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October 27, 2021

To: Supervisor Hilda L. Solis, Chair
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From: Peter Loo
Acting Chief Information Officer

FIRST REPORT BACK ON DEPLOYMENT AND INTEGRATION OF INFORMATION TECHNOLOGY (ITEM NO. 13, AGENDA OF JULY 13, 2021)

On July 13, 2021, the Board of Supervisors (Board) directed the Office of the Chief Information Officer (OCIO) to provide a written report to the Board in 60 days on the status of the 2013-2023 Enterprise Technology Strategic Plan, with a special focus on how the goals and directives fit in coordination with digital divide strategies the County of Los Angeles (County) has adopted.

The OCIO launched a user-centered strategic planning program in 2018-2019 across the five clusters that represent 37 departments. As a result of this program, the County has developed five Enterprise Technology Strategic Goals that transcend departments and initiatives, align with the Board's Strategic Priorities, and create a common focal point for service delivery and technology investments that ultimately impact 10 million residents. These five strategic goals are *Mobility, Data as a Utility, Digital Civic Engagement, Workforce Empowerment, and Transform Procurement*.

These strategic goals are aligned with the County's 2016-2021 Strategic Plan's business priorities. Each of the strategic goals has been assigned teams consisting of an Executive Sponsor, OCIO Advisor, and team members from departments comprised of business and information technology leaders. These teams have developed strategic objective metrics for each of the goals. Also, the current and future initiatives are identified for each objective to achieve the target state. Since early 2020, these teams transitioned to execution mode to launch identified initiatives to achieve the target state. The attached report provides details of the approach, efforts, current status, and next steps of various initiatives.

Key initiatives for each goal are highlighted below:

- **Mobility** – Department initiatives to build out Wi-Fi infrastructure at County parks and libraries, and the Delete the Divide initiatives to establish a Community Wireless Network and Fiber to Home to help close the digital divide.

- **Data as a Utility** – Expansion of the County's enterprise Information Platform to support Justice Reform, Jail Closure Implementation Team, Countywide Prevention Metrics for child welfare, Homeless Initiative, and Anti-Racism, Diversity, and Inclusion Initiative.

- **Digital Civic Engagement** – A re-envisioning of digital services to enhance engagement with County constituents, including a resident portal that provides personalized access to County and municipal services.

- **Workforce Empowerment** – Creation of new technology, project management and data science classifications for hard to recruit positions and continue to build out County infrastructure to enable a mobile workforce.

- **Transform Procurement** – Internal Services Department efforts to improve and standardize procurement processes, develop novel solicitation approaches to increase the effectiveness of technology solutions and solicitation for a new eProcurement System that will modernize the County and business procurement user experience.

The Mobility, Data as a Utility, and Digital Civic Engagement strategic goals were leveraged and incorporated into the Digital Divide Strategic Goals, including:

- Low cost access to internet services by extending Wi-Fi services in County parks and libraries to include adjacent public areas, and establishing a Community Wireless Network for public access;

- Using available public and County data to develop and track internet adoption metrics and outcomes; and

- Enhancing community outreach and providing assistance in enrolling households into available financial assistance programs and low-cost internet services.

The Digital Divide initiatives and their alignment details are provided in the attached report.

Should you have any questions concerning this matter, please contact me at (213) 253-5627 or ploo@cio.lacounty.gov.

FAD:JMN:TJM
PL:JD:jmn

Attachment

c: Department Heads

Attachment

Enterprise IT Strategic Plan Update

Peter Loo
Acting Chief Information Officer

SEPTEMBER 2021

Chief Executive Office
COUNTY OF LOS ANGELES

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1. Overview

The County of Los Angeles' (County) 2016-21 Strategic Plan (https://www.lacounty.gov/strategic-plan-and-goals/) highlights the County's business priorities aligned with the mission to improve the quality of life for the people and communities of the County. To ensure the County leverages best-in-class technologies to address business strategic goals, the Office of Chief Information Officer (OCIO) embarked on a journey to develop an Enterprise Technology Strategic Plan in late 2018. The key purpose of the Enterprise Technology Strategic Plan is to ensure technology alignment to the business needs. OCIO launched a user-centered strategic planning program across the five clusters that represent 37 departments. As a result of this program, the County has developed five Enterprise Information Technology (IT) Strategic Goals that transcend departments and initiatives, align with the Board of Supervisors' (Board) Strategic Priorities, and create a common focal point for service delivery and technology investments that ultimately impact 10 million residents. These five strategic goals are:

1. **Mobility** – Accelerate mobility for employees and residents to deliver services anywhere at any time.
2. **Data as a Utility** – Enable the use and accessibility of data to build a Countywide culture that emphasizes data-driven decision-making.
3. **Digital Civic Engagement** – Engage our residents and communities with a variety of digital methods to interact with their government.
4. **Workforce Empowerment** – Build a modern workforce that embraces evolving technologies that transform service delivery.
5. **Transform Procurement** – Revamp procurement processes for more speed and flexibility to accelerate improved service delivery to residents.

2. Approach

OCIO facilitated a strategic planning program that included participation of over 200 business and IT professionals from 37 County departments. This program was focused on engaging employees and users from the beginning, on how we achieve outcomes, better serve our customers, and improve our staff's experience working across the County. The program identified how service delivery can be reimagined and how department technology needs can be supported to address the needs of our customers. The program is primarily facilitated through design-thinking workshops to engage users to generate bold ideas for how to address program outcomes through the enablement of IT and/or other innovative solutions. As a part of this program, OCIO facilitated workshops involving business and IT leadership. More than 1000 ideas were generated in these workshops, resulting in 200+ themes. The five enterprise IT strategic goals that emerged from the workshops were the result of common themes from the department clusters (public safety, operations, community services, health services, and children and family services). Each of the five strategic goals was assigned an executive sponsor, a goal team lead, an advisor from OCIO, and team members from departments that consisted of business and IT leaders. Throughout the year, each of the goal teams detailed the following components for each of the strategic goals and finalized these goals by late 2019:

- Common meaning and definition;
- Alignment to County strategic goals;

- Three to five objectives that will make each of the goals actionable, measurements for each objective; and
- Current and future initiatives that align with each objective and drive the progress and measurements.

In early 2020, the Strategic Goal teams transitioned to Strategy Execution Teams to launch identified initiatives to achieve the target state. These goals have been used in budget meetings to prioritize requests, align department priorities to the goals, and engage leadership to better serve the public by elevating department technology needs. All 200+ department technology requests in Fiscal Year (FY) 2020-21 aligned with one or more of the five strategic goals.

3. County Strategic Goals

3.1 Mobility

The Mobility Goal focuses on accelerating mobility for employees to work and residents to receive services anywhere at any time. To make tangible and measurable progress, a Mobility Strategic Goal Team was assembled with 17 team members from nine departments. The Mobility Goal Team developed five key objectives and identified current and future initiatives that support the goal. The target vision of this goal is a County workforce that is fully mobile and residents that can use mobile devices to conduct business with the County. The five objectives, initiatives, and corresponding status are as follows:

1. Wireless – Increase wireless capacity and access for County staff and the public at County facilities.

Initiatives	Accomplishments	Next Steps
Increase Wi-Fi capacity in County facilities that serve the public to make key internet services available to the public.	Wi-Fi capacity at 25 percent of target County facilities have been completed. The wireless sub-team is working with the Internal Services Department (ISD) database team to integrate bandwidth and Wi-Fi installation data into a database by December 2021.	Work with ISD to influence and support a Countywide Network service that includes Wide Area Network, Local Area Network, and wireless infrastructure.
	90 percent County conference rooms have implemented the baseline conference room technologies. The wireless sub-team documented the technologies required to provide a seamless conference room experience.	
	Investigate options to deploy Wi-Fi as an enterprise-wide service instead of relying on individual departments to provide funding (Wireless as a Service). Milestones are 50 percent complete.	

2. Unified Communications (UC) – Provide UC tools and services to County employees to facilitate multiple methods of communication anywhere at any time.

Initiatives	Accomplishments	Next Steps
Drive the adoption of Microsoft (MS) O365 workloads that provide employees with the tools needed for remote work (e.g., email, OneDrive, SharePoint.). Work with ISD in the adoption of MS Teams Voice as an option for departments as they migrate away from legacy voice technologies.	Established a baseline with adoption targets for each workload to track MS O365 Adoption. Completed a pilot of MS Teams Voice integration with Cisco Voice Over IP telephony solutions to create a seamless, one device unified communication experience for County employees.	Integrate MS Teams Voice with Cisco Voice Over IP telephony solutions to create a seamless, one device unified communication experience for County employees.
	Track the adoption of MS Teams Voice as an alternative to legacy telephony solutions and set targets for adoption of MS Teams Voice throughout the County. There are currently 2,720 users using MS Teams Voice for all telephonic communications.	
	Established a group of Department MS Teams Champions to create awareness of MS O365. Champions will provide in-house expertise to departments to promote MS O365 adoption. Champions will provide continued support to departments by sharing examples, tools, and migration plans. Milestone kicked off April 18, 2021 and monthly meetings are being held. Currently, there are 15 Champions across 10 County departments.	

3. Mobility Device – Increase the purchase and use of laptops and tablets in the County to enable employee mobility.

Initiatives	Accomplishments	Next Steps
Promote the use of laptop computers or tablets for employees. ISD is working to establish a leasing option for laptops and tablets.	For Mobile Devices – track percentage of mobile devices vs. desktops; target a 10 percent year-over-year increase of mobile devices. Leasing options for Mobile Devices – track number of leasing options/contracts available to departments; track percentage of leased vs. purchase devices, with a year-over-year target increase of 10 percent over a five-year period. Leasing solicitation has been completed by ISD Purchasing.	Increase the selection of mobile devices to include laptops, tablets, and Chromebooks from various vendors as part of the purchasing and leasing program.
	Proposed new policy on the use of Information Technology Infrastructure Funding (ITF) for PC replacement. Mobility Goal team proposed policy change was approved by the IT Investment Board. The policy change has been communicated to the Technology	

Initiatives	Accomplishments	Next Steps
	Management Council and the Business Management Council.	

4. Mobility Services – Increase the number of services that residents of the County can access from mobile devices by increasing the number of available mobile services.

Initiatives	Accomplishments	Next Steps
Identify the top five manual department transactions that require the public to come into a County facility or mail information.	Completed the baseline of services that require on-site or mail-in customer interaction.	Implement two mobile applications from the list of the top five manual transactions that can be automated based on the impact to the public and department readiness.
	Established evaluation criteria and evaluated/scored all projects and selected the top five projects. ITF requests have been approved for projects at Department of Human Resources (DHR) and Library.	
	Measure the adoption of the automated transaction and the related savings by tracking usage over time. Project is in progress.	

5. Mobility Culture – Change the culture of the County to embrace mobility and enhance the ability for employees to work and deliver services from anywhere at any time.

Initiatives	Accomplishment	Next Steps
Support workforce telecommuting options and the ability to work from remote locations. Support the County's mobility culture to improve recruitment of new employees and the retention of existing employees.	Collected metrics for telecommuting staff participation by determining percentage of staff that are actively telecommuting out of the total number of staff in departments with telecommuting policies.	Develop strategies to close the gap between the current baseline and future opportunities for improved teleworking in the County. Develop requirements for a common workspace hoteling reservation system.
	Collected information average frequency of telecommuting among County staff that use alternate work locations.	
	Identifying the number of workstations available for County staff at alternative work locations preparing survey to aggregate available hoteling space across departments.	

3.2 Data as a Utility

The Goal "Data as a Utility (DaaU)" is focusing on building a Countywide culture that emphasizes data-driven decision-making. This requires improving the data maturity across departments, as well as building governance structures and create data management resources that enable a data-driven environment and culture. This goal is aligned with the County Strategic Goal – "III, Realize Tomorrow's Government Today."

The County has yet to fully leverage big data and analytics to enhance its business operations and improve service delivery. The current state of data and information management is at a low maturity level. Data quality issues are resulting in many questions on the completeness, timeliness, and consistency of information captured across disparate systems. Additionally, distributed data captured across multiple systems lack common definitions and taxonomy. Auxiliary and support systems created to address gaps in legacy systems have resulted in data silos and duplicated data.

The target vision of this goal includes data inventory as an initial and important step of gathering the current state of datasets. It will help identify and prioritize the data sets which are required for the decision-making aligned with the business priorities. Having a standard definition of these cross-departmental data sets will create awareness and enable synergies across the departments. The data platform services will store, manage, govern, and protect county data, enrich this data with metadata classification/cataloging and integrate orchestrate data assets across the enterprise. The data governance overlays structure and consistency on the processes, infrastructure, and tools that facilitate secure and ubiquitous access to data. The multi-department data sharing creates clarity for stakeholders by creating inter-departmental communication channels, data sharing agreements, and common elements and schemas for general County data and specific line-of-business data. Lastly, there would be a need to instill a data-driven culture through communicating and building awareness about how the future of data can support County programs and the people they serve.

During the first year of the Strategic Plan, the DaaU Strategy Team developed the following objectives required to achieve the vision. The current initiatives are collated from all the departments, as well as potential future initiatives needed to fulfill the gaps. After finalizing the objectives and initiatives, the DaaU team moved to the strategy execution phase from early 2020 and accomplished the following activities:

1. Data Inventory – Identify cross-departmental data elements and develop its standard definition to the extent possible.

Initiatives	Accomplishments	Next Steps
Expansion and Standardization of Sexual Orientation and Gender Identity (SOGI) Data Collection in the County.	Standardization of SOGI Data Collection published in May 2021.	Development of a Technology Directive to facilitate the implementation of SOGI data collection standards and best practices by October 2021.
Pretrial Reform Data Collection.	This project was created through a Board motion in August 2020. The team is in the final stages of completing the initial report back on this motion, which will provide information on outcomes for individuals released pretrial and how these outcomes very by individual characteristics,	The report is expected to be filed with the Board at the end of September 2021.

Initiatives	Accomplishments	Next Steps
	pretrial release programs, and supportive services programs.	

2. Data Platforms – Establish data platforms through a common reference architecture to enable effective use of data.

Initiatives	Accomplishments	Next Steps
Data Principles and Reference Architecture	The reference architecture for the data landscape is prepared and presented at Information Management Committees (IMC). Also, the Enterprise Architecture principles are finalized, including data principles to guide the departments.	As part of Enterprise Architecture and Information Management Committees.
Application Programming Interphase (API) Management	Implemented an API management platform to enable the use of modern web-based interfaces to access data and enable coordination of care.	Develop a Provider Registry and API – enabled webservice for care coordination.
County Data Analytics Platform	Evaluating cloud-based analytic tools to leverage modern information management and machine learning capabilities for the County's Enterprise Information Hub.	Selection of a modern cloud-based analytics toolset.
Department of Public Social Services Enterprise Data Warehouse and Data Analytics initiative	Initiated an effort to develop a foundation and a systematic approach for ingesting, profiling, governing, securing, analyzing, and consuming large and diverse datasets.	Achieve a positive business impact that is enabled by solid analytics models.

3. Data Sharing and Governance – Facilitate inter/intra-departmental data programs and data sharing through governance bodies, guiding principles, and compliance with applicable policies/regulations.

Initiatives	Accomplishments	Next Steps
IMC	Prioritized the development of a County Consent Form and management process to enable data sharing for care coordination, and adopted data standards for race, ethnicity, sex, and SOGI.	Develop a County Consent Form and technology directives to guide the adoption of data standards for race and ethnicity, and SOGI data.
Information Systems Advisory Board (ISAB)	ISAB has begun planning for Data Governance, to include Data Catalogs, Data Inventory, and Data Platforms, in addition to feeding Business Intelligence and Analytics frameworks.	Execute the strategic plan developed by ISAB.

Initiatives	Accomplishments	Next Steps
Strategic Planning – Data Governance across Justice Community		
Data Sharing Handbook	Published a County Data Sharing Handbook that included an initial set of five protocols for data sharing.	Include additional protocols for data sharing, including the use of a County Consent Form.
Justice Metrics Framework (JMF)	JMF is an initiative to develop outcome metrics to assess the County's performance in achieving justice reform goals. The JMF Baseline Report was published in February 2021, describing various justice and non-justice outcome metrics for the re-entry and during and/or after supervision periods.	Align JMF metrics to support goals and priorities of the Alternatives to Incarceration (ATI) Initiative. Reconvene the JMF Advisory Committee later this year to continue developing metrics for other intercepts of the justice process.
Alternate Crisis Response (ACR) – Information Exchange	ACR initiative was launched to explore ways for the County to provide access to a consolidated health and human services response, consistent with and building off the recommendations in the ATI efforts. A working group from Department of Mental Health, Didi Hirsch, Los Angeles Police Department, Sheriff, Emergency Medical Services Commission, OCIO, and County Counsel formulated a project write-up, laying out the needed project scope. A consultant has been hired to develop the solution requirements.	Develop solutions to share information about individuals in crisis between care providers, such as service history, hooks and triggers, crisis care plans, and/or psychiatric advance directives.

4. <u>Open Data leveraging Civic Engagement</u> – Create a next-gen Open Data 2.0 for the constituents of the County and enable feedback through Civic Engagement for continuous improvements.

Initiatives	Accomplishments	Next Steps
Open Data 2.0 Platform	Developed Open Data 2.0 Strategic Plan document which provides an assessment of the current state of Open Data in the County. This will address	Finalize the platform selection and start pilot use cases along

Initiatives	Accomplishments	Next Steps
	challenges of the current model followed by a vision for Open Data 2.0, including recommended technical and functional capabilities and an operating model to implement this vision. The Request for Bid is in progress to finalize the platform to implement Open Data 2.0 vision.	with migration of existing storyboards and datasets to new platform.
Countywide Prevention Metrics (CPM)	Finished stakeholder engagements to identify indicators, data sources, and stories for the next iteration of CPM. https://data.lacounty.gov/stories/s/tvyf-vhpc	Developing wireframes of additional dashboards based on the identified indicators from stakeholders, procuring, and analyzing data from stakeholders, developing additional dashboards and data stories.

5. Future of Data – Instill a data-driven culture through communicating and building awareness about how the future of data can support County programs and the people they serve.

Initiatives	Accomplishments	Next Steps
Data Literacy including Women in Data Science and Data and Donuts.	Ongoing events in multiple areas to advocate and promote digital literacy skills.	

6. Data Services – Enable data services from Strategy, Project, Analytics, Research, and Support Services for the County's data needs.

Initiatives	Accomplishments	Next Steps
Information Management Maturity Assessments	Performed maturity assessment for two departments, Probation and District Attorney and provided the roadmap with actionable plan to establish data organization.	Execute plan in these two departments with support of the Department leadership.
Enabling Data Services (i.e., Strategy, Project, Analytics,	Developed the strategy document, identifying the service offerings, roles, and plan to ramp-up services.	Pilot the services with one of the departments.

Initiatives	Accomplishments	Next Steps
Research, and Support) at ISD and OCIO.		

Continuing the momentum, the DaaU Team will continue focusing on the following in the next 12 months:

- Expansion of data standardization for other common terms used within the County, especially focusing on social-economic issues;
- Assist Departments in modernizing their data platforms, aligned with the Countywide Enterprise Architecture principles;
- Implement the Countywide Open Data 2.0 platform and operating model;
- Assist and enable information exchange for ATI/ACR efforts;
- Develop principles for data management in emerging technologies including Internet of Things; and
- Enable Data Services in partnership with ISD to provide end-to-end data capabilities.

3.3 Digital Civic Engagement

Digital Civic Engagement Goal is among the County's enterprise Technology Strategic Plan, which focuses on creating connections between the public, communities, and government to provide seamless customer experience. The County departments currently have over 250 online services enabled using department-specific portals, and customer experience can be very disparate and required an understanding of department service offerings. The County intends to provide various digital methods to increase engagement with its constituents and create a better experience by leveraging a multi-channel approach to connect with its constituents on their terms. The Digital Civic Engagement Goal aligns with the County and department's Strategic Plans, including Board Priorities, Strategy III.2, Embrace Digital Government for the Benefit of our Internal Customers and Communities; and Strategy III.4, Engage and Share Information with Our Customers, Communities, and Partners.

The Digital Civic Engagement Goal Committee was established with 20 members from 15 different County departments to accomplish the outcomes. The Goal Committee meets monthly to collaborate and refine the objectives and associated measures and align current and future initiatives to drive the strategic goals forward. The vision of the Goal is to improve County services by:

1. Create a consistent constituent experience for digital services;
2. Share information to streamline processes;
3. Personalize services to provide promptly complete transactions and find relevant resources; and
4. Collect feedback to improve services.

Below are three key objectives created to support the Digital Civic Engagement Goals:

1. Guiding Principles – Establish a series of guiding principles for countywide digital services that promote equitable access and encourage design and creation approaches that are inclusive, open, transparent, and secure.

Initiatives	Accomplishments	Next Steps
Establishing guiding principles to foster a culture of innovation, analysis, and experimentation for digital services.	Established a multi-department Digital Civic Engagement Workgroup. Finalized and adopted Digital Civic Engagement principles, goals and objectives, and initiatives in May 2021.	Develop a Digital Civic Engagement Vision and Plan.
Identify three to five opportunities to provide digital services to residents.	A sub-committee team was established in June 2021 to conduct an inventory of County digital services and to identify opportunities for creating or enhancing digital services.	Identify current offline countywide services that would be good candidates for digital and/or virtual augmentation.

2. External Focus – Improve the end-user experience by maximizing the use of innovative digital resources and capabilities to support direct public engagement with the County.

Initiatives	Accomplishments	Next Steps
Develop before and after surveys to measure public sentiment towards County digital resources.	A sub-committee team was established in June 2021 to identify an approach and methods to collect public feedback on current and unfulfilled digital services.	Determine the feasibility of contracting a usability organization. Define standardize public outreach and training models and methods. Procure the services to collect user sentiment and feedback across County departments.
Create an engagement tool inventory that catalogs the usage and best practices	A sub-committee team was established in June 2021 to conduct an inventory of County digital services.	Identify digital services used by the public and create an inventory.

Initiatives	Accomplishments	Next Steps
of all County public engagement tools.		
Establish a Digital Civic Engagement vision.	A sub-committee team was established in June 2021 to develop a Digital Civic Engagement Vision for a resident portal.	Continue to work with the Committee to complete the Digital Civic Engagement's Vision document by the end 2021.

3. Internal Focus – Promote the internal changes needed to adopt, support, and improve the County's digital services.

Initiatives	Accomplishments	Next Steps
Establish a forum for centralized cross-sharing of information, such as foundational requirements, use cases, best practices, and lessons learned among County departments.	A sub-committee team was established in June 2021 to develop an online resource for departments to share best practices and solutions for digital services.	Launch a governance model for the County's digital services. Identify resources (staffing and funding) needed to enable the Digital Civic Engagement Vision.

3.4 Workforce Empowerment

The Workforce Empowerment Goal focuses on planning, recruiting, and developing the County's IT workforce to ensure that it is sufficiently positioned to successfully support County IT modernization initiatives and effectively implement, operate, and maintain IT assets. The goal aligns with the County Strategic Goal III, Realize Tomorrow's Government Today.

In today's environment, where organizations across public and private sectors are struggling to recruit, retain, equip an IT workforce requisite skills and competencies, it is more important that the County define its current and future IT workforce requirements, identify IT workforce gaps and implement strategies to optimize IT workforce succession planning, recruitment, and retention. The objectives of the Workforce Empowerment goal include:

1. Workforce Planning – Acquire the expertise to conduct workforce planning including people, skillsets, and tools.

Initiatives	Accomplishments	Next Steps
Conduct 2021 Countywide Succession Planning Program to assess key staff readiness and availability to assume leadership responsibilities, which will inform individual and department workforce and succession planning.	**In Progress** – The 2021 Countywide Succession Planning Program is underway. DHR distributed an online Leadership Evaluation to help departments assist their bench strength of their Management Appraisal and Performance Plan (MAPP) employees, including their IT leadership. They have distributed a customized Departmental Leadership Evaluation Summary Report, which each department will use to create a Department Leadership Development Plan that will support MAPP employee development and leadership development plans. (https://lacounty.sharepoint.com/sites/SuccessionPlanningProgram/SitePages/2021-Program-Launch.aspx)	Market and communicate the importance of succession planning through County IT governance meetings.

2. IT Classifications – Modernize IT job titles, classifications, and salary structures to attract, recruit, hire, and retain technology talent needed to support ever evolving IT services.

Initiatives	Accomplishments	Next Steps
Create and establish key IT and data science classifications to support the delivery IT services and data driven decision-making.	**Completed** - OCIO partnered with CEO Classification and Compensation to successfully create and establish ten new classifications across three series - IT Business Analyst, IT Project Management, and Data Science. Following briefings with County business and IT stakeholders in January to February 2021, the classifications were approved by the Board in March 2021 and were published and made available to departments in April 2021.	OCIO will assist CEO Classification to review and/or approve department reclassification and reorganization requests involving these classifications and new position requests in the FY 2022-23 budget process.
Conduct job and competency analyses to develop examination specifications for new IT and data science classifications.	DHR, departmental subject matter experts in consultation with OCIO are developing job and competency models for the new classifications. A list of work behaviors and competencies needed for each classification and ratings have been completed. DHR is completing data analysis and is targeting completion of exam plans in August 2021.	Exam plans will be used in recruitment and outreach plans described below.
Develop recruitment and outreach plan to target talent for new IT and data	The new classifications will be treated as "Master Calendar" items and DHR will be responsible for developing outreach and examination plans on behalf of all departments for these jobs. DHR will use job and competency models to establish the contents of the examination and will publish job announcements for these exams on various websites, as well	

Initiatives	Accomplishments	Next Steps
science classifications.	as the County's Job Opportunities website. Further, it is likely that DHR will facilitate outreach to hard-to-find candidates using a variety of recruitment tools, resulting in a higher-quality applicant pool for these newly created classifications.	

3. IT Hiring – Acquire and deploy technologies to improve the quality and speed of IT staff hiring and onboarding.

Initiatives	Accomplishments	Next Steps
Develop and deploy an electronic dashboard with time-to-hire data that will be available to human resources staff throughout the County to provide on-demand hiring metrics, including IT classifications.	DHR has engaged Accenture to develop and deploy the data visualization and analysis tools to extract and collect data from multiple enterprise systems to produce and report on relevant operational metrics around all aspects of County hiring processes. When fully implemented, these dashboards will provide status on 29 metrics to assist the County to innovate and make improvements to County hiring processes.	
Expand video interviewing for countywide selection/hiring processes, including IT hiring.	DHR has rolled-out video interviewing software throughout the County as a cost- and time-effective solution to conducting interviews. It enables departments to conduct "one-way" interviews, where the department pre-records prompts and questions for respondents, and respondents access this recording to respond to the interview questions via a webcam. The recorded responses are then scored by interview raters. This enables candidates to take the interview at any time, significantly reducing the no-show rate, and enabling raters to provide scores by reviewing recorded responses at a time convenient for them. Since 2017, 20 departments have used video interviewing to conduct approximately 12,000 interviews, representing an 86.5 percent "show" rate.	Promote the use of video interviewing through County IT governance meetings to streamline IT hiring.
Expand the use of computerized online IT knowledge testing to streamline for hiring of IT candidates.	Traditionally, candidates for IT positions have been assessed on their IT knowledge using interviews and training and experience evaluations. Each of these methods are prone to error: interviews are not sufficiently comprehensive to adequately cover a knowledge domain, while training and experience may not indicate the quality or depth of knowledge.	Promote the use of online tests Countywide exams, such as the IT and data science. OCIO will promote and encourage these assessments in

Initiatives	Accomplishments	Next Steps
	Moreover, these methods are time- and resource-intensive, a significant problem when the County is competing for talent with much faster-moving private sector IT organizations. To address these challenges, DHR introduced IT knowledge testing using standardized subjective multiple-choice tests to assess each candidate's depth of knowledge on skills that are relevant to a particular job. Use of these tests have reduced the amount of time required to assess job candidates - the average time for conducting exams using IT knowledge tests is about 33 days, compared to an average of 69 days for exams that do not use IT knowledge tests, a 52 percent decrease.	departmental exams to streamline IT hiring.

4. Workforce Development – Enhance employee development and skill sets that will support current and/or future technological investments across the County.

Initiatives	Accomplishments	Next Steps
Los Angeles County's Udemy (Udemy) for business online learning platform to support supervisor-guided and employee-self-directed IT learning.	The County has purchased Udemy, a business online learning catalog of over 5,000 on-demand courses. DHR has been instrumental in developing County IT staff through Udemy's extensive technology course selection. The County's Udemy implementation has empowered and democratized learning and enabled IT staff to: keep pace with evolving technologies and practices; achieve constant IT learning to maintain capability; provide IT certification preparation; and develop employees for career changes and advancement in the IT field.	Promote the use of Udemy, a business online learning platform to improve the knowledge and skills of IT staff.

The Workforce Empowerment team future initiatives include:

- Collaborating with DHR to identify and acquire potential workforce planning software solutions to analyze, forecast, plan workforce supply and demand, and assess gaps to inform recruitment efforts and succession planning;
- Convening a working group of County administrative and IT professionals to analyze current County IT job families and/or class structure, identify challenges and opportunities, and develop a roadmap for IT classification modernization;
- Collaborating with DHR to acquire and deploy an Artificial Intelligence Machine Learning solution to streamline the review of job candidate applications, including IT job candidates; and
- Collaborating with DHR to acquire and deploy a smart messaging service communication solution to provide real time updates to job candidates on their exam status.

3.5 Transform Procurement

The Transform Procurement Goal focuses on revamping procurement processes for more speed and flexibility to accelerate improved service delivery to residents. As the Purchasing Agent for the County, ISD Purchasing and Contracting is leading this Goal and driving procurement transformation. To make tangible and measurable progress, the Transform Procurement Goal Team developed five key objectives and identified initiatives that support the Goal. The Goal, objectives, and corresponding initiatives are aligned to Board priorities and the County Strategic Plan, including the Digital Divide Strategy. The target vision of this goal is the improvement of County procurement processes to facilitate the acquisition of products and services to improve service delivery to the residents of the County, while maintaining the necessary controls to ensure quality. This has been particularly critical to the County during the COVID-19 pandemic.

The five objectives, initiatives, and corresponding status are as follows:

1. New eProcurement Solution – Identify and implement a new end-to-end eProcurement system that will modernize the County and the business procurement user experience.

Initiatives	Accomplishments	Next Steps
Procure a new eProcurement system that will incorporate business process improvements with best-in-class technology to allow the County to achieve its business goals while maintaining transparency, accountability, and efficiency.	ISD developed system requirements and released a Request for Proposal (RFP) for a new eProcurement system and is currently evaluating vendor proposals.	Award contract and request budget to acquire and implement the new system and develop all the necessary interfaces to eCAPS.

2. Standardize Processes and Practices – Develop standard processes and tools for appropriate IT-related fields, products, and services.

Initiatives	Next Steps
Implement business process improvements across contracting functions resulting in more than 75 percent cycle time reduction in some functions.	ISD measuring impact of business process improvements.

3. Enhance access to technology solutions – Modify or develop new and existing agreements to increase volume and speed in accessing technology solutions.

Initiatives	Next Steps
Release new RFP for a managed service provider to transform the way the County contracts for short-term discrete IT services, such as software development, project management.	ISD managing the RFP process for a new managed service provider.

Initiatives	Next Steps
Develop master agreements for commodities that Departments use often and at scale, including software licenses, to obtain better pricing and reduce cycle times.	ISD managing the development of new master agreements.

4. Novel Sourcing Methods – Implement novel solicitation approaches to increase the effectiveness of technology solutions.

Initiatives	Next Steps
Implement a full online solicitation and bid process via eCAPS procurement for all purchasing needs.	100 percent adoption targeted for late 2021.
Develop and launch a new fully paperless procurement request solution for ISD's internal procurement needs.	ISD tracking a five-fold cycle time reduction for internal requests.
Lead and participate in dozens of business outreach events to increase opportunities for local, small, and diverse businesses in the region.	ISD leading the outreach efforts to diverse businesses.

4. Digital Divide Strategy

On February 23, 2021, the Board directed the County, OCIO, in coordination with the Departments of ISD; Regional Planning; Public Works (DPW); Consumer and Business Affairs; Workforce Development, Aging and Community Services; County Counsel; and other relevant departments, to develop and implement a County Digital Divide Internal Action Plan. The Board motion also directs the OCIO, in coordination with the above-listed departments, as well as external stakeholders including cities, private sector partners, community-based organizations, school districts, nonprofits, venture capitalists, and others to develop and begin implementing a Comprehensive Regional Digital Divide Strategy for the County.

OCIO initiated the effort in March 2021, by establishing the "Digital Equity Regional Teams" structure to facilitate the development of the Digital Divide Regional Strategic Plan. The Teams consist of multiple groups, including the working groups, the "County Digital Divide Action Team," focused on County's internal action plan, and the "County Digital Divide Regional Strategy Team," focused on the regional strategy. The Regional Strategy Team is focusing on developing long-term sustainable solutions, policy and high-value systemic programs interventions using perpetual funding options. The County Action Team is focusing on collating all digital divide efforts completed/in-progress by participating departments, as well as aggregating all datasets to develop the current baseline and identify gaps. In addition, the County Action Team identified initiatives in the high-impact neighborhoods in each district that can be launched in the near term. The top three to five neighborhoods are identified in each district so that current and/or upcoming initiatives can be focused in their areas. The federal and state grants and/or funding applications are being considered for these prioritized initiatives.

