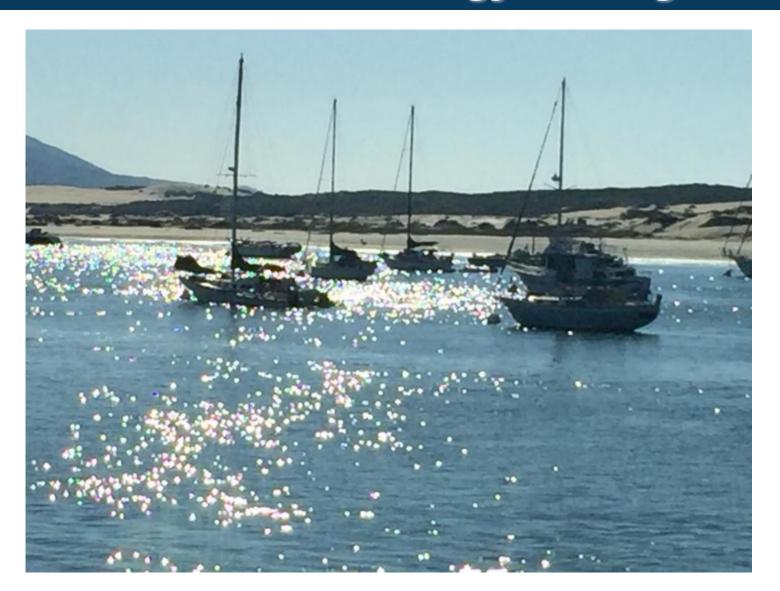


San Luis Obispo County FY 2019-20 to FY 2022-23

Information Technology Strategic Plan



July 2019

Message from the IT Director



These are indeed exciting times for the County at large and our department in particular. With remediation and replacement efforts in the rear-view mirror, we can now apply the power of technology to help build a more powerful, effective, agile organization by delivering accessible, streamlined, and well-coordinated governmental services. This strategic plan captures extensive discussions with departments regarding their business needs and goals, incorporates findings and recommendations from surveys and third-party information technology, enterprise resource planning, and security engagements, and moreover, articulates what is needed next for our department to continue its journey as an agent of change digitizing and mobilizing services.

Whether successfully expanding Office 365 collaboration capabilities, building web-based forms, developing an award-winning public facing website, implementing a new budgeting system, going electronic with health care records, starting major efforts to replace jail management, records management, and permit tracking systems, or leading the charge in digitizing decades of paper history, the last three years were nothing but pure excitement. Through well-developed methodologies, proven results, and surgical consulting, ITD continued to partner with County departments helping them clarify and document business requirements, build

solid business cases, prioritize needs, explore viable options, and select sustainable, modern solutions to meet the needs of the people we serve and enable the transformation of County services.

This is ITD's fifth year as a standalone department and the first year of a new strategic plan. While the previous strategic plan focused on remediation, replacement, refacing, modernizing, and re-staffing, the new plan leverages the great foundation now in place and zeroes in on improving and transforming departmental business processes. Enhanced by a solid investment in infrastructure, a new Information Security Program, a well-defined digital government strategy, skilled staff, expanded use of GIS capabilities, and gradual acceptance of the importance of the business analysis and project management disciplines, the County is ready to trust the Information Technology Department to lead the transformation of County business by delivering cloud based, secure, mobile solutions. This is about deep change and renewal; continual, unrelenting change demanding we think beyond budgetary cycles and remediation. Such demand for change will require strong business acumen, proven leadership, and solid communication, collaboration, and negotiation skills.

In this new, brave, connected world, the evolving demands for services and fast structural changes are forcing us to rethink the role of technology and maximize its potential for delivering government services. In order to succeed, technology must align and respond effectively to the needs of business. As technologists and agents of change, it is our mission to strive for such fine balance.

