A Letter from Our CIO

Imre Kabai
CIO, County of Santa Clara

It is my pleasure to share with you the County of Santa Clara’s IT FY22-24 Strategic Plan. Because information technologies are fundamental enablers of our present and future, our plan describes how the Technology Services and Solutions (TSS) Department will advance County services for all citizens, residents, and visitors.

TSS provides IT services to approximately 22,000 County staff in over forty County departments. These agencies deliver critical services to the 2 million residents of Silicon Valley. Additionally, we support one of the largest public healthcare systems in the nation.

2020 was a year like no other. Demands on technology and technology services came simultaneously from the COVID-19 pandemic, the California fires, deep rooted social injustice, and a dramatic increase in residents’ economic challenges. The TSS team shifted thousands of users to remote work, built out telehealth services to reach those in medical need, created information dashboards to better manage the pandemic, participated in the mass vaccination sites, and successfully supported a national Presidential election.

While the pandemic sped up our transformation timeline, there is still much work to be done. With our partners, we will continue driving our digital transformation – shifting brick and mortar services to digital – ensuring all Silicon Valley residents can consume services quickly and conveniently. In the short term, we are focused on establishing the fundamental governing processes, technical platforms and building workforce capacity. Laying foundations for flexible technologies that support business goals, with an understanding that by the time we utilize the newly emerged technologies and meet the shifting expectations of our residents, new technologies and expectations will emerge.

Our strategic plan serves as our guide by sequencing and prioritizing our initiatives to become a more mature IT organization, transforming the way we think and work.

We look forward to ongoing collaboration with our colleagues, partners, and the community to achieve outstanding results!

~Imre
# Table of Contents

Overview.............................................................................................................................................4  
Mission & Values .................................................................................................................................7  
Goal #1: EMPOWER – Build a Diverse and Motivated Workforce......................................................11  
Goal #2: OPERATE – Drive Operational and IT Effectiveness............................................................14  
Goal #3: GROW – Cultivate Organizational Maturity and Collaborate with Our Partners ..............19  
Goal #4: TRANSFORM – Embed Innovation and Transformation Into Our Work ....................... 24  
Appendix...............................................................................................................................................27  
IT Capabilities and Value Stream........................................................................................................31  
Initiatives Mapped to the Value Stream..............................................................................................33
Overview
Overview

Purpose of the Strategic Plan

TSS provides County of Santa Clara agencies with a full suite of technologies and IT services. With roughly 910 staff, the TSS budget is $385 million of an overall County budget of $8 billion. This strategic plan outlines how TSS will ensure it is fully supporting the County’s mission to “Plan for the needs of a dynamic community, provide quality services, and promote a healthy, safe, and prosperous community for all.”

The goals in this plan identify where TSS employees will focus their efforts and what they must do to ensure TSS—and consequently, the County—are staying ahead of advances in technology and adapting to effectively support the changing needs and expectations of the residents we serve.

This plan came together from a deliberate and thoughtful process that included all levels of the TSS department, involved extensive collaboration with our agency partners, an in-depth analysis of experts’ technology forecasts and careful consideration of the community’s service and technology needs today and well into the future.

The result: a new TSS mission and four strategic goals that define TSS’s strategic framework and serve as the foundation for this FY22-24 IT strategic plan.
Overview

Planning Process and Principles

Below is a view of our planning process and the data that informed it. Details can be found in the appendix.

<table>
<thead>
<tr>
<th>Phase 1: Assess the Current State</th>
<th>Phase 2: Establish Strategic Direction &amp; Priorities</th>
<th>Phase 3: Develop Strategic Goals &amp; Initiatives</th>
<th>Phase 4: Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gather Existing Data</td>
<td>TSS Leadership</td>
<td>TSS Leadership and Management Workshops</td>
<td>Design Implementation Approach and Expectations</td>
</tr>
<tr>
<td>Compile internal department primary data and external/industry secondary data</td>
<td>Define TSS’ mission</td>
<td>Refine the four Strategic Goals:</td>
<td>FY22 action planning</td>
</tr>
<tr>
<td>Conduct primary research and gain stakeholder input:</td>
<td>Confirm core values</td>
<td>- Identify the diagnoses</td>
<td>Launch strategy reviews and reporting</td>
</tr>
<tr>
<td>• TSS Leadership</td>
<td>Identify eight priority areas and key problem areas</td>
<td>- Define guiding policies</td>
<td></td>
</tr>
<tr>
<td>• TSS Managers</td>
<td></td>
<td>- Determine coherent actions (initiatives)</td>
<td></td>
</tr>
<tr>
<td>• Vertical Business Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Included perspectives:

- **TSS Staff**: Employee Wellness Survey, June 2020 (355 responses)
- **TSS Leadership**: Executive interviews, April 2020 (14 chiefs, directors, and senior managers)
- **Business Partners/Clients**: Interviews with client directors

The Structure of the TSS Strategic Plan

- **Mission & Values**: What is our purpose and identity?
- **Vision**: What do we thrive to achieve?
- **Goals**: Where must we focus to achieve the vision?
- **Initiatives**: What must we do to achieve the vision?
- **Milestones & Actions**: How do we know that we are successful?
Mission & Values
TSS’ mission and values support the mission of the County of Santa Clara which is centered on our community. Our mission focuses on empowering the County’s customer-facing departments with technology to provide quality services to residents, enabling access, ease of use and positive interactions. Our core values represent our mindset of partnering with our County business partners to support a healthy, safe and prosperous community.

County of Santa Clara Mission
Plan for the needs of a dynamic community, provide quality services, and promote a healthy, safe, and prosperous community for all.

TSS Mission
Partner with County departments to deliver services to our community through operational excellence and innovative technology solutions.

TSS Values

Respect
Listening to each other and considering all ideas.

Integrity
Being honest with each other and doing the right thing for the organization and our peers.

Accountability
Ensuring that we meet our commitments.

Transparency
Providing accurate and clear information to everyone.

Compassion
Showing empathy and being willing to help each other.

Excellence
Going above and beyond to produce extraordinary results.
Vision & Strategic Goals
County of Santa Clara Vision
Engaged employees delivering exceptional customer experiences.