Three goals and respective objectives identified to address the digital divide holistically are listed below:

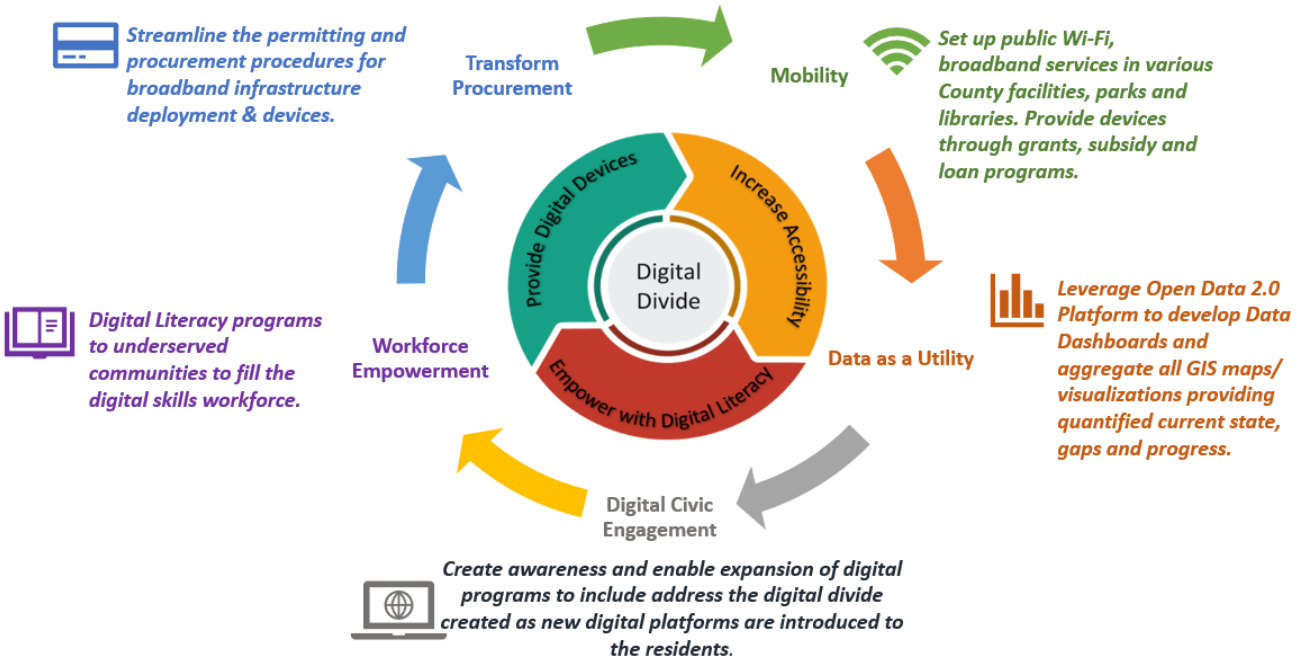
- Goal 1: Increase Accessibility
  - Identify gaps in the availability of broadband access, capacity, and services;
  - Accelerate broadband access solutions deployed in underserved areas;

- Reduce internet subscription costs;
- Increase public-private partnerships related to broadband access services; and
- Increase awareness about broadband access in the community.

- Goal 2: Provide Digital Devices
  - Develop a sustainable device procurement process;
  - Enable reduced-cost device options; and
  - Enable after-purchase technology support options.

- Goal 3: Empower with Digital Literacy
  - Identify digital literacy gaps;
  - Enable new channels to deliver digital literacy programs; and
  - Introduce new training programs to cover diverse needs.

The Enterprise IT Strategic Goals approach is leveraged to jump-start Digital Divide Strategic approach.



The following are some of the key initiatives aligned with the strategic goals which are prioritized to address the Digital Divide:

Initiatives	Lead Department	Mapped Enterprise IT Strategic Goal	Mapped Digital Divide Strategy
County laptop lending program	Library	Mobility	Provide Digital Devices
Device Distribution Program	Los Angeles County Office of Education (LACOE)	Mobility	Provide Digital Devices

Initiatives	Lead Department	Mapped Enterprise IT Strategic Goal	Mapped Digital Divide Strategy
Delete the Divide – Empowering Youth and Small Businesses with Digital Skills	ISD	Workforce Empowerment	Empower Digital Literacy
Los Angeles Community Impact Hubs – Tech Centers for technical support	LACOE in partnership with Greater Los Angeles Education Funds	Digital Civic Engagement	Empower Digital Literacy
Title 16 and Title 22 Wireless Ordinances	DPW	Transform Procurement	Increase Accessibility
County Wi-Fi Hotspot Locator	Library and ISD	Mobility	Increase Accessibility

County of Los Angeles
CHIEF EXECUTIVE OFFICE
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(213) 974-1101
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FESIA A. DAVENPORT
Chief Executive Officer

February 7, 2022

To: Supervisor Holly J. Mitchell, Chair
Supervisor Hilda L. Solis
Supervisor Sheila Kuehl
Supervisor Janice Hahn
Supervisor Kathryn Barger

From: Fesia A. Davenport
Chief Executive Officer

SECOND REPORT BACK ON DEPLOYMENT AND INTEGRATION OF INFORMATION TECHNOLOGY (ITEM NO. 13, AGENDA OF JULY 13, 2021)

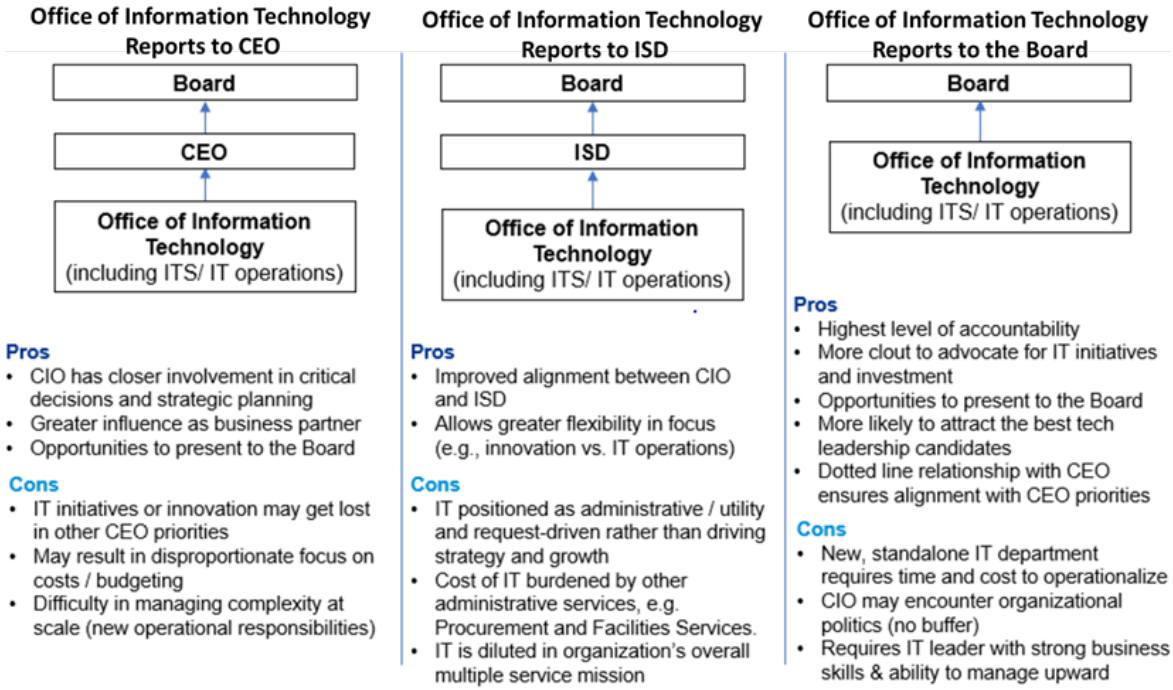
On July 13, 2021, the Board of Supervisors (Board) adopted a motion directing the Chief Executive Officer (CEO) to report back in 90 days on the organizational models and appropriate roles and responsibilities of the County of Los Angeles (County) departments, the Office of the Chief Information Officer (CIO), and the Internal Services Department (ISD), as it relates to the management and operations of information technology (IT), data sharing, cybersecurity, and IT procurement, including policy recommendations on appropriate authority to enforce policy compliance.

Information Technology Organizational Model

The CEO engaged KPMG LLP (KPMG) to conduct an IT organizational assessment based on a peer entity analysis and review of current state of IT management and operations and develop organizational models for the CEO to consider. A copy of the KPMG report is attached. KPMG conducted 13 peer entity analyses and found nine entities had a hybrid IT organization model, two were centralized, and two were decentralized. In all the 13 peer entities reviewed, IT strategy, management, and operations were brought together under a single reporting line with the CIO responsible for the IT strategy and operations. KPMG also surmised that information security functions are typically the responsibility of the Chief Information Security Officer (CISO). The CISO's reporting structure varied, with some CISOs reporting to the CIO and a few reporting to the Chief Operating Officer. IT procurement functions exist as both centralized and decentralized; however, central procurement functions typically have an influence on decisions on systems that integrate with central/core systems and mitigate risks to information security.

In addition to the peer entity analysis, KPMG met with over 50 internal businesses and technology stakeholders from across the County to gain an understanding of the County's current IT landscape. The interviews were conducted in a workshop or one-on-one setup and focused on a variety of areas, including, but not limited to, collaboration between departments and ISD/CIO, service delivery models, IT procurement, cybersecurity, and IT operations. KPMG noted recent successes including the relatively quick adaptation to the pandemic by bringing in new technology and successfully executing work-from-home initiatives, and the consolidation of data centers across various data departments into the County's Data Center, which significantly improved the security, resiliency, and efficiencies of IT operations. KPMG noted perceived challenges from their analysis, including the lack of limited evidence of cohesive IT strategies across departments, with ISD Information Technology Service's (ITS) chargeback process creating inequalities across departments, and the CIO perceived as a budgetary control function. KPMG also identified a lack of IT and project management standards and inconsistent practices across departments.

A hybrid IT organization model is recommended as it aligns most closely with County governance structure, based on the diverse nature of County services and their impact on the unique IT needs across different service clusters of the County. However, KPMG did not make recommendations regarding the reporting structures within the hybrid model. Rather KPMG provided options within a hybrid structure. The hybrid IT organization models are summarized below:

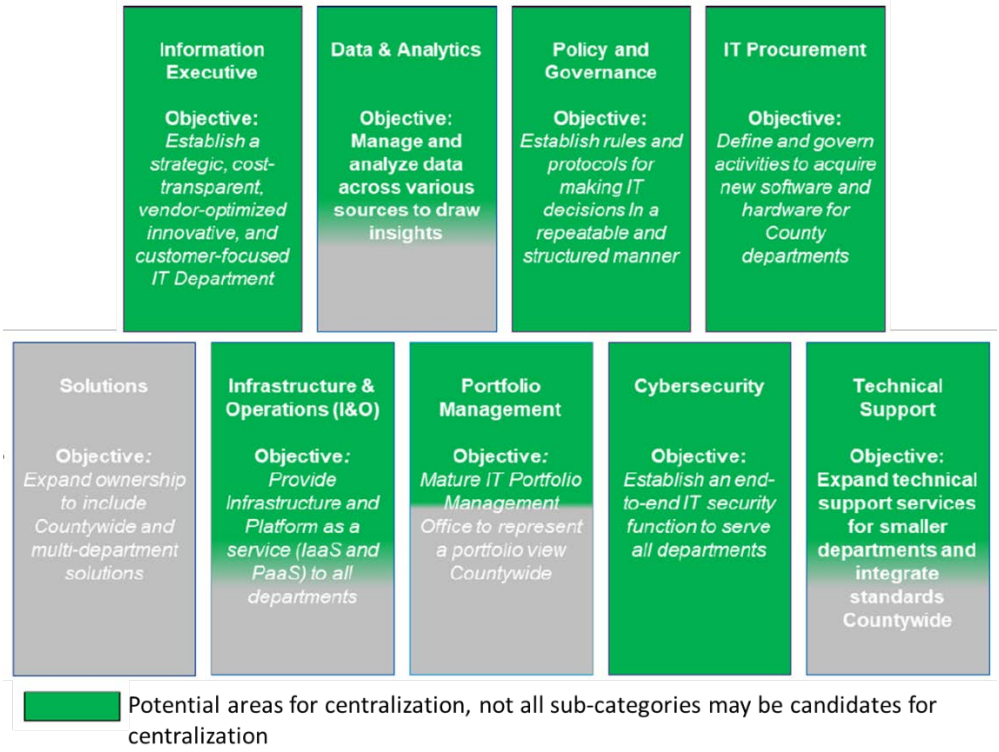


The CEO lacks sufficient information to make a recommendation to the Board regarding the reporting structures within a hybrid model and recommends further analysis of the lines of

business of ITS and CIO to develop an integrated IT services organization with improved efficiencies and alignment of IT strategies and operations, governance, cybersecurity protections, streamlining IT contracts and procurement, and adoption of contemporary technologies and best practices.

Information Technology Roles and Responsibilities

KPMG also identified various IT functions which may be candidates for centralization within a hybrid organizational unit. The graphic below provides an overview of IT functions that could be further centralized within the County.



Each of the IT functions noted have a series of sub-capabilities within, which is why certain functions could be shaded completely or partially in green. For example, technical support includes sub-functions of desktop support, application support, service desk/help desk, end-user computing, and mobile device management. While a large part of these functions may be centralized, the application support may need to be embedded within the departments to directly support department operations and ownership of service delivery.

Next Steps

1. Report back to the Board in 60 days with a detailed organization design of the functions and lines of business for an integrated IT organization, with a corresponding chargeback model and budgetary considerations for Fiscal Year 2023-24.

2. Provide recommended revisions to County ordinance, as appropriate, to reflect the authority and responsibilities of the integrated IT organization.

Should you have any questions regarding this matter, please contact me or Joseph M. Nicchitta, Chief Deputy, at (213) 974-1104 or jnicchitta@ceo.lacounty.gov.

FAD:JMN:JO
PL:jmn

Attachment

c: Executive Office, Board of Supervisors
County Counsel

Attachment

Information Technology Organization Analysis

County of Los Angeles

Full Report

November 2021

kpmg.com

Contents

1. Executive summary

1.1. Background

The Office of the CEO at the County of Los Angeles (County) engaged KPMG LLP (KPMG) to provide consulting services to assist in developing options for organizational models for management, operation and governance of Information Technology (IT) for County departments, the Office of Chief Information Officer (CIO), and Internal Services Department (ISD).

KPMG developed the IT organizational models based on the following three tasks:

Task 1 Peer Entity Analysis: KPMG conducted a peer entity analysis of IT governance, management and operation models for public sector and commercial entities similar to the County in order to provide industry perspective to the County.

Task 2 Current State Understanding: KPMG examined County's current IT management, operations, and governance landscape, including the inefficiencies, risks, gaps, challenges, and opportunities to improve.

Task 3 Develop Organizational Model Options: KPMG designed and developed options for organizational models for County's IT management, operation, and governance, with key considerations for each option.

KPMG's analysis was focused on the following areas, in alignment with the statement of work:

- Oversight and management of County wide cybersecurity operations
- Strategies to leverage cloud and emerging technologies across County departments
- Consolidation of IT procurement practices
- Communication and collaboration between the CIO, ISD and County departments
- Management and oversight of IT policies
- Organizational placement of the office of the CIO

The KPMG team utilized the following methods and tools to complete the tasks and meet the engagement objective:

- Interviews with over 13 peer entities.
- Review of information available in public domains.
- Interviews with business and technology stakeholders across 37 departments of the County.

— Review of County's existing documentation including organizational structure, charters, and service level agreements.

— Review of benchmark data and IT organizational models available in KPMG's proprietary methodologies and toolsets.

The following sections provide a summary for each task, followed by IT operational models for consideration, and insights into potential next steps for the County.

1.2. Task 1 Summary: Peer Entity Analysis

The KPMG team conducted a peer entity analysis to obtain an understanding of prevalent IT governance and organizational models in the industry. The analysis included 13 public sector and commercial entities, including large counties, large states, large commercial entities with diverse services, and large universities with healthcare services. The peer entities were selected based on their constituent/customer population, size in terms of revenue and number of employees, geography and IT organization structure, financial spend, overall and IT budget, and diversity of service offerings.

Based on information gathered through interviews with peer entities and review of information available, we noted a range of approaches to management and governance of IT functions. In no cases was LA County considered an extreme outlier for any of the comparators we reviewed. Our analysis found:

— Most of the peer entities have a hybrid approach to IT management.

— Most CIOs report directly to the CEO, and the CIO is involved and accountable for both strategic and operational aspects of IT.

— The top three issues administrations are looking for the IT function to address include: improving operational efficiency, enabling the workforce, and improving constituent engagement.

— The top five most in-demand skills for IT are technical architecture, cybersecurity, organizational change management, enterprise architecture, and intelligent automation.

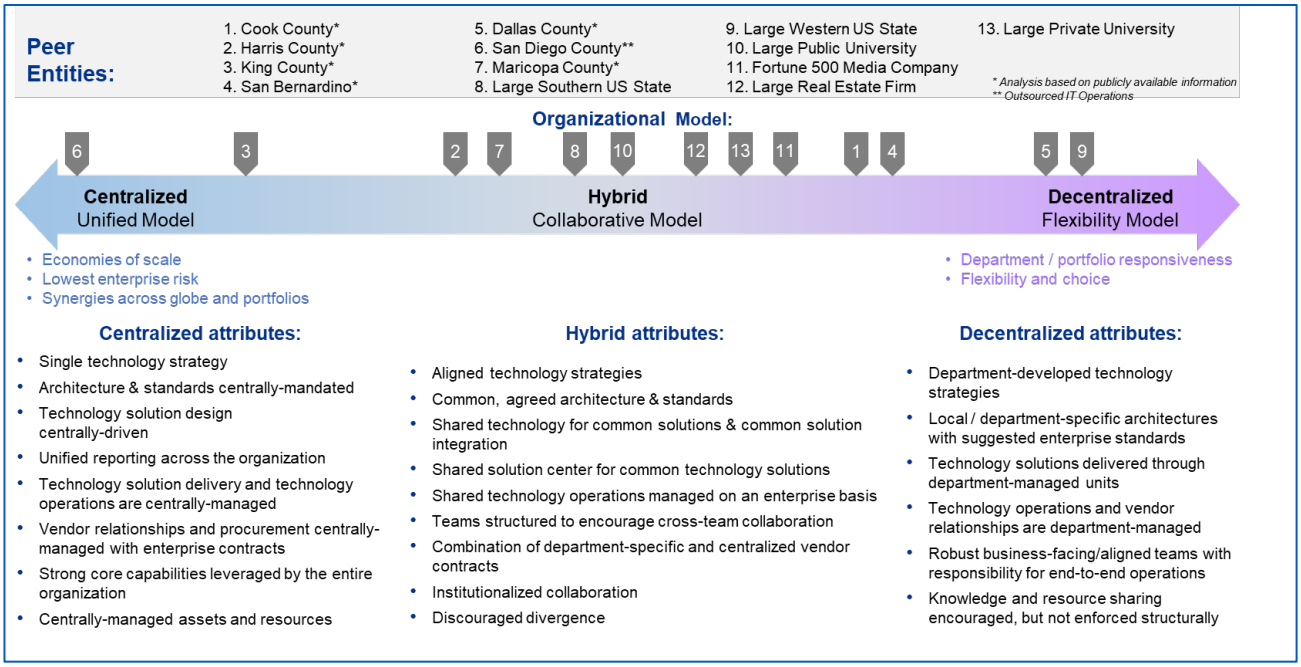
— The top technology investments include infrastructure/cloud, constituent experience and engagement, and security and privacy.

— Information security reporting structures vary but all information security functions are typically the responsibility of the CISO. The security The CISO's reporting structure varies with few CISOs reporting to the CIO, and few reporting to the COO. Regardless, security function has a reporting line to the head of the organization and/or the board.

— IT procurement functions exist as both centralized and decentralized, but central procurement functions typically have an influence on decisions on systems that integrate with central/core systems, pose risks to security and/or access.

— In general, the role of the CIO is increasingly at the forefront of digital transformation, and CIOs are striving to drive alignment and advance innovation.

The graphic below provides a pictorial representation of the different IT organizational models observed during KPMG's peer entity analysis for this engagement, including the key attributes that were observed in the governance models. As noted above, most peer entities are using hybrid model to manage IT and some of the key attributes in the hybrid model included aligned technology strategies across the departments, and high degree of collaboration across departments and divisions.



1.3. Task 2 Summary: County's Current IT Landscape

The KPMG team met with over 50 business and technology stakeholders from across the County to gain an understanding of County's current IT landscape. The interviews were conducted in a workshop or one on one set-up and focused on variety of areas, including but not limited to collaboration between departments and ISD/CIO, service delivery models, IT procurement, cybersecurity and IT operations. In addition to interviews, KPMG reviewed the available documentation including organizational structure, policies and procedures, committee charters and service level agreements. The feedback was gathered from multiple perspectives, for example IT service users (departments), IT service providers (CIO and ITS) and County leadership (Board of Supervisors, CEO's office).

Based on feedback gathered from interviews and review of documentation, KPMG noted the following areas of perceived recent **successes** and perceived **notable challenges** for LA County's existing IT landscape:

Successes:

— There was a relatively quick adaptation to the pandemic by bringing in new technology and successfully executing work-from-home initiatives.

— The cybersecurity team has established a new cyber security perimeter and governance standards that potentially have avoided data breaches.

— There is a consolidation of data centers across various departments.

- There are centrally hosted vendor days to provide departments insights into emerging technologies and innovations.
- There is an increased focus and capabilities in maturing business and data analytics capabilities.
- There has been modernization of the web presence and GIS capabilities throughout County departments to help provide digital services to the citizens.

Challenges:

- There is limited evidence of cohesive IT strategies across departments. There are multiple departmental silos, with varying degree of IT autonomy and services within each department.
- IT is perceived by County stakeholders as a utility rather than a strategic partner providing value add services.
- There are competing priorities between the Board, CEO's office (CIO), ITS within ISD and the Department heads.
- Chargeback process creates inequalities across departments, and CIO is perceived as a budgetary control function.
- ISD cost-recovery based model lacks transparency and is perceived as barrier for many departments.
- There are inconsistent experiences and "unknown" IT standards across departments (including for cybersecurity).
- There is Insufficient communications on progress of initiatives, county-wide issues, and leading practices across departments.
- There is a significant pain point for IT resources and skillsets, including inadequate resource skills, siloed technology related knowledge within departments, critical dependencies on a single or set of individuals, and limited ability to attract, develop, and retain the right talent.
- There are inconsistent approaches and standards for project management across departments.
- There is no alignment on best-of-breed technologies and use of vendors across departments.
- There is limited ability to visualize, analyze, share, and utilize data effectively across the County.
- There are inconsistent or nonexistent measures (KPIs) for IT success across departments.

1.4. Task 3 Summary: Options for IT organizational models

The KPMG team reviewed the available IT organizational models using the feedback from prevalent governance models in the peer entities and the current County's IT landscape. The models were evaluated using the leading practices and benchmark data available to KPMG. The team also evaluated influence of each option on broader County goals and vision for the future state of IT. As KPMG

evaluated different options, it was established that there are three key questions that the County should consider in moving towards its future IT organization model:

1. Should IT functions be centralized or decentralized across the County?

2. Where should the Office of the CIO reside within the County to improve the areas outlined in the board motion?

3. Which IT capabilities (e.g., Cybersecurity, IT Procurement, Infrastructure and Operations, etc.) could be centralized or have the potential for further centralization?

The following sections provide more insights and options for each of the question above, followed by a section on impact of each of the IT organization archetypes on overall County's objectives.

Options for IT organizational Archetypes

Broadly, there are three IT Organization archetypes for the County to consider:

1. Centralized IT organization

2. Hybrid IT organization

3. Decentralized IT organization

The table below provides characteristics, implications for LA County's environment and overall considerations for each of the three archetypes.

	Centralized	Hybrid	Decentralized
Characteristics	• Centralized IT resources using a single point of contact for interaction with business stakeholders • Highly specialized domain knowledge with emphasis on technical competencies • Significant dependencies between IT teams • Fewer customer touchpoints as demand is relatively stable • More formal governance structures	• Decentralized IT resources using sub-functions that align to the business with a central IT function for shared IT services • Significant interaction with business stakeholders • Some dependencies exist across teams • Highly responsive to customer and business needs • Depth of knowledge across capabilities • Flexibility at the edges allows for reskilling and development opportunities	• Decentralized IT resources with close proximity to business stakeholders • Broad domain knowledge with few dependencies across teams • Typically high levels of customization • Maximizes customer engagement and delivery speeds • Lean governance models focused on delivering quickly • Reskilling and development opportunities
LAC Implications	• Departments have high dependency on central IT for all aspects of building, running, and maintaining their IT operations • Departments have less freedom of choice in terms of vendor engagement or purchasing decisions, but can benefit from economies of scale pricing	• Individual department teams support different business applications / end-users, but follow shared standards • ITS provides services for those departments who wish to pay for and consume IT services • Clear governance to prioritize centralization decisions	• Departments set their own policies and strategy aligned to their businesses / customers • No need to consult a central authority for purchasing • Freedom to partner with vendors based on departments own criteria
Considerations	• Risk management capability of LA County IT organization • Maturity of information security and overall risk bearing capacity • Level of outsourcing and other support for the organization	• Sufficiently addressing security across all vertical & horizontal functions • IT departmental resource allocation • Strategic utilization of IT in order to optimize internal operations • Resources & skillsets required	• Managerial and personnel roles, along with departmental teams • Required IT systems of the IT infrastructure • Critical problems that the IT department is envisioned to solve – currently and in the future • Expectations of key stakeholders

In addition, the following table provides **pros and cons** for each of the above archetype, including **potential budgetary impacts** to the County both in short and long term. The budgetary impact of each archetype is evaluated for three key elements: Need to recruit and train the resources, need for change management and communication across the County, and need for new technology.

	Centralized	Hybrid	Decentralized
Pros / Benefits	• Optimizes for enterprise scale and synergies • More consistent and auditable processes and methods • Stable & predictable • High degree of specialization within capabilities • Reinforces technical competencies	• Optimizes for balance of enterprise scale/ synergy and response to specific business needs • Close alignment with the business units with high degree of responsiveness to their demands • Develop depth of knowledge on solutions and business processes • Increased flexibility at the edges	• Teams build scalable, powerful, and customized solutions for their users, as all applications are built in-house. • Groups act and build new solutions quickly, as each pillar operates autonomously and does not depend on others. • Teams own their own code, and incidents are resolved quickly • Optimizes local control and responsiveness
Cons / Challenges	• Limited flexibility/agility/lower velocity to deliver • Knowledge transfer across functions is difficult, and can lead to siloed knowledge • Low incentive for organization-wide integration • Challenges with business / IT alignment	• Potential for duplication of capabilities across business units • Difficult to consistently scale capabilities and solutions across the various groups; may end up building the same thing multiple times and in different ways • Challenges in consistently applying standards (e.g., security, risk, architecture, etc.)	• Teams are siloed from best-practices in other groups • Lack of communication as teams do not work cross-functionally, making them unaware of partner needs • Multiple cultures may exist and detract from a sense of unity • Formation of cliques and value of small groups over the organization may arise

Budget Factors	**Short term**	***Costs***	**Long term**	**Short term**	***Costs***	**Long term**	**Short term**	***Costs***	**Long term**
	High	*Recruiting & Training*	Moderate	Moderate	*Recruiting & Training*	Low	High	*Recruiting & Training*	Moderate
	Moderate	*Change Mgmt & Communications*	Moderate	Low	*Change Mgmt & Communications*	Low	High	*Change Mgmt & Communications*	Moderate
	High	*Technology*	Low	Moderate	*Technology*	Moderate	Moderate	*Technology*	High

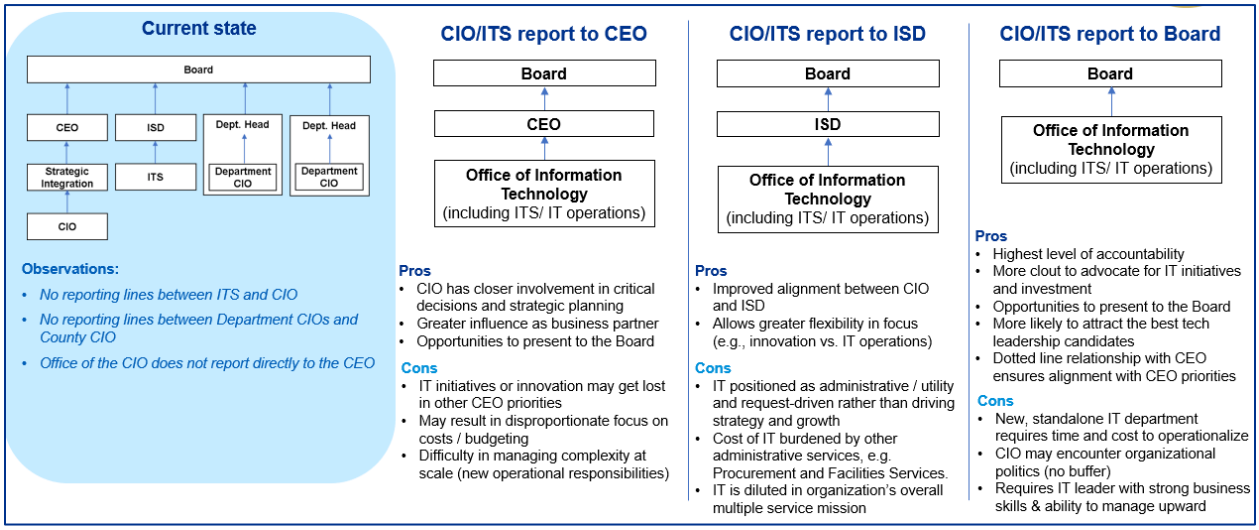
Based on our learnings from Tasks 1 and 2, a hybrid IT organization model appears to align most closely for the County. This is due to the diverse nature of services provided by the County to its constituents and their impact on the unique IT needs across different service clusters of the County. The section below provides further options on reporting structures available within the hybrid model, but also incorporates an additional assumption, in that the hybrid options presented assume that CIO and ITS are brought together under a single reporting line and the CIO would have authority and responsibility for strategy and operations. This reflects not only feedback from some interviewed parties wishing to see closer alignment between CIO and ITS, but also reflects structures at some peer organizations where IT strategy and operations are governed by a common executive.

Reporting Structure Options within Hybrid IT Model

KPMG evaluated the following three reporting structure options as part of a hybrid model.:

1. CIO/ITS reporting to CEO
2. CIO/ITS reporting to ISD
3. CIO/ITS reporting to the Board

Each reporting structure option was evaluated for its impact on the County in terms of pros and cons. The graphic below provides a pictorial representation of the County's current reporting structure for the IT organization(s) and the three different reporting structure options evaluated, including pros and cons for each.



It is important to note, regardless of the reporting structure selected by the County, it will be critical to establish and define the Department CIOs' relationship (i.e., direct reporting line, indirect, matrix / clusters) to the central IT organization.

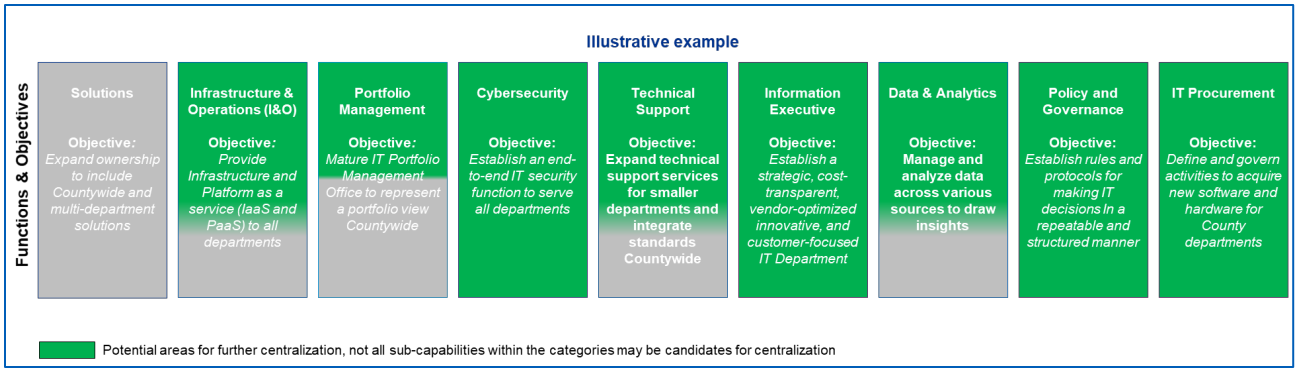
Once the IT archetype and reporting structure decisions are made, it will also be important for the County to establish the IT capabilities and functions that will be central IT organization and departmental IT organizations.

The section below provides insights into various functions that are potential candidates for centralization within the hybrid model archetype.

Potential IT functions for Centralization within IT Hybrid Model

Based on findings from Task 1 and Task 2 and in alignment with leading practices, KPMG has identified various IT functions which may be candidates for further centralization. The graphic below provides an overview of IT functions that could be further centralized within the County.

Each of the IT functions noted below have a series of sub-capabilities within, which is why certain functions could be shaded completely in green or partially. For example, technical support includes sub-functions of desktop support, application support, service desk/help desk, end user computing and mobile device management. While a large part of these functions may be centralized, the application support may need to be embedded within the departments to align with the skillset and ownership. In the graphic below, technical support is represented as mostly green in that many functions can be good candidates for centralization, however, part of the decisioning process the County may which to pursue is to consider which IT functions are closely related to the unique business needs of individual departments.



It is important to note that in determining which capabilities/functions to centralize, organizations like ISAB should be considered as they currently do not have a formalized connection with central IT. Additional analysis may be required to consider need and alignment for ISAB within the hybrid IT model.

