4
Enterprise License Lifecycle Management	• WTC IT Inventory Assessment 2019, Recommendation 6.1.4	• Goal 1 • Goal 2

Create an IT Employee Recognition Program	• Renew 22, Retain RT-2.01	• Goal 1 • Goal 3