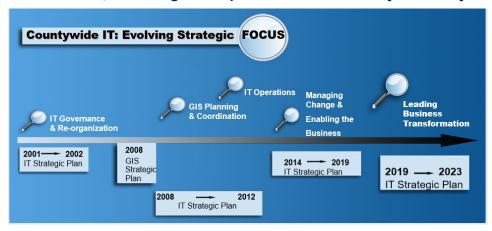
Very truly yours,

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1. Introduction

As noted in a Harvard Business Review survey, "adaptability is the most important skill for companies undergoing a digital transformation—more important than technical knowledge, communication skills or even customer-focused problem-solving." **Change is the New Normal**. How will we handle it? In the past, leaders predicted threats and planned responses with a risk-management strategy. Today, however, the nature of risk itself is different. Instead of anticipating known risks, organizations must cope with an environment that is volatile, uncertain, always complex and often ambiguous. New, agile models empower people to move quickly in a dynamic environment, but they also require employees to re-imagine how they work.

This strategic IT plan centers on leveraging technology to help manage such change and enable the County workforce to adapt as quickly as possible in a well-governed, efficient, and effective manner. In alignment with the County's mission, this plan charts the next steps forward in the County's technological evolution. The previous strategic plan focused on remediation, retirement, and replacement of obsolete systems solutions. The new plan is business-centric in nature; its main goal: help transform the delivery of County services.



Clearly, technology represents a critical tool for taking government services to "the next level" in San Luis Obispo and elsewhere. In the face of growing expectations for online service and transparency, increasing use of mobile devices and social media, a changing workforce, and pent-up demand, **technology must become the centerpiece of efficient government by enabling a transformation in the way services are delivered.**

San Luis Obispo County is a safe, healthy, livable, prosperous, and well-governed community



The new plan spells out a clear vision for countywide IT – one that is centered on **understanding the business of government and enhancing IT/business partnership and trust**. The plan articulates **four primary goals** related to the vision, as well as a series of **strategic initiatives for realizing each goal**. Working in partnership with all departments and under the guidance of the County's IT Executive Steering Committee, IT professionals countywide will pursue and execute key departmental initiatives.

The graphic below encapsulates the plan's four pillars and major goals.

Talented Work Force

- Attract and retain top talent
- Capture institutional knowledge
- Build an enticing, competitive, modern IT career path
- Provide opportunities to learn and grow

Agile Governance

- Streamline processes
- Encourage innovation and change
- Promote transparency
- Identify, measure, and manage acceptable risk
- Respond to business needs with agility

Customer Service Excellence

- Digitize, mobilize, modernize
- Leverage data to drive best possible decision-making
- Build partnerships on the basis of trust and timely effective communications
- Strive for on-line, not in-line solutions

Reliable Technical Foundation

- Build technical framework to collaborate effectively, seamlessly, and remotely
- Enable secure access to resources everywhere, anytime



COUNTY

OBISPO

2. Business Context

This section highlights several core trends driving the demand for information technology in San Luis Obispo County. It provides a business-based context for the IT vision driving the goals and strategic initiatives presented in this document. Key business drivers include hunger for quality data to drive faster and better decision making, a constituent demand for easy to use, intuitive online services, a changing County workforce, and the increasing use of mobile devices.

Constituent Expectations for Online Services and Transparency

The County relies heavily upon information technology to support vital government services. The County's constituents are used to conducting business online; accordingly, they expect County services to be available through the web, providing **anytime**, **anywhere access**. Stakeholders are also concerned about government transparency and increasingly demand more information regarding County operations, funding, and performance statistics.

Information should be easily available on the County's website and automatically updated to reflect the latest available data. Online technology has become a critical vehicle for communications (one way, two way, and interactive) with citizens, business partners, and other stakeholders – using a variety of media (smart phone, web, email, and social media). Constituents expect the County to keep pace with the private sector, leverage technology to transform the delivery of government services and encourage the participation and suggestions of the people we serve.