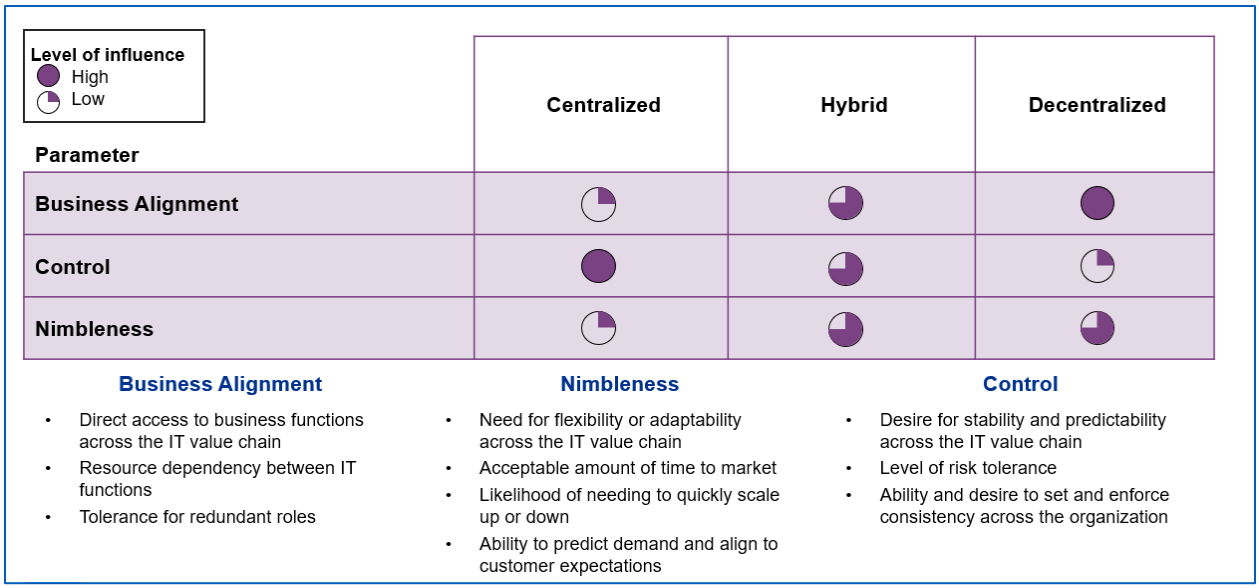
Lastly, to assist the County in its decision-making process, KPMG developed the tables below which outline how the proposed models would work to address the improvements outlined in the statement of work.

Potential Influence of IT organization models on County objectives

The table below provides relative influence of each of the IT organization archetype (centralized, hybrid and decentralized) on the County objectives as defined in the Statement of Work, and related board motion. In determining the level of influence, the KPMG team assumed that IT functions noted as potential candidates for centralization in the preceding section will be centralized under the centralized IT "Office of Information Technology", and the centralized IT will be responsible for both strategic and operational aspects of the IT.

Level of influence: ● High ◔ Low **Board Motion objectives**	**Centralized**	**Hybrid**	**Decentralized**
Improve oversight of cybersecurity operations	●	◕	◑
Increase use of cloud and emerging technologies	◕	◑	◑
Consolidate IT procurement practices (& modernize legacy tech)	◕	◑	◔
Improve communications between CIO and all departments	◕	◑	◔
Enforce compliance with policies	●	◑	◔

In addition, the table below also captures the influence of IT organizational archetypes on three key business parameters that are highly influenced by IT and its services.



As noted in the tables above, there are multiple factors for County's considerations as each archetype is evaluated. While an archetype might be impactful on the County's objectives, it may also impact County's ability to make business driven decisions in a quick manner. It is important to consider the priority of each of the parameters and evaluate the impacts across the County.

1.5. Next Steps for the County

Based on the analysis conducted and options available to the County, the County will need to take incremental steps in short and long term to transition into the selected organizational model and the reporting structure. The transition will be a journey and will require a strategic roadmap including clear definition of roles and responsibilities for each stakeholder. There will also be need of aligned technology strategies across the County, common definition of IT services, and clearly understood service delivery model and service level agreements between the IT organization and departments. KPMG has provided below some of the near-term next steps for County CEO's considerations:

— Decide on which IT organization model option to recommend to the Board for adoption, in consideration of:
  a. Ability to address key County objectives / goals.
  b. Appetite for change – both culturally and financially.
  c. Employee sentiment.
  d. Impact to country residents / constituents served.

— Begin definition of roles & responsibilities for departments, ISD, and Office of the CIO for the organizational model selected:
  a. Oversight and management of cybersecurity operations.
  b. Development and implementation of IT strategies to leverage cloud and emerging technologies.
  c. Consolidation of IT procurement practices.
  d. Improving the communication and collaboration between the Chief Information Officer, ISD, and County departments.
  e. Policy recommendations for appropriate authority to enforce compliance.

Implementation of any organizational change done right is more important than the implementation done fast. While change provides an opportunity, it is important to understand that change for any organization is hard, due to legacy ways of working, employee satisfaction, company culture, and other historical factors. The leadership team will need to develop an environment which allows for small steps towards the larger vision, rewards wins, secures alignment and agreement with key stakeholders on why the change is beneficial for the whole of the County, and provides a safe environment to innovate and pivot successfully towards the end goal.

2. Overview and Approach

2.1. Overview

Given the complexity of the County's various departments and the criticality of effective and efficient IT services to all departments and residents of the County, the County's Office of the CEO engaged KPMG to provide consulting services to assist in developing options for organizational models for management, governance, and operation of IT for County departments, the Office of the Chief Information Officer, and Internal Services Department (ISD).

Key considerations in KPMG's analysis included, but were not limited to, LA County's recent Board Motion:

> *As a result of the COVID-19 pandemic, Los Angeles County government structures began to quickly accelerate digital transformation. With an immense increase in teleworking during the pandemic which many departments plan to continue to implement due to staff support, cost savings, decrease in commute times, and more, County digital transformations should consider how any digital and technological solutions address ways to engage with the new teleworking workforce. Going forward, this should include utilizing new technologies for onboarding, contracts, procurements, and more. **
>
> *Digital adoption strategies are occurring throughout County departments, but sometimes in a siloed way, as highlighted in the Second Report on Digital and Streamlined Contracting and Auditing for Los Angeles County, dated February 18, 2021. This has led to duplication of contracts for similar services, resulting in a net increase in net county cost. The role of the County Chief Information Office (CIO) is more important than ever given the move towards online integration, data sharing, increased cybersecurity needs, and more. **
>
> *On July 7, 2015, the Board of Supervisors (Board) adopted recommendations to amend the County Governance structure to increase efficiency, transparency, and collaboration across County departments. In January 2016, the Chief Executive Office (CEO) reassigned the CIO to the CEO, with the approval of the Board, retaining its responsibilities with a focus on oversight of various Information Technology (IT) projects, policies, and working groups. The CIO's operational and transactional functions were transferred to Internal Services Department (ISD), which already operates the County's centralized IT infrastructure programs. Over five years later, with the announcement of the departure of the County CIO, it is the appropriate time to re-evaluate this decision with an eye towards clarifying roles and responsibilities of the CIO. Given the challenges facing the County, it is more important than ever to work towards improving efficiencies, providing cybersecurity protections, streamlining contracts and procurement efforts, and offering appropriate and responsive government to the County's residents. **
>
> ** from July 13, 2021 Board Motion*

KPMG's analysis was focused on the following areas, in alignment with the statement of work:

- Oversight and management of County wide cybersecurity operations

- Strategies to leverage cloud and emerging technologies across County departments
- Consolidation of IT procurement practices
- Communication and collaboration between the CIO, ISD and County departments
- Management and oversight of IT policies
- Organizational placement of the office of the CIO

2.2. Approach

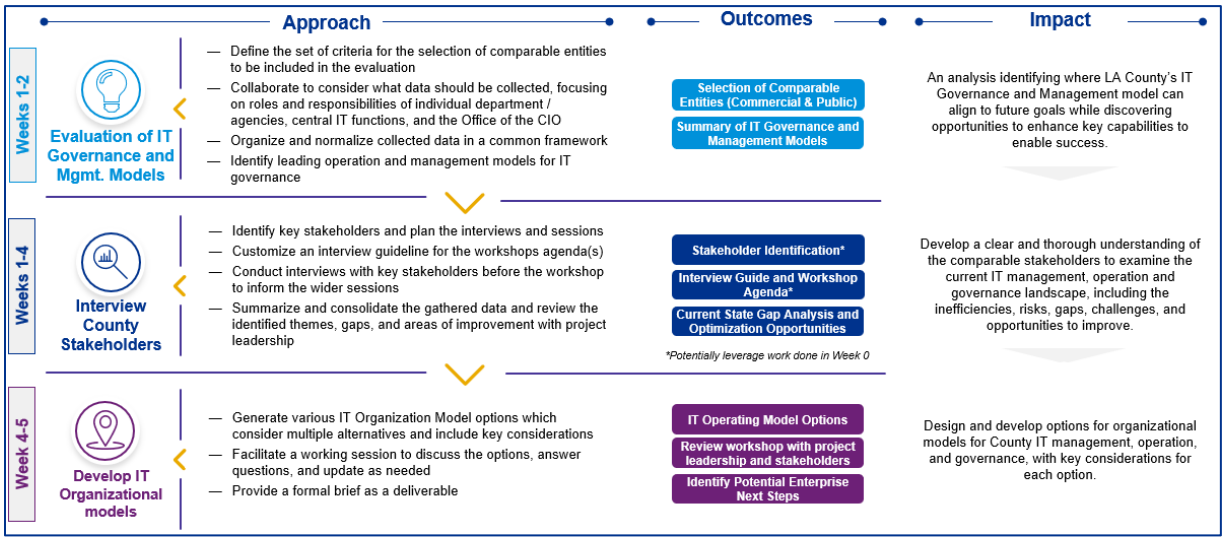
KPMG developed the IT organizational models based on the following three tasks:

Task 1 Peer Entity Analysis: KPMG conducted a peer entity analysis of IT governance, management and operation models for public sector and commercial entities similar to the County in order to provide industry perspective to the County.

Task 2 Current State Understanding: KPMG examined County's current IT management, operations, and governance landscape, including the inefficiencies, risks, gaps, challenges, and opportunities to improve.

Task 3 Develop Organizational Model Options: KPMG designed and developed options for organizational models for County's IT management, operation, and governance, with key considerations for each option.

A summary of the approach, outcomes, and impact of the three tasks is outlined below.



A summary of the methods and tools to complete the tasks can be found in Appendix 1.

The following sections provide our findings and outcomes for each of the three tasks, followed by IT operational models for consideration, and insights into potential next steps for the County.

Engagement Management

Considering the proposed approach, KPMG performed the requested activities in three tasks performed over six weeks. The core team was composed of six KPMG resources and three LA County project sponsors. KPMG and the County project sponsors met on a weekly basis to discuss progress and quickly resolve roadblocks, if any. Working sessions were also held to review deliverables and provide feedback.

Two kickoff meetings were held in the first week to introduce the engagement to County stakeholders: one with County executive leadership, and another with members from the County's Business Management Council.

The kickoff meetings introduced the engagement to County stakeholders and allowed them to provide input on the overall project management and deliverables. Over the six weeks of the engagement, the project hosted 21 meetings to interview over 50 internal LA County stakeholders. These interviews captured the inefficiencies, risks, gaps, challenges, and opportunities at the organizational level. Another seven interviews with nine external peer entities were held to capture comparison, insights, and best practices regarding organizational models and activities. Interview questions were sent via email to stakeholders who were not able to participate in interview sessions.

3. Task 1: Evaluation of IT governance and management models

3.1. Peer Entities Overview

The purpose of Task 1 was to develop a summary of findings including perspectives on IT department / agency functions and a high-level description of roles and responsibilities at the organizational level.

KPMG conducted a peer entity analysis to obtain an understanding of prevalent IT governance and organizational models in the industry. The analysis included 13 public sector and commercial entities, including large counties, large states, large commercial entities with diverse services, and large universities with healthcare services.

The peer entities were selected through a collaborative discussion with the County project sponsor team. The following factors were considered while selecting the peer entities:

1. Constituent/customer population
2. Size in terms of revenue and number of employees
3. Geography and IT organization structure
4. Financial spend, overall and IT budget,
5. Diversity and nature of service offerings.

- Based on the above factors, KPMG team selected the following entities. Cook County*
- Harris County*
- King County*
- San Bernardino County*
- Dallas County*
- San Diego County*
- Maricopa County*
- Large Southern US State

- Large Western US State
- Large Public University
- Large Private University
- Large Real Estate Firm
- Fortune 500 Media Company

** Analysis based on publicly available information*

For each of the selected peer entity above, KPMG team performed the analysis through the following methods:

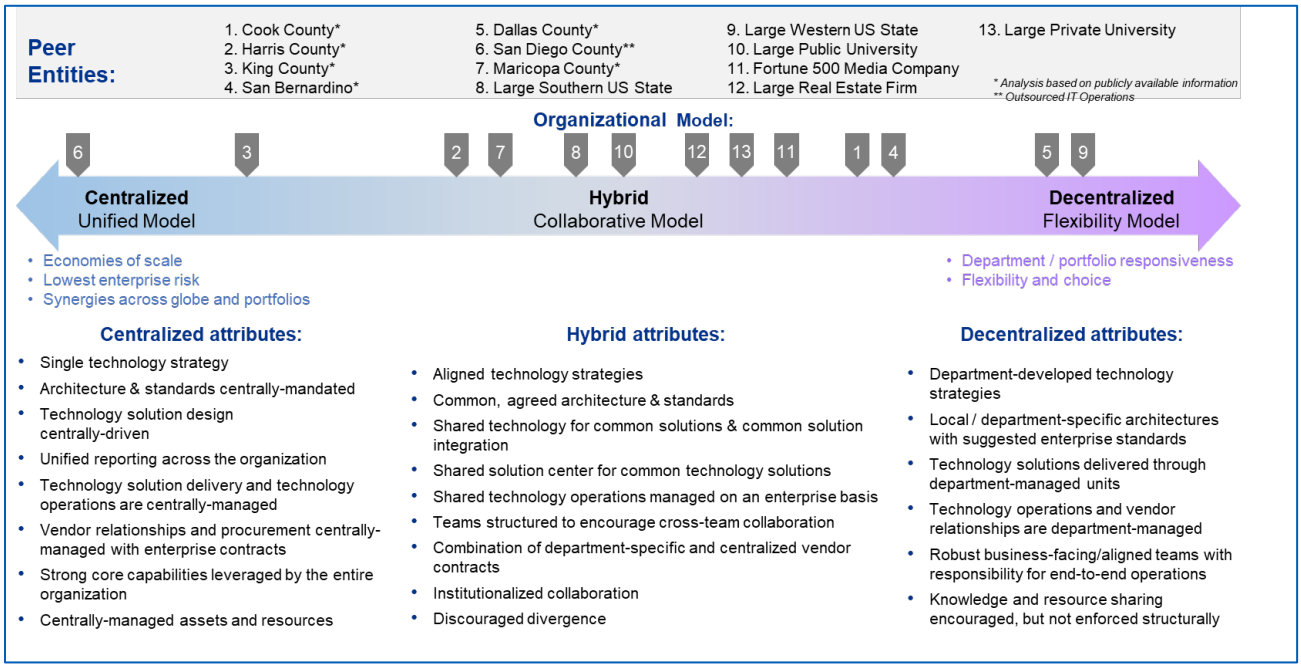
- Direct interviews with the representatives of the entities.
- Review of the information available in the public domain.
- Data from the Harvey Nash / KPMG CIO Survey 2020. Now in its 22nd year, the Harvey Nash / KPMG CIO Survey 2020 is the largest IT leadership survey in the world, with over 4,200 responses from CIOs and technology executives across 83 countries.

KPMG team developed a questionnaire focused on the specific aspects of IT governance and organizational model, through the lens of the Board motion objectives, namely cybersecurity, procurement, and cloud and emerging technology. The questionnaire was reviewed with the County project sponsor and was used to guide the peer entity interviews and information gathering process. The detailed questionnaire is available in Appendix. In the below sections for Task 1, we provide key observations from the reviewed entities. The observations are in the following areas:

1. IT organizational model
2. IT Governance structure
3. Strategic priorities for the IT
4. Cybersecurity governance and operations
5. IT procurement
6. Use and governance of emerging technologies
7. Considerations for governance, strategic priorities, and a review of the peer entities

Organizational Model Analysis

The graphic below provides a pictorial representation of the different IT organizational models observed during KPMG's peer entity analysis for this engagement, including the key attributes that were observed in the governance models. Most peer entities are using hybrid model to manage IT and some of the key attributes in the hybrid model included aligned technology strategies across the departments, and high degree of collaboration across departments and divisions.

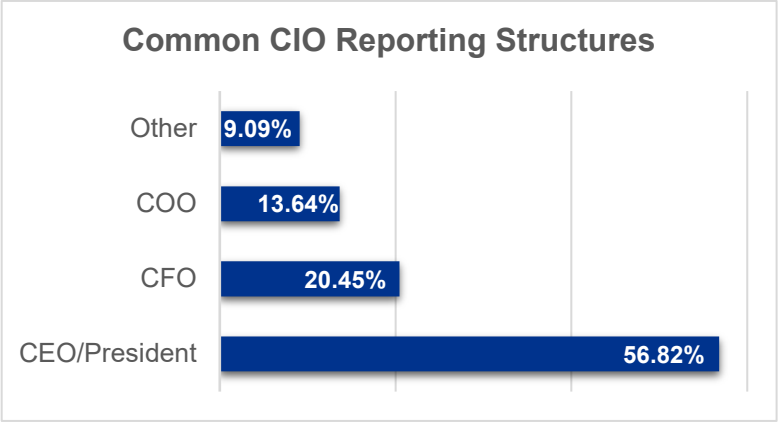


Governance

Based on information gathered through interviews with peer entities and review of information available, we noted a range of approaches to management and governance of IT functions. In no cases was LA County considered an extreme outlier for any of the comparators we reviewed. Our analysis found that most CIOs report directly to the CEO, and the CIO may be involved in both strategic and operational aspects of IT.

Considerations for Reporting Line

1. CIO responsibilities typically include both oversight of strategic and operational aspects of IT management
2. The CIO reporting to the CEO may maximize the usage of technology to achieve strategic priorities.
3. CIO does not usually report to a Board because a Board does not foster management of business functions.



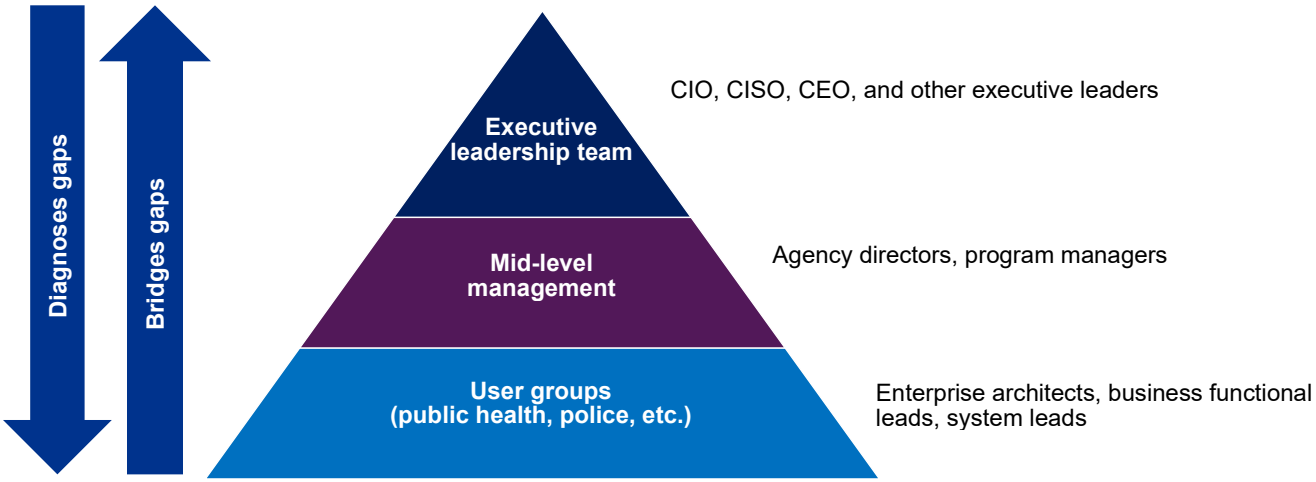
Source: CIO Professional Network Study (4,000 respondents)

4. In the operations environment (COO), there is common vocabulary, business objectives, and governance structures around IT reporting; but it is less likely to bring about innovation.

5. The CIO reports to the CFO under the pretense that the CFO understands and supports technology; otherwise, IT may be considered simply as a cost center.

Case study of governance structure

In one peer interview, KPMG discovered that a US state's Department of Information Resources delivers knowledge sharing and allows for coordinated decision making with a **multi-level governance board within the organization,** pictured below. The governance board sits at the three levels of the organizational hierarchy listed within the triangle: the executive leadership team, mid-level management, and user groups. The governance board is composed of the groups listed to the right of the triangle and meets monthly to discuss goals, progress, and gaps in project delivery. This structure fosters collaboration and provides a monthly review of all levels of the government entity.



Strategic Priorities for IT

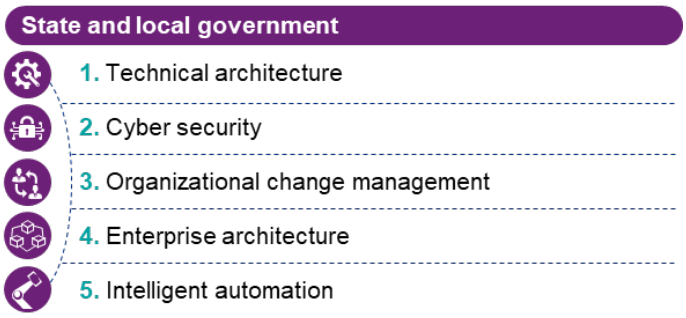
Our analysis revealed that IT priorities across other state & local government organizations are similar to those at LA County. Some examples of the strategic priorities listed in the surveydirectly match the priorities in the board motion; such as, cybersecurity, infrastructure/cloud, and organizational change management (i.e. communication between the CIO and departments).

Based on results of a 2020 CIO survey conducted by KPMG in collaboration with Harvey Nash, the following strategic priorities were highlighted by state and local government respondents to the survey, which relate closely to much of the feedback gathered from internal interviews with LA County.

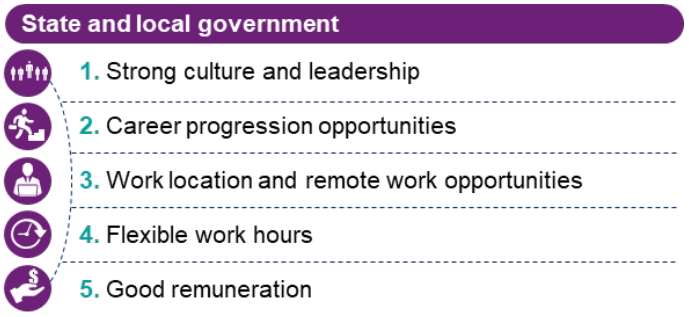
- The top three issues administrations are looking for the IT function to address include: improving operational efficiency, enabling the workforce, and improving constituent engagement.
- The top five most in-demand skills for IT are technical architecture, cybersecurity, organizational change management, enterprise architecture, and intelligent automation.
- The top technology investments include infrastructure/cloud, constituent experience and engagement, and security and privacy.

Below are key excerpts, showing priorities in rank-order, from the Harvey Nash / KPMG CIO Survey.

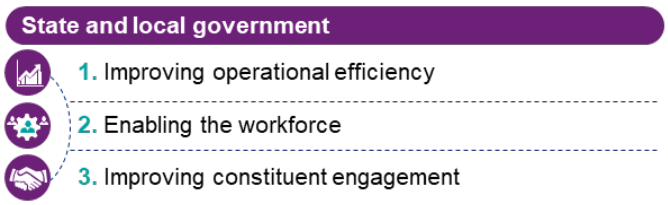
Most in demand skills:
State and local government vs. overall



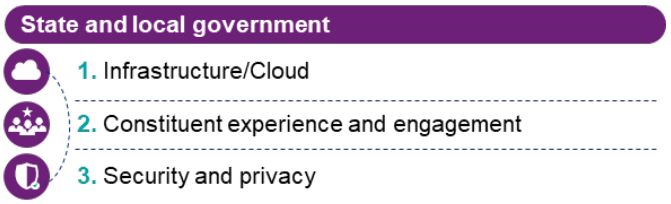
Top factors in engaging and retaining key technology talent in the new reality:
State and local government vs. overall



Top three business issues that administrations are looking for the IT function to address
State and local government vs. overall



Three most important technology investments
State and local government vs. overall



Source: Harvey Nash/KPMG CIO Survey, 2020

Cybersecurity

As noted above, cybersecurity is top of mind for most state and local government organizations. For organizations to meet the expectations of the public and uphold data integrity throughout the county, the need to build security throughout county IT systems is prevalent. While analyzing the cybersecurity functions of sampled state and local governments, KPMG reviewed public county cybersecurity plans, governance structures of the CISO and CIO, and public surveys of cybersecurity leaders within state and local government.

Below is a description of the cybersecurity function, as observed, for several county governments across the nation.

- **Cook County:** The Information Security Office (ISO) protects the confidentiality, integrity, and availability of all Cook County information by leveraging cybersecurity capabilities across the enterprise and informing system stakeholders on cyber risk. Cook County implements an ordinance-established Information Security Framework, while also using the National Institute of Standards and Technology (NIST) Risk Management Framework (RMF) as the model.
- **Harris County:** Harris County's IT Department (Universal Services) hosts a cybersecurity division. This division reports to the CIO and works to protect the confidentiality, integrity and availability of Harris County information and information systems.
- **King County:** The Technology Management Board (TMB) sits within King County IT and is chaired by the County Chief Information Officer and includes one IT Deputy Director and Operations Cabinet Member from each agency. The Board acts in an advisory capacity to the County's Chief Information Officer on technical issues including policies and standards for information security, applications, infrastructure, and data management.
- **Dallas County**: Protecting County data assets and infrastructure has become one of the strategic imperatives for the Information Services Department (ISD). Reporting to the Chief Information Officer, the Chief Information Security Officer (CISO) is responsible for safeguarding against security threats that may not only disrupt County operations, but also the confidential information of the residents and businesses the County serves.

In addition, KPMG team noted the following key factors during our analysis:

- Information security reporting structures vary across counties, but all information security functions are typically the responsibility of the agency head (either CIO or CISO).
- Cybersecurity is getting more centralized as there is a high level of Board and leadership focus on the issue.
- State / local government is one of the top industries that registered the highest growth in cybersecurity, increasing spending in 2020 by 8.9% worldwide. *(Source: IDC CIO Survey 2020)*
- Most county-level cybersecurity frameworks and policies employ the use of the National Institute of Standards and Technology (NIST) Risk Management Framework (RMF) as the models.

Non-government entities also depict similar responsibilities for information security. We interviewed two IT leaders of large commercial organizations about their cybersecurity functions. Below are two examples of case studies of cybersecurity practices in two non-government organizations.

1. Large Public University

   According to a former CIO of a large public university, the organization tends to view cybersecurity bucketed in two ways: (1) issues of managing cyber-risk, which is tactical; and (2) the practice of

cybersecurity, which is strategic. Managing risk and enforcement of compliance is generally done at the department level, while policy setting is performed centrally.

Cybersecurity is a common information security policy that is backed up by the cyber security coordination center. The purpose of this center is to provide a baseline level of monitoring sufficient to manage risk at that location (with potential for add-on service). These services are centrally procured but locally managed and supported. Each campus attaches a cyber-risk authority direct report straight to the chancellor which promotes consistency in risk reporting and management.

2. Large Fortune 100 Media Company

CISO and CIO are peers, with the CISO working on enterprise wide policy-setting and the CIO having a shared services linkage to a governance and infrastructure support roles. There is a direct CISO in each department, reporting to the global CISO. Policy and standards are set from the top down, but compliance sits within each department.

Method for compliance controls is multi-layered, following 3 lines of defense:

1) Whoever operates controls is responsible for compliance of those controls.

2) Someone will spot check (sample sizes) for the effectiveness of controls; and

3) External auditor at the entity level audits controls

Procurement

CIOs indicated the need for procurement practices that consider the nuances of software services, platforms, and the high rate of change in the technology space. Through interviews with both public and commercial peer entities and a review of standard practices within state and local government, we gathered key insights related to the IT procurement function.

Key insights include:

- IT should be an active partner in the selection, value determination, design and execution of solutions and that solutions are aligned to strategic goals. Central IT functions typically have a say in decisions on systems that integrate with central/core systems, or that may pose risks to security and/or user access.
- The organizations interviewed make a deliberate effort to reduce the tactical workload of procurement by utilizing process standardization, tools, and templates to simplify repetitive tasks, automating procurement where applicable.
- Departments are commonly organized to separate the management of different tasks. Ideally, procurement may segment tasks vertically to ensure that strategic resources are not also responsible for management transactions.
- By utilizing risk conversations, CIOs can drive changes in purchasing behavior. For example, an organization may integrate a risk management program by designating management personnel to provide oversight of procurement standards and activities with a well-managed exception process.

Cloud and Emerging Technologies

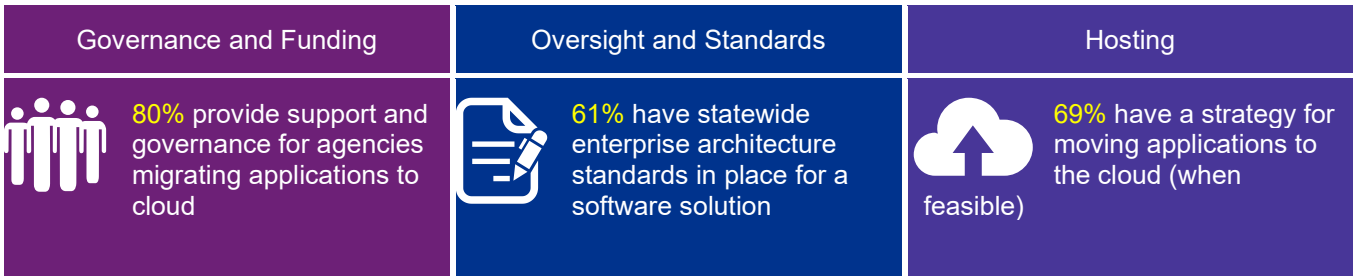
All peer entity organizations in our analysis have a strategic plan to move forward with cloud modernization and innovative technologies. In general, the role of the CIO is increasingly at the forefront

of digital transformation, and CIOs are helping drive alignment across the C-suite and advancing the focus on cultivating innovation.

Three key priority outcomes driving cloud strategies can be found below. These desired outcomes are based on research of leading practices in the industry, and learnings from other successful cloud strategies within state and local government entities.

1. Scalability/Flexibility
2. Security
3. Investment Optimization

From a 2021 State CIO Survey conducted by the National Association of State Chief Information Officers, 48 state CIOs answered questions related to legacy modernization and cloud migration within their organization. Excerpts of this survey's findings which are considered relevant to LA County are noted below.



The emerging technology that will be the most impactful within the next three to five years (per a 2021 study by the Government Finance Officers Association) is found below.

1. Low-code application development
2. AI/ML & Robotic Process Automation (RPA)
3. User-centric Design
4. Cloud / Legacy Modernization
5. Internet of Things (IoT)
6. Remote work technology

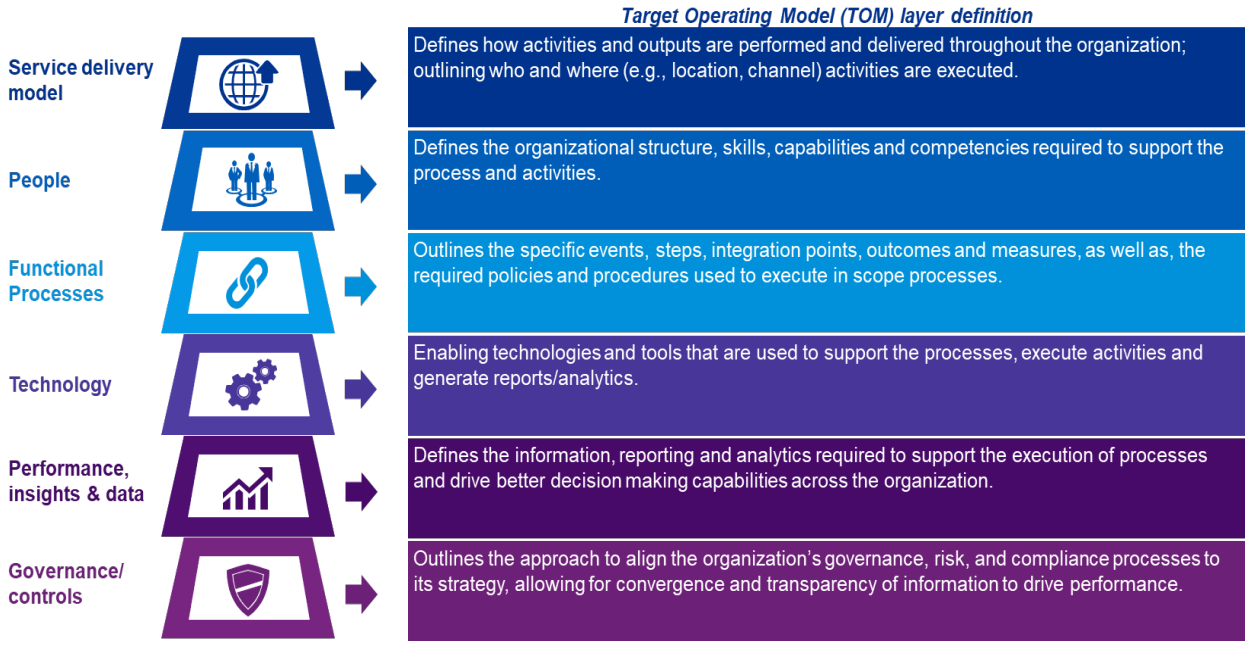
When considering how emerging technologies can add value to state and local governments in the future, delivering mobility and flexibility is a clear and consistent use case that resonated with many LA County stakeholders. By prioritizing implementation and integration of impactful modern technology, the County has an opportunity to continue enabling increased levels of productivity – a desired business outcome that is universal across departments.