TSS Vision
TSS’ vision is the County’s vision, and we support it by the following strategic goals:

TSS Strategic Goals: How We Will Achieve the Vision

**EMPOWER**
Build a Diverse and Highly Motivated Workforce

**OPERATE**
Drive Operational Excellence and IT Effectiveness

**GROW**
Deliver Programs and Collaborate with Our Partners

**TRANSFORM**
Enable Innovation and Digital Government Transformation
Goal #1: EMPOWER

Build a Diverse and Highly Motivated Workforce
Goal #1: EMPOWER

Build a Diverse and Highly Motivated Workforce

We will achieve this goal by:
- ensuring staff can see how their work is connected to a greater purpose.
- making decisions that support a healthy work/life balance and that will foster a healthy work environment.
- making investments to enable our employees to reach their full potential.

Rationale

Our employees are our most important foundation, and their well-being is integral to the success of our organization and the County. To that effect, we have opportunities to enhance our work environment, including a formal employee wellness program, mentoring programs, clearly defined career paths for staff, and formal succession plans. We provide opportunities for staff to see how their work fits into the larger purpose to support deep employee engagement and foster a sense of accomplishment.

Other factors impacting staff wellness relate to professional development and an orchestrated approach to ensure staff have awareness of and access to formal learning opportunities. To prepare the TSS organization for meeting the technological challenges and encourage more innovation and transformation, we support greater exposure to advanced technology training and education opportunities.

Outcome

From the bottom to the top, our culture, processes, and platforms ensure that good ideas are proposed and implemented by colleagues who love what they do, feel they have a purpose, and are valued.

Areas of Focus

The initiative themes for this goal focus on improving hiring practices and staff retention, while supporting staff well-being and a fulfilling work environment.

- Distribute decision-making down the organization to increase agility.
- Launch mentoring program that focuses on diversity, equity, and inclusion, and formalize succession plans.
- Align staff with areas of interest and related career paths.
- Accelerate and simplify candidate selection, onboarding processes and staffing models.
Goal #1: EMPOWER

Initiatives Detail:

- **Create Mentorship Program:** Implement a mentorship program that develops employees’ next-level skills needed for advancement.
- **Establish Succession Plans:** Create succession plans in anticipation of staff retirements.
- **Increase Empathy:** Embed everyone in the organization in a yearly “Day in the Life” public touch experience that has been powered by IT.
- **Ensure a Healthy Environment:** Establish standards for a healthy work environment (e.g., ergonomics, meeting standards such as number of hours/days in meetings, taking meetings outside, etc.).
- **Distribute Decision-Making:** Empower staff to make decisions in the areas they influence to increase organizational agility.
- **Establish Staff Performance Metrics:** Set and manage metrics-based performance goals for each employee.
- **Adjust Job Classifications:** Establish a continuous review/adjustment process of job classifications and minimum qualification to adapt to technology changes.
- **Proactively Manage Training Credits:** Maximize staff training opportunities by centrally managing training credits across technology toolsets.
- **Align Roles to Interests:** Simplify processes and encourage staff to integrate their interests into their work roles.
- **Increase Professional Education:** Encourage and enable every employee to access two to three learning opportunities per year.
- **Encourage Peer Learning:** Foster increased exposure to TSS capabilities and technology by utilizing brown bag meetings with internal and external technology experts.
- **Increase Tech Awareness:** Increase awareness of available technologies and their use via IT knowledge management platforms.
- **Instill Skip Level Meetings:** Shift up to 10% of leadership’s meetings to skip level to create a culture of openness and availability at all levels.
- **Accelerate Hiring Process:** Collaborate with centralized talent recruiting office to improve and speed up hiring process.
- **Develop Dynamic Recruitment Dashboards:** Create consistent and up-to-date recruitment dashboards.
- **Ensure Accurate Candidate Testing:** Update skill assessment testing to accurately evaluate the candidate’s relevant skills.
Goal #2: OPERATE

Drive Operational Excellence and IT Effectiveness
Goal #2: OPERATE

Drive Operational Excellence and IT Effectiveness

We will achieve this goal by:

- evaluating whether existing technologies can serve the desired outcome before introducing new technologies.
- making metric-driven decisions that consider budgets and resource availability to support the solution while ensuring customers are partners in the decision-making process.
- establishing processes that prefer the minimum viable product over perfection.

Rationale

TSS is a new organization, having merged four IT departments into one in the last few years while undergoing fundamental structural and functional changes. Because of these changes, we have exciting opportunities to strengthen our core IT capabilities.

TSS continuously seeks opportunities to improve customer experience while increasing efficiency and system availability.

We also see opportunities to improve our technology life cycle management process and rationalize our technology portfolios achieving smart cost savings without impacting service delivery.

Outcome

We achieve high levels of operational excellence: our processes, systems and services are efficient, stable and resilient.
Goal #2: OPERATE

Areas of Focus

The focus of this goal is foundational: stabilizing basic IT capabilities and strengthening TSS’s core competencies.

- Improve core operational processes.
- Simplify processes for securing small scale and low complexity services.
- Centralize IT license management.
- Expand business continuity and disaster recovery capabilities.
- Establish a Process Engineering Center of Excellence.
- Replace manual administrative controls with technical controls for speed and consistency.
- Create a single transparent intake process and governance for service/project demand.
- Proactively monitor events and create streamline major incident response.
- Balance the best of federated and centralized IT structures for efficiency and optimal customer experience.
- Create and manage a centralized and comprehensive technology asset inventory.
- Identify and classify technical debt to manage systems lifecycle.
Initiatives Detail

- **Strengthen Operating Model:** Ensure all major divisions within TSS have a clear, documented, and executable concept of operations that defines operational purpose and mission.

- **Establish Operational Transition Reviews:** Formalize standard artifacts and procedures when transitioning solutions from development into production.

- **Retain Technical Knowledge:** Formalize the process to document and transfer knowledge from staff, contractors, and extra help as they transition out of TSS.

- **Govern Software Licenses:** Standardize the process to track software licenses, understand current licensing liabilities, and model future license demand.