The County's employees represent its most crucial component for high-quality service delivery – as well as its largest expense (i.e., payroll accounts for approximately 60% of the County's budget). A large cross-section of the County workforce is eligible to retire within the next five years – elevating the criticality of effective **succession planning and knowledge transfer** as the County works to attract, select, develop, and retain a talented workforce. With the median age of employees quickly decreasing, the County must proactively evolve in a manner that serves a new generation of employees who demand and expect a "plugged in" work environment in which they can develop and grow.

Increasing Mobile Device Utilization

Mobile access to the County's applications and information must also match the needs of the County's changing community – for both internal and external customers. Mobile devices (e.g., smart phones, tablets) continued to proliferate exponentially since the last IT planning cycle. IT must support this explosion of mobile devices, as well as the increasing demand for secure data access, by providing a **comprehensive set of mobile computing**

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services that appropriately consider and leverage security, business needs, and technology capabilities.

3. Introduction

A **business-based IT vision**, four goals that support this vision, and a series of strategic initiatives aimed at realizing the goals, drive this plan's directives for the future. This section presents the IT vision and related goals for countywide information technology.

IT Vision



To be a flexible and responsive business partner delivering innovative valued technology solutions and services.

IT Goals

1	Talented Workforce	Attract and retain top talent by providing an enticing, competitive career path, opportunities to learn and grow through interesting projects and superb training, and enabling our resources to thrive and realize their full potential as part of a healthy and engaged community
2	Customer Service Excellence	Deliver valued and innovative services by digitizing, mobilizing, and modernizing our solutions, leveraging data to drive the best possible decision-making, and building partnerships based on trust
3	Agile Governance	Build a high-performing organization by streamlining processes, encouraging innovation and change, promoting transparency, accepting risk when necessary, and responding to business needs with agility
4	Reliable Technical Foundation	Increased expectations from County teams and constituents for always on, from anywhere services, a growing demand to collect, correlate, analyze, publish data and act upon trends, and the never-ending vigilance against bad actors require a modern technical infrastructure that supports secure, flexible, collaboration and access to resources.

This plan outlines a business-driven IT vision, the four goals supporting this vision, and a series of strategic initiatives aimed at realizing such goals



4. Strategic Initiatives

This section delineates the strategic initiatives associated with the plan's defined IT goals. Working in partnership with departmental stakeholders, ITD will help define and execute specific projects to address each of the initiatives outlined below.

Goal 1: Talented Workforce

As previously noted, with a large portion of County employees eligible to retire within the next five years, it has become imperative to modernize the County's recruitment, selection, training, and retention processes. This goal centers on leveraging technology to keep pace with a shifting, technically savvy, mobile workforce. It supports succession planning by emphasizing the implementation of contemporary tools, providing training, and striving to capture and share critical institutional knowledge. It also promotes regional collaboration as a means to explore potential technology-related economies of scale and better integration of solutions.

The implementation of various NeoGov human resource management modules helped streamline and automate performance reviews and training tracking processes. Furthermore, the adoption of effective workflows resulted in a more proactive engagement with applicants, better tracking, and the creation of reliable data to analyze and act upon trends. Working in close partnership with IT management, the Human Resources department **modernized technology job descriptions to accurately reflect the knowledge, skills and abilities** required in the 21st century. The new structure offers an opportunity to reassess training needs and career path development opportunities as well. In combination with other strategic initiatives aimed at raising the County's technology capabilities (e.g., enhanced mobility and social media), the new framework promotes **an attractive, contemporary culture for applicants and employees**.

Compounding the exodus of County employees who possess extensive knowledge of both historical and current operations, SLO does not have a mechanism to effectively capture and manage the departing functional knowledge and collaborate to address this looming loss of critical information. Within the world of IT, over 18 different solutions are employed for storing and sharing **institutional knowledge**. Efforts under this goal also seek to narrow the set of collaboration tool solutions in use, formalize the processes for **capturing and retrieving information in standard formats**, ensure that appropriate training occurs, and promote employee outreach and communication. Representatives from key customer areas (e.g., finance, property tax, criminal justice) should form a business-based task force to explore how the County can improve content/data management, efficiently and consistently manage and keep current knowledge repositories (e.g. wikis), and make the necessary data and functionality easily accessible in the field.