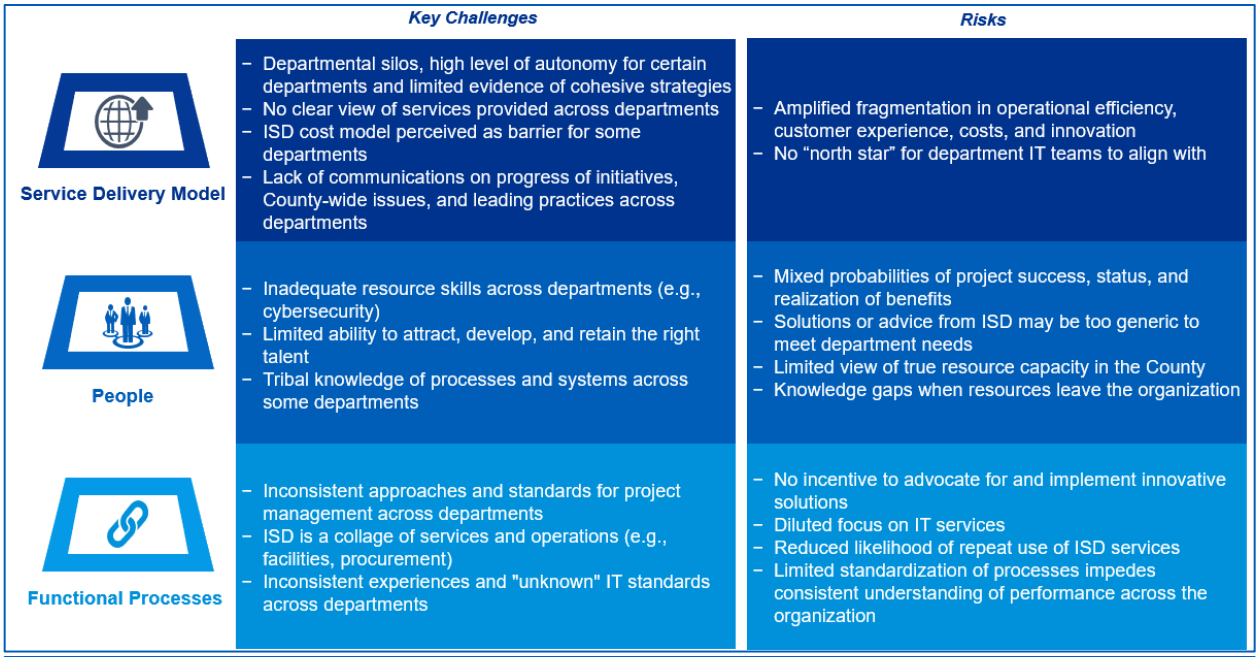
4. Task 2: Interview County stakeholders

The KPMG team met with over 50 business and technology stakeholders from across the County to gain an understanding of County's current IT landscape. The interviews were conducted in a workshop or one on one set-up and focused on variety of areas, including but not limited to collaboration between departments and ISD/CIO, service delivery models, IT procurement, cybersecurity, and IT operations. In addition to interviews, KPMG reviewed the available documentation including organizational structure, policies and procedures, committee charters and service level agreements. The feedback was gathered from multiple perspectives, for example IT service users (departments), IT service providers (CIO and ITS) and County leadership (Board of Supervisors, CEO's office). The full list of LA County Interviewees can be found in Appendix 2.

4.1. Key Successes & Challenges

Based on feedback gathered from interviews and review of supporting documentation, in the charts below we have categorized key challenges and risks across LA County's current IT environment utilizing KPMG's six-layer Target Operating Model (TOM) framework. The IT TOM framework considers an IT organization as a composition of specific areas and aspects that, when well balanced and aligned, enable an effective delivery of IT services.





4.2. Key Areas for Improvement

In this section, KPMG has provided a list of improvement opportunities that the County may consider in response to the priority aeras outlines in the previously mentioned Board motion. These improvement opportunities were gathered during interviews with County stakeholders and address some of the challenges mentioned above. Most of these activities point to establishing strong governance and monitoring of IT systems and processes and include a desire for implementation and integration of innovative and emerging IT solutions.

Dimension	Improvement Opportunities
Cybersecurity operations	• Modernizing approach to risk management for technology • Mandating County-wide cybersecurity solutions • Having a more proactive approach to cybersecurity
Cloud and emerging Technologies	• Enhancing focus on legacy modernization and cloud migration to provide digital experiences • Leveraging economies of scale to provide opportunity in the cloud computing space • Leveraging IT solutions to quickly service the public's needs and provide accessible information to the public
IT procurement practices	• Providing more transparency in the billing of IT services, so there is no perception of being overcharged • Having a more central, standardized procurement location to purchase IT i.e., an Amazon-esque portal • Qualifying more IT vendors to have more IT procurement options
Communications between CIO and all departments	• Improvement in the way data is collected, controlled, communicated, and shared across departments • Being more transparent regarding billing and IT initiatives/plans • Sharing leading practices across departments • Coordinating testing and deployment schedules (ISD & departments) to reduce risk of unanticipated outages • Improvement in governance to foster more transparent communication and higher levels of collaboration
Policy compliance	• Enforcing compliance with cybersecurity policies and governance • Administering more accountability to stay compliant with IT standards • Clearly defining organizational roles and relationships between them
Other	• Evolving IT's role to become a strategic advisor for the County rather than being perceived as a "utility" • Leveraging Business Management Council to foster strategic value of IT

5. Task 3: Develop IT organizational models

Based on analysis of peer entities and leading practices in Task 1, and feedback gathered from interviews in Task 2, combined with an understanding of the County's current challenges and future needs, KPMG has provided a set of IT organizational model options that the County may consider adopting.

KPMG reviewed and evaluated variations of IT organizational models in operation with peer entities, considering the current County's IT landscape, notable leading practices in the market, and benchmark data available to KPMG. The KPMG team also evaluated the influence of each option on the County's broader goals and vision for the future state of IT. As KPMG evaluated different options, it was established that there are three key questions that the County should consider in moving towards its future IT organization model:

1. Should IT functions be centralized or decentralized across the County?

2. Where should the Office of the CIO reside within the County to improve the areas outlined in the board motion?

3. Which IT capabilities (e.g., Cybersecurity, IT Procurement, Infrastructure and Operations, etc.) could be centralized or have the potential for further centralization?

The following sections provide more insights and options for each of the questions above, followed by a section on the impact of each of the IT organization archetypes on LA County's overall objectives.

5.1. Options for IT Organizational Archetypes

Broadly, there are three IT organizational archetypes for the County to consider:

1. Centralized IT organization
2. Hybrid IT organization
3. Decentralized IT organization

The table below provides characteristics, implications for LA County's environment and overall considerations for each of the three archetypes.

	Centralized	Hybrid	Decentralized
Characteristics	• Centralized IT resources using a single point of contact for interaction with business stakeholders • Highly specialized domain knowledge with emphasis on technical competencies • Significant dependencies between IT teams • Fewer customer touchpoints as demand is relatively stable • More formal governance structures	• Decentralized IT resources using sub-functions that align to the business with a central IT function for shared IT services • Significant interaction with business stakeholders • Some dependencies exist across teams • Highly responsive to customer and business needs • Depth of knowledge across capabilities • Flexibility at the edges allows for reskilling and development opportunities	• Decentralized IT resources with close proximity to business stakeholders • Broad domain knowledge with few dependencies across teams • Typically high levels of customization • Maximizes customer engagement and delivery speeds • Lean governance models focused on delivering quickly • Reskilling and development opportunities
LAC Implications	• Departments have high dependency on central IT for all aspects of building, running, and maintaining their IT operations • Departments have less freedom of choice in terms of vendor engagement or purchasing decisions, but can benefit from economies of scale pricing	• Individual department teams support different business applications / end-users, but follow shared standards • ITS provides services for those departments who wish to pay for and consume IT services • Clear governance to prioritize centralization decisions	• Departments set their own policies and strategy aligned to their businesses / customers • No need to consult a central authority for purchasing • Freedom to partner with vendors based on departments own criteria
Considerations	• Risk management capability of LA County IT organization • Maturity of information security and overall risk bearing capacity • Level of outsourcing and other support for the organization	• Sufficiently addressing security across all vertical & horizontal functions • IT departmental resource allocation • Strategic utilization of IT in order to optimize internal operations • Resources & skillsets required	• Managerial and personnel roles, along with departmental teams • Required IT systems of the IT infrastructure • Critical problems that the IT department is envisioned to solve – currently and in the future • Expectations of key stakeholders

In addition, the following table provides **pros and cons** for each of the above archetype, including **potential budgetary impacts** to the County both in short and long term. The budgetary impact of each archetype is evaluated for three key elements: Need to recruit and train the resources, need for change management and communication across the County, and need for new technology.

	Centralized	Hybrid	Decentralized
Pros / Benefits	• Optimizes for enterprise scale and synergies • More consistent and auditable processes and methods • Stable & predictable • High degree of specialization within capabilities • Reinforces technical competencies	• Optimizes for balance of enterprise scale/ synergy and response to specific business needs • Close alignment with the business units with high degree of responsiveness to their demands • Develop depth of knowledge on solutions and business processes • Increased flexibility at the edges	• Teams build scalable, powerful, and customized solutions for their users, as all applications are built in-house. • Groups act and build new solutions quickly, as each pillar operates autonomously and does not depend on others. • Teams own their own code, and incidents are resolved quickly • Optimizes local control and responsiveness
Cons / Challenges	• Limited flexibility/agility/lower velocity to deliver • Knowledge transfer across functions is difficult, and can lead to siloed knowledge • Low incentive for organization-wide integration • Challenges with business / IT alignment	• Potential for duplication of capabilities across business units • Difficult to consistently scale capabilities and solutions across the various groups; may end up building the same thing multiple times and in different ways • Challenges in consistently applying standards (e.g., security, risk, architecture, etc.)	• Teams are siloed from best-practices in other groups • Lack of communication as teams do not work cross-functionally, making them unaware of partner needs • Multiple cultures may exist and detract from a sense of unity • Formation of cliques and value of small groups over the organization may arise

Budget Factors	Short term	*Costs*	Long term	Short term	*Costs*	Long term	Short term	*Costs*	Long term
	High	*Recruiting & Training*	Moderate	Moderate	*Recruiting & Training*	Low	High	*Recruiting & Training*	Moderate
	Moderate	*Change Mgmt & Communications*	Moderate	Low	*Change Mgmt & Communications*	Low	High	*Change Mgmt & Communications*	Moderate
	High	*Technology*	Low	Moderate	*Technology*	Moderate	Moderate	*Technology*	High

Based on our learnings from Tasks 1 and 2, a hybrid IT organization model appears to align most closely for the County. This is due to the diverse nature of services provided by the County to its constituents and their impact on the unique IT needs across different service clusters of the County. The section below provides further options on reporting structures available within the hybrid model, but also incorporates an additional assumption, in that the hybrid options presented assume that CIO and ITS are brought together under a single reporting line and the CIO would have authority and responsibility for

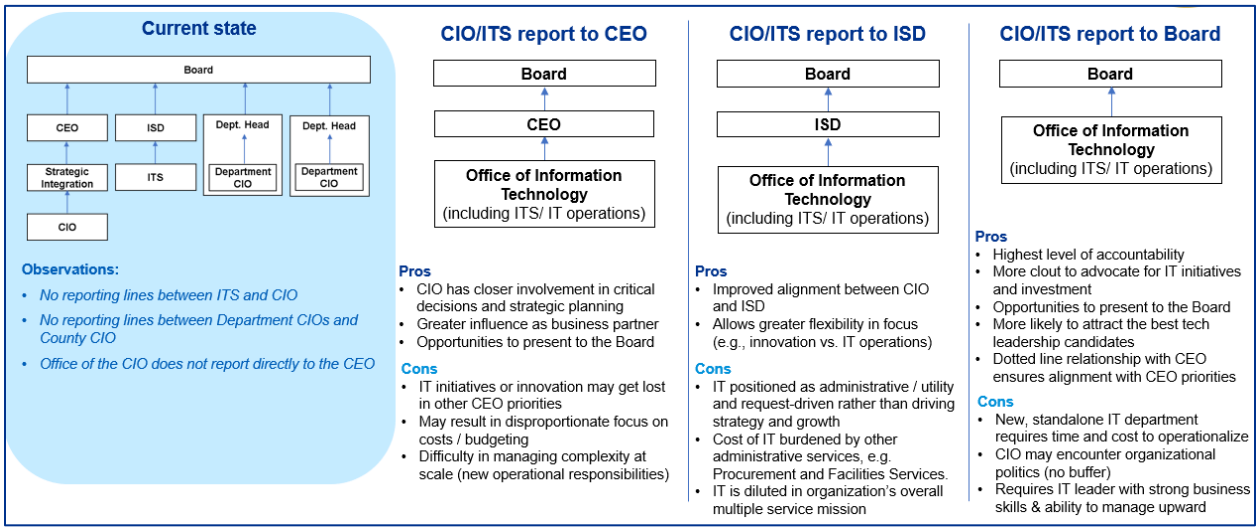
strategy and operations. This reflects not only feedback from some interviewed parties wishing to see closer alignment between CIO and ITS, but also reflects structures at some peer organizations where IT strategy and operations are governed by a common executive.

5.2. Reporting Structure Options within Hybrid IT Model

KPMG evaluated the following three reporting structure options as part of a hybrid model:

1. CIO/ITS reporting to CEO
2. CIO/ITS reporting to ISD
3. CIO/ITS reporting to the Board

Each reporting structure option was evaluated for its impact on the County in terms of pros and cons. The graphic below provides a pictorial representation of the County's current reporting structure for the IT organization(s) and the three different reporting structure options evaluated, including pros and cons for each.



It is important to note, regardless of the reporting structure selected by the County, it will be critical to establish and define the Department CIOs' relationship (i.e., direct reporting line, indirect, matrix / clusters) to the central IT organization.

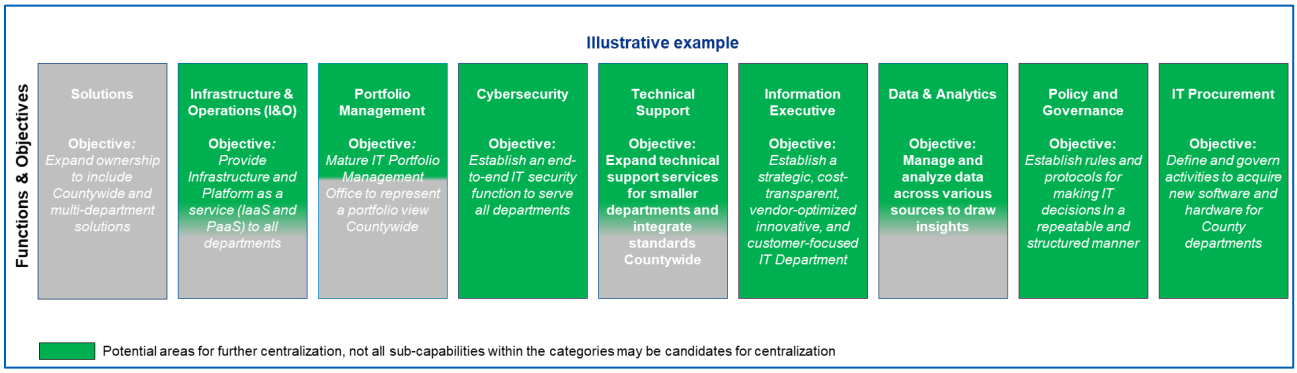
Once the IT archetype and reporting structure decisions are made, it will also be important for the County to establish the IT capabilities and functions that will be central IT organization and departmental IT organizations.

The section below provides insights into various functions that are potential candidates for centralization within the hybrid model archetype.

5.3. Potential IT functions for Centralization within IT Hybrid Model

Based on findings from Task 1 and Task 2 and in alignment with leading practices, KPMG has identified various IT functions which may be candidates for further centralization. The graphic below provides an overview of IT functions that could be further centralized within the County.

Each of the IT functions noted below have a series of sub-capabilities within, which is why certain functions could be shaded completely in green or partially. For example, technical support includes sub-functions of desktop support, application support, service desk/help desk, end user computing and mobile device management. While a large part of these functions may be centralized, the application support may need to be embedded within the departments to align with the skillset and ownership. In the graphic below, technical support is represented as mostly green in that many functions can be good candidates for centralization, however, part of the decisioning process the County may wish to pursue is to consider which IT functions are closely related to the unique business needs of individual departments.



It is important to note that varying maturity of IT competency levels within each department should be considered in making centralization decisions.

Additionally, in determining which capabilities/functions to centralize, organizations like ISAB should be considered as they currently do not have a formalized connection with central IT. Additional analysis may be required to consider need and alignment for ISAB within the hybrid IT model.

Lastly, to assist the County in its decision-making process, KPMG developed the tables below which outline how the proposed models would work to address the improvements outlined in the statement of work.

5.4. Potential Influence of IT organization models on County objectives

The table below provides relative influence of each of the IT organization archetype (centralized, hybrid and decentralized) on the County objectives as defined in the Statement of Work, and related board motion. In determining the level of influence, the KPMG team assumed that IT functions noted as candidate of centralization in the preceding section will be centralized under the centralized IT “Office of Information Technology”, and the centralized IT will be responsible for both strategic and operational aspects of the IT.

Level of influence: High / Low Board Motion objectives	Centralized	Hybrid	Decentralized
Improve oversight of cybersecurity operations	●	◕	◑
Increase use of cloud and emerging technologies	◕	◑	◑
Consolidate IT procurement practices (& modernize legacy tech)	◕	◑	◔
Improve communications between CIO and all departments	◕	◑	◔
Enforce compliance with policies	●	◑	◔

In addition, the table below also captures the influence of IT organizational archetypes on three key business parameters that are highly influenced by IT and its services. It is noted that in some respects there is a tradeoff between how well a centralized vs. decentralized model can enable certain parameters.

Level of influence: High / Low Parameter	Centralized	Hybrid	Decentralized
Business Alignment	◔	◕	●
Control	●	◕	◔
Nimbleness	◔	◕	◕

Business Alignment

- Direct access to business functions across the IT value chain
- Resource dependency between IT functions
- Tolerance for redundant roles

Nimbleness

- Need for flexibility or adaptability across the IT value chain
- Acceptable amount of time to market
- Likelihood of needing to quickly scale up or down
- Ability to predict demand and align to customer expectations

Control

- Desire for stability and predictability across the IT value chain
- Level of risk tolerance
- Ability and desire to set and enforce consistency across the organization

As noted in the tables above, there are multiple factors for the County's considerations as each archetype is evaluated. While an archetype might be impactful on the County's objectives, it may also impact the County's ability to make business driven decisions in a quick manner. It is important to consider the priority of each of the parameters and evaluate the impacts across the County.

6. Next Steps

Based on the analysis conducted and options available to the County, the County will need to take incremental steps in short and long term to transition into the selected organizational model and the reporting structure. The transition will be a journey and will require a strategic roadmap including clear definition of roles and responsibilities for each stakeholder. There will also be need of aligned technology strategies across the County, common definition of IT services, and clearly understood service delivery model and service level agreements between the IT organization and departments. KPMG has provided below some of the near-term next steps for County CEO's considerations:

- Decide on which IT organization model option to recommend to the Board for adoption, in consideration of:
  a. Ability to address key County objectives / goals.
  b. Appetite for change – both culturally and financially.
  c. Employee sentiment.
  d. Impact to country residents / constituents served.

- Begin definition of roles & responsibilities for departments, ISD, and Office of the CIO for the organizational model selected:
  a. Oversight and management of cybersecurity operations.
  b. Development and implementation of IT strategies to leverage cloud and emerging technologies.
  c. Consolidation of IT procurement practices.
  d. Improving the communication and collaboration between the Chief Information Officer, ISD, and County departments.
  e. Policy recommendations for appropriate authority to enforce compliance.

Implementation of any organizational change done right is more important than the implementation done fast. While change provides an opportunity, it is important to understand that change for any organization is hard, due to legacy ways of working, employee satisfaction, company culture, and other historical factors. The leadership team will need to develop an environment which allows for small steps towards the larger vision, rewards wins, secures alignment and agreement with key stakeholders on why the change is beneficial for the whole of the County, and provides a safe environment to innovate and pivot successfully towards the end goal.

7. Appendix

7.1. Appendix 1

The KPMG team utilized the following methods and tools to complete the tasks and meet the engagement objective:

- Interviews with over 13 peer entities.
- Review of information available in public domains.
- Interviews with business and technology stakeholders across 37 departments of the County.
- Review of County's existing documentation including organizational structure, charters, and service level agreements.
- Review of benchmark data and IT organizational models available in KPMG's proprietary methodologies and toolsets.

7.2. Appendix 2

Below is a list of stakeholders who were included in interview sessions or provided responses to interview questions via email.

Interviews	Representative Departments/Areas
Group 1: Kevin Lynch, Mike Sylvester, Brian Yanagi, Amin Almuhajab	Department of Health Services DPSS / Public Social Services Sherriff Board of Supervisors
Group 2: Mohammad Al Rawi, Todd Pelkey, Darwin Sypinero, Jim Green, Vanessa Lam, Thomas Kooy	Public Defender District Attorney Medical Examiner Probation Fire Information Systems Advisory Board
Group 3: Mirian Avalos, David Cardenas, Jerry Aoki, Hooman Hassanpour	Mental Health Public Health Children & Family Services DCFS Child Support Services
Group 4: Tim Grizzle, Karen Loquet, Ki Kim, Kiet Huynh, Matthew Der, Roozan Zarifian, Brian Schwarz, Aman Bhullar	Assessor Auditor/Controller County Council CEO Treasury Tax Collector HR Consumer Affairs Register Recorder

Group 5: Jesse Juarros, Kevin Fountain, Binh Le, Mark Remollino, Shakeel Qazi	Public Works Beaches & Harbor County Library Regional Planning Animal Care
Group 6: Paul Goldman, Malou Rubio, Michael Owens, Cynthia McCoy-Miller, Brandon Turner, Laura Jane Kessner	Workforce Development, Aging & Community Services Parks & Recreation County Counsel Children & Family Services Arts & Culture District Attorney
Group 7: Dennis Slavin, Elizabeth Buenrostro Ginsberg, Oscar Valdez, Genie Chough, Paul Goldman	Regional Planning Treasure Tax Collector Auditor Child Support Services Workforce Development, Aging & Community Services
Group 8: Mark Delgado, Jane Yang, Howard Wong, Nicole Davis Tinkham	CCJCC Alternate Public Defender Probation County Counsel
Group 9: Dave Wesolik, Jac Fagundo, Trinh Mac, Benny Chacko, Eric Sasaki, Robert King	ISD
Group 10 – Jeff Aguilar, Sladjana Markovic, Lillian Russell, Chris Paltao	CEO ISD
Selwyn Hollins and Michael Owh	ISD
Peter Loo	CIO
Amylen Clarke	CEO
Tiana Murillo	CEO

County of Los Angeles
CHIEF EXECUTIVE OFFICE
Kenneth Hahn Hall of Administration
500 West Temple Street, Room 713, Los Angeles, California 90012
(213) 974-1101
http://ceo.lacounty.gov

FESIA A. DAVENPORT
Chief Executive Officer

August 31, 2022

To: Supervisor Holly J. Mitchell, Chair
Supervisor Hilda L. Solis
Supervisor Sheila Kuehl
Supervisor Janice Hahn
Supervisor Kathryn Barger

From: Fesia A. Davenport
Chief Executive Officer

THIRD REPORT ON DEPLOYMENT AND INTEGRATION OF INFORMATION TECHNOLOGY (ITEM NO. 13, AGENDA OF JULY 13, 2021)

On July 13, 2021, the Board of Supervisors (Board) adopted a motion directing the Chief Executive Officer to report back in 120 days on the potential new or clarified job duties of the Office of the Chief Information Officer (CIO), to include: 1) Oversight of proactive County cybersecurity operations; 2) Strategies to leverage the use of cloud and emerging technologies; 3) Consolidation of Information Technology (IT) procurement practices of all departments for cost savings, and replacement and modernization of legacy computer systems, with an increase of new technology solutions that can support the workforce of tomorrow; 4) Improve communication amongst the CIO with all departments; and 5) Policy recommendations on appropriate authority to enforce policy compliance.

This report is based on the findings and recommendations from the second report, prepared by KPMG LLP, describing options for a future facing information technology model for Los Angeles County (County) as it relates to information technology for County departments, CIO, and Internal Services Department (ISD).

Information Technology Organizational Model

In March 2022, the Chief Executive Office (CEO) contracted with Info-Tech Research Group (Info-Tech) to facilitate a series of workshops with 17 County department CIOs and two Chief Deputies, to provide feedback and input on defining the operating model, services, funding model, organizational structure, and organizational placement of a future facing Integrated IT Organization for the County.

Info-Tech recommends that the CIO and ISD-Information Technology Services (ISD-ITS) be consolidated into a single Department of Information Technology (DoIT). Similar to other core administrative Departments, such as the CEO, Human Resources, County Counsel, and Auditor-Controller, DoIT will establish authority and accountability for the County IT strategies, management and operations.

Future Facing Model for Roles and Responsibilities for the County

The future facing model for County departments, CIO, and ISD is a federated model where departments and the DoIT share roles and responsibilities for the delivery of IT services to constituents. Critical enterprise services such as policy and standard setting, IT procurement, application and infrastructure lifecycle management and commodity services such as datacenter services and productivity tools will be provided by DoIT, while departments maintain responsibility for their mission critical systems supporting their unique missions and constituents.

Organizational Placement of the CIO

Info-Tech recommends that DoIT should be chartered as a new County department reporting to the Board, led by a County Chief Information Officer. This will ensure alignment with both Board priorities and department technology-based services and maximizes the accountability for IT in the County. Technology is widely recognized as a mission critical capability to deliver County services and should therefore be structured like other departments who deliver critical administrative services in a federated model (e.g., CEO, Human Resources, County Counsel, and Auditor-Controller).

Roles of CIO and ISD Relating to Proactive Cybersecurity Measures for County Owned Technology, Cloud Computing Uses and Data Sharing Agreements

DoIT will provide a single point of accountability for cybersecurity by aligning the policy and management of countywide cybersecurity operations under the leadership of the Chief Information Security Officer, that will include a new cybersecurity audit function to ensure compliance with cybersecurity policy and standards. This new organization will also include strategic and operational aspects of IT and establishes clear, countywide accountability for other critical functions such as IT strategy, IT procurement, innovation, and enterprise data management. A governance structure that allows departmental input will ensure alignment and improve communication between the CIO and County departments.

Next Steps

An assessment of ISD-ITS services and cost model is necessary to inform the Board on whether ISD-ITS will be consolidated into a new department or remain in ISD. The CEO will hire a consultant to assess ISD-ITS services and fiscal operations to determine the feasibility of implementing the recommendations in this report including the fiscal impact to ISD.

Should you have any questions regarding this matter, please contact me or Joseph M. Nicchitta, Chief Deputy, at (213) 974-1104 or jnicchitta@ceo.lacounty.gov.

FAD:JMN:JFO
PL:jmn

Attachment

c: Executive Office, Board of Supervisors
County Counsel
Internal Services

EXECUTIVE SUMMARY - DESIGN AND DEVELOPMENT OF LA COUNTY'S INTEGRATED IT ORGANIZATION
INFO-TECH RESEARCH GROUP
JUNE 2022

BACKGROUND
In March 2022, the Los Angeles County Chief Executive Officer contracted with Info-Tech Research Group (Info-Tech) to assist in developing the third report back to the Board on the motion "Deployment and Integration of Information Technology" (Item No. 13, Agenda of July 13, 2021). The objective of the engagement was to develop a set of recommendations on the key items of the Board Motion, including:

- Future facing model for roles and responsibilities between County departments, CIO and ISD
- Roles of CIO and ISD relating to proactive cybersecurity measures for County owned technology, cloud computing uses and data sharing agreements
- Organizational placement of the Office of the CIO

Info-Tech facilitated a series work six working sessions, with 15 department CIOs and 2 Chief Deputies, to get input on the roles, responsibilities, operating model, services, functions, funding model, organizational structure, and organizational placement of a future facing Integrated IT Organization for LA County.

RECOMMENDATIONS
Info-Tech's recommendations, unanimously supported by the working session participants, are as follows:

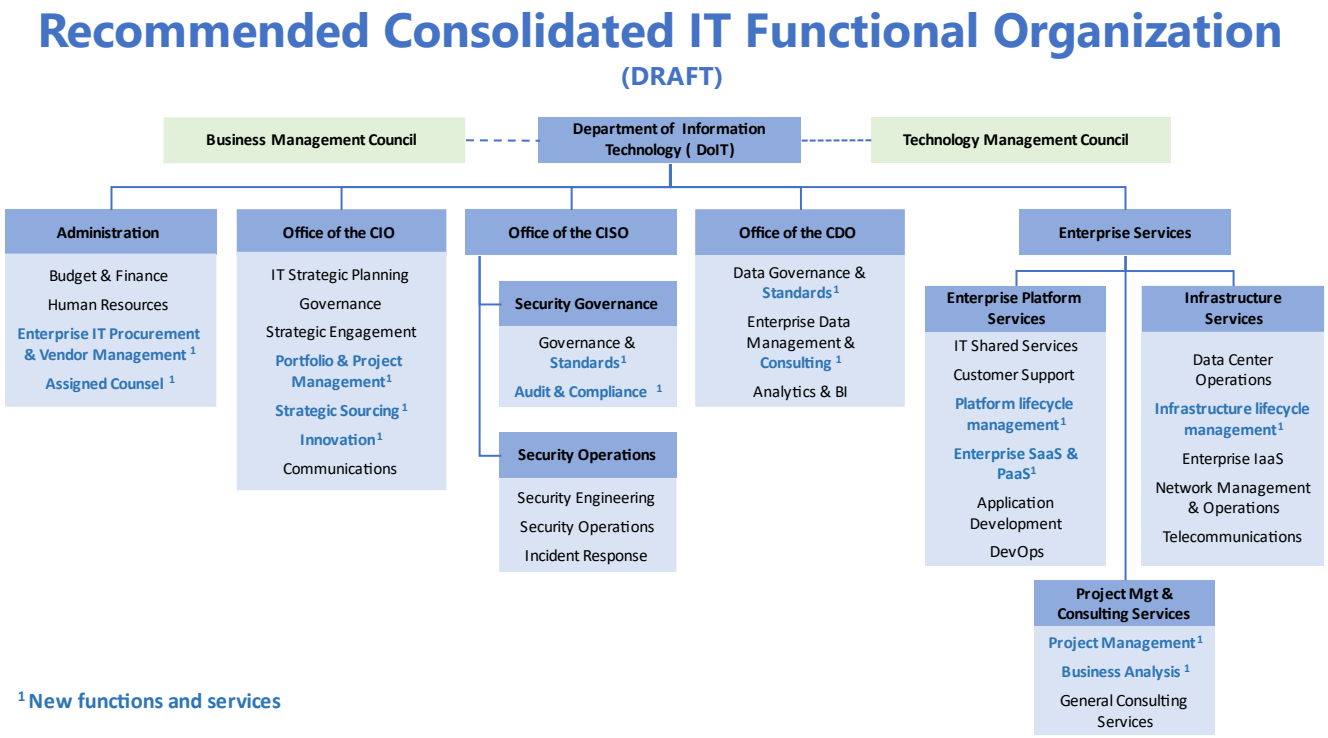
1. Future facing model for roles and responsibilities between County departments, CIO and ISD
The future facing operating model for Los Angeles County IT is a ***federated model***, where County departments and the central Integrated IT Organization share roles and responsibilities for the delivery of IT services to constituents. The central Integrated IT Organization is responsible for critical enterprise (county wide) strategy, governance (policy and standards setting), platform services, infrastructure services, IT procurement, application and infrastructure lifecycle management and commodity services such as datacenters, productivity tools (see Figure 1 for more functions and services detail). Departments continue to maintain their responsibility for mission critical systems that support their unique missions and constituents.

2. Roles of CIO and ISD relating to proactive cybersecurity measures for County owned technology, cloud computing uses and data sharing agreements
Consolidate the Office of the CIO and Information Technology Services within ISD into a ***single Department of Information Technology*** and expand the breadth of services to meet the future needs of County constituents (see Figure 1 for highlights of new services). This new organization will include strategic and operational IT functions. IT will establish clear accountability, governance, standards, and operations for county wide, mission critical functions like cybersecurity, enterprise data management and countywide platforms, including cloud technologies. A supporting governance structure (Business and Technology Councils) is necessary to enable departmental input from a business and technology perspective, assist in prioritizing new and enhanced enterprise services, facilitate improved communication.