- **Become a Process Factory:** Establish a Process Engineering and Business Analysts’ Community of Practice with a focus on process re-engineering, critical process documentation, and standardized process design.

- **Deploy a Single Point of Demand Intake:** Collect demand for TSS services using a single intake process allowing for improved demand rationalization, forecasting, and prioritization.

- **Improve Project and Portfolio Management:** Deploy a robust project and portfolio management solution for improved real-time project performance transparency and accurate fund tracking.

- **Accelerate Change Management:** Deploy change control capabilities for increased visibility to potential negative impacts to TSS services before changes are implemented.

- **Establish Incident/Problem Management:** Establish a major incident and problem management task force.

- **Proactively Monitor System Events:** Deploy monitoring equipment and software to proactively detect potential problems and prevent service delivery impacts.

- **Establish Architectural Review Board (ARB):** Ensure technical designs are consistent with technology roadmaps and can trace back to business requirements.

- **Target Industry Standard Service Desk Metrics:** Bring service desk metrics in line with industry standards and eliminate common call types with self-service software.

- **Simplify Time Tracking:** Streamline processes to track all TSS resources, ensure accurate chargebacks, govern service rates, and provide more accurate labor planning and budgeting.

- **Create Transparent Performance Dashboards:** Use SMART (Specific, Measurable, Attainable, Relevant, Time-Bound) performance metrics and dashboards across TSS to improve decision-making, and monitor portfolio performances and the health of each division.

- **Ensure Purchase Order Compliance:** Ensure all technology acquisitions follow formal procurement processes to ensure asset tracking, controlled licenses, and appropriately distributed costs.
Goal #2: OPERATE

- **Enable 24/7 Support**: Provide 24/7 support capabilities based upon the service needs of departments and associated services.
- **Automate Configuration Deployment**: Establish pre-defined system configurations for a consistent support model, reducing manual work and errors.
- **Automate Software Development Testing**: Reduce delivery timelines and improve quality with standardized and automated application testing.
- **Re-engineer Funding/Budgeting Model**: Streamline the funding process to support mid-cycle demand and ensure ongoing IT support and fixed asset replacement.
- **Establish IT Communication Plan**: Formalize an IT communications plan to support targeted and meaningful communications to specific audiences.
- **Create IT Policy Catalog**: Create a discoverable catalog of simple, unambiguous IT policies.
- **Develop Business Continuity Capabilities**: Integrate business continuity planning and associated costs into the project/service design.
- **Introduce On-board/Off-board Assets Controls**: Integrate license management and access controls with core processes (e.g., off-boarding) to control costs and inappropriate permissions.
- **Automate the Routine**: Automate routine and manual processes to allow staff more time to focus on value-added work.
- **Convert Manual Administrative Controls to Technical Controls**: Use technology and network segmentation to support policy compliance and prevent policy violations.
- **Create Accurate Demand Forecasts**: Create approximately 20% accurate demand forecasts and properly manage asset inventory.
- **Establish Dynamic Software Development**: Establish a flexible agile application development model that can quickly respond to demand cycles.
- **Quantify Client Satisfaction**: Gather data on client satisfaction to monitor service quality.
- **Enable Open Licenses and Low-code Tools**: Increase usage of low-code tools to enable faster solution development.
- **Build a Centralized Technology Asset Repository**: Populate a configuration management database (CMDB) to manage details and control changes in hardware and software assets.
- **Reduce Technical Debt**: Maintain a prioritized list with level of scope to address critical technical debt with recommended actions.
Goal #3: GROW

Deliver Programs and Collaborate with Our Partners
Goal #3: GROW

Deliver Programs and Collaborate with Our Partners

We will achieve this goal by:

• collaborating with stakeholders and vertical business partners to follow a data-driven, decision-making methodology to set priorities and define measures of success.
• establishing clear decision-making methods informed by IT Principles for projects, programs, and the portfolio.
• encouraging transparency by using accurate, relevant, timely and complete data.
• taking an agile approach to addressing stakeholders’ needs by shifting to continuous project intake.
• using an objective scoring mechanism to inform technology investments.
• instituting an agile framework across the organization through governance and programs.

Rationale

Meeting our customers’ needs is our number one priority. TSS can expand its use of industry-proven operating models and decision-making frameworks to make wise technology investment decisions that meet our partners’ desired outcomes. The right IT investments are an important factor in the County’s success and sustainability. TSS will continue to quantify the impact of proposed projects and services against our partners’ service delivery objectives. To do so, TSS must continue to gain intimate knowledge of the business’ capabilities and the underlying technologies that our vertical business partners use to deliver services to residents. With this level of collaboration, TSS can accurately define, scope, and deliver the right technology solution. Lastly, technology investments will be made with clearly established measures and quantifiable benefits to ensure the joint customer-TSS success.

Outcome

We are an agile, proactive, and mature IT organization that leverages purposeful governance and best-practice frameworks. In doing so, we consistently deliver measurable value to vertical business partners and in turn meet the needs of County residents.

Areas of Focus:

• Consistently incorporate Total Cost of Ownership into project recommendations.
• Align key technical domain strategies with business strategies.
• Establish an understandable and transparent charge-back/show-back model.
• Deploy an IT operations service catalog.
Goal #3: GROW

- Become a Business Analysis Center of Excellence.
- Advance the County's cloud transition.
- Develop a leaner technology acquisition process.
- Operationalize the IT Governance Board.
- Update and implement IT governance and IT standards.
- Define TSS' concept of operations for internal alignment and customer satisfaction.
- Expand business relationship management processes and best practices.
- Complete the technology blueprint to ensure the County infrastructure supports departments' needs.
Goal #3: GROW

Initiatives Detail:

- **Define Technology Standards:** Ensure technology standards and roadmaps are well defined, documented, and published for the technology domain.

- **Create Integration Framework:** Design a framework to enable and support end-to-end system integrations.

- **Operationalize Governance Board:** Establish a fully functioning IT Governance Board.

- **Establish Operational Level Agreements (OLAs):** Ensure key OLAs are in place.

- **Account for Total Cost of Ownership:** Integrate total cost of ownership rationalization into technology architectural reviews.