An increasing appetite for sophisticated online services demands a business savvy, innovative, technically skilled workforce



Strategic Initiatives

Aligned with best practices, the last component of this goal fosters **regional collaboration related to technology solutions**. This initiative builds upon collaborative efforts already in place (e.g. public safety, criminal justice), assesses opportunities for new consortiums, and explores shared IT objectives across jurisdictions with an eye toward increasing workforce efficiency and maximizing the use of regional resources. Collectively, multi-agency projects can achieve **economies of scale** by sharing resources surrounding common platforms and infrastructure. The County should continue to consider opportunities that combine IT solutions with nearby local government entities where appropriate. Accordingly, the County of San Luis Obispo and its partnering agencies could pool resources, eliminating unnecessary redundancy, and providing cost-effective, regional approaches to IT support countywide.

<u>Goal 1: Talented Workforce – Strategic Initiatives</u>

- 1.1 As part of a comprehensive countywide Succession Planning initiative, document requirements, select the right methodology and tool to capture institutional knowledge
- 1.2 Streamline countywide recruitment processes to reduce the amount of time required from posting the job announcement to the first day at the office
- 1.3 Define and invest in a comprehensive training program that focuses on and aligns the evolving technological needs of departments with the mobile, tech savvy nature of our upcoming workforce
- 1.4 Lead efforts to foster regional technological collaboration by sharing knowledge and experiences with other agencies, identifying common needs, and building shared solutions and data exchanges
- 1.5 Given the changing nature of IT, build flexibility into the staffing processes by delegating responsibility to departmental management to determine the right position to meet their specific business needs
- 1.6 Leverage the new information technology job classes and structure, and support and maximize the utilization of business analysis and business relationship management skills across the enterprise



Citizen-centric
solutions support a
high level of
customer service
that respond
effectively to
constituent needs

Goal 2: Customer Service Excellence

San Luis Obispo County's citizens, businesses, government partners, and employees all have high expectations for technology-supported services. Increasingly, they expect to conduct business "online" rather than in line. Constituents expect to access public information in a simple and intuitive manner and conduct business with the County just as they do in other aspects of their lives by incorporating the use of online information, social media, and mobile applications.

It is imperative to have a well-defined digital government strategy that addresses key needs surrounding website design and enhanced self-service, promotes community engagement and transparency, and enhances business operations through automation.

The County recognizes that its website plays a critical role in communicating and interacting with the County's stakeholders. The website also serves as San Luis Obispo's digital brand, conveying the image and culture of the County to online visitors. Building upon the prior work of the County's eGov Community of Interest (eGov-COI) and eGov Executive Steering Committee (eGov-ESC), this goal includes a strategic initiative centered on having a dedicated team managing the County's web presence and maximizing the expansion and use of the new content management system (CMS). The goals are to keep information fresh and build interactive and user-friendly applications while establishing clear content ownership. Functionality such as telephone-based general inquiry, online service to handle complaints, requests, and payments, data mapping representation (e.g. crime trends, restaurant ratings, airports and parks information, recruitment statistics, a vendor portal, foster children management, emergency education, preparedness, and response) should continue to expand while promoting active community involvement via online participation forums.

For effective upkeep over the long term, a well-orchestrated web presence will require a strong investment in talent and tools as well as well-defined lines of authority. Tight collaboration among the County Administrative Office, departments, and ITD will help ensure a coordinated, holistic, enterprise approach to branding, marketing, training, and informing. From a technical support perspective, this initiative will require a dedicated web team – working in partnership with the social media analyst – to monitor analytics, safeguard compliance with established policies, help ensure that content is fresh and relevant, coordinate upgrades, train content providers in the business areas, and clarify attendant roles.