3. Organizational placement of the Office of the CIO
Establish the central, Integrated IT organization as ***a new County Department reporting to the Board of Supervisors*** and led by a county wide Chief Information Officer (CIO). This ensures direct alignment with both Board priorities, providing enterprise services that support Departments, as well as maximizing the accountability for county wide IT. This reporting structure is consistent with a) other mission critical services

provided across the county in a federated model, such as Human Resources, Auditor-Controller, and County Counsel, and b) other jurisdictions of similar size and complexity.

Figure 1: Recommended Consolidated IT Functional Organization, with new services highlighted.



SUPPORTING DETAILS FOR RECOMMENDATIONS

More details and key benefits associated with the three main recommendations are provided below in Table 1 below.

Table 1. Supporting details for recommendations

Recommendation Details	Key Justification and Benefits
Consolidate countywide IT into a Department reporting to the Board	• Strategic alignment of Board priorities, County Strategy, Departmental strategies, and IT strategies and elevates IT as a critical county function, similar to HR, Auditor-Controller and County Counsel. • Alignment of the strategy, governance, management and operations of countywide applications, platforms and infrastructure, including lifecycle management, cybersecurity, and IT procurement, to achieve economies of scale
Enhance and improve coordination of services and constituent experience countywide	• Provides common application integration platforms to enable data sharing and enhanced constituent user experience across countywide digital services • Responsibility for business-specific mission critical systems remains with departments • Large and "subvened" departments retain their independence and funding streams are not impaired • Commodity services and support for smaller departments can be delivered centrally

Establish clear accountability for countywide IT Department	• Standard setting and IT service delivery are within the same organization • Departments will have one single contact at the County level for any given Function or Service. This will lead to faster, more consistent, and better integrated service delivery.
Centralize cybersecurity accountability and operations	• Cybersecurity will be elevated to be a county-wide responsibility with centralized standard setting and enforcement • Better visibility into the threat landscape, security posture and higher level of accountability at the county level
Simplify funding and increase cost transparency for IT services	• Implement a multi-tiered cost recovery model distinguishing between recovery of operating costs and chargeback for volume-based services • Replace current cost model with a value-based rate structure that reflects the true costs of providing IT services
Expedite and simplify countywide IT procurement	• Consolidate strategic sourcing, MSAs for IT products and services within the new IT organization • Establish better guidelines and services to enable legacy replacements leveraging countywide application platforms • Streamline the procurement process for pre-approved solutions or extensions of existing platform solutions
Establish a countywide innovation and emerging technology incubator	• Establish a forward looking, business-oriented organizational unit who works closely with departments on identifying and acting on innovative concepts and funding sources to better serve the County's constituents • Create an innovation lab with formal processes for ideation, rapid prototyping, and adoption of emerging technologies

CRITIAL SUCCESS FACTORS

Creating a new Department of Information Technology with a range of new services and combining the current staff of CIO and ISD is a complex endeavour. It will require time, commitment, and collaboration to succeed. The following provides a list of critical success factors for the design and development of LA County's integrated IT organization:

- **Clear direction by the Board of Supervisors** on the County wide IT operating model and consolidated IT organization
- **Executive support, commitment and timely decision making is necessary at the highest County levels,** including the Board, CEO, and ISD leadership
- **County policy and standards are enacted** to support the new consolidated IT organization, operating model, and IT procurement changes
- **Continue a phased, collaborative, and transparent approach** by creating a Task Force similar to the working group for this report who will guide and oversee the planning and implementation of the new IT Department and then a dedicated transformation team that will lead the transformation workstreams
- **Implementation Task Force is empowered to lead the transformational change,** within the boundaries of the Board direction and resources provided
- **Realistic expectations, scope, timeline, and resources** are needed to maintain current momentum and ensure continued County wide IT engagement
- **County staff are dedicated to the transformation team**, independent from their normal duties

- **Any new services provided by the new consolidated IT organization must be resourced** adequately to ensure their success, as well as ensure ongoing services continue to be successfully delivered
- **Organizational change management and communications** is a dedicated role and function on the transformation team

RECOMMENDED APPROACH

Given the size and complexity of creating a consolidated Department of Information Technology, this effort is expected to take at a minimum 2 years to complete. Initially, an Implementation Task Force should be created to work with the CIO, ISD and external Consultants to develop a comprehensive implementation plan.

It is imperative that this planning occur separate from the day-to-day operations of current CIO and ISD, and that the primary focus is put on creating the structure of the new organization free of current-state constraints. Once that structure is formally in place, leadership positions can be filled, and functions and services staffed with existing and new personnel.

In parallel, separate workstreams will focus on developing a comprehensive service catalog that includes all functions and services of the new Department of Information Technology as well as the cost and chargeback model for said services and functions.

Additional key activities include change management and communications to ensure that internal and external stakeholders are well informed and ready to embrace the changes.

DRAFT TIMELINE

NEXT STEPS

Immediate next steps include a go/no-go decision by the Board regarding the implementation of the recommendations in this report coupled with the task to charter a transition Task Force and the development of an Implementation Plan within the next 90 days. Such a plan will include the following:

- Workstreams for:
  - Charter the Department of Information Technology
  - Service Catalog
  - Cost Model
  - Funding Model
  - Detailed Organizational Structure with positions
- Activities and milestones for each workstream
- Workstream leads and resource requirements
- Budget estimates for internal and external costs
- Timeframes and critical milestones

ADDITIONAL INFORMATION

While it was not within the scope of this effort to determine the fiscal impact of the recommendations to the Board, Info-Tech, CIO, and the participating CIOs generally agree that the fiscal impact of these changes in the long run will be net neutral, as long as the scope of the new services are managed effectively.

There can be significant savings from consolidating services and reducing complexity in the current charge back model. These savings can be used to build out new services and functions. Services will be charged to departments either in the form of Standard Operating Cost Recovery or as a volume-based chargeback by consumption.

The transition itself however will require initial funding for the staff needed in the planning and creation of the new Department of Information Technology, as well as external consulting support for the organizational design, service portfolio management, service catalog development, cost model development, change management and communications. Developing cost estimates would be included in the initial planning effort.

Table 2. Working session participants

Name	Title
Aman Bhullar	CIO, Registrar Recorder/County Clerk
Amin Almuhajab	CIO, Board of Supervisors
Benny Chacko	Acting General Manager, ISD
Binh Le	CIO, Library
David Cardenas	Deputy Director of Operations, Department of Public Health
Hooman Hassanpour	CIO, Child Support Services
Jeramy Gray	Chief Deputy, Registrar-Recorder/County Clerk
Jesse Juarros	CIO, Public Works
Jim Green	CIO, Probation
Karen Loquet	Assistant Auditor-Controller
Kevin Lynch	CIO, Department of Health Services
Michael Sylvester	Bureau Director & CIO, Public Social Services
Mirian Avalos	CIO, Department of Mental Health

Mohammed Al Rawi	CIO, Public Defender
Pamela Missett	Chief Deputy, Department of Human Resources
Peter Loo	Acting CIO, Office of the CIO
Thomas Kooy	CIO, Information Systems Advisory Board

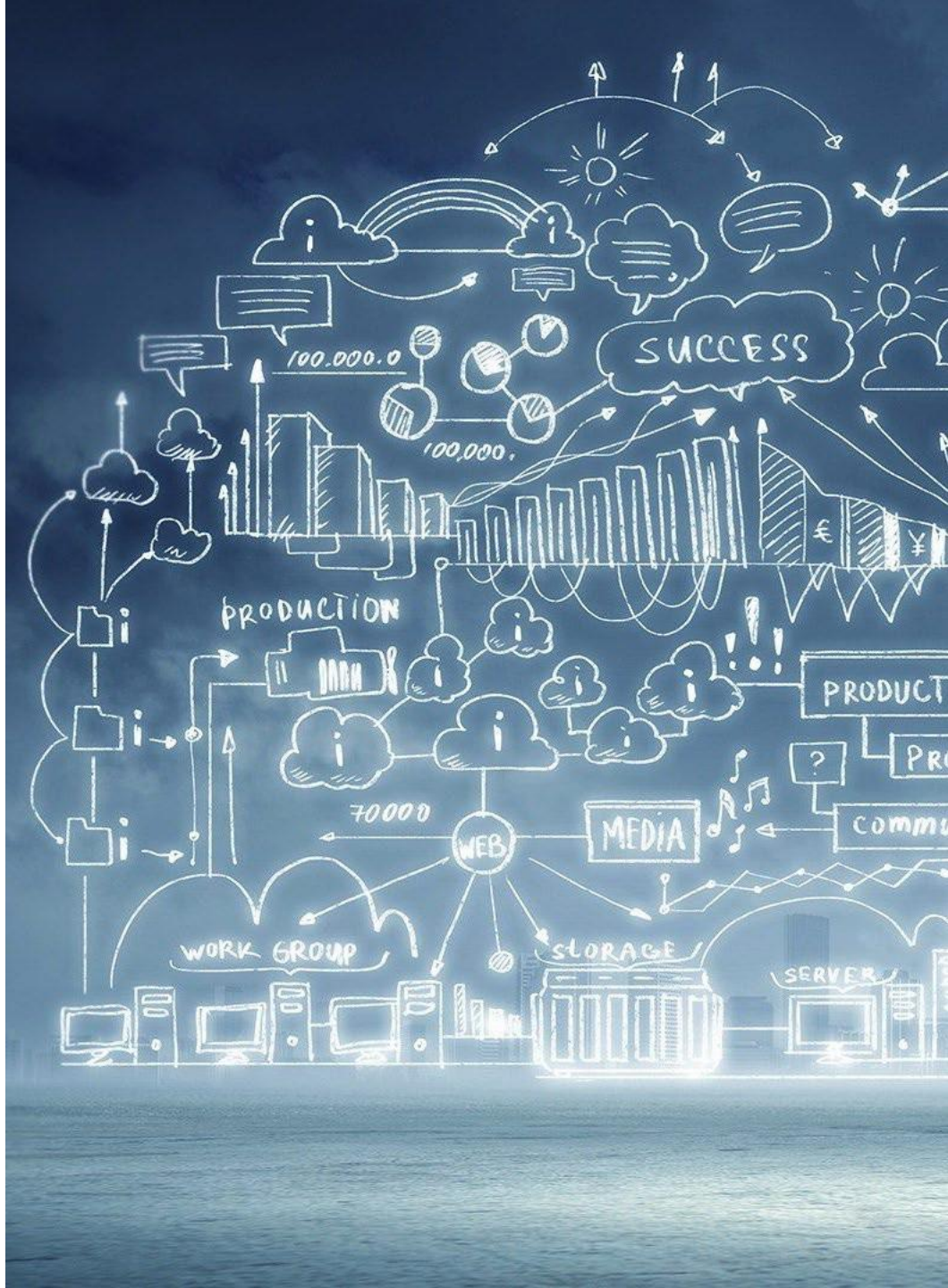
Los Angeles County
Office of the Chief Information Officer

Integrated IT Organization

Recommendations and Supporting Information

June 10, 2022

INFO~TECH



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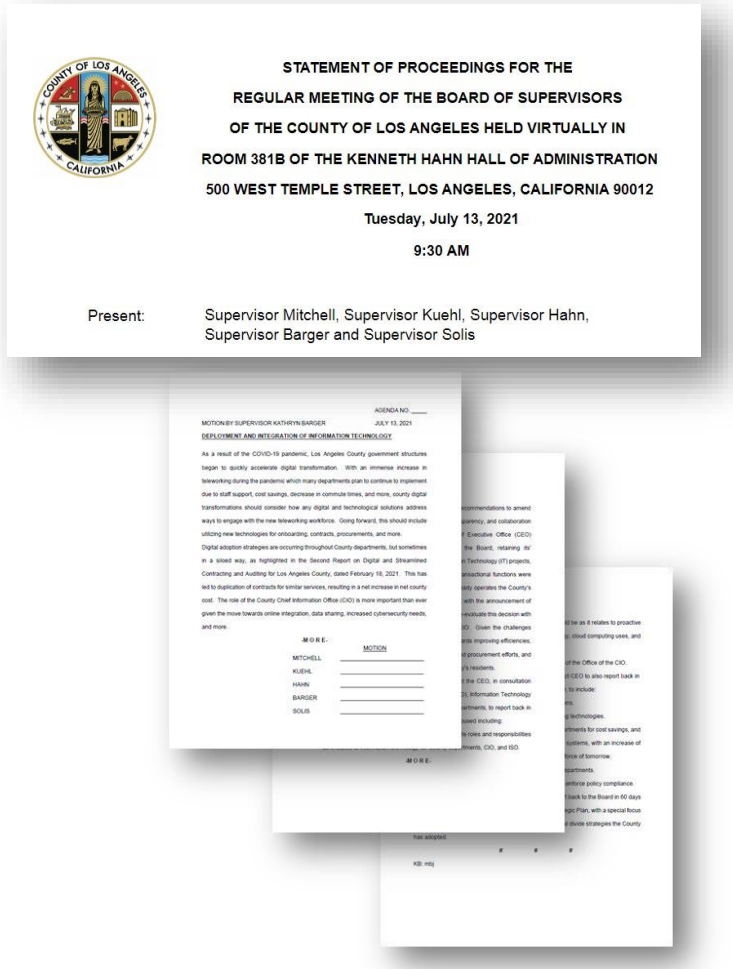
Background

Board passed a motion on “Integrated IT”…

Board Motion July 2021



STATEMENT OF PROCEEDINGS FOR THE
REGULAR MEETING OF THE BOARD OF SUPERVISORS
OF THE COUNTY OF LOS ANGELES HELD VIRTUALLY IN
ROOM 381B OF THE KENNETH HAHN HALL OF ADMINISTRATION
500 WEST TEMPLE STREET, LOS ANGELES, CALIFORNIA 90012
Tuesday, July 13, 2021
9:30 AM

Present: Supervisor Mitchell, Supervisor Kuehl, Supervisor Hahn, Supervisor Barger and Supervisor Solis

MOTION BY SUPERVISOR KATHRYN BARGER JULY 13, 2021
DEPLOYMENT AND INTEGRATION OF INFORMATION TECHNOLOGY

MOTION
MITCHELL
KUEHL
HAHN
BARGER
SOLIS

Statement of Proceedings July 12, 2021

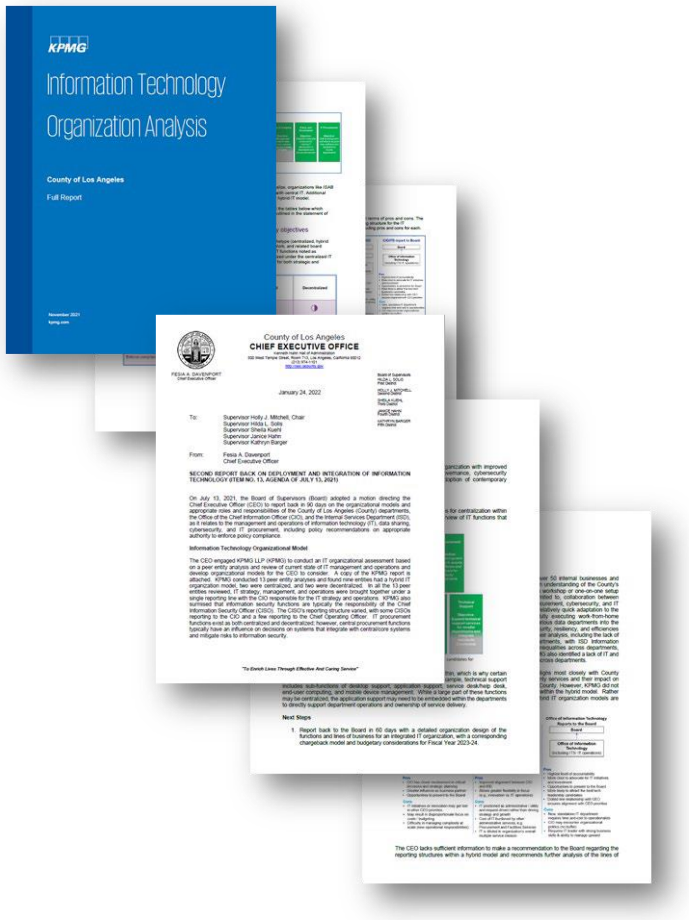
Recommendations to report back on:

1. “What a **future facing model** should be for the appropriate **roles and responsibilities as it relates to information technology for County Departments, CIO and the Internal Services Department (ISD)**”,
2. “What the appropriate **roles of the CIO and ISD** should be as it relates to **proactive cybersecurity measures for County-owned technology, cloud computing uses, and data sharing agreements**,
3. “**Recommendations for the organizational placement of the (Office of the) CIO”**

Including :

- “Potential new or clarified job duties of the CIO”
- “Oversight of proactive County cybersecurity operations”
- “Strategies to leverage the use of cloud and emerging technologies;
- “Consolidation of Information Technology procurement practices of all Departments for cost savings, and replacement and modernization of legacy computer systems, with an increase of new technology solutions that can support the workforce of tomorrow”
- “Improve communication amongst the CIO with all Departments”
- “Policy recommendations on appropriate authority to enforce policy compliance”

IT Organization Analysis and Second Board Report



February Report Back to Board on Deployment and Integration of IT

KPMG Analysis:

- Conducted **13 peer entity** analyses and found **nine entities had a hybrid IT organization model**, two were centralized, and two were decentralized.
  - In all the 13 peer entities reviewed, **IT strategy, management, and operations** were brought together **under a single reporting line with the CIO responsible for the IT strategy and operations**
  - **Information security** functions are typically the **responsibility of the Chief Information Security Officer (CISO)** - reporting structure varied
  - **IT procurement functions exist as both centralized and decentralized**; however, **central procurement** functions typically have an **influence on decisions on systems that integrate with central/core systems and mitigate risks to information security.**
- Met with over **50 internal businesses and technology stakeholders** from across the County to gain an understanding of the **County's current IT landscape**.
  - Collaboration between departments and ISD/CIO, service delivery models, IT procurement, cybersecurity, and IT operations
  - Discovered successes and challenges
- A **hybrid IT organization model is recommended** as it aligns most closely with County governance structure, based on the diverse nature of County services and their impact on the unique IT needs across different service clusters of the County.
- However, KPMG **did not make recommendations regarding the reporting structures** within the hybrid model.

The Case for Action for an Integrated IT Department is the result of a collaborative work effort

Facilitated by the Info-Tech Research Group, the following participated in a series of working sessions:

Aman Bhullar	CIO, Registrar Recorder/County Clerk
Amin Almuhajab	CIO, Board of Supervisors
Benny Chacko	Acting General Manager, ISD
Binh Le	CIO, Library
David Cardenas	Deputy Director of Operations, Department of Public Health
Hooman Hassanpour	CIO, Child Support Services
Jeramy Gray	Chief Deputy, Registrar-Recorder/County Clerk
Jesse Juarros	CIO, Public Works
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Karen Loquet	Assistant Auditor-Controller
Kevin Lynch	CIO, Department of Health Services
Michael Sylvester	Bureau Director & CIO, Public Social Services
Mirian Avalos	CIO, Department of Mental Health
Mohammed Al Rawi	CIO, Public Defender
Pamela Missett	Chief Deputy, Department of Human Resources
Peter Loo	Acting CIO, Office of the CIO
Thomas Kooy	CIO, Information Systems Advisory Board

Case for Action

Los Angeles County constituents expect public services to be …

- available anytime and anywhere, just as they would from private business service providers
- equitable and accessible to all people
- consolidated and integrated when they are requested or accessed
- securely, privately and cost effectively provided

… people and technology enable Los Angeles County to meet constituent's expectations

County Departments are successfully delivering unique technology-enabled services to their constituents

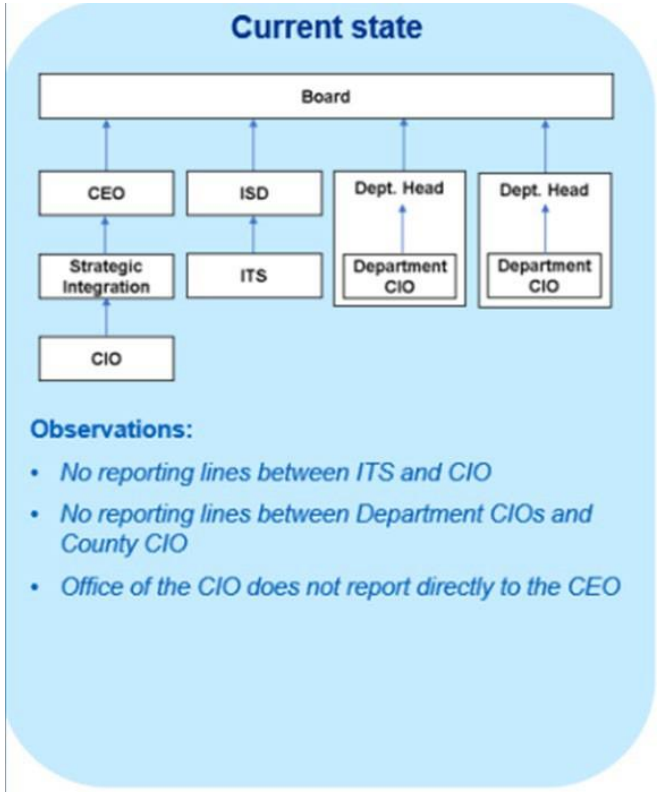
- These services support departmental missions and unique constituent needs
- Constituents and Departments benefit from technology-based automation and service delivery
- Technology is a major driver in Departments delivering digital services countywide

There are opportunities to lead and improve countywide constituent experience by …

- Enhancing the coordination of online services and overall user experience
- Expanding accessibility, making services more intuitive and improve mobile experiences
- Ensure that smaller and less subvened departments can provide state-of-the-art level of technology enabled services
- Implementing standards and governance for consistency
- Expediting and simplifying procurement to reduce lengthy delays in acquisition, development and implementation of new digital services

To meet constituent needs and expectations, countywide IT leadership and service delivery needs restructuring

- Servicing the largest Municipality in North America requires a highly coordinated and collaborative approach to efficiently and securely meet the needs of 10 million constituents, while providing Digital Equity countywide.
- "*Proactive cybersecurity measures for County owned technology, cloud computing uses, and data sharing agreements*" cannot be achieved under the current bifurcated organizational structure.
- IT leadership and accountability must take place at the highest level in the County – just like other core administrative County functions.



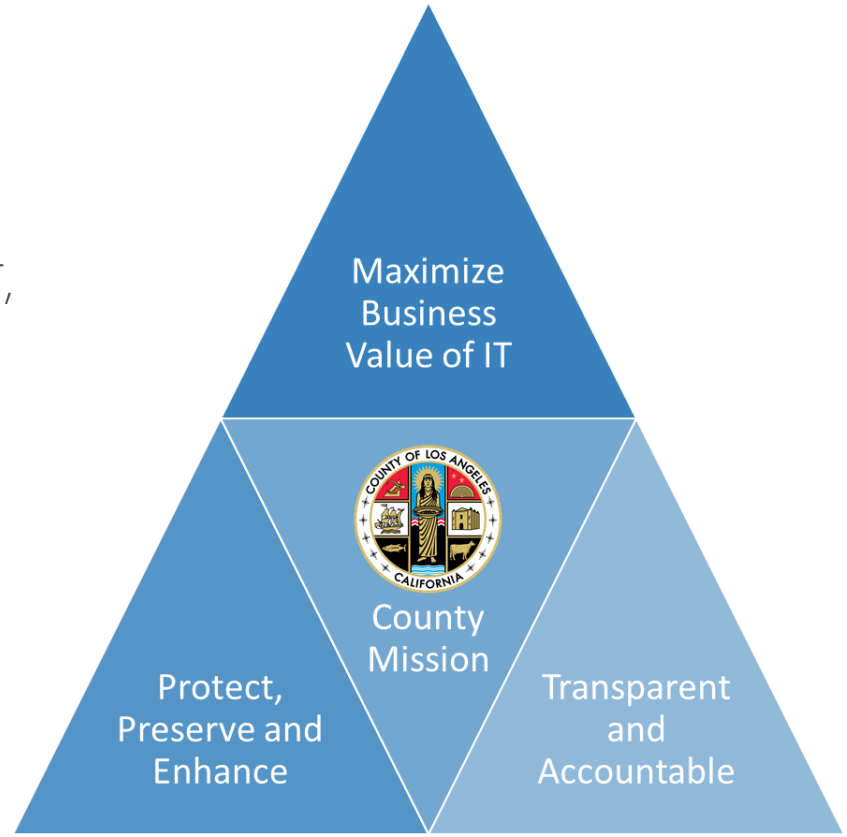
Information Technology is organized differently than other core administrative functions

Compared to other departments with core administrative functions, Information Technology does not have countywide authority and mandate.

	Auditor/Controller	Human Resources	County Counsel	Information Technology
Mandate (Mission/Vision)	Provide the County with expert advice and leadership in business and financial practices to promote financial integrity, accountability, compliance and innovation.	Attract, develop, and retain a talented, engaged, and diverse workforce passionate about public service.	The Office of County Counsel provides legal representation, advice and counsel to the Board of Supervisors [and] County Departments (…) as mandated and authorized by the County charter (…)	No clear mandate across OCIO and ISD. Separate missions, visions and strategies.
Description	Single department that sets financial management standards that are consistently used across all departments.	Single department that sets HR standards that are consistently used across all departments.	Single department that sets legal standards that are consistently used across all departments.	Two business units embedded in two different departments with no formal structured interactions.
Accountability	Department Head reporting to the Board	Department Head reporting to the Board	Department Head reporting to the Board	2 or 3 levels below department head

Info-Tech recommends consolidating the OCIO and ISD-ITS into a single Department reporting to the Board

- Info-Tech recommends that the OCIO and ISD-ITS be consolidated into a single Department reporting to the Board.*
- This Department will establish authority and accountability for countywide IT, just like other core administrative countywide Departments, such as Human Resources, County Counsel and Auditor-Controller
- The technology department will:
  - Focus on enabling the County's Mission through technology and delivering services that improve the quality of life in Los Angeles County
  - Implement processes and technologies that ensure County assets and data are leveraged, safe and secure.
  - Ensure that IT is budgeted, funded, procured and delivered in a transparent manner and that there is clear accountability for all aspects of IT across all stakeholders.



"Improve the quality of life in the County of Los Angeles by providing responsive, efficient, and high-quality public services that promote the self-sufficiency, well-being and prosperity of individuals, families, businesses and communities."

* This recommendation is unanimously supported by the participants of the working sessions.

Recommendations addressing the specific points in the Board Motion from July 12, 2021

1. Future facing model for roles and responsibilities between County departments, CIO and ISD

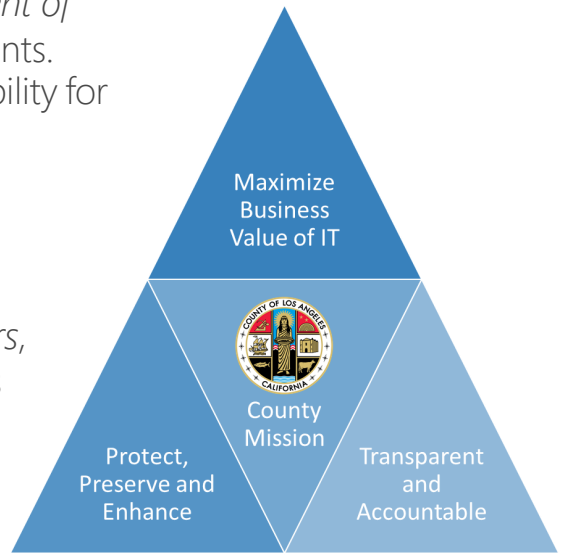
The future facing model for Los Angeles County is a *federated model* where departments and the central IT organization share roles and responsibilities for the delivery of IT services to constituents. Critical enterprise services such as policy and standard setting, IT procurement, application and infrastructure lifecycle management and commodity services such as datacenters, productivity tools will be provided by the central IT organization while Departments maintain responsibility for their mission critical systems supporting their unique missions and constituents.

2.Roles of CIO and ISD relating to proactive cybersecurity measures for County owned technology, cloud computing uses and data sharing agreements

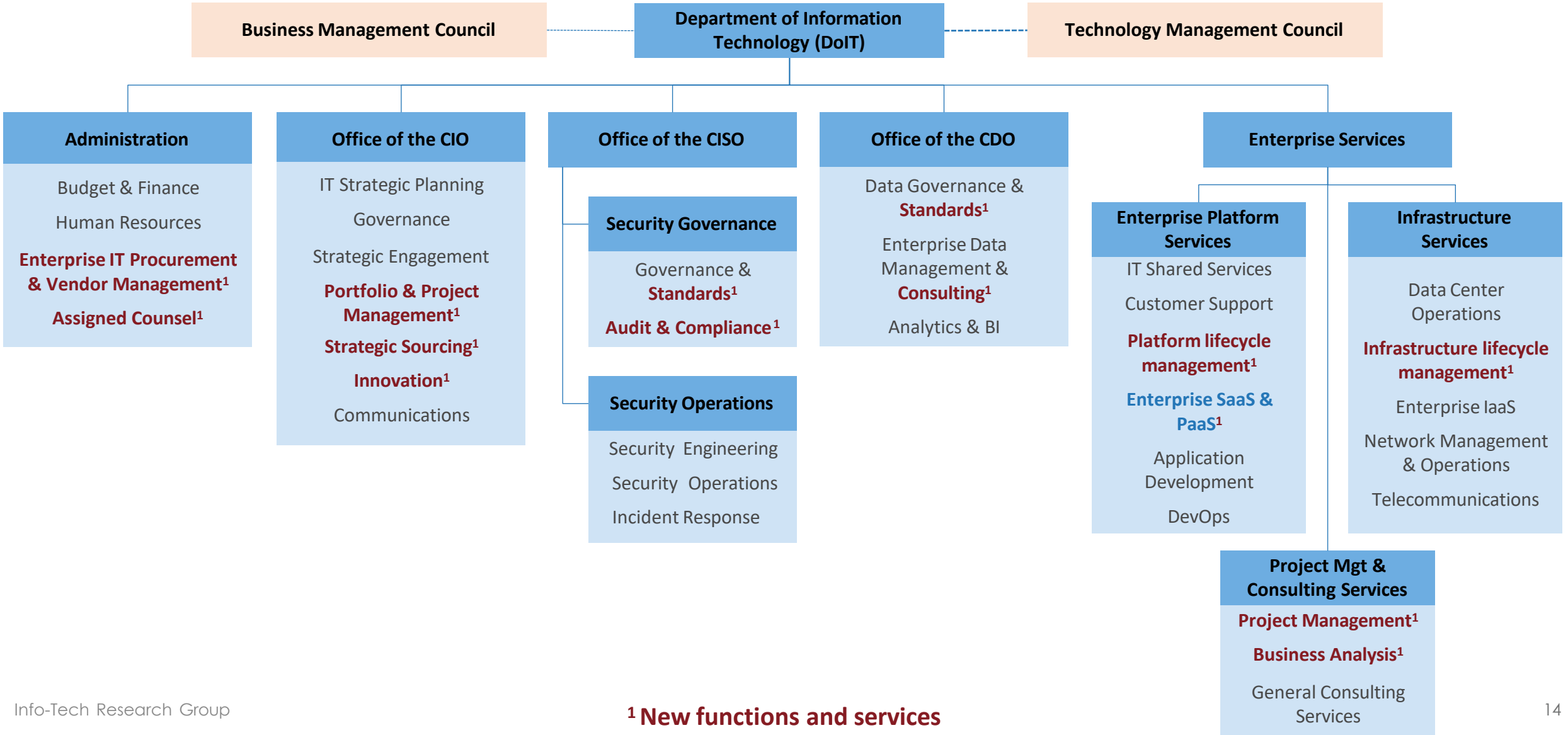
The Office of the CIO and Information Technology Services within ISD should be consolidated into a *single Department of Information Technology* and augment the range of services to meet the current and future needs of County constituents. This new organization will include strategic and operational aspects of IT and establishes clear, countywide accountability for critical functions like cybersecurity, IT strategy, IT procurement, cloud technologies and data. A governance structure that allows departmental input will ensure alignment and improve communication.

3. Organizational placement of the Office of the CIO

The Integrated IT organization should be chartered as a *new County Department reporting to the Board of Supervisors*, led by a countywide Chief Information Officer (CIO). This will ensure that there is alignment with both Board priorities and Department technology-based services and maximizes the accountability for IT in the County. Technology is widely recognized as a mission critical capability to deliver County services and should therefore be structured like other departments who deliver critical services in a federated model (Human Resources, County Counsel or Auditor-Controller).



Recommended Consolidated IT Organization Structure
(DRAFT)



[1] New functions and services

High Level Analysis of Countywide IT reporting options

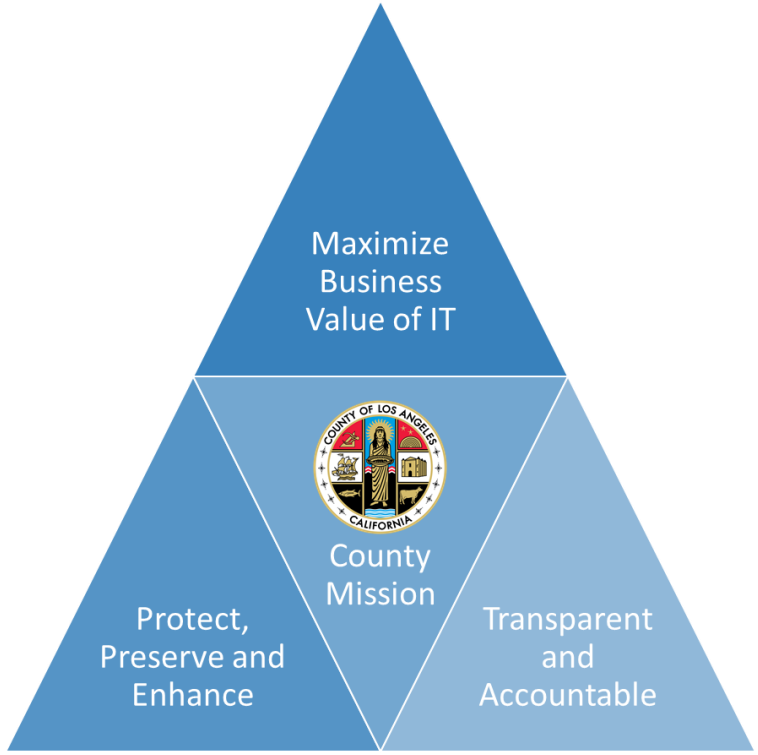
Of the three options considered for reporting structure, only reporting directly to the Board will allow LA County to fully capitalize on the benefits of consolidating CIO and ISD/ITS.