- **Design Roadmaps for Key Technology Domains:** Associate business strategy and roadmaps with the key technology domains that TSS supports.

- **Create a Customer-facing Service Catalog:** Operationalize a business service catalog.

- **Establish Service Management Roles:** Mature our IT service management capabilities by funding and creating specific service management roles.

- **Develop a Transparent Charge-Back Model:** Create accurate reporting with a clear show-back model that explains service costs.

- **Advance the County’s Cloud Transition:** Establish an approach and support the County’s transition to leverage cloud-based technology.

- **Rationalize the IT Project Portfolio:** Enhance the IT project rationalization process to be realistic, equitable, with high quality data.

- **Establish a Business Analysis Center of Excellence:** Establish a Business Analysis Center of Excellence to support rapid response to the critical analysis necessary to engage in technology solutions.

- **Develop a Leaner Technology Acquisition Process:** Improve the process to ensure acquisitions are completed within 10% of the useful technology life or 30% of major product release time.

- **Balance the IT Structure:** Update the IT organizational structure to create a balance between centralization and federation.

- **Standardize Delivery Frameworks:** Use best practice delivery frameworks for repeatable and consistent IT delivery for enterprise or multi-agency programs.

- **Mature Business Relationship Management Discipline:** Cultivate a high-functioning Business Relationship Management practice.

- **Establish an Internal Audit Function:** Create an internal TSS audit capability to identify continuous improvement opportunities and create transparency.
Goal #3: GROW

- **Complete the Technology Blueprint:** Ensure current business capabilities digital blueprints are captured in a digital modeling system for strategic planning purposes.

- **Perform Technology Rationalization:** Identify opportunities for standardization, fit for purpose, or gaps within technology landscape using technology blueprints.

- **Establish an Interface Control Board:** Validate and approve interface design to formalize interaction between TSS divisions using concepts of operations or management systems.

- **Develop Data Governance:** Develop governance for data usage, storage, and sharing.
Goal #4: TRANSFORM
Enable Innovation and Digital Government Transformation
Enable Innovation and Digital Government Transformation

We will achieve this goal by:

- investing in the County’s Innovation Lab.
- deploying a County-wide social networking tool for idea incubation.
- completing the County’s ‘Digital Twin’ to design our digital future.

Rationale

Innovative technology-driven solutions improve our ability to effectively provide services. Technology now exists to reduce homelessness through 3-D printed shelters that are completed in hours; drones that deliver food/medicine to the elderly or infirm; artificial intelligence that makes decisions without human bias; and autonomous vehicles improving transportation options. Technology advancements will ensure greater security of our private information and more transparency about the County’s performance through accessible real-time data. As innovation continues to transform every aspect of our lives, so will TSS transform how the County ultimately serves residents.

Outcome

By embedding innovative thinking into our work, we will empower Santa Clara County to become a leading institution in government innovation.

Areas of Focus

- Develop a comprehensive digital strategy.
- Integrate design-thinking into our work.
- Seek opportunities for powerful value creation.
- Complete 25 proof-of-concepts annually.
- Partner with early adopters to test emerging technologies.
Goal #4: TRANSFORM

Initiatives Detail:

- **Provide Educational Opportunities**: Reach out to local schools to educate them about what TSS does and inspire youth to explore using technology to serve the community.

- **Integrate Design thinking into Our Work**: Use design thinking approaches to build human-centric solutions.

- **Seek-out 10X Opportunities**: Utilize SCCLab to perform 25 proof-of-concepts annually to find powerful value generating solutions.

- **Host TEDx-Like Conferences**: Encourage TSS staff to dream big by inviting speakers to speak about their technology innovations and provide context into what IT organizations like TSS can do.

- **Develop a Digital Transformation Strategy**: Create a portfolio of business capabilities and services that could benefit from digitization and design a strategy to address them.

- **Establish a Robot League**: Gain practical knowledge of how robotics can be used to deliver County services.

- **Expand SCCLab**: Expand SCCLab to include different teams and levels of the organization to foster innovative thinking across the organization.
Planning Process Detail

The County of Santa Clara’s Technology Services and Solutions (TSS) Department began the FY22-24 planning process shortly after establishing new leadership. While a wide range of perspectives provided the insights and input for this plan, the TSS leadership team was primarily responsible for setting our three-year strategic direction and establishing the framework for the strategic plan. Our leadership team includes representatives from the following TSS divisions:

- **Office of the CIO (OCIO)**, is responsible for overseeing all elements the Business Transformation portfolios – the major lever of which is the IT project portfolio. From intake to production - design, implementation, evaluation of business needs met, and into operations. Over the past year, the OCIO created Centers of Excellence to ensure the delivery teams who oversee new efforts and projects are close to the business lines and benefits and needs are understood throughout the process – keeping the customer central to the outcome. The Project Management Center of Excellence supports effective project delivery, and actively governs the $125M dollar project portfolio. The Business Relationship Management Center of Excellence supports client departments in deriving maximum value from TSS’ technology investments and services, while the Process Engineering Community of Practice standardizes approaches with both our process and business analysts’ teams. This standardization allows evaluation of our efforts through data and creates understanding of what we can do better to serve our clients in the future.

- **Vertical Business Partner Engagement:**
  - Public Safety and Justice includes all public safety agencies, County adult and juvenile criminal justice agencies, the local Superior Court, all County law enforcement agencies, and State and Federal justice agencies that require access to the County’s public safety and justice information.
  - Social Services provides economic benefits, public health insurance administration, food assistance, adult and child protective services, foster care and adoption services, and community-based prevention of abuse.
  - Health System is the local healthcare safety net and provider of comprehensive care to County residents, providing healthcare, emergency and trauma care, mental health services, low-cost health insurance, anti-domestic violence programs, immunizations, and the 911 emergency response system.
  - County Administration includes the Registrar of Voters, Clerk of the Board/Board of Supervisors, Facilities and Fleet, Planning and Development and the Office of the County Executive and federated departments.
  - Financial and Employee Systems is made up of Employee Services (human resources), the County Assessor, the Procurement Department, the Finance Agency (treasurer, clerk-recorder, tax collections), and Valley Health Plan (County insurance underwriter).
Appendix

• **Architecture, Innovation, Mode2 Solution Development** which leads innovation in TSS, creating the IT architecture of the organization. They research, collaborate with external and internal stakeholders, and set the IT principles and governance for how TSS will move the County into the future. This division also works with County stakeholders to gather, store and analyze data from different sources and business units. They collaborate with other agencies to manage data resources that can be used across the organization to streamline and simplify the way the government interacts with county residents.