Excellence in customer service relies on modern business applications running on a reliable infrastructure to mine quality data. Key recommended efforts include:



Strategic Initiatives

Goal 2: Customer Service Excellence - Strategic Initiatives

- 2.1 Continue to develop a digital government strategy that focuses on improved content management, mobile optimization, and enhanced self-service
- 2.2 Engage the community and promote government transparency via social media and outreach
- 2.3 Optimize critical business applications via an investment refresh cycle, enhanced integration, new functionality and business process re-engineering, including:
 - a. Improve collaboration and data presentation framework by leveraging Office 365 investment (e.g., Skype, Teams, SharePoint)
 - b. Continue the expansion of GIS services and offerings
 - c. Leverage quality data to develop decision support dashboards
 - d. Digitize and enable mobile access to data
 - e. Build an Enterprise Resource Planning (ERP) strategy utilizing the SAP Health Check findings and recommendations as a foundation
 - f. Develop an application investment refresh cycle and support framework for all business applications



IT services are proactive, accountable, and well-governed

Goal 3: Agile Governance

This goal and its related strategic initiatives focus on establishing a participatory, inclusive IT culture at the County – one that builds trust between IT and departments, technology and business, fully engages executives and line staff, supports informed technology decision-making, streamlines operations, and helps ensure continuous improvement.

Currently, over a dozen IT-related governance bodies exist at the County, including the IT Executive Steering Committee (IT-ESC), Information Security Executive Committee (iSEC), and Digital Government Community of Interest (COI) – to name just a few. While IT-ESC, chartered with providing overall IT direction, works effectively at prioritizing technology investments with an enterprise view, it is not always well-coordinated with the myriad of other advisory groups also in play at the County (e.g., the EFS Steering Committee, Information Security Executive Steering, Community of Interest groups).

Forums, like iSEC, need to work further on clarifying their strategic focus and function. In many respects, program-driven bodies seem to operate most effectively (e.g., Criminal Justice Information System, GIS, etc.), where there is a clear, common goal that must be addressed. Conceptually, all of these advisory bodies can play an important role in directing limited County resources to the areas of greatest technology need and value. Historically, however, stakeholders have tended to disengage and delegate participation downward (e.g., from director to supervisor to operational staff). With the above in mind, the first strategic initiative associated with this goal works toward **improved coordination among the IT governance bodies** – notably by assigning a single business/IT liaison early in the process to drive the effort, further clarify costs, benefits, and risks, and ensure that impacted stakeholders have appropriate channels for participation and communication. To ensure success moving forward, this initiative also engages members of the IT-ESC to assess **meaningful outcome measures related to the IT goals outlined within this plan.**

It is also extremely important to note that one size doesn't fit all when it comes to IT governance and support. The second initiative related to this goal centers on appropriately defining, pricing, and scaling IT service and management methods – with an eye toward promoting IT/business partnership and improving accountability. Initial efforts in this regard surround an evaluation of the project management office (PMO) current practices and exploring opportunities to tailor and scale associated methods to address concerns and/or misconceptions about the PMO methodology and related chargebacks. More specifically, this may include embracing a more consultative, advisory approach for smaller projects where an IT project management resource may be available to a project part-time on a consultative basis. Instead of a fully developed business case, a light definition and documentation of requirements into a simpler artifact would be created. The availability of lighter project management processes coupled with an increased emphasis on customer advocacy and business analysis should help eliminate misconceptions about the speed and complexity of the project intake process.



Developing a comprehensive **catalog of IT services** and service owners should enable the organization to more efficiently, proactively and transparently serve its customers. A catalog of IT services also helps define, monitor, and communicate **service management measures** to help ensure continuous improvement and level customer expectations.

Now more than ever before, the County must bring IT closer to the customer – bridging the line between business and technology and promoting that conversation among departmental and IT personnel.