	Reporting to the Board	Reporting to ISD	Reporting to CEO
Advantages	• Core Administrative Functions are organized as Departments • Ensures alignment with both Board priorities and Department technology-based services • Puts County CIO at same level as Department heads, above departmental CIOs • Reduces risk by establishing clear, countywide accountability for functions like cybersecurity, IT strategy, IT procurement, etc. • Public organizations of similar size, complexity and structure consistently have a CIO position that reports directly to the decision-making authority (Board, Governor, Mayor).	• Minimizes organizational changes as large portion of the central IT workforce remains in ISD • Aligns CIO with IT service delivery	• No change to current status for CIO • Aligns IT service delivery with CIO
Disadvantages	• Requires chartering a new department • Highest level of effort to achieve target state	• Continues the perception of IT being a commoditized general service • Continues positioning IT as a cost center • Puts County CIO at same level as department CIO, below department heads	• Continues to deprecate IT below department CIOs • Triples the size of CEO • CEO is not an operational department • Focus on budget & operation vs. IT and Innovation
Conclusion	• Only option that allows LA County to fully capitalize on the benefits of consolidating CIO and ISD/ITS	• No other jurisdiction is organized in this manner • Unlikely to be successful in the long run as departments would turn away from ISD	• Would present an anomaly within LA County org structure as IT would be the only operation within CEO

Supporting Recommendations

Supporting Recommendations for an LA County consolidated IT Department

1. Consolidate countywide IT into a Department reporting to the Board
2. Enhance and improve coordination of services and constituent experience countywide
3. Establish clear accountability for countywide IT Department
4. Centralize cybersecurity accountability and operations
5. Simplify funding and increase cost transparency for IT services
6. Expedite and simplify countywide IT procurement
7. Establish a countywide innovation and emerging technology incubator

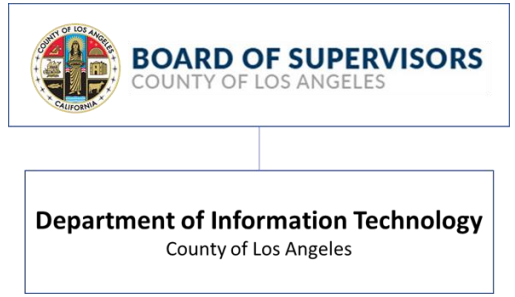


Supporting Recommendations

Info-Tech facilitated a series of six working sessions with 17 CIOs and Deputy Department Heads over the course of 2 months. Out of these sessions and based on industry best practices and Research provided by Info-Tech, we developed the following seven recommendations:

	Critical Success Factors	Key Benefits
1	**Consolidate countywide IT into a Department reporting to the Board**	• Strategic alignment of Board priorities, County Strategy, Departmental strategies and IT strategy • Like HR, Payroll, Tax Collection or Elections Information Technology is a critical capability that enables the County in fulfilling its Mission.
2	**Enhance and improve coordination of services and constituent experience countywide**	• Responsibility for business mission critical systems remains with departments • Large and "subvened" departments retain their independence and funding streams are not impaired • Commodity services and support for smaller departments can be delivered centrally
3	**Establish clear accountability for countywide IT Department**	• Standard setting and IT service delivery are within the same organization. Departments will have one single contact at the County level for any given Function or Service. This will lead to faster, more consistent and better integrated service delivery.
4	**Centralize cybersecurity accountability and operations**	• Cybersecurity will be elevated to be a county-wide responsibility with centralized standard setting and enforcement • Better visibility into the threat landscape, security posture and higher level of accountability at the county level
5	**Simplify funding and increase cost transparency for IT services**	• Implement a multi-tiered cost recovery model distinguishing between recovery of operating costs and chargeback for volume-based services • Replace current cost model with a value-based rate structure that reflects the true costs of providing a service
6	**Expedite and simplify countywide IT procurement**	• Consolidate strategic sourcing, MSAs for IT products and service within the new IT organization • Establish better guidelines for legacy replacements as to converge on fewer platforms • Streamline the procurement process for pre-approved solutions or extensions of existing platform solutions
7	**Establish a countywide innovation and emerging technology incubator**	• Establish a forward looking, business-oriented organizational unit who works closely with departments on identifying and acting on innovative concepts and funding sources to better serve the County's constituents. • Create an innovation lab with formal processes for ideation, rapid prototyping and collaboration

1 Consolidate countywide IT into a Department reporting to the Board



Recommendation

- Consolidate the Office of the CIO and Information Technology Services within ISD into Consolidated Information Technology Department
- Charter the Integrated IT organization as a new County Department reporting to the Board of Supervisors, led by a countywide Chief Information Officer (CIO)
- Hold the CIO accountable and responsible to lead, administer, govern, set strategy & standards, and operate countywide IT functions and services
- Establish business and technical governance boards to inform and guide the CIO

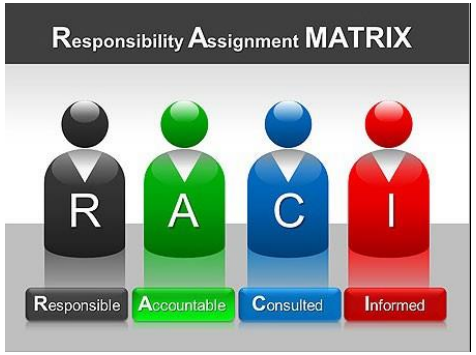
Rationale/ Supporting Best Practices

- Ensures alignment with both Board priorities and Department technology-based services
- Reduces risk by establishing clear, countywide accountability for functions like cybersecurity, IT strategy, IT procurement, etc.
- Public organizations of similar size, complexity and structure consistently have a CIO position that reports directly to the decision-making authority (Board, Governor, Mayor).
- Technology is widely recognized as a mission critical capability to deliver County services. IT should be structured like other departments (Human Resources, County Counsel or Auditor-Controller) who deliver critical services in a federated model.
- This organizational structure and reporting option was unanimously recommended by all participants of the working sessions

2 Enhance and improve coordination of services and constituent experience countywide

Recommendation	Rationale/ Supporting Best Practices
• Maintain the County's "federated" IT service delivery model, with Department technology-based services supporting their unique missions and constituents • Foster better cross-departmental collaboration by establishing countywide technology, security and data sharing standards • Establish a formal governance process that ensures Departments participation in the setting of standards and oversight processes • Improve service catalog to support smaller departments in delivering technology enabled services	• Departments maintain responsibility for their mission critical systems and use of countywide platforms for efficiencies, security and coordination of services • Many – and often "subvened" departments – need to be nimble and responsive to their stakeholders (i.e., providers of funding) and constituents • Complex issues such as homelessness, person centered care and diversion require cross-departmental data sharing beyond the current practices and capabilities • Smaller Departments will need continued, state of the art technology-based services that they could not provide / afford themselves

3 Establish clear accountability for countywide IT Department



Recommendations

- Establish IT standards and compliance enforcement authority that resides at the countywide CIO level
- Empower the CIO with the appropriate authority to act quickly and decisively to protect and preserve critical assets and functions
- Establish clear expectations and cadence for countywide communications and reporting
- Create cost transparency and add new services by expanding and enhancing the service catalog
- Identify which services are centralized, mandatory, and/or can reside within Departments, while following countywide standards and practices

Rationale/ Supporting Best Practices

- Standard setting, governance and compliance enforcement must take place at the highest level in the organization to be effective
- Effective communication is critical to the success of countywide technology-based service delivery, fosters collaboration, transparency and sharing of best practices
- Establishes the CISO as the single point of accountability for cybersecurity governance, strategy and operations
- Establishes the CDO as the single point of accountability for managing enterprise data and data sharing

4 Centralize Cybersecurity accountability and operations

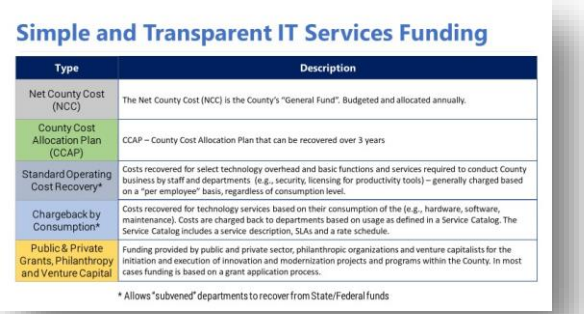
Recommendation

- Create a countywide cybersecurity program that includes an empowered Chief Information Security Officer (CISO) who is accountable for countywide cybersecurity strategy, standards, governance, audit, compliance and operations
- The countywide cybersecurity approach must enable and support different County business "cluster" security and privacy requirements, such as health, human services, public safety
- Ensure the countywide cybersecurity program is aligned with Board priorities and risk tolerance level

Rationale/ Supporting Best Practices

- Cybersecurity is one of the greatest County's organizational and reputational risks, and must be continuously monitored, assessed and mitigated.
- To preserve and effectively protect the County's digital assets, it is essential to align cybersecurity strategy, governance and operations.

5 Simplify funding and increase cost transparency for IT services



Simple and Transparent IT Services Funding

Type	Description
Net County Cost (NCC)	The Net County Cost (NCC) is the County's "General Fund". Budgeted and allocated annually.
County Cost Allocation Plan (CCAP)	CCAP – County Cost Allocation Plan that can be recovered over 3 years
Standard Operating Cost Recovery*	Costs recovered for select technology overhead and basic functions and services required to conduct County business by staff and departments (e.g., security, licensing for productivity tools) – generally charged based on a "per employee" basis, regardless of consumption level.
Chargeback by Consumption*	Costs recovered for technology services based on their consumption of the (e.g., hardware, software, maintenance). Costs are charged back to departments based on usage as defined in a Service Catalog. The Service Catalog includes a service description, SLAs and a rate schedule.
Public & Private Grants, Philanthropy and Venture Capital	Funding provided by public and private sector, philanthropic organizations and venture capitalists for the initiation and execution of innovation and modernization projects and programs within the County. In most cases funding is based on a grant application process.

* Allows "subvened" departments to recover from State/Federal funds

Recommendations

- Verify and finalize funding sources that are consistent with countywide policy and standards
- Implement a multi-tiered cost recovery model that distinguishes between operating costs and chargeback for volume-based services
- Replace current resource-based cost model with a service catalog that reflects a value-based rate structure with transparent costs
- Eliminate current practices of interdepartmental charging for activities and personnel

Rationale/ Supporting Best Practices

- Cost transparency will increase trust and confidence in shared services, reduce internal chargebacks and cost recovery mechanisms to free up funds and resources
- A comprehensive service catalog will improve the marketing and delivery of shared services as well as reduce procurement of third-party services for (available) county provided commodities countywide

Simple and Transparent IT Services Funding

Type	Description
Net County Cost (NCC)	The Net County Cost (NCC) is the County's "General Fund". Budgeted and allocated annually.
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* Allows "subvened" departments to recover from State/Federal funds

6 Expedite and simplify countywide IT procurement

Recommendations	Rationale/ Supporting Best Practices
• Establish a countywide strategic IT sourcing, procurement and vendor management capabilities to consolidate and streamline procurement processes • Streamline and expedite the procurement process for common platform solutions, cloud services and other emerging technologies • Institute the countywide CIO as a technology broker on behalf of departments vis-à-vis the vendor community to leverage buying power and reduce redundant contracts • Establish lifecycle management for software and hardware assets to enable predictive cost management and reduce risks • Transform IT procurement to be inclusive, transparent and accessible	• Leverage County's enormous purchasing power to secure better pricing, support agreements • Consolidating technology solutions lowers support and management costs and allows for the development of deeper in-house expertise • Fosters the countywide adoption of emerging technologies for the workforce of tomorrow • Tailor processes and templates to streamline procurement of IT products and services.

7 Establish a countywide Innovation and Emerging Technology Incubator

Recommendations

- Establish an incubator for Innovation and Emerging Technology that that works collaboratively with Departments
- Develop formal processes for ideation, rapid prototyping and collaboration with external entities such as universities, tech companies and other jurisdictions
- Develop a program of dedicated grant writers familiar with Federal, State and private grants to respond to and secure funding to review public and private grant opportunities and align them with Board priorities and Department needs

Rationale/ Supporting Best Practices

- Technology Lab/ Incubator will identify and pilot innovative technologies that will support the Workforce of Tomorrow, as well as innovative countywide services for constituents
- Creating innovation partnerships enables further constituent engagement and opportunities throughout the research communities countywide
- Leverage Research and Development (R&D) partnership opportunities with other community-based innovations programs

High Level Timeline and Milestones

Recommended Implementation Approach

Given the size and complexity of creating a consolidated Department of Information Technology, this effort is expected to take at a minimum 2 years to complete. Initially, an Implementation Task Force should be created to work with the CIO, ISD and external Consultants to develop a comprehensive implementation plan.

It is imperative that this planning occur separate from the day-to-day operations of current CIO and ISD, and that the primary focus is put on creating the structure of the new organization free of current-state constraints. Once that structure is formally in place, leadership positions can be filled, and functions and services staffed with existing and new personnel.

In parallel, separate workstreams will focus on developing a comprehensive service catalog that includes all functions and services of the new Department of Information Technology as well as the cost and chargeback model for said services and functions.

Additional key activities include change management and communications to ensure that internal and external stakeholders are well informed and ready to embrace the changes.

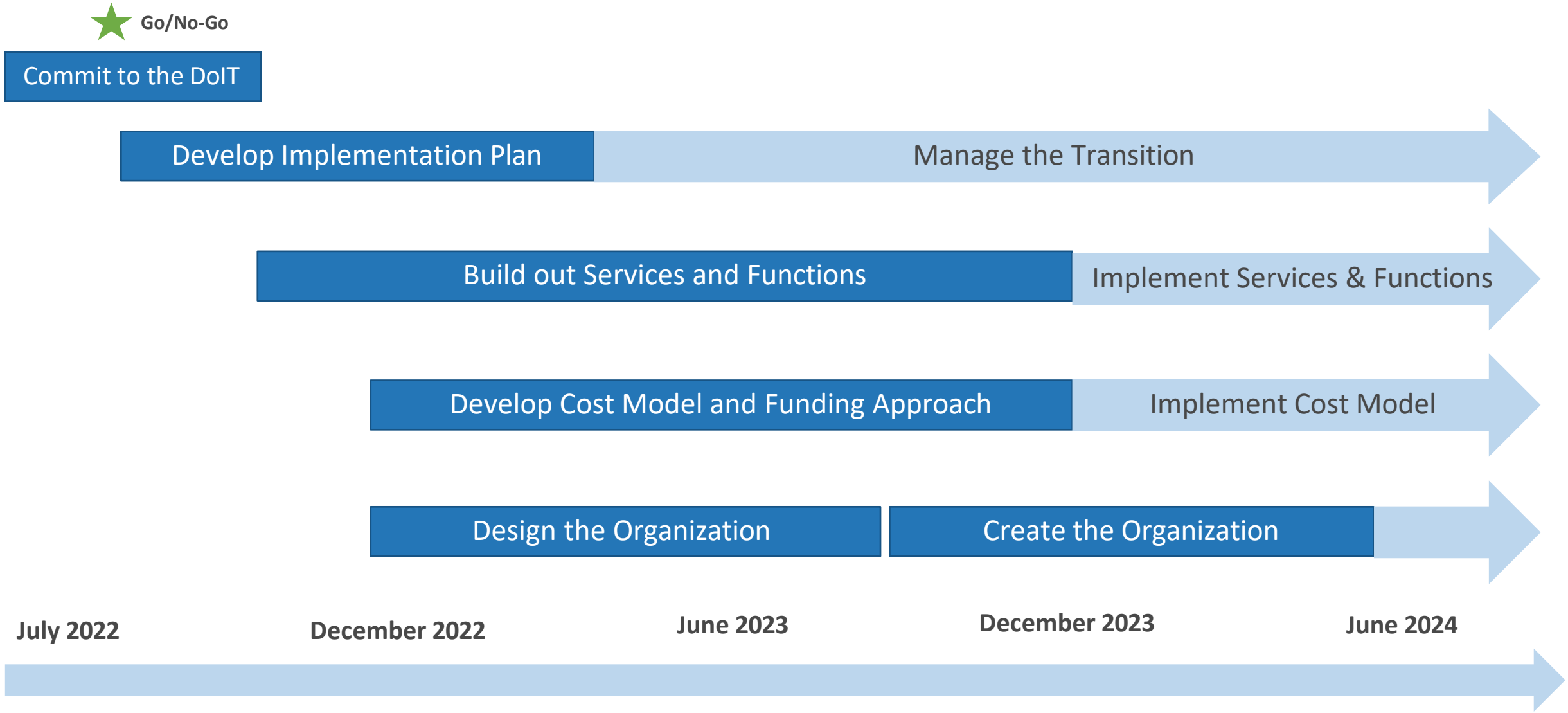
Next Steps

Immediate next steps include a go/no-go decision by the Board regarding the implementation of the recommendations in this report coupled with the task to charter a transition Task Force and the development of an Implementation Plan within the next 90 days. Such a plan would include the following:

- Workstreams
    - Charter the Department of Information Technology
    - Service Catalog
    - Cost Model
    - Funding Model
    - Detailed Organizational Structure with positions
- Activities and milestones for each workstream
- Workstream leads and resource requirements
- Budget estimates for internal and external costs
- Timeframes and critical milestones

CIO will report back to the Board quarterly days on status.

High Level Timeline and Milestones



Critical Success Factors

Critical Success Factors

Creating a new Department of Information Technology with a range of new services and combining the current staff of CIO and ISD is a complex endeavor. It will require time, commitment and collaboration to succeed. The following provides a list of critical success factors for the design and development of LA County's integrated IT organization:

- Clear direction by the Board of Supervisors on the County wide IT operating model and consolidated IT organization
- Executive support, commitment and timely decision making is necessary at the highest County levels, including the Board, CEO, and ISD leadership
- County policy and standards are enacted to support the new consolidated IT organization, operating model, and IT procurement changes
- Continue a phased, collaborative, and transparent approach by creating a Task Force similar to the working group for this report who will guide and oversee the planning and implementation of the new IT Department and then a dedicated transformation team that will lead the transformation workstreams
- Implementation Task Force is empowered to lead the transformational change, within the boundaries of the Board direction and resources provided
- Realistic expectations, scope, timeline, and resources are needed to maintain current momentum and ensure continued County wide IT engagement
- County staff are dedicated to the transformation team, independent from their normal duties
- Any new services provided by the new consolidated IT organization must be resourced adequately to ensure their success, as well as ensure ongoing services continue to be successfully delivered
- Organizational change management and communications is a dedicated role and function on the transformation team

Additional Information

Additional Information

While it was not within the scope of this effort to determine the fiscal impact of the recommendations to the Board, Info-Tech, CIO, and the participating CIOs generally agree that the *fiscal impact of these changes in the long run will be net neutral*, if the scope of the new services are managed effectively.

New positions and services can be funded through re-allocation of vacancies and services that are no longer needed (or not needed at the same levels as in the past). Savings can also be realized by consolidating services and reducing complexity of today's charge back model.

The transition itself however will require initial funding for staff needed in the planning and creation of the new Department of Information Technology, as well as external consulting support for the organizational design, service portfolio management, service catalog development, cost model development, change management and communications. Developing cost estimates will be included in the initial planning effort.

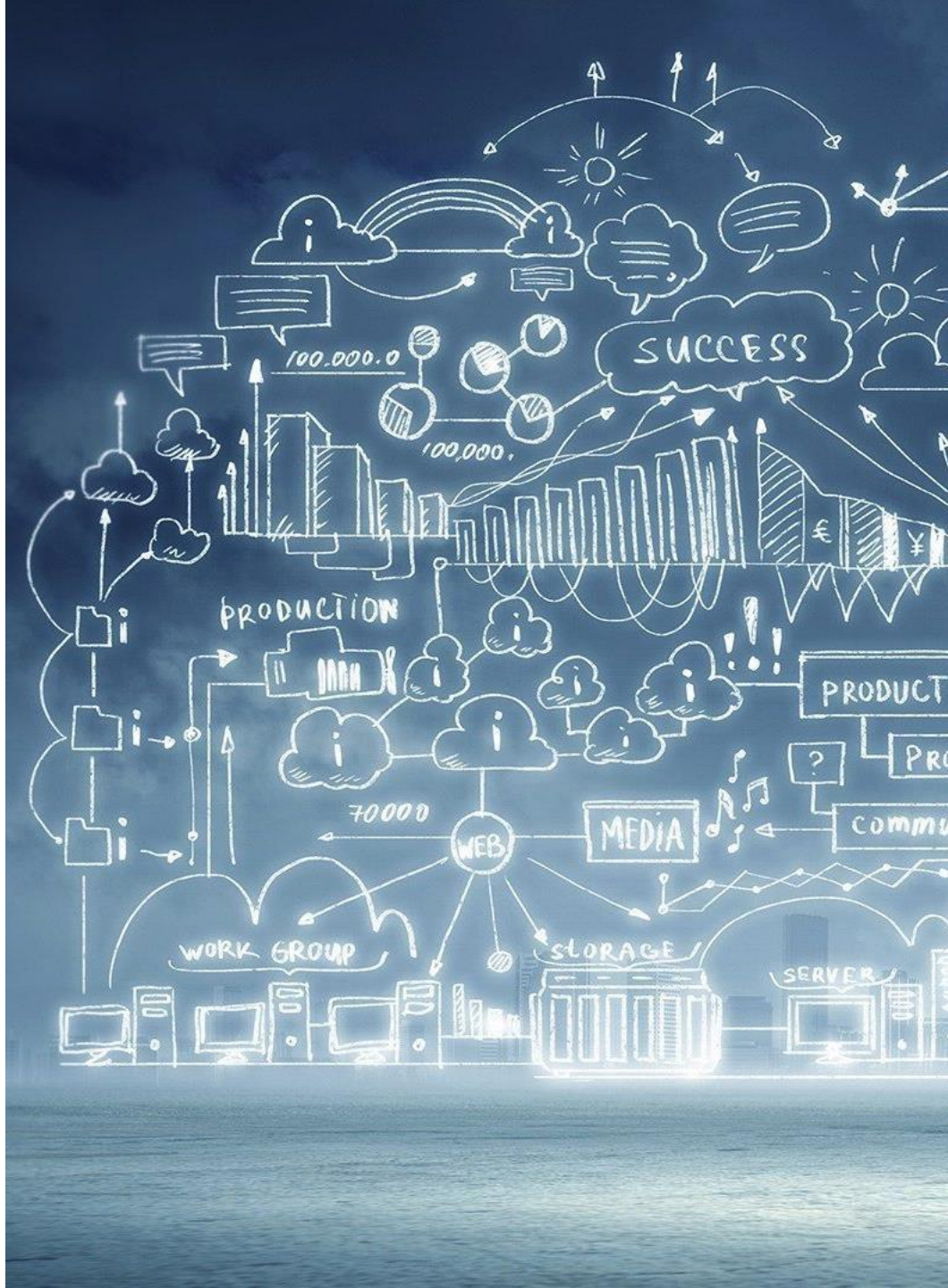
Los Angles County
Office of the Chief Information Officer

Integrated IT Organization

Attachment A: Charter Outline & Guiding Principles

May 25, 2022

INFO~TECH



Charter Outline:

1. Mission and Vision Statement
2. Goals and Objectives
3. Scope
4. Current State
5. Target State
6. Project Team, Stakeholders, Resources
7. Phased Project Milestones
8. Sponsorship Signatures

Guiding Principles

Charter Outline

Mission & Vision

Vision

A vision statement illustrates where the company would like to see itself further down the line, what it hopes to achieve, and what its goals are.

Mission

A mission statement illustrates the purpose of the organization, what it does, and what it intends on achieving. Its main function is to provide direction to the organization and highlight what it needs to do to achieve its vision.

Sample Mission & Vision

Mission: The New York City Department of Information Technology & Telecommunications (DoITT) provides for the sustained, efficient, and effective delivery of IT services, infrastructure, and telecommunications to enhance service delivery to the City's residents, businesses, employees and visitors.

Vision: A value driven culture, characterized by extraordinary employee commitment to enrich lives through effective and caring service, and empower people through knowledge and information

Goals & Objectives

Goals

Goals are high-level, specific objectives that need to be achieved to reach the target state.

Objectives

Objectives are measurable actions taken to achieve the goals. They are used to indicate when and if the target state vision is achieved.

Sample Goals & Objectives

- Make Investments That Transform Lives
- Foster Vibrant and Resilient Communities
- Realize Tomorrow's Government Today

Scope

Scope

The scope outlines the deliverables in detail and provides a common understanding of the integrated IT org scope to all stakeholders. It is used as a benchmark for future decisions.

Sample Scope

- Organization Charter Outline and Guiding Principles
- Integrated IT Operating Model and Organization Structure
- Funding Model Strategy and Approach
- Critical Success Criteria

Current & Target State

Current State

The current state provides an understanding of current maturity of the IT organization and where the organization stands currently from a capabilities standards.

Target State

A target-state describes what your department could look like when you are addressing your drivers and constraints. A target-state vision shows the end you want to achieve.

Sample Current & Target State

Current State: Interviews were conducted, and documents were reviewed to understand LA County's current IT landscape. Some successes and challenges noted:

- Success: (1) Quick adaptation to the pandemic by bringing in new technology and successfully executive work from home initiatives (2) Establishing new cyber security perimeter and governance standards
- Challenges: (1) Multiple departmental silos, (2) Limited evidence of cohesive IT strategies across department

Target State: A future facing IT organization model that aligns most closely with County governance structure and considers the roles and responsibilities of IT for county departments, CIO and ISD.

Project Team, Stakeholders, Resources

RACI

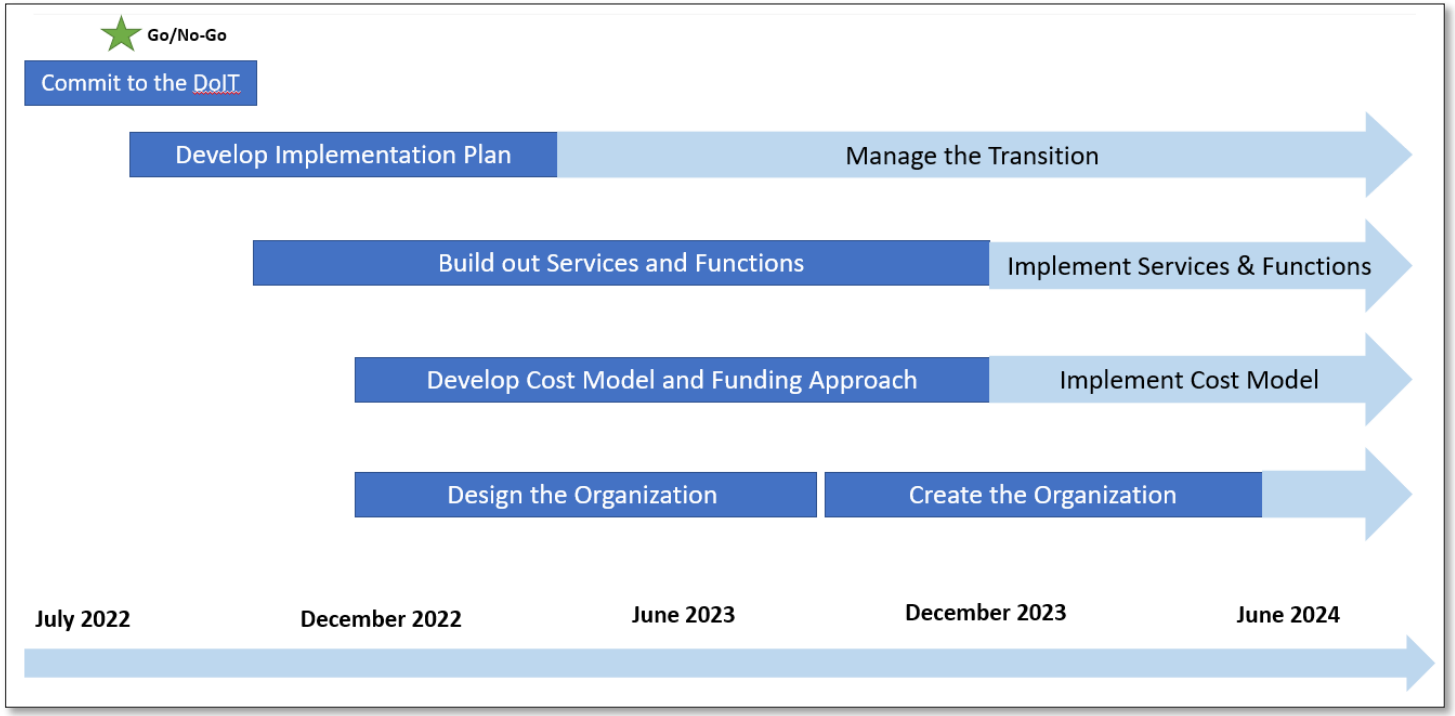
A RACI chart depicting the team structure, including the sponsor(s), steering committee, initiative lead, core team, subject matter advisors, and a table that defines responsibilities, authorities, and estimated effort required.

Project Roles	Outline Business case: goal, risks, assumptions, benefits and costs	Manage Organization Communication	Review Design: (Dependency, Integration, etc.)	Prepare Evaluation Criteria: (i.e. Bus, IT, Data, User)	Develop Migration Plan	Data conversion	Test Plan	Validate Results
Executive Steering Committee	Informed			Informed				
Project Sponsorship (i.e. Executive Sponsor)	Accountable	Responsible						
Legal/Compliance			Consulted	Consulted				Informed
Project Management (i.e. Project Manager)			Informed	Informed	Informed	Informed	Informed	Informed
Business Process Analysis (i.e. Project Manager, HR Specialist, Other SME)			Responsible	Responsible				
System Administration (i.e. System Administrator)			Consulted	Consulted	Consulted	Consulted	Consulted	Consulted
Report Design and Creation (i.e. Payroll Specialist)							Consulted	Informed
Data Migration (i.e. Technical Resource, HR Specialist, Payroll Specialist)					Responsible	Responsible		
Testing (i.e. All)							Responsible	Responsible
Security Administration (i.e. System Administration/ Technical Resource)							Consulted	Informed

Phased Project Milestones

Phased Project Milestones

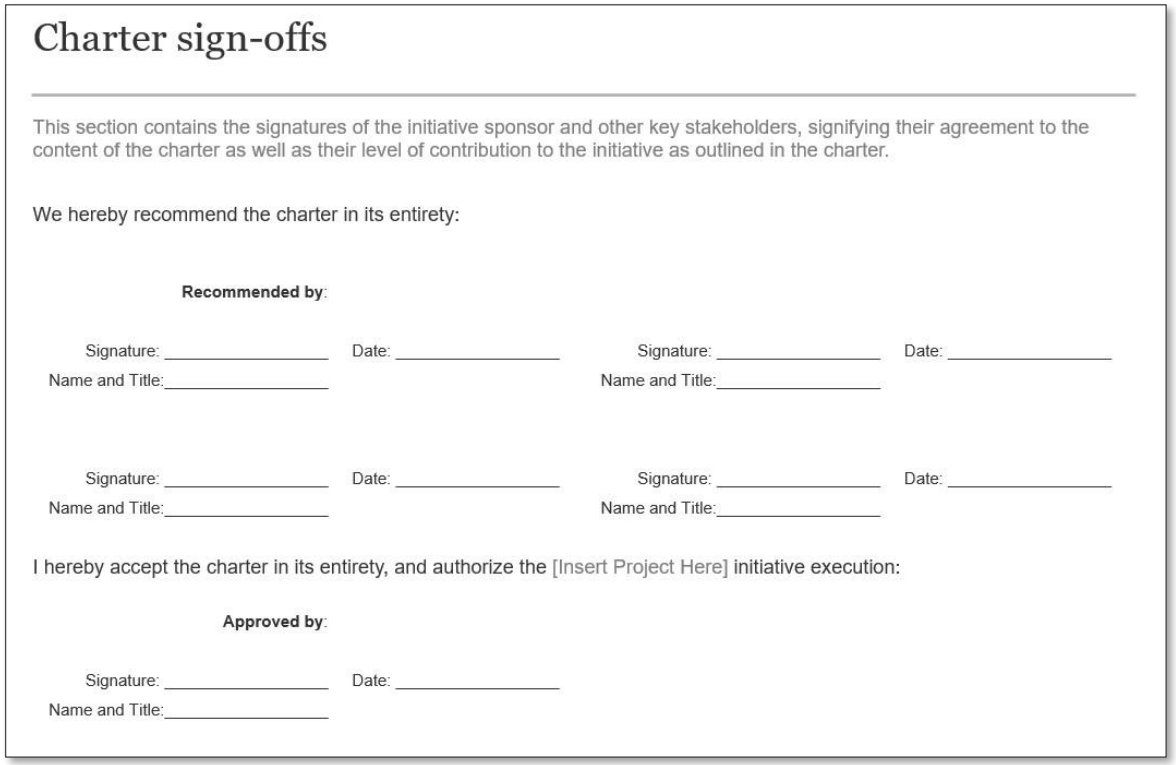
Describes the key milestones and the overall project plan to keep management and/or project sponsors informed.