• **Shared Services**, which enables the development, delivery, governance, and support of IT services. Over 40 IT services are available across SCC and these teams work alongside our vertical business partners to provide technological solutions and support to add value and efficiency to their businesses. This past year, TSS budget, finance, and procurement, and contract management teams fell under this division.

Below details TSS’ planning process:

**Phase 0 – Baselining**

When designing the planning process, TSS considered the following: internal County stakeholders and the needs of County residents, the parameters of the County’s budget and budgeting process, our current strategic plan and the County’s strategic plan. Interviews were conducted with each member of our leadership team and with the chief information security officer and chief privacy officer who are partners outside of TSS. These interviews helped us establish expectations and enabled us to obtain leadership’s input to our strategic areas of focus for the next three years. We gathered existing data including TSS Team plans and roadmaps, the County’s priorities as represented in the FY21 Budget Book Highlights, and the June 2020 Employee Wellness Survey (355 total responses). We also looked at external standards and best practices from Gartner®, including a CIO assessment, project management office and procurement/sourcing best practices.

**Phase 1 – Assessing the Current State**

When developing the TSS strategic plan, it was critical to understand the current state of our organization and the technology uses, access needs and circumstances of the County and its residents. An in-depth strategic assessment was key to this phase of the process. Conducted via an online survey of TSS chiefs, directors and managers (40 total respondents), the assessment gathered insights related to technology, the needs of our County partners and residents. It also identified the gaps and potential solutions for us to meet those needs. During this period, we conducted an in-depth exercise called “Digitopia” to prepare our staff and the County for very long-term digital changes and advances. This is so the strategies in the TSS strategic plan would address both current problems, challenges and opportunities and prepare the County for future technological advances.

A key component of this phase was in-depth interviews with our vertical business partners/clients to understand their strategic priorities and technology needs. TSS business relationship managers met with directors from 24 departments representing five vertical businesses (Social Services, Public Safety and Justice,
County of Santa Clara Health System, Financial and Employee Systems and County Administration). Where available, we gathered business/department strategic plans. The interviews and plans helped us to define the future needs of County departments that we can support using technology.

**Phase 2 – Establishing Strategic Direction, Goals and Initiatives**

Building off TSS’ existing core values, the leadership team through a series of virtual workshops defined our mission (core purpose) and determined that TSS’ vision is the County’s vision. Through a series of remote work sessions, senior leadership, directors and managers identified the strategic goals (focus areas of the strategic plan). The outcomes were clearly defined diagnoses for each goal and the guiding principles for the approach to achieving them. Coordinated actions or strategic initiatives were identified and further prioritized into near-term (initiatives that need to be implemented during FY21 through December 2021 and have budget funding, where applicable), mid-term (initiatives that need to be completed by the end of FY23) and long-term (initiatives that need to be completed by the end of FY24).

**Phase 3 – Action Planning & Implementation**

TSS directors and managers completed quarterly action plans for the FY21 near-term strategic initiatives identifying those responsible for completing the articulated outcomes of each initiative—this distributed responsibility but centralized accountability. Using a technology tool to manage action plan implementation and to report on TSS’ progress, we established a monthly strategy review process to seek support or solutions in overcoming obstacles to achievement.

**Perspectives were included from:**

- **TSS Staff:** Employee Wellness Survey, June 2020 (355 responses)
- **TSS Leadership:** Executive interviews, April 2020 (14 chiefs, directors and senior managers)
- **TSS Management:** CIO and Manager Strategic Assessment, May 2020 (40 responses: three chiefs, six directors, 20 senior managers, 15 managers, eight other)
- **Vertical Business Partners/ Clients:** Interviews with client directors
IT Capabilities and Value Stream

What is the Value Stream?

The Value Stream describes the work TSS performs to produce benefit or value for our customers. It reflects what we do. As projects, initiatives and services pass through the various phases of the stream, they increase in value. The value stream identifies the critical activities associated with the planning, sourcing, delivery, and management of our work.

Why is This Relevant to Strategy?

For TSS to meet the requirements of the departments we serve we must know and leverage our strengths. It is equally important to understand the weakness or gaps in our value stream. Identifying opportunities for improvement and mapping them to the value stream allows us to better understand how these issues impact our ability to meet departments’ needs. Associating strategic initiatives to the value stream allows us to identify where to concentrate our focus to strengthen the value stream. All the initiatives within this strategic plan are aligned to a phase within the value stream.
## Appendix