Goal 3: Agile Governance - Strategic Initiatives

3.1 Revisit and redefine IT governance structure; empower staff while fostering executive	ve
championship	

3.2 Develop a catalog of IT services; measure value and performance of such services

- 3.3 Define and implement an alternative "light" project management framework and tools
- 3.4 Foster and embrace the increasing demand for business analysis and customer advocacy
- 3.5 Proactively and transparently manage application portfolio investment following realistic refresh cycles
- 3.6 Establish system of record (e.g. consider "SAP first" concept) dependencies and framework
- 3.7 Modernize policies to further enable the delivery of services while protecting County assets



Strategic Initiatives

Increased
expectations from
constituents require
a modern, properly
funded and
elegantly supported,
technical framework
that enables
collaboration and
effective, seamless,
remote access to
resources

Goal 4: Reliable Technical Foundation

An organization's technical infrastructure provides the critical foundation for connectivity and processing power. This goal and its related strategic initiatives surround the County's hardware, systems software, databases, network components, and the complex security wrapping protecting all services. In order to be reliable and trusted, the underlying technical infrastructure needs to be current, sustainable, secure, and capable to run and enable business execution anytime, anywhere.

The mainframe decommissioning has led to what the CIO calls, "the balkanization of IT." While the mainframe environment provided a spartan and austere customer experience compared to modern technology, it did so in a consistently reliable, stable, secure manner, and at a predictable cost. Its replacement by multiple niche, not best in breed applications and services, has shifted support to departments thus creating additional challenges for central IT as understaffed departments are reaching out for technical and functional help in multi-disciplinary spaces. Such reach goes beyond traditional IT spaces and now includes the need for departmental business analysis, business workflow evaluations, requirements gathering, contract negotiation and management, and vendor evaluations. Furthermore, information security, SAP, and disaster recovery third-party independent assessments documented and delineated the need to act and invest to alleviate major technical and functional shortcomings. Incorporating and aligning those third-party recommendations with the general IT strategic plan are essential to building a reliable, efficient, and secure technical foundation.

In concert with county emergency management efforts, a **Disaster Recovery Plan (DRP)** must comprise a significant portion of any organization's broader continuity of operations planning. On the basis of pre-established and agreed-upon business priorities, the County's DRP should outline IT policies and procedures to be followed in the event of a major disruptive event (e.g., natural disaster) that could isolate or otherwise render IT systems unusable. A disaster recovery plan should also instruct IT personnel about which business systems to recover first, and how to transition operations to an alternate location. Once it has been formally documented, the County should test the plan annually and refresh it when key business needs or processes change.

There is an increasing demand to invest in additional infrastructure to enable the **expansion of mobile access to information**. Mobile access to information continues to be a **balancing act between securing assets and providing flexibility** given the protected nature of many government services delivered by Health, Social Services, Criminal Justice agencies and others. As funding becomes available, the countywide Information Security Strategic Roadmap will continue to establish formal plans and associated policies for mobile communication and computing devices at the County. While departments independently evaluate current and future need for their employees and the public to access County information on smart phones, laptops, tablets, and other portable devices, IT must continue to revisit and re-issue policies and procedures controlling access to



sensitive data, mitigating related security risks and clarifying the County's stance on the use of personal devices.

Whenever possible, the County supports efforts to **increase network connectivity to underserved areas**. Currently, a public/private cooperative effort comprised of Ventura, Santa Barbara and San Luis Obispo counties in association with Digital West Networks, Inc., and other telecom providers is exploring a broadband initiative along these lines. Additionally, as the County builds new facilities (e.g., the Co-located Sheriff and Fire Dispatch Center), it must include the cost of extending fiber to these facilities as part of the overall planning process.

In order to leverage and control its technological investment, the County must increase its attention to **IT asset management** – for hardware as well as software. The former will make locating and troubleshooting or replacing equipment easier. The latter will diminish application sprawl by instituting software portfolio management best practices. Technology refresh cycles, which were extended at the County during the last economic downturn, need to be updated and formalized. Most departmental software should be evaluated within 5 years and an investment mechanism must be in place to replace or update applications regularly. Better IT asset management will also help ensure continuity of mission critical applications and infrastructure – avoiding large, unplanned and unbudgeted expenditures to upgrade or replace critical IT assets. By developing a countywide IT asset inventory and associated refresh cycles, potential economies of scale may also surface.