Sponsorship Signatures

Phased Project Milestones

This section contains the signatures of the initiative sponsor and other key stakeholders, signifying their agreement to the content of the charter as well as their level of contribution to the initiative as outlined in the charter.



Charter sign-offs

This section contains the signatures of the initiative sponsor and other key stakeholders, signifying their agreement to the content of the charter as well as their level of contribution to the initiative as outlined in the charter.

We hereby recommend the charter in its entirety:

Recommended by:

Signature: _____ Date: _____ Signature: _____ Date: _____
Name and Title:_____ Name and Title:_____

Signature: _____ Date: _____ Signature: _____ Date: _____
Name and Title:_____ Name and Title:_____

I hereby accept the charter in its entirety, and authorize the [Insert Project Here] initiative execution:

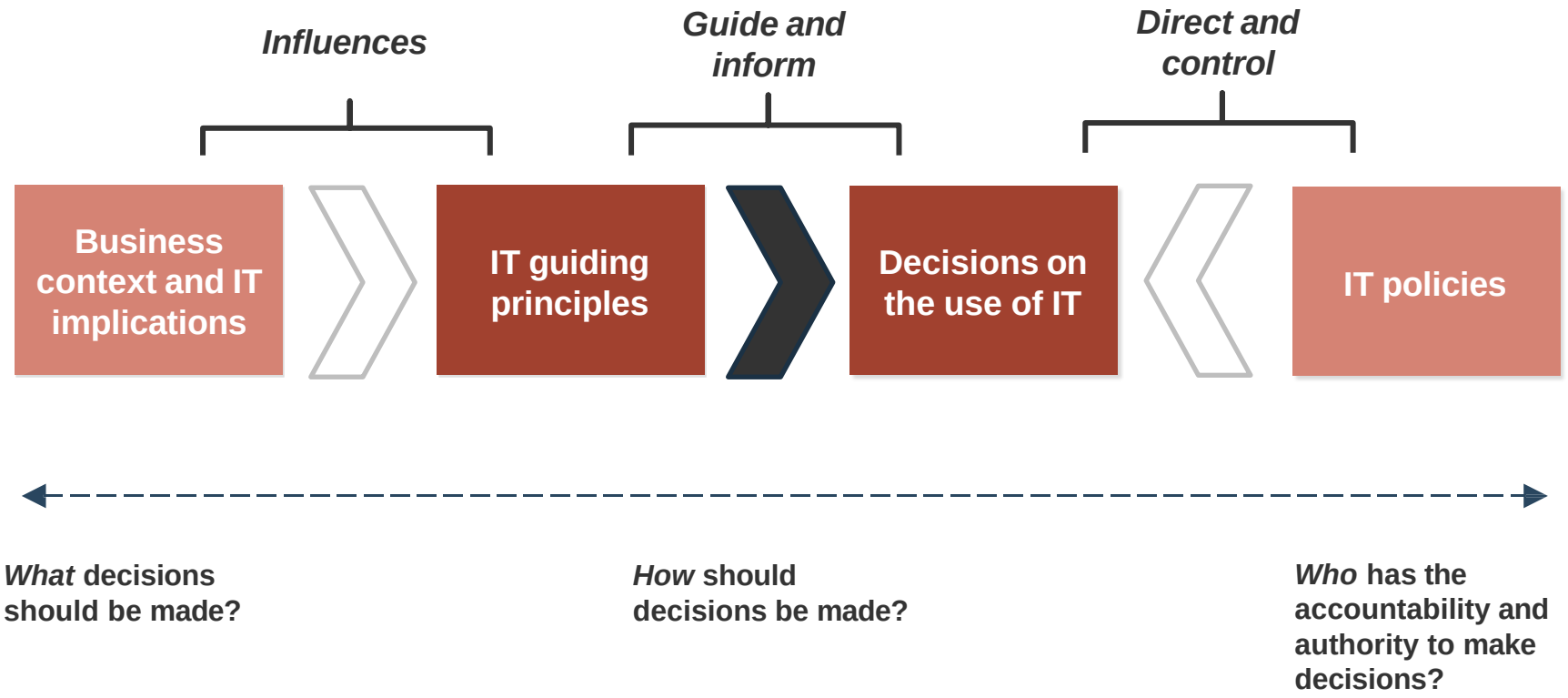
Approved by:

Signature: _____ Date: _____
Name and Title:_____

Guiding Principles

IT guiding principles advise the IT organization on making investment decisions

Guiding principles establish the beliefs and philosophy that guide decision making. These principles will serve as fundamental norms that help govern the rightfulness or wrongfulness of actions taken by the organization and respective departments.



Guiding Principles for the Integrated IT Organization

1. Support the County's Mission "to improve the quality of life in the County of Los Angeles by providing responsive, efficient, and high-quality public services"

2. Integrated IT Organization will improve:
   - Accountability
   - Transparency
   - Support Diversity across all department
   - Efficiencies through leveraging economies of scale across technology infrastructure, platforms and contracts

3. Enable continuous modernization of County Information Technology

4. Foster, encourage and support innovation and emerging technologies

5. Enable interoperative and collaborative decision making and services delivery

6. Securing county's digital assets

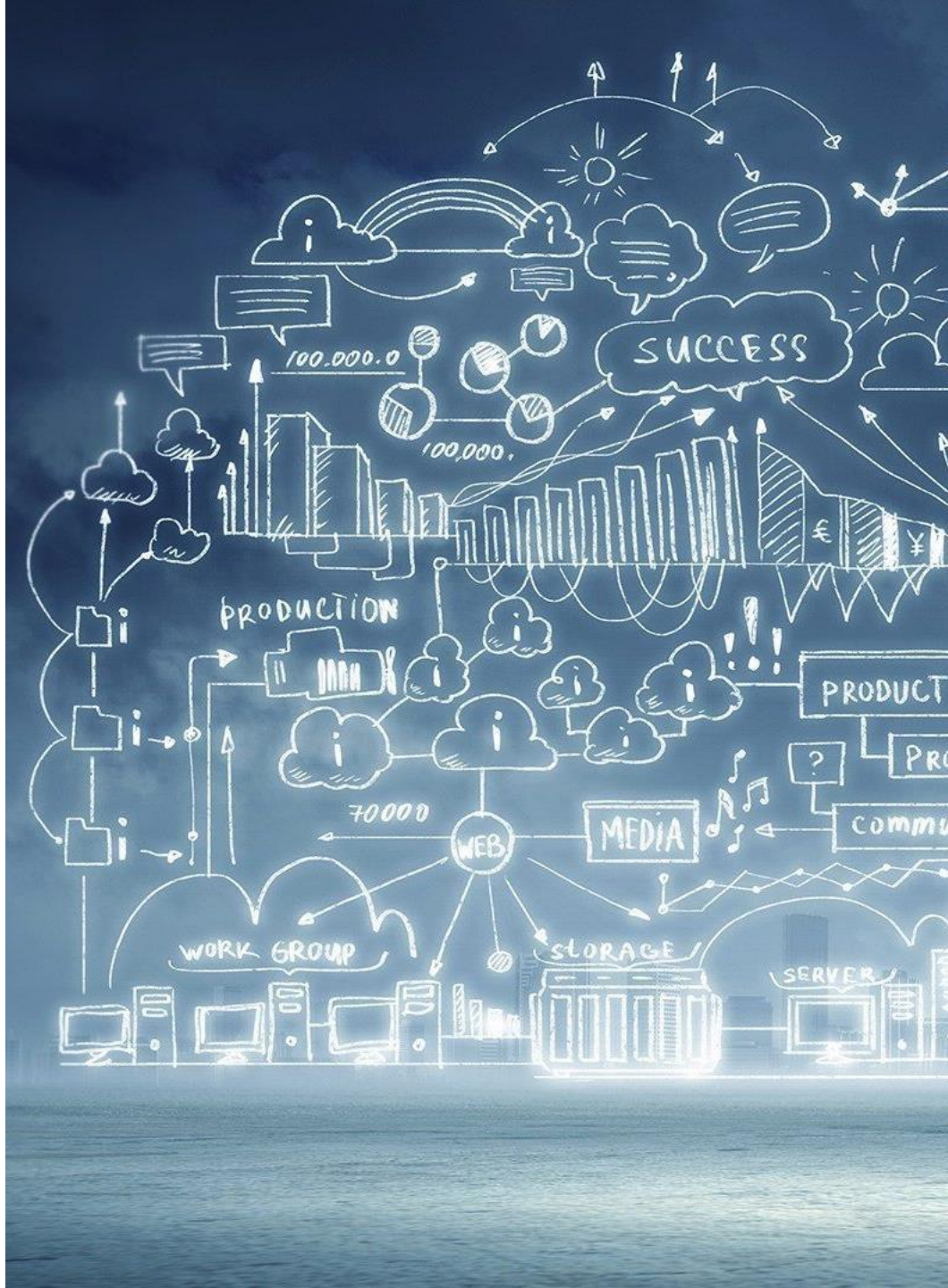
Los Angles County
Office of the Chief Information Officer

Integrated IT Organization

Attachment B: Services & Functions, and Integrated IT Organization Structure

May 25, 2022

INFO~TECH



- Background & Definitions
- Recommended Consolidated IT Organization Structure
- County-wide Services Description

Background and Definitions

Integrated IT Organization
The new organization to be created by combining today's Office of the CIO with ISD's ITS organization.

County Department "Organization"
IT responsibilities are operated and managed from end-to-end within each unit.

Hybrid/Federated
Describes the operating model in which IT responsibilities in the County are shared between a central, Integrated IT Organization and departmental IT organizations. While many services may be only provided by one or the other, some will be provided by both.

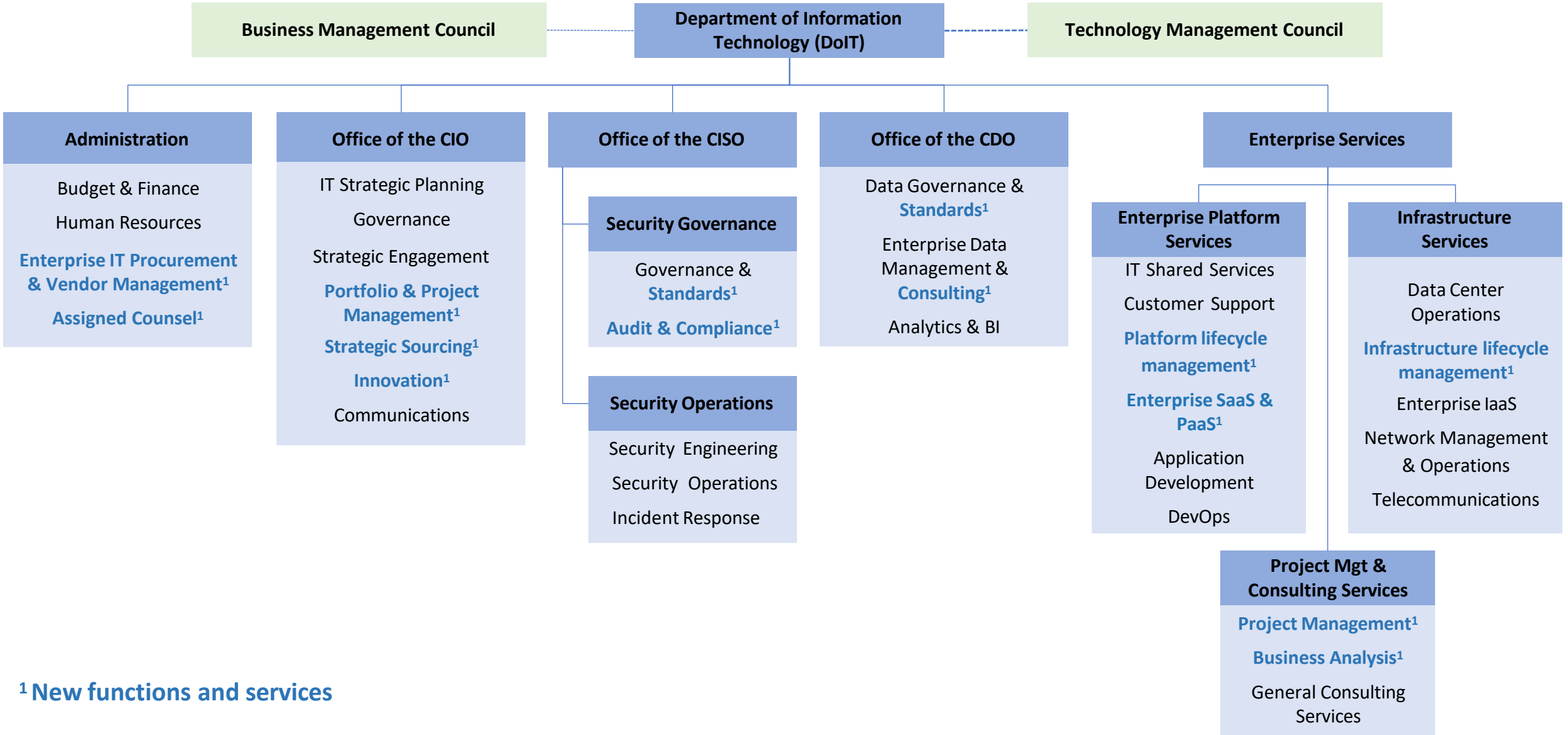
Function
A group that has a discrete set of services or capabilities that it is responsible for, which don't overlap with any others.

Service
A collection of business and technology activities or support provided by IT for consumption by the departments

Key Activities
Detailed tasks completed to deliver a service – generally out-of-scope

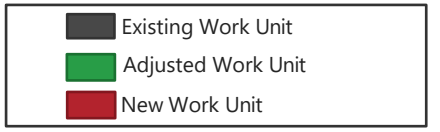
Service Descriptions

Recommended Consolidated IT Organization Structure



[1] New functions and services

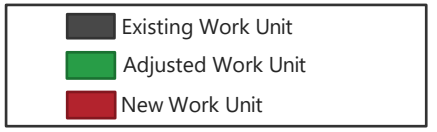
Administration



Administration

Services	Definition
Budget & Finance • Budget Development • Business & Financial Management Services	Develop a budget for IT and support individual IT groups in their separate budget development. Manage the IT-related financial activities and prioritize spending using formal budgeting practices. Provide transparency and accountability of the cost and business value of IT solutions and services. Administration of the Information Technology and Legacy Modernization Funds.
Human Resources • Strategic workforce planning • Resource Management • Employee Engagement • Learning & Development	Manage the people and people processes across the many IT groups in the County.
Enterprise Procurement & Vendor Mgmt • Procurement & Vendor Governance and Standards • Commodity Purchases • Vendor Portfolio Management • RFPs for IT Projects • Contracting • Professional Services MSAs • MSP Relationship Management	ISD's Contracts Services helps County departments develop various contract solicitation processes including Request for Proposals, Request for Statements of Qualifications and Statements of Work. ISD Contracts staff also assist departments in the entire solicitation process such as meeting with vendors, evaluating proposals and bids, coordinating solicitation protests and recommending contract awards to the Board of Supervisors. Manage IT-related services provided by all suppliers, including the selection of suppliers, management of relationships, management of contracts, and reviewing and monitoring of supplier performance.
Assigned Counsel • Counsel Engagement	Engaging with counsel to understand key priorities and identify how this will affect the priorities and strategy of IT, including IT contracts and data sharing agreements.

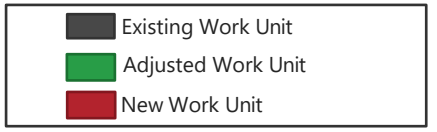
Office of the CIO



Office of the CIO

Services	Definition
IT Strategic Planning • Strategic Planning & Alignment	Define IT's strategy, priorities, decision making criteria and governing bodies.
Governance • Standards & Policies • IT Governance	Set and administer processes to allow all county departments to achieve its objectives by ensuring effective and efficient use of IT applications.
Strategic Engagement • Strategic Engagement / BRM	Engage with key clients across the county and build a relationship to understand their IT and business needs.
Portfolio & Project Management • County-wide Investment Strategy	Manage all IT programs and projects from the portfolio in alignment with the business strategy. Initiate, plan, control, and execute programs and projects to ensure that the business realizes project benefits while experiencing few delays and cost overruns.
Innovation • Innovation Governance & Standards • Ideation • Prototype • Service Improvement • Innovation & Business Management	Maintain an awareness of information technology and related service trends, identify innovation opportunities, and plan how to benefit from innovation in relation to business needs. Analyze what opportunities for business innovation or improvement can be created by emerging technologies, services, or IT-enabled business innovation, as well as through existing established technologies and by business and IT process innovation. Influence strategic planning and enterprise architecture decisions.
Communication • Strategic Communication / Stakeholder Management	Build key communication documents to communicate the IT strategy, strategic priorities and initiatives, success stories, and provide performance updates to both IT staff and business leaders.

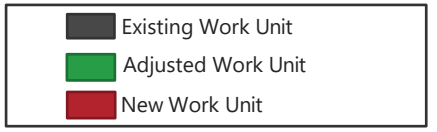
Office of the CISO



Office of the CISO

Services		Definition
Security Governance	**Security Governance & Standards** • Security Governance & Standards • Security Strategy • Cyber Governance	Define, operate, and monitor a system for information security management. Keep the impact and occurrence of information security incidents within the business' risk appetite levels. Continually identify, assess, and reduce IT-related risk within levels of tolerance set by the business.
	Audit & Compliance • Compliance, Audit & Review	Ensure that IT processes and IT-supported business processes are compliant with laws, regulations, and contractual requirements.
Security Operations	**Security Engineering** • Security Detection • Security Prevention • Response & Recovery	Design and implement security management practices in order to effectively respond to security incidents, information security in BCM, execute backup and recovery, and eDiscovery & forensics.
	SecOps • Security Operations • Risk Management	Monitor and assess security risks for the County.
	Incident Response • Cyber Security	Effectively identify and respond to cyber threats and incidents. Define policies and procedures to allow County to prevent and coordinate response to cybersecurity incidents.

Office of the CDO



Office of the CDO

Services	Definition
Data Governance & Standards • Data Governance • Data Standards • Data Quality & Governance	Put policies, processes, and capabilities in place to ensure that appropriate targets for data quality are set and achieved to match the needs of the business.
Enterprise Data Mgmt & Consulting • Data Architecture • Database Operations • Enterprise Content Management	Provide County customers with access to advanced Enterprise Content Management (ECM) tools to assist in managing, storing and accessing the documents and data that are vital to your business operations. Provide end-to-end solutions that help capture, integrate and manage content from your desktop.
Analytics & BI • Business Analytics & Reporting • Financial Analytics • People Analytics in a short period of time.	ISD's Countywide Business Analytics & Reporting (BA&R) service helps County departments and agencies turn data into information, information into knowledge and knowledge into plans. Our turn-key Business Analytics & Reporting platform provides the ability to rapidly develop and implement analytics and reports, allowing you to focus on key business drivers which result in informed decisions and process improvements

Enterprise Services

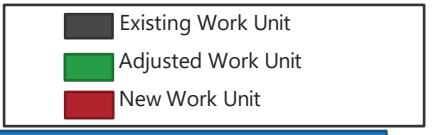
Existing Work Unit
Adjusted Work Unit
New Work Unit

Enterprise Services

Enterprise Platform Services

Services	Definition
IT Shared Services • Shared Services Model	Provide centralized information technology (IT) services that will provide departments with cost effective access to the ISD's IT infrastructure, technologies and expertise.
Customer Support • Midrange Computing • Service Desk & Incident Management • Problem Management • Provisioning of End Use Devices • Demand Management	Provide timely and effective response to user requests and resolution of all types of incidents. Restore normal service; record and fulfill user requests; and record, investigate, diagnose, escalate, and resolve incidents. Identify and classify problems and their root causes and provide timely resolution to prevent recurring incidents. Reduce the number of operational problems. ISD provides County departments with end-to-end delivery – including hardware provisioning and installation – of telephone services to customer desktops and telephone network access.
Platform Lifecycle Management • Application Portfolio & Lifecycle Management	Manage the organization's suite of applications by determining each application's ability to provide value to the business relative to its cost. Identify which applications to retire, grow or replace, repurpose or sustain.
Enterprise SaaS & PaaS • Enterprise Applications / Systems Platforms	Administration and operation of enterprise public cloud Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS) platforms and services.
Application Development • Application Maintenance • Application Hosting	Any activities involved between the conception of a desired application through the final materialization of that application contained within the software development lifecycle (SDLC).
DevOps • Software Development • IT Operations	Define processes and tools to allow County to deliver and/or improve applications and products in an efficient manner.

Enterprise Services

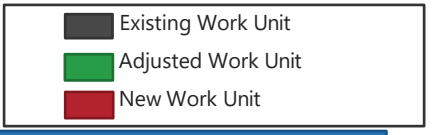


Enterprise Services

Project Management & Consulting

Services	Definition
Project Management Services • PMO • Project Oversight • IT Project Management (Staff Augmentation)	Manage all IT programs and projects from the portfolio in alignment with the business strategy. Initiate, plan, control, and execute programs and projects to ensure that the business realizes project benefits while experiencing few delays and cost overruns.
Business Analysis • Requirements Analysis	The process of collecting and managing the requirements of a system, application, or team from executives, end users, and other stakeholders.
General Consulting Services • PM Consultancy Services	Provide strategic and effective guidance to the organization for managing various projects and troubleshooting any internal/external issues.

Enterprise Services



Enterprise Services

Services	Definition
Infrastructure Services	
Data Centre Operations • Cloud Computing Services • Business Backup & Recovery	ISD Computing Services operates the County Data Center processing over a million transactions from more than 40,000 personal computers every day. With the implementation of leading technology services such as cloud computing and virtual servers, ITS is key to assisting County Departments maximize their technology resources.
Infrastructure Lifecycle Management • Infrastructure rationalization • Infrastructure Configuration Management	Manage the organization's infrastructure lifecycle by determining each infrastructure asset's ability to provide value to the organization relative to its cost. Develop and maintain the infrastructure roadmap, including when to retire, grow or replace, repurpose or sustain.
Enterprise IaaS • Training	County's adoption of public cloud Infrastructure-as-a-Service (IaaS) products and services that provide the ability to provision processing, storage, networks, and other fundamental computing resources.
Network Management & Operations • LAN • WAN • Availability & Capacity • Operations Management • Internet and Intranet websites • CCTV	ISD monitors, maintains and optimizes the data communication networks for over 850 County locations, including network design and operation support services for wide (WAN), local (LAN) and wireless local (WLAN) area networks. ISD assist departments with the planning, design and implementation of networks including equipment acquisition and installation as well as ongoing monitoring and maintenance of systems. Manage the activities and operational procedures required to deliver IT services, including standard operating procedures and monitoring activities.
Telecommunications • Telephone networks	ISD Telecommunications provides cost-effective and reliable voice, data and video communications through a vast telecommunications network.

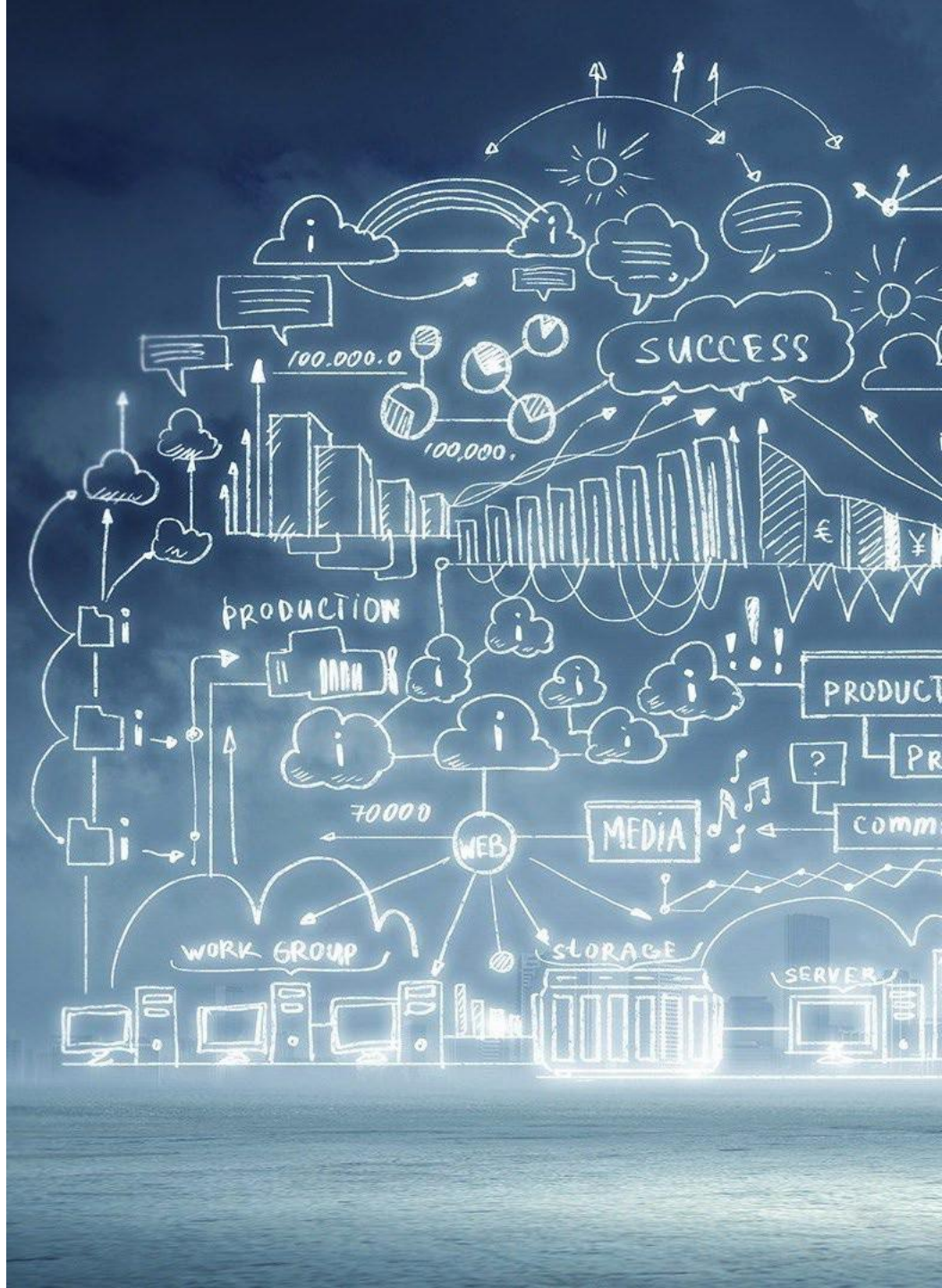
Los Angeles County
Office of the Chief Information Officer

Integrated IT Organization

Attachment C: Funding Approach

April 26, 2022

INFO~TECH



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High-Level Timeline & Milestones

High-Level Timeline & Milestones

Commit to the Organization

- Board “Go” decision
- Solicit Contractor support
- Establish Task Force
- Set up governance

Develop Implementation Plan

- Develop detailed Implementation Tasks
- Develop Resource Plan
- Develop Implementation Timeline
- Document Dependencies
- Develop OCM and Communications Plan
- Identify Key Transition Milestones

Create the Organization

- Finalize org structure
- Identify leadership classifications and obtain approval
- Identify total headcount by classification (top down)
- Build out Charter
- Develop Ordinance
- Establish Governance
- Hire CIO
- Develop Strategy
- Establish admin functions
- Identify resource by service
- Move resources by Function / Service to new org

Build Services & Functions

- Develop Service Catalog outline
- Develop comprehensive list of Functions and Services
- Identify Services to be kept
- Identify new services
- Identify Services to be adjusted
- Resource service delivery
- Cost out services (bottom up)
- Develop Service Catalog
- Create Rate schedule

Develop Cost Model & Funding Approach

- Map services and functions to funding sources
- Develop chargeback model for "Standard Operating Cost Recovery"
- Develop chargeback model for "Chargeback by Consumption"

Guiding Principles for Funding Integrated IT

Guiding Principles for Funding Integrated IT

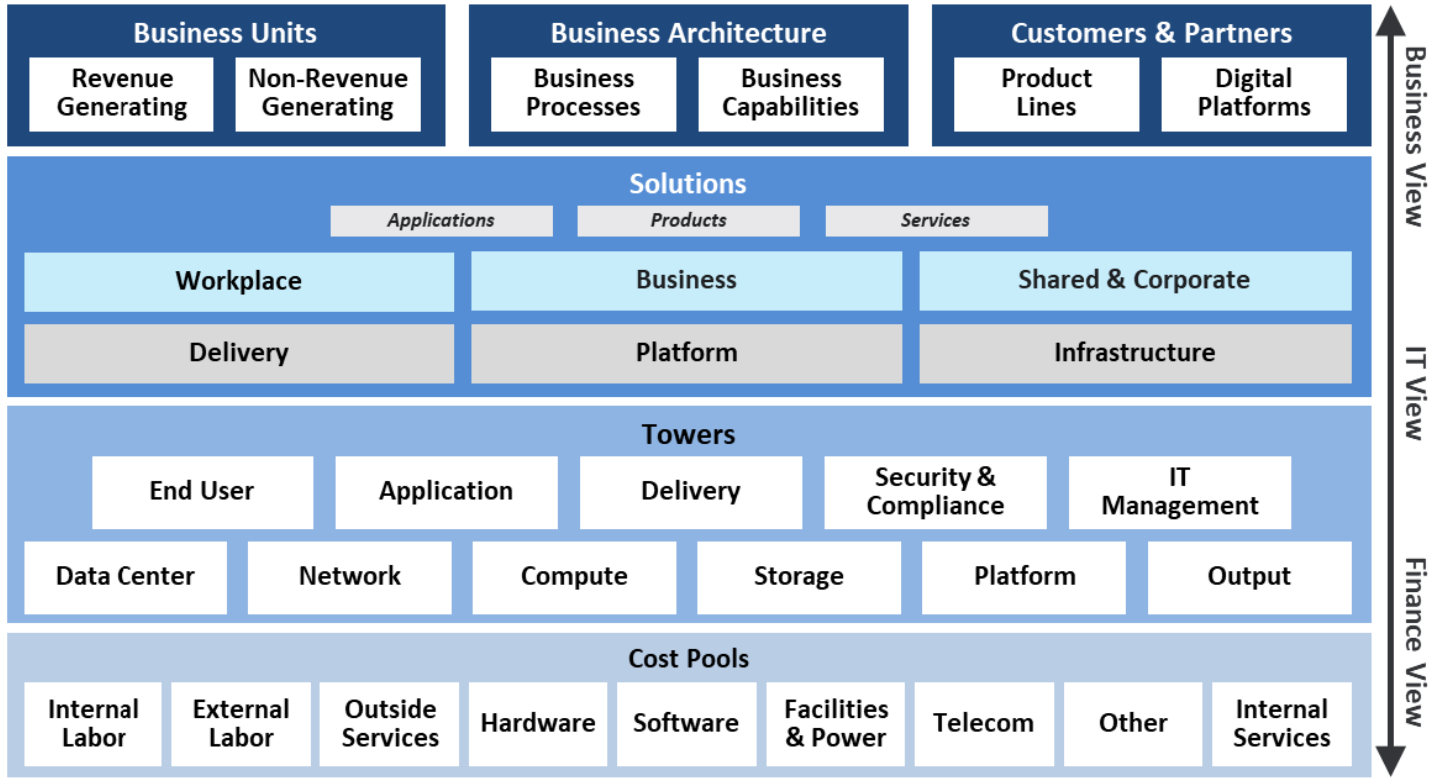
Delivering Los Angeles County's services and operating the County's business is enabled by and dependent upon business technology. Funding of the County's business technology must not only be stable, but continuous improvements and investments must be made to:

1. Enable adoption of enterprise platforms and solutions
2. For simple, transparent and enabling cost management:
   - To consumers (Departments)
   - Total cost of IT for the County
3. Enable continuous modernization of County Information Technology
4. Support the true IT asset lifecycle management
5. Leverage economies of scale for enterprise platforms, infrastructure and services
6. Leverage common practices, patterns and processes that already exist in the County, minimize new major changes to county budgeting policy and processes

Technology Business Management (TBM) Framework

Technology Business Management (TBM) is a discipline that improves business outcomes by giving organizations a consistent way to connect business value to technology investments by using a standard IT spend taxonomy to map technology assets and resources to business outcomes. TBM provides the cost transparency of IT to:

- **Optimize:** Continuously improve the unit cost of technologies and services while keeping cost and quality in proper balance.
- **Rationalize:** Better focus of time and resources on the services, applications, technologies and vendors that drive the most value.
- **Innovate:** Mission/business and IT partnership that ensures maximum value from technology investments
- **Transform:** Provide mission/business partners with agility to "pivot" more quickly to exploit innovation and capitalize on new opportunities



Funding Mechanisms for IT

Five County Funding Mechanisms for IT

Type	Description
Net County Cost (NCC)	The Net County Cost (NCC) is the County's "General Fund". Budgeted and allocated annually.
County Cost Allocation Plan (CCAP)	Funded by NCC but represents cost distributed by countywide allocation that can be submitted for reimbursement, subject to state grantor agency approval prior to the reimbursement of certain costs allocated, billed, or cost applied.
Standard Operating Cost Recovery*	Capacity-based cost recovery for select technology overhead and baseline services required to conduct County business by staff and departments (e.g., eCAPS, security, licensing for productivity tools) – generally charged based on a "per employee" basis.
Chargeback by Consumption*	Consumption-based cost recovery for technology services based on their consumption of the (e.g., hardware, software, maintenance). Costs are charged back to departments based on usage as defined in a Service Catalog. The Service Catalog includes a service description, SLAs and a rate schedule.
Public & Private Grants, Philanthropy and Venture Capital	Funding provided by public and private sector, philanthropic organizations and venture capitalists for the initiation and execution of innovation and modernization projects and programs within the County. In most cases funding is based on a grant application process.