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Design</th>
<th>Acquire</th>
<th>Deploy</th>
<th>Utilize</th>
<th>Maintain</th>
<th>End-of-Life</th>
<th>Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 IT Strategy</td>
<td>2.1 Technology Design</td>
<td>3.1 Acquire Technology &amp; Service</td>
<td>4.1 Deploy Technology Solution</td>
<td>5.1 Service Provisioning</td>
<td>6.1 Service Management</td>
<td>7.1 Technology &amp; Service Disposal</td>
<td>8.1 IT Financial &amp; Asset Management</td>
</tr>
<tr>
<td>1.1.1 IT Governance</td>
<td>2.1.1 Detailed Requirements Development</td>
<td>3.1.1 Develop Enterprise Sourcing Strategy</td>
<td>4.1.1 IT Program and Project Management</td>
<td>5.1.1 Service Desk Management</td>
<td>6.1.1 Incident Management</td>
<td>7.1.1 Service Disposal</td>
<td>8.1.1 IT Budget Planning and Management</td>
</tr>
<tr>
<td>1.1.2 IT Strategy &amp; Alignment with Business Strategy</td>
<td>2.1.2 Technology Concept, Feasibility &amp; Business Value Analysis</td>
<td>3.1.2 Manage Sourcing &amp; Procurement</td>
<td>4.1.2 Solution and Service Development</td>
<td>5.1.2 Service Portfolio Management</td>
<td>6.1.2 Problem Management</td>
<td>7.1.2 Technology Disposal</td>
<td>8.1.2 IT Cost Management</td>
</tr>
<tr>
<td>1.1.3 IT Performance Measurement &amp; Management</td>
<td>2.1.3 Business Process Analysis and Re-engineering</td>
<td>3.1.3 Manage Vendor &amp; Supplier Relationships</td>
<td>4.1.3 System Integration</td>
<td>5.1.3 Service Catalog Management</td>
<td>6.1.3 Release Management &amp; Solution/Service Transition to Operations</td>
<td>7.1.3 Data Retention, Archiving, and Scraping</td>
<td>8.1.3 IT Software and Hardware Asset Management</td>
</tr>
<tr>
<td>1.1.4 IT Communication Management</td>
<td></td>
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<td>4.1.4 Solution and Service Quality Management &amp; Testing</td>
<td>5.1.4 Service &amp; Operational Level Monitoring &amp; Management</td>
<td></td>
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</tr>
<tr>
<td>1.1.5 Service Strategy and Planning</td>
<td>2.1.4 IT Service Design</td>
<td>4.1.5 Training &amp; Adoption for New Technology Solutions and Services</td>
<td>5.1.5 Service Level Reporting &amp; Communication</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1.2 Work Intake</td>
<td>2.1.5 Technology Design</td>
<td>4.1.6 Solution &amp; Service Transition into Production</td>
<td>5.1.6 User Training</td>
<td></td>
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<tr>
<td>1.2.1 Business Relationship Management</td>
<td>2.1.6 Information Architecture Design</td>
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<tr>
<td>1.2.2 IT Project Prioritization &amp; Portfolio Management</td>
<td>2.1.7 Integration and Interface Design</td>
<td></td>
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<tr>
<td>1.2.3 Technology Capacity Planning</td>
<td>2.1.8 User Experience Design</td>
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<tr>
<td>1.2.4 Technology Capacity Management</td>
<td>2.1.9 Technology Assurance, Technical Design Review</td>
<td></td>
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<tr>
<td>1.2.5 Demand Management (Business Capacity Planning)</td>
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<tr>
<td>1.3 Technology Strategy &amp; Innovation</td>
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<td>1.3.1 Technology Strategy, Lifecycle &amp; Roadmaps</td>
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<tr>
<td>1.3.2 IT Principles, Standards, and Guidelines</td>
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<tr>
<td>1.3.3 Technology Portfolio Management &amp; Optimization</td>
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<tr>
<td>1.3.4 Innovation Management and Technology Research</td>
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<tr>
<td>1.3.5 Technology Incubation, Proof of Concept Analysis</td>
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<td>1.4 Enterprise Data</td>
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<td>1.4.3 Data Architecture</td>
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<td>1.4.4 Master Data Management</td>
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<td>1.4.5 Enterprise Data Policies, Standards, and Guidelines</td>
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<tr>
<td>1.4.6 Data Platforms and Tools</td>
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<tr>
<td>1.4.7 Information Analysis</td>
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<tr>
<td>1.5 Risk &amp; Compliance</td>
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<td>1.5.1 IT Policy Management</td>
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<tr>
<td>1.5.2 Technology and Information Risk Management</td>
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<tr>
<td>1.5.3 External and Internal Compliance</td>
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<td>1.6.1 Maintain Citizen and Employee Privacy</td>
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</tr>
</tbody>
</table>
## Initiatives Mapped to the Value Stream

TSS’ FY22 near-term strategic initiatives map to the Value Stream:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerate Hiring Process</td>
<td>Expand SCCLab, the County’s innovation lab</td>
</tr>
<tr>
<td>Establish Staff Performance Metrics</td>
<td>Adjust job Classifications</td>
</tr>
<tr>
<td>Increase Professional Education</td>
<td>Ensure Healthy Environment</td>
</tr>
<tr>
<td>Distribute Decision Making</td>
<td>Encourage Peer Learning</td>
</tr>
<tr>
<td>Establish IT Communication Plan</td>
<td>Strengthen Operating Model</td>
</tr>
<tr>
<td>Deploy a Single Point of Demand Intake</td>
<td>Simplify Time Tracking</td>
</tr>
<tr>
<td>Quantify Client Satisfaction</td>
<td>Design Roadmaps for Key Technical Domains</td>
</tr>
<tr>
<td>Rationalize IT Project Portfolio</td>
<td>Complete the Technology Blueprint</td>
</tr>
<tr>
<td>Perform Technology Rationalization</td>
<td>Establish a Robot League</td>
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<tr>
<td>Host TEDx-like Conferences</td>
<td>Align Roles to Interests</td>
</tr>
<tr>
<td>Develop Dynamic Recruiting Dashboards</td>
<td>Create Performance Dashboards</td>
</tr>
<tr>
<td>Create Mentorship Program</td>
<td>Operationalize Governance Boards</td>
</tr>
<tr>
<td>Proactively Manage Training Credits</td>
<td>Balance the IT Structure</td>
</tr>
<tr>
<td>Develop Data Governance</td>
<td>Seek out 10X Opportunities</td>
</tr>
</tbody>
</table>

### Acquire

- Develop Leaner Technology Acquisition Process

### Deploy

- Automate Configuration Deployment
- Automate Software Development Testing
- Establish Dynamic Software Development
- Establish Operational Transition Review

### Utilize

- Enable 24/7 Support
- Target Industry Standard Service Desk Metrics
- Establish Operational Level Agreements
- Automate the Routine
- Govern Software Licenses
- Create a Customer-facing Service Catalog
- Introduce On-board/Off-board Asset Controls
- Enable Open Licenses and Low-code Tools
- Proactively Monitor System Events
- Increase Access to Micro Services

### Maintain

- Develop Business Continuity Capabilities
- Establish Internal Audit Function
- Retain Technical Knowledge
- Accelerate Change Management
- Establish Incident/Problem Management
- Establish Service Management Roles

### End of Life

- Re-engineer Funding/Budgeting Model
- Develop Transparent Charge-Back Model

### Finance

- Ensure Purchase Order Compliance
**IT Principles**

The following principles are used to evaluate, design, build, and operate information technology-based solutions. They ensure TSS meets customers’ needs, provides business value in cost-effective and risk-conscious ways, and is aligned with the County’s strategic goals.