The final strategic initiative associated with this goal centers on optimizing the technology infrastructure by streamlining data center operations, maximizing virtualization opportunities, and leveraging cloud computing when viable. A key component of this directive also focuses on the need for effective remote management tools to facilitate installation/updates, expedite troubleshooting, and assist in performance tuning. The County should, when warranted, embrace a cloud first approach to hosting. Such approach, when properly vetted, could simplify the technical environment, reduce internal support requirements, and mitigate disaster recovery concerns.



Goal 4: Reliable Technical Foundation - Strategic Initiatives

- 4.1 Assist departments in resizing, reskilling their workforces to be able to support the postmainframe era
- 4.2 Embrace, align, and support Security Strategic Plan roadmap recommendations
- 4.3 Embrace, align, and support SAP Health Check recommendations
- 4.4 Buildup IT disaster recovery capabilities

Strategic Initiatives

- 4.5 Expand and enhance the County's fiber footprint
- 4.6 Pursue the implementation of tools and systems to track assets, automate and streamline processes, improve remote monitoring of operations
- 4.7 Think virtual, cloud, mobile first when building or buying solutions
- 4.8 Define and implement an application replacement, monitoring, and funding mechanism program

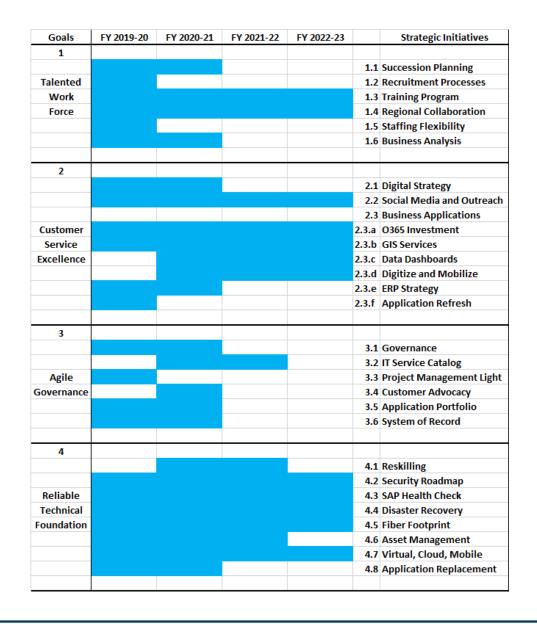
5. Implementation Roadmap

The Gantt chart below illustrates the proposed timeline for implementing the strategic initiatives included in this IT strategic plan (presented in fiscal years). The County must periodically review and adjust this implementation timeline based on progress made – as well as resource constraints, changing business needs and County priorities. Accordingly, the County's IT governance will need to **appropriately prioritize and invest in these strategic initiatives** and related projects within the context of other departmental IT initiatives and ongoing production support demands.



<u>Information Technology Strategic Plan Initiatives – Proposed Timeline</u>

The County must
periodically review
and adjust this
implementation
timeline based on
progress made,
resource constraints,
and changing
business needs





Several critical factors must be in place to successfully realize the County's transformational IT vision

6. Critical Success Factors

The County is poised to deploy IT solutions that better support the delivery of services to constituents, improve business processes, and facilitate access to ever-increasing information needs. The positive transformation of public services will only be possible through the championing of IT as an agent of change and enabler of better government. The world, private and public, clamors for mobile, cloud, with decision making data just a click away. The technological framework for solutions continues to evolve almost daily. As stated early on, "continuous change is the new normal" and technology somehow is forcing such change. It is time to embrace this change with skill and passion.

To realize the countywide **transformational** IT vision and successfully implement this plan, **the following critical factors must be in place**:

- ♦ Buy-in from key decision makers
- ♦ Sufficient funding and talent
- **♦ IT/business partnership and trust**
- **♦** Clearly communicated business-based benefits
- ♦ Business-process redesign and training that leverage best practices and maximize technology investments
- ♦ Data-driven methodology to monitor progress and adjust course as necessary