<table>
<thead>
<tr>
<th>Governance</th>
<th>Enterprise Architecture</th>
<th>IT Service Delivery</th>
<th>Risk Management</th>
<th>Business Function</th>
<th>Platforms</th>
<th>Information and Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Business Priority</td>
<td>Manage Complexity</td>
<td>Value Delivery</td>
<td>Compliance with Law</td>
<td>Ease of Use</td>
<td>Portability</td>
<td>Information Stewardship</td>
</tr>
<tr>
<td>Stakeholder Involvement and Oversight</td>
<td>Hide Complexity</td>
<td>Complete Solution</td>
<td>Secure and Privacy by Design</td>
<td>Scalability</td>
<td>Reusability</td>
<td>Data Standards</td>
</tr>
<tr>
<td>Overall Benefit</td>
<td>IT Alignment</td>
<td>Agile Solution Delivery</td>
<td>Defense-in-Depth</td>
<td>Evolvability</td>
<td>Commodity</td>
<td>System of Record</td>
</tr>
<tr>
<td>Clearly Defined Rules</td>
<td>Technology Innovation</td>
<td>Continuous Improvement</td>
<td>Technology Risk Management</td>
<td>Requirement Based Change</td>
<td>Interoperability</td>
<td>Integration</td>
</tr>
<tr>
<td>Technology Governance and Assurance</td>
<td>Think Forward</td>
<td>Service Standardization</td>
<td>Business Continuity and Impact Analysis</td>
<td>Minimize Customization</td>
<td>Preferred Sources</td>
<td>Interfaces</td>
</tr>
<tr>
<td>Technology Ownership</td>
<td>Engineered Solutions</td>
<td>Automate Operations</td>
<td>Cloud Solutions</td>
<td>Confidentiality, Availability and Integrity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Use Solutions</td>
<td></td>
<td></td>
<td>Technology Lifecycle</td>
<td>Data in the Cloud</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on Future State</td>
<td></td>
<td></td>
<td>Virtualization</td>
<td>Information is an Asset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Standards</td>
<td></td>
<td></td>
<td>Sustainability</td>
<td>Information Sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost of Ownership</td>
<td></td>
<td></td>
<td>Documentation</td>
<td>Data Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor Lock-in</td>
<td></td>
<td></td>
<td>End-of-Life Solutions</td>
<td>Data Privacy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Governance

County Business Priority
Information systems exist to support the needs of County employees and residents. Each IT goal and major decision must be traceable to the underlying business requirement, business rule or strategy.

Stakeholder Involvement and Oversight
TSS identifies appropriate stakeholders and incorporates their input and requirements into IT decisions.

Overall Benefit
Technology decisions optimize the benefit to the County as a whole, as opposed to individual agencies, departments, or persons. We achieve this by balancing business needs, functional requirements, speed of solution delivery, value realization, total cost of ownership, usability, security, and compliance. We also look at reliability, supportability, scalability, the ability of computer systems or software to exchange and make use of information.

Clearly Defined Rules
IT principles, standards, roadmaps, procedures, and policies must be deliberate with a clear scope of applicability.

Technology Governance and Assurance
Compliance with IT principles, standards, roadmaps, and policies is monitored and enforced. This is achieved through the Technical Design Review process conducted by the Architecture Review Board. These rules are also applied during project prioritization, and service and technology portfolio rationalization.

Technology Ownership
IT service, application and infrastructure elements must have identified IT and, where applicable, business owners. Functional ownership of shared IT systems (e.g., email) belongs to the IT Governance Board.
Enterprise Architecture

Manage Complexity
Enterprise Architecture is a conceptual blueprint that defines the structure and operation of organizations. Enterprise Architecture principles and standards are applied to control the growth of our diversified technology base and to reduce cost. Lower complexity decreases cost and increases speed and quality.

Hide Complexity
TSS aims to provide simple and user-friendly IT solutions to our customers. We strive to encapsulate and manage the underlying technological complexity.

IT Alignment
Enterprise Architecture techniques, including governance, capability models, roadmaps, standards, and principles are used to align IT investments with business strategies and goals.

Technology Innovation
We actively identify and incorporate new information technology to meet business needs.

Think Forward
IT solutions are designed with consideration for the future and long-term sustainability.

Engineered Solutions
IT solutions are designed using engineering best practices to meet well-defined business objectives. Some examples include Availability Engineering, Process Engineering such as Six Sigma and Lean, Decision Frameworks, Systems Development Lifecycle and more.

Common Use Solutions
Preference is given to solutions that can be used across the County, versus developing or acquiring similar or duplicate solutions provided only to one agency or department.

Focus on Future State
The current technology state is documented only to the extent necessary to outline the change needed to drive the technology future state and enable efficient operational support.
Appendix

**Technology Standards**
IT standards are developed and followed to increase effectiveness, efficiency, supportability, agility, reusability, interoperability and reduce risk.

**Total Cost of Ownership**
IT solutions are evaluated based on their purchase price plus the cost of operation. Cost components may include hardware, software, vendor and in-house support, implementation, avoidance of lost opportunities, risk avoidance and intangible factors.

**Vendor Lock-in**
During the design of IT-based solutions, effort is made to mitigate the risk of becoming dependent on a particular vendor for products and services.

**IT Service Delivery**

**Value Delivery**
Information technology is used to create meaningful and measurable business value for affected stakeholders. Value is established jointly with stakeholders through negotiated service level agreements with measurable key performance indicators (KPI) and cost transparency.

**Complete Solution**
IT-based solutions address all three components of the solution space including *people, process, and technology*. Failing to address any of the three components will result in suboptimal solutions.

**Agile Solution Delivery**
Our highest priority is to satisfy our customers through early and continuous delivery of valuable services. When agile approaches (tasks divided into short phases of work) are viable, they are the preferred method of execution.

**Continuous Improvement**
We continuously measure service performance and seek opportunities to provide better and more cost-effective services.

**Service Standardization**
Services and service levels are standardized when appropriate to improve the speed, quality and price of services provisioned.
Risk Management

Compliance with Law
IT solutions and services comply with all relevant laws, policies, and regulations.

Secure and Privacy by Design
Security and privacy controls are built into systems from their inception rather than added after implementation.

Defense-in-Depth
The architecture embraces the concepts of compartmentalization and layers of defense creating buffers of safety.

Technology Risk Management
To minimize risk, we embrace solutions that are standard, industry-proven, best practice and delivered by trusted strategic partners.

Business Continuity and Impact Analysis
Critical business capabilities remain operational during system interruptions. Appropriate measures may include failover (when stand-by equipment takes over when main system fails), onsite and remote recovery, built-in resiliency, manual processes, special service contracts and similar solutions.

Business Function

Ease of Use
IT solutions embrace ease of use, natural user interfaces and seamless information intake and delivery. Solutions consider the customer interaction from the customer’s perspective and provide a positive experience whenever possible.

Scalability
The underlying technology infrastructure and applications are scalable in size, capacity, and functionality to meet changing County requirements.

Evolvability
IT solutions adapt with minimized costs to accommodate evolving County needs and a rapidly changing IT landscape.
Appendix

Requirement Based Change
Changes to applications and technologies made in response to current and future business needs. These needs may be related to functionality, efficiency, or risk management. The County does not fund technical improvement or system development unless a documented business need exists.

Minimize Customization
The long-term total cost of ownership drops significantly if the systems are kept as close to industry standards/base product as possible while still fulfilling the business purpose. Configuration is strongly preferable to customization.

Automate Operations
IT automates operational processes and minimizes manual operations. Self-service solutions are preferred when they improve key performance indicators and minimize risks.

Platforms

Portability
Solutions are not dependent on specific technology used in the infrastructure in which they are built and operate on a variety of platforms.

Reusability
Whenever possible, applications and infrastructure elements are assembled from reusable components or services. The following are preferred for generating data outputs:

- **Service-oriented architectures.** A style of software design where services are provided to the other components by application components through a communication protocol over a network.
- **Web services.** A method of communication between two electronic devices over a network.
- **Containers.** A standard unit of software that packages code and its dependencies, so the application runs quickly and reliably from one computing environment to another.
- **Microservices.** A method of developing software applications which are made up of independently deployable, modular services.
- **Other forms of standardized Application Programming Interface (API).** Software program that allows two applications to talk to each other.
Appendix

**Commodity**
Generic infrastructure components are preferred over specialized solutions. Vendor provided integrations like hyperconverged (IT framework that combines storage, computing, and networking) architectures are preferable to custom integration.

**Interoperability**
Whenever possible, technology solutions are based on industry best practices and open standards to enable interoperability.

**Preferred Sources**
Applications are selected with preference given first to commercial off-the-shelf (COTS) solutions, then to community supported open source options. Custom-built solutions are considered as a last resort. Exceptions are based on a thorough analysis.

**Cloud Solutions**
When appropriate, cloud services are considered as the first option. Cloud services are infrastructure, platforms, or software hosted by third-party providers and accessible to users over the internet.

**Technology Life Cycle**
The technology life cycle is actively managed using industry best practices including ITIL (IT Infrastructure Library) and frameworks like agile, and producing high-quality software in a systematic and cost-effective way.

**Virtualization**
Virtualized, or software-based, solutions are preferred over those that rely on any specific hardware or software component.

**Sustainability**
Infrastructure decisions incorporate environmental, fiscal, and social sustainability requirements such as determining how much energy is used by computing equipment in contrast to cooling and other overhead.

**Documentation**
IT documentation is created and maintained to simplify maintenance and knowledge transfer. Documentation avoids the use of jargon, acronyms, and technical terms unless it is certain that the audience understands them.

**End-of-Life Solutions**
Technology that has reached it useful life shall be actively identified and retired. New technologies intended to replace existing technologies shall include retirement plans for the old technologies as part of the implementation plan.
Information and Data

Information Stewardship
All enterprise data will have identified data stewards. Stewards are responsible for data lifecycle, availability, accessibility, data sharing, quality and defining sensitivity and urgency.

Data Standards
Enterprise data standards of both syntax (format) and semantics (meaning) are followed to enable interoperability with other information systems. Adoption of industry standards are considered where they exist.

System of Record
County data have a clearly defined authoritative primary data source. All other systems that use this source contain either read-only copies of this data or pointers to the primary source. When the County must maintain multiple Systems of Records, we may utilize Canonical Data Models, also referred to as Master Data Management (MDM).

Integration
Integration is considered for all information systems because the value of sharing data with other systems usually exceeds the value of keeping it siloed.

Interfaces
Integration between systems is performed using formally established interfaces. Interfaces are loosely coupled, backward compatible, self-describing, published, platform independent, reusable, and open standards based.

Information Confidentiality, Availability, and Integrity
Appropriate security controls and assurances are implemented to protect information against risks such as loss, unauthorized access or use, destruction, modification, or unintended or inappropriate disclosure.

Data in the Cloud
The County retains the ownership of its data stored in the Cloud and maintains the ability to move the data on-premise if needed.

Information is an Asset
Data usage and data sources are managed utilizing the County’s stewardship principles applied to any other asset to maximize the value of data for employees and residents.
Information Sharing (Need to know/Right to know)

Information is made accessible to all authorized users and systems, regardless of organizational affiliation and is subject to all relevant laws, regulations, and County policies. It may only be used for the purpose for which it was required to be accessed.

Data Quality

Efforts to improve data quality occurs as close to the source system of record as possible and is incorporated into the overall information lifecycle management processes. This ensures that the data is accurate, relevant, timely, and complete.

Data Privacy

Information systems only collect and retain personally identifiable information (PII) that is directly relevant and necessary to accomplish specified, documented and a published purpose. The data collection is based on specific authority and on individual consent to the extent practicable.