* Allows "subvened" departments to recover from State/Federal funds

Criteria & Examples

Type	Description	Criteria and Examples
Net County Cost (NCC)	The Net County Cost (NCC) is the County's "General Fund". Budgeted and allocated annually.	• Portion of the County budget that is financed with locally generated revenues. • Limit use of this funding approach for IT related services. • Examples include Legacy Modernization Fund and Information Technology Fund.
County Cost AllocationPlan (CCAP)	Funded by NCC but represents cost distributed by countywide allocation that can be submitted for reimbursement, subject to state grantor agency approval prior to the reimbursement of certain costs allocated, billed, or cost applied.	• One-time costs to help close gaps, level up, e.g. MS365 one-time true up. • Generally funded by legacy, ITF and some cases NCC. • Use for one-time funding for significant program capital costs, e.g. cybersecurity and establishing county data center services. • Portion of NCC to subsidize overhead rate associated with countywide chargeback options- to maintain market competitiveness.

Criteria & Examples

Type	Description	Criteria and Examples
Standard Operating Cost Recovery	Capacity-based pricing: Setting service unit prices as a percent of the total service volume that IT is capable of providing overall. Unit prices will remain fixed across cycles unless the percent setting is changed. Total charges depend on overall consumption and departments are generally charged based on a “per employee” basis.	• Administrative and operational costs for countywide services, e.g. eCAPS, Telephone Utilities, and cybersecurity infrastructure. • Recovery of platform and infrastructure lifecycle costs. • Presumption that this would be **allocated** to all departments. • Many of these can be charged quarterly to accommodate department cash flow and lower administrative costs .

Criteria & Examples

Type	Description	Criteria and Examples
Chargeback by Consumption	Usage-based pricing: Setting service unit prices equitably based on consumption levels by each business unit. Unit prices will vary with overall consumption each cycle. Costs are charged back to departments based on usage as defined in a Service Catalog. The Service Catalog includes a service description, SLAs and a rate schedule.	• Services that are consumed on an as needed basis • County eCloud services, desktop and laptop computer installation, software and hardware maintenance.
Public & Private Grants, Philanthropy and Venture Capital	Funding provided by public and private sector, philanthropic organizations and venture capitalists for the initiation and execution of innovation and modernization projects and programs within the County.	• Seed funding for Innovation initiatives • Public and private grants for specific projects or initiatives • Not currently leveraged • Need for grant writers to pusue grant opportunities. • Some ARPA- ex. 4MM used for some of the Wi-Fi • Grant service broader than just philanthropic- all depts could use • You can build in overhead.

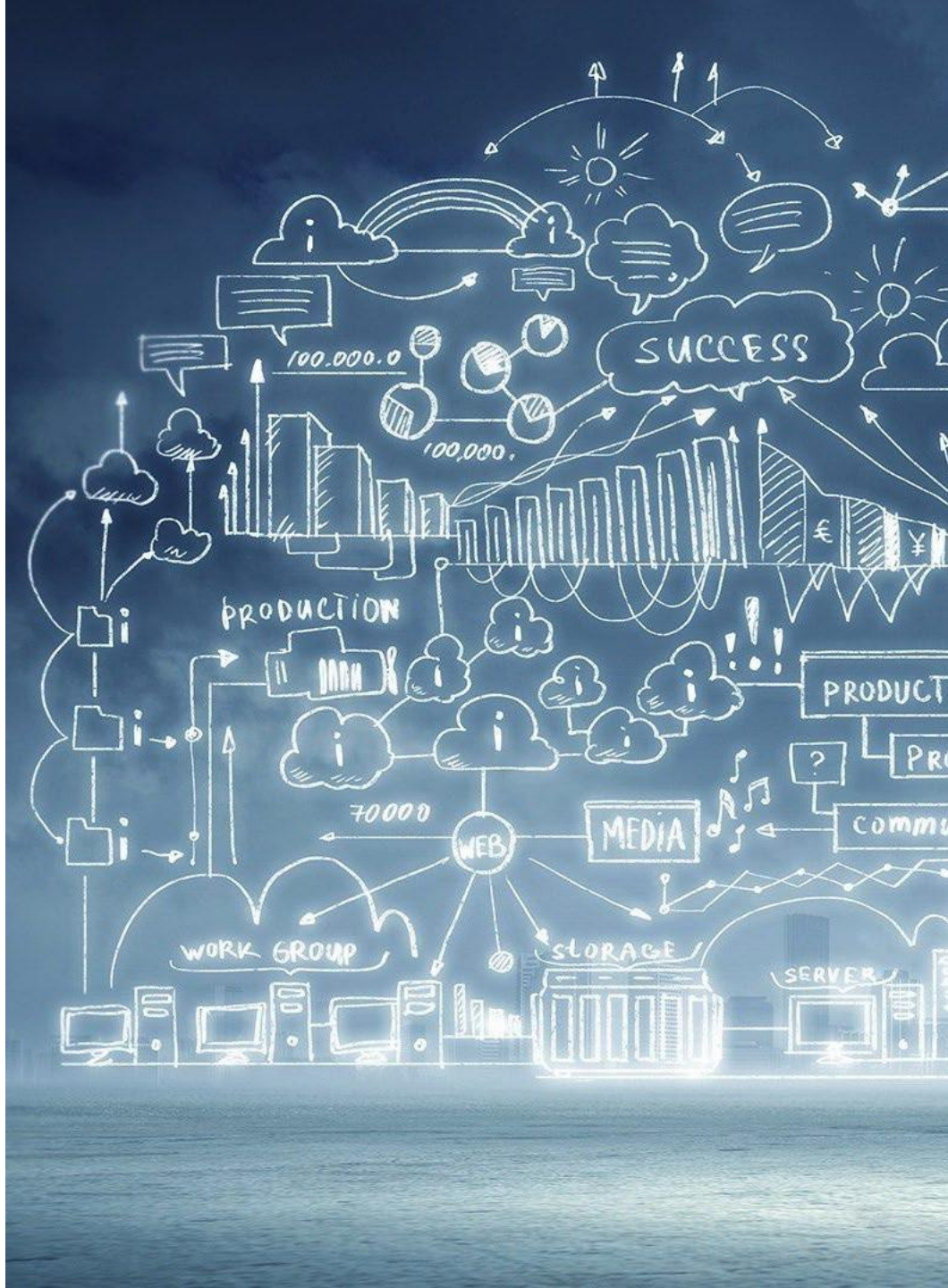
Los Angles County
Office of the Chief Information Officer

Integrated IT Organization

Attachment D: Organizational Structures of Jurisdictions similar in size and complexity to LA County

June 10, 2022

INFO~TECH



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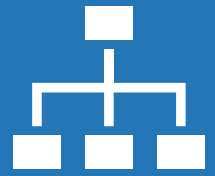


Organizational Structures of Jurisdictions similar in size and complexity to LA County

Other Comparable Jurisdictions

WaTech
Washington Technology Solutions
Washington's Consolidated Technology Services Agency

THE COUNTY OF DALLAS STATE OF TEXAS

OREGON ENTERPRISE information services

DIR Texas Department of Information Resources

California DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY

MARICOPA 1871 ARIZONA COUNTY

Ohio | Department of Administrative Services

COOK COUNTY BOT BUREAU OF TECHNOLOGY

King County

THE NOBLEST MOTIVE IS THE PUBLIC GOOD
COUNTY OF SAN DIEGO
MDCCCLI

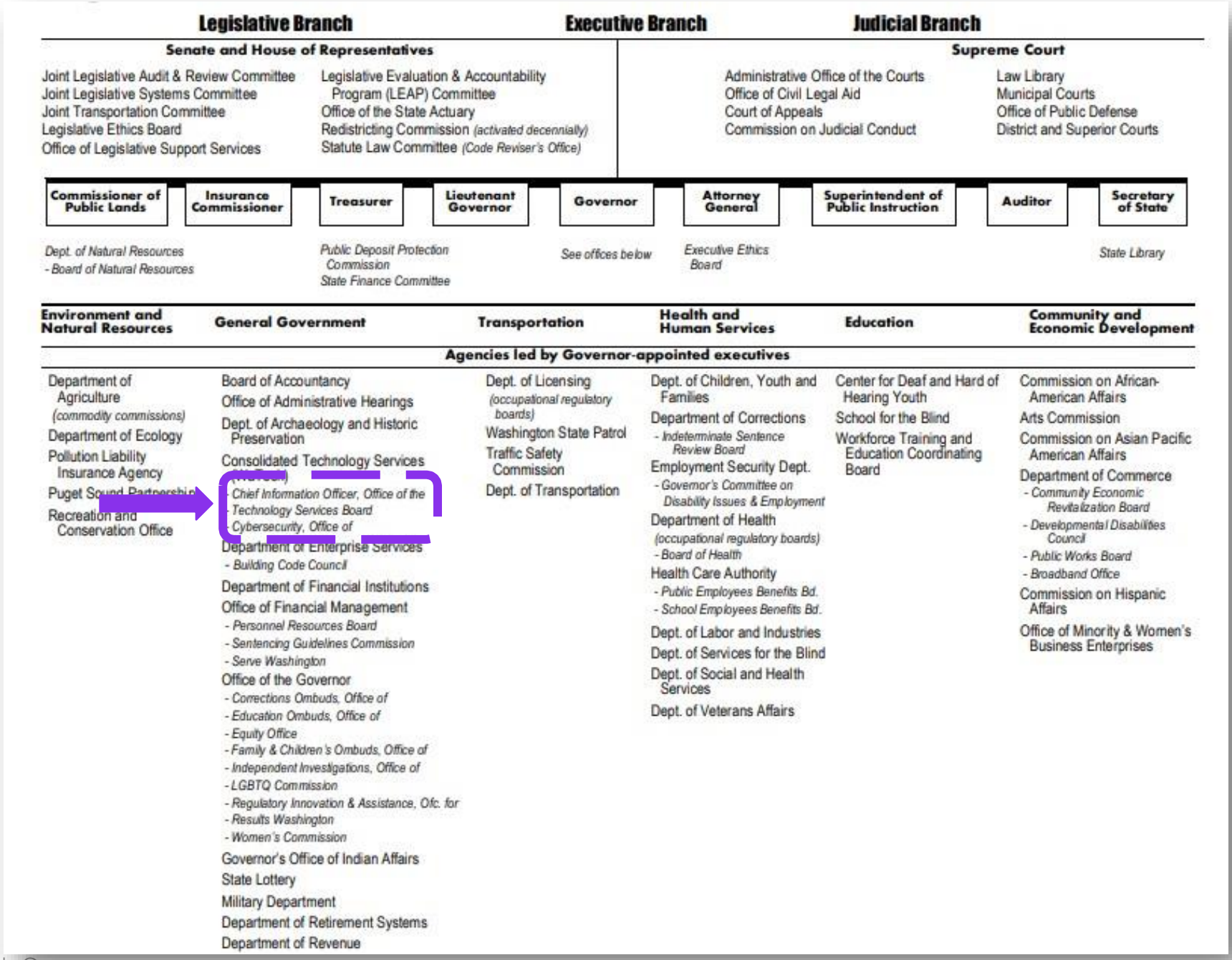
State of Washington Office of the Chief Information Officer

WaTech
Washington Technology Solutions
Washington's Consolidated Technology Services Agency

The Office of the Chief Information Officer (OCIO) sets information technology (IT) policy and direction for the State of Washington. The State CIO is a member of the Governor's Executive Cabinet and advisor to the Governor on technology issues.

The OCIO's unique role in state government is to:

- Create clarity and alignment for IT investments
- Provide strategic direction and enterprise architecture for state government
- Enable standardization and consolidation of IT infrastructure
- Establish standards and policies for efficient and consistent operations
- Educate and inform policy leaders
- Create and nurture a cohesive operating IT community
- Bring technology expertise to improve the business of Government
- Foster innovation and experimentation to bring modern capabilities to Government
- Together with OFM Budget the OCIO will bring a big picture view of agency investments and strategies, assuring that agency investments will fit into an enterprise view of IT.



Legislative Branch

Senate and House of Representatives

Joint Legislative Audit & Review Committee
Joint Legislative Systems Committee
Joint Transportation Committee
Legislative Ethics Board
Office of Legislative Support Services
Legislative Evaluation & Accountability Program (LEAP) Committee
Office of the State Actuary
Redistricting Commission *(activated decennially)*
Statute Law Committee *(Code Reviser's Office)*

Executive Branch

- **Commissioner of Public Lands**
  - *Dept. of Natural Resources*
  - *- Board of Natural Resources*
- **Insurance Commissioner**
- **Treasurer**
  - *Public Deposit Protection Commission*
  - *State Finance Committee*
- **Lieutenant Governor**
- **Governor**
  - *See offices below*
- **Attorney General**
  - *Executive Ethics Board*
- **Superintendent of Public Instruction**
- **Auditor**
- **Secretary of State**
  - *State Library*

Agencies led by Governor-appointed executives

Environment and Natural Resources

Department of Agriculture *(commodity commissions)*
Department of Ecology
Pollution Liability Insurance Agency
Puget Sound Partnership
Recreation and Conservation Office

General Government

Board of Accountancy
Office of Administrative Hearings
Dept. of Archaeology and Historic Preservation
Consolidated Technology Services (WaTech)
- *Chief Information Officer, Office of the*
- *Technology Services Board*
- *Cybersecurity, Office of*

Department of Enterprise Services
- *Building Code Council*

Department of Financial Institutions
Office of Financial Management
- *Personnel Resources Board*
- *Sentencing Guidelines Commission*
- *Serve Washington*

Office of the Governor
- *Corrections Ombuds, Office of*
- *Education Ombuds, Office of*
- *Equity Office*
- *Family & Children's Ombuds, Office of*
- *Independent Investigations, Office of*
- *LGBTQ Commission*
- *Regulatory Innovation & Assistance, Ofc. for*
- *Results Washington*
- *Women's Commission*

Governor's Office of Indian Affairs
State Lottery
Military Department
Department of Retirement Systems
Department of Revenue

Transportation

Dept. of Licensing *(occupational regulatory boards)*
Washington State Patrol
Traffic Safety Commission
Dept. of Transportation

Health and Human Services

Dept. of Children, Youth and Families
Department of Corrections
- *Indeterminate Sentence Review Board*

Employment Security Dept.
- *Governor's Committee on Disability Issues & Employment*

Department of Health *(occupational regulatory boards)*
- *Board of Health*

Health Care Authority
- *Public Employees Benefits Bd.*
- *School Employees Benefits Bd.*

Dept. of Labor and Industries
Dept. of Services for the Blind
Dept. of Social and Health Services
Dept. of Veterans Affairs

Education

Center for Deaf and Hard of Hearing Youth
School for the Blind
Workforce Training and Education Coordinating Board

Community and Economic Development

Commission on African-American Affairs
Arts Commission
Commission on Asian Pacific American Affairs
Department of Commerce
- *Community Economic Revitalization Board*
- *Developmental Disabilities Council*
- *Public Works Board*
- *Broadband Office*

Commission on Hispanic Affairs
Office of Minority & Women's Business Enterprises

Judicial Branch

Supreme Court

Administrative Office of the Courts
Office of Civil Legal Aid
Court of Appeals
Commission on Judicial Conduct
Law Library
Municipal Courts
Office of Public Defense
District and Superior Courts

https://ofm.wa.gov/sites/default/files/public/publications/2021_State_Org_Chart.pdf

Ohio Department of Administrative Services, Office of Information Technology

The DAS Office of Information Technology (OIT) delivers statewide information technology and telecommunication services to state government agencies, boards and commissions as well as policy and standards development, lifecycle investment planning and privacy and security management.

The following OIT sections carry out these responsibilities according to the DAS mission, vision, goals and principles to provide service, support and solutions that improve state government:

- State Chief Information Officer's Office - The State Chief Information Officer is responsible for the strategic direction and efficient use of information technology across the state and for oversight of state IT activities
- Investment and Governance Division - Assists state agencies by providing IT policy and, standards, as well as investment planning and management, research and project support services.
- Infrastructure Services Division - Operates the IT infrastructure for the state, which includes hardware, software and telecommunications.
- Enterprise Shared Solutions - Coordinates strategies for delivery of government information and services electronically

https://das.ohio.gov/Divisions/Information-Technology

https://www.das.ohio.gov/Portals/0/DASDivisions/DirectorsOffice/Organizational%20chart_Feb2018.pdf

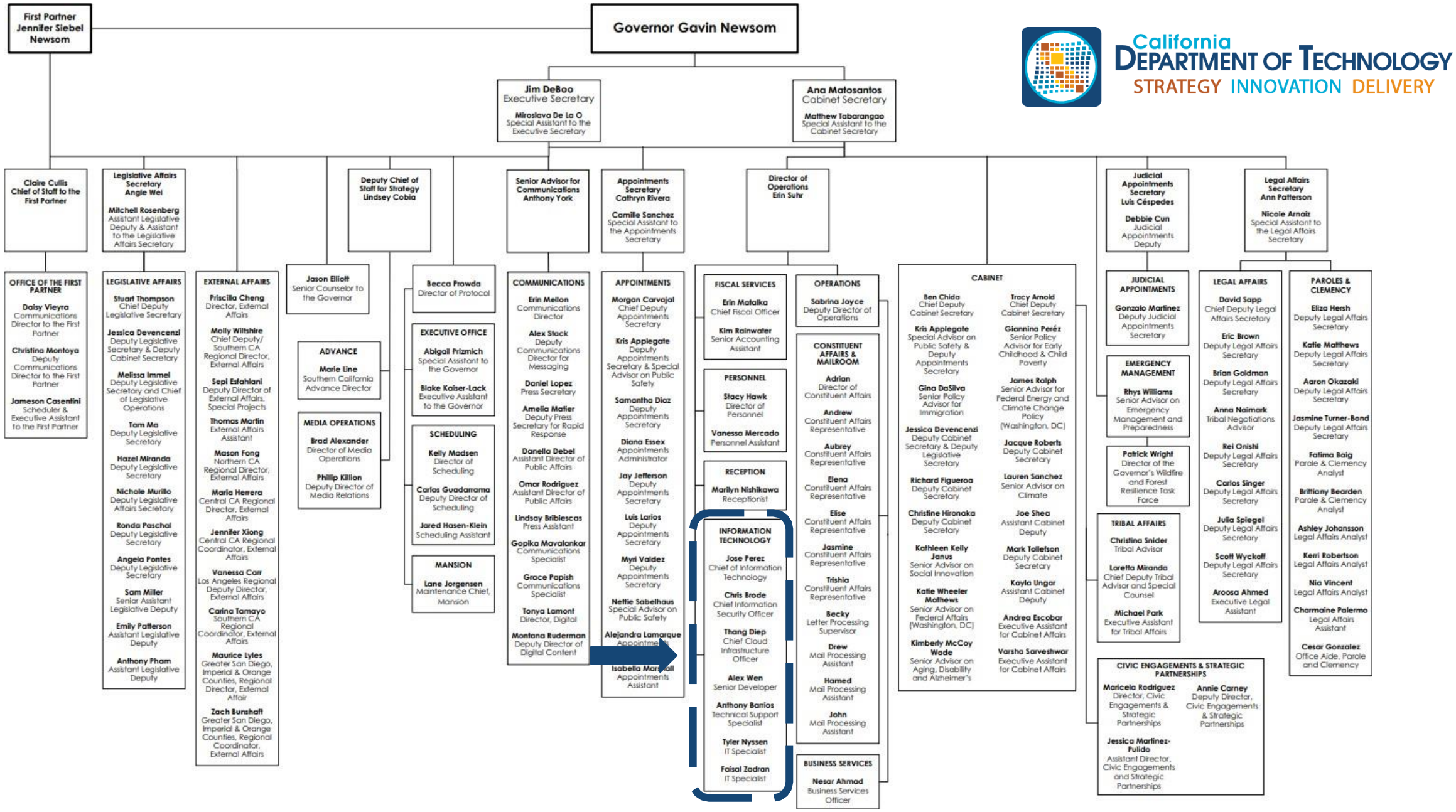
California Department of Technology (CDT)

The California Department of Technology leads the state's drive to deliver clear, fast, dependable, and equitable public services. It provides for the delivery of digital government services through the oversight of statewide IT strategic planning, project delivery, procurement, policy and standards, and enterprise architecture.

Home to the State Data Center, CDT provides infrastructure services for government customers that include on-premises and cloud-based services. CDT is leading statewide broadband planning and execution to deliver digital equity and reliability for all Californians. The Director of CDT is also the State Chief Information Officer (CIO), and advises the Governor on the strategic management and direction of the state's IT resources and policies.

Key role/responsibility and authority include policy formation, inter-agency coordination, IT project oversight, information security, technology service delivery, and advocacy.

https://cdt.ca.gov/about/



California DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY

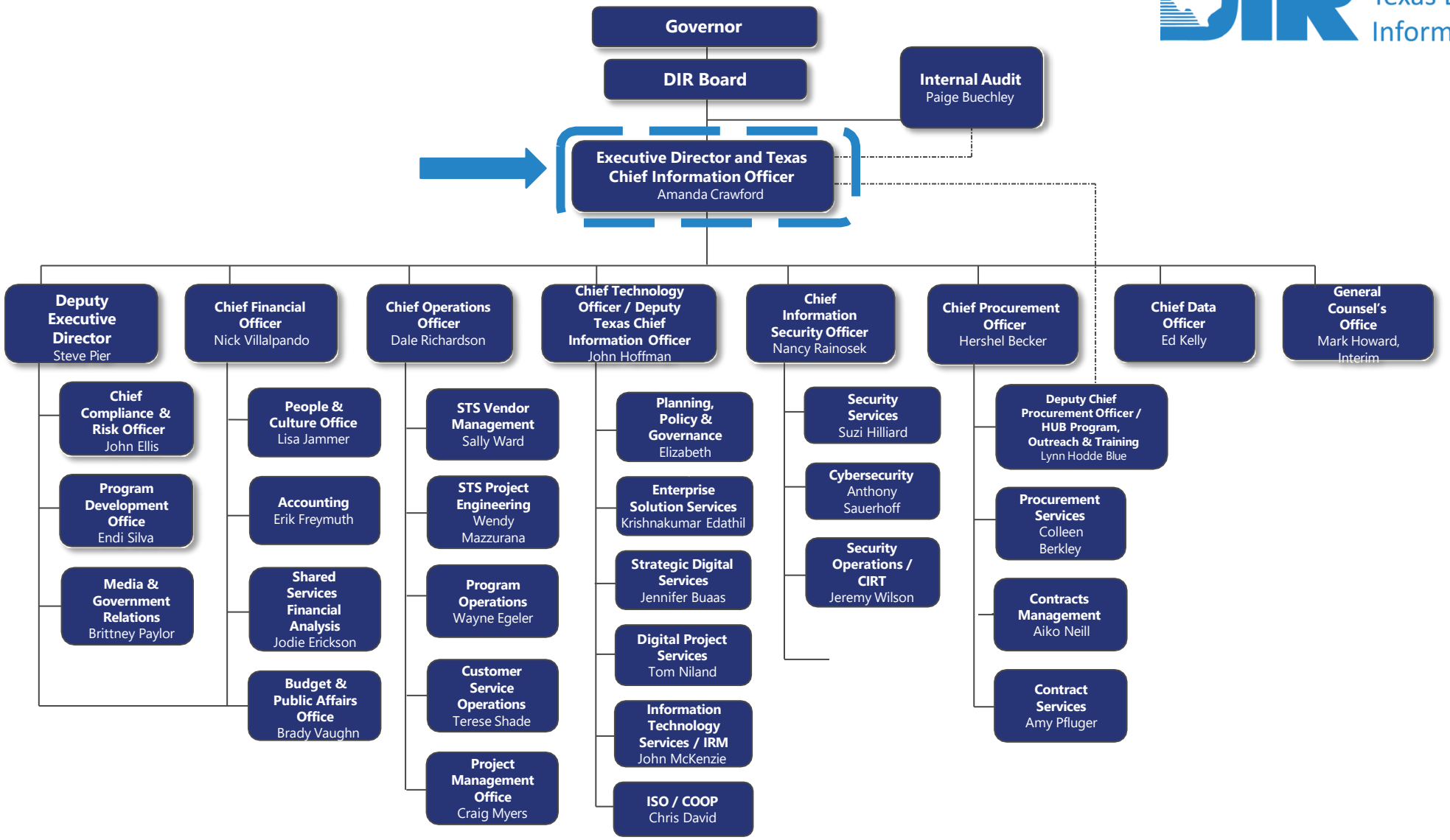
https://www.gov.ca.gov/orgchart/

Texas Department of Information Resources

The Texas Department of Information Resources (DIR) delivers technology solutions to state and local government entities. Specifically, DIR is here to:

- Offer purchasing support and policy insights so organizations across all levels of Texas government can find and securely implement modern technology
- Set forth strategic direction for IT statewide through policies and guidance
- Analyze cybersecurity risks and solutions
- Empower state and local government entities with reliable and secure technology
- Assist with technology procurement/purchasing
- Collaborate with technology vendors
- Create a dynamic online community for knowledge sharing

https://dir.texas.gov/about-dir

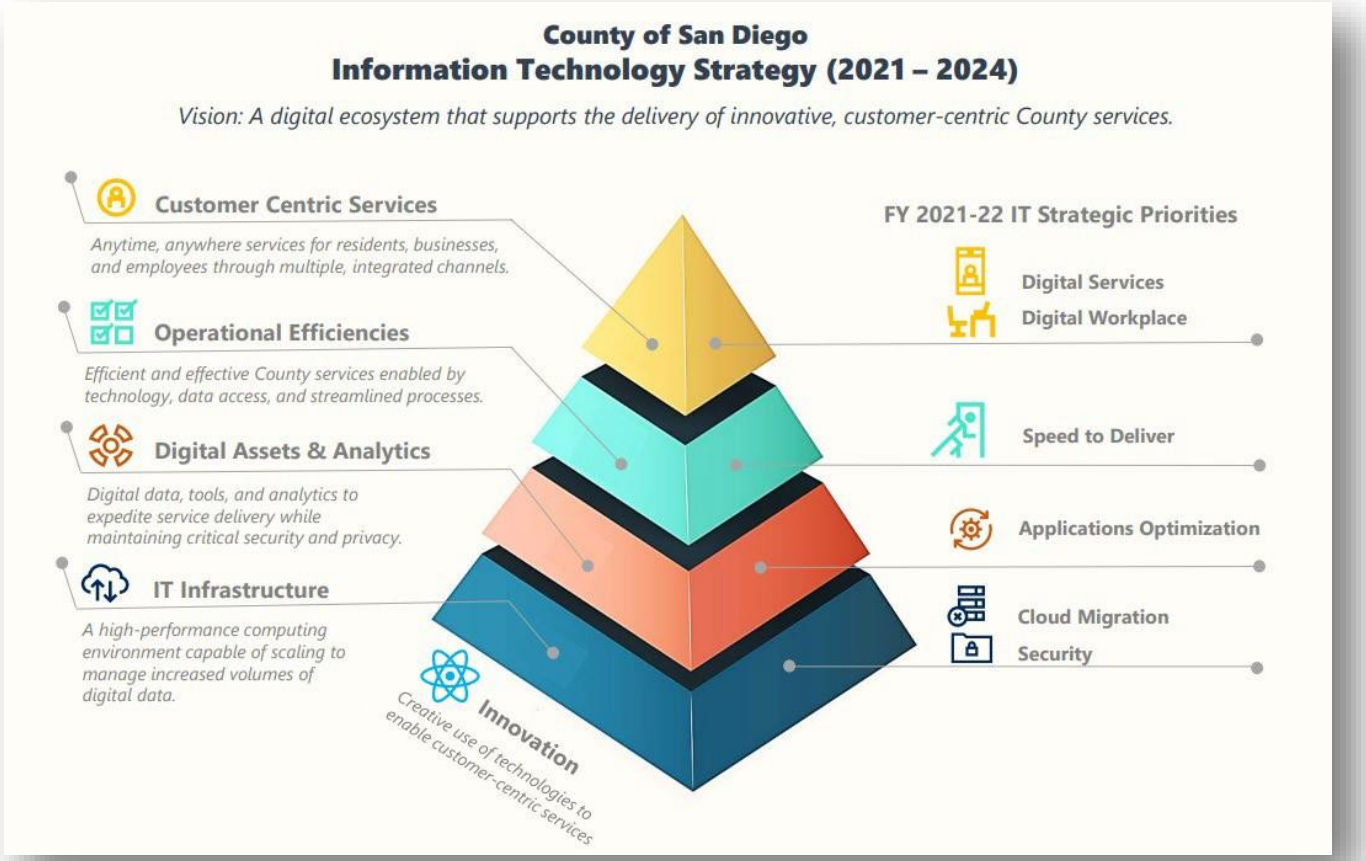


https://dir.texas.gov/about-dir/organization-and-divisions

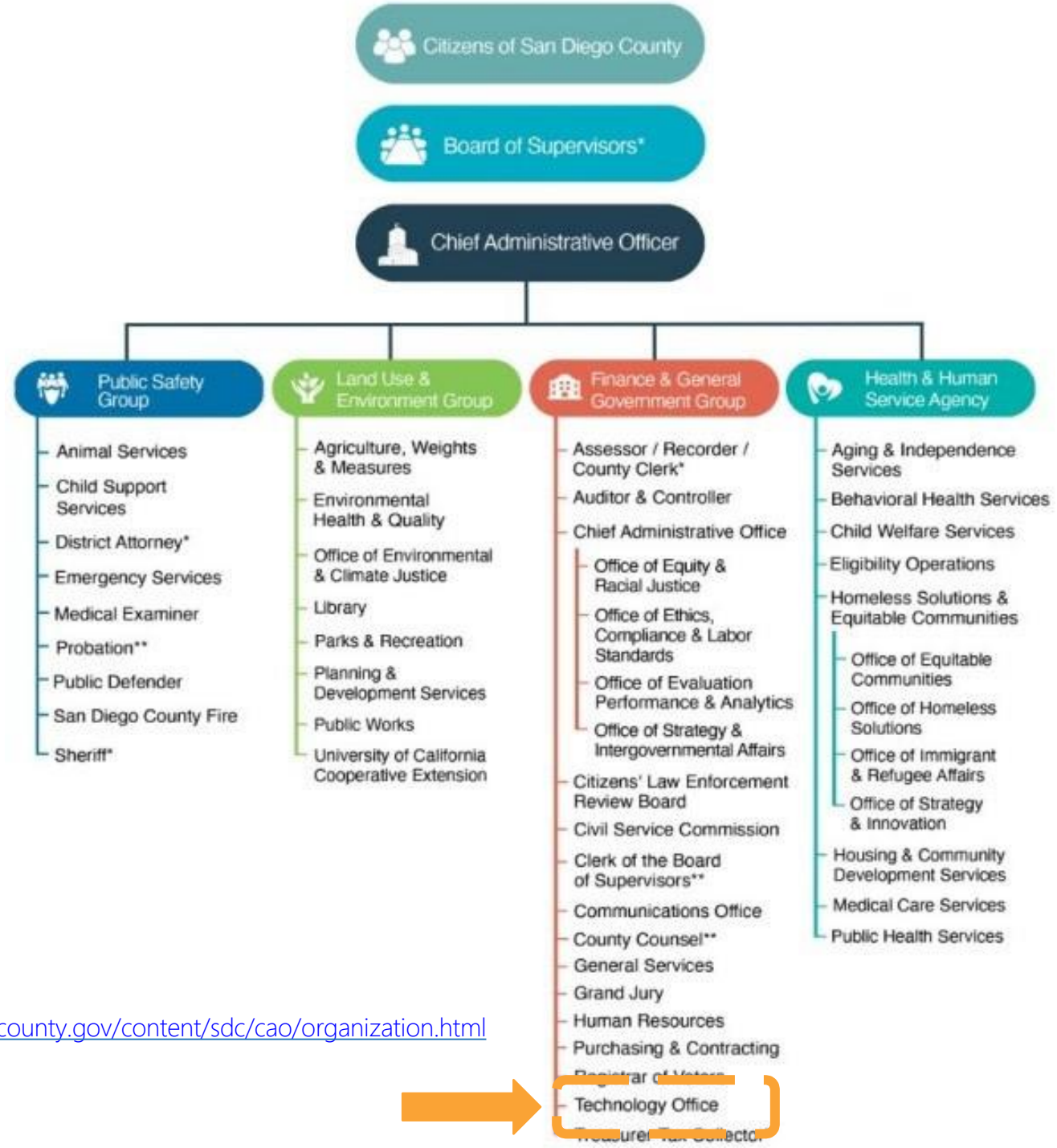
San Diego County Technology Office

The County Technology Office (CTO) supports a full range of IT services for County Employees and San Diego County residents. The purpose of the CTO is to lead, guide, and facilitate the optimal business management of information technology by County Business Groups and departments.

The mission is to guide the enterprise toward solutions that meet the diverse needs of our County customers through continuous improvement, thought leadership and operational excellence.



https://www.sandiegocounty.gov/content/sdc/cto.html



https://www.sandiegocounty.gov/content/sdc/cao/organization.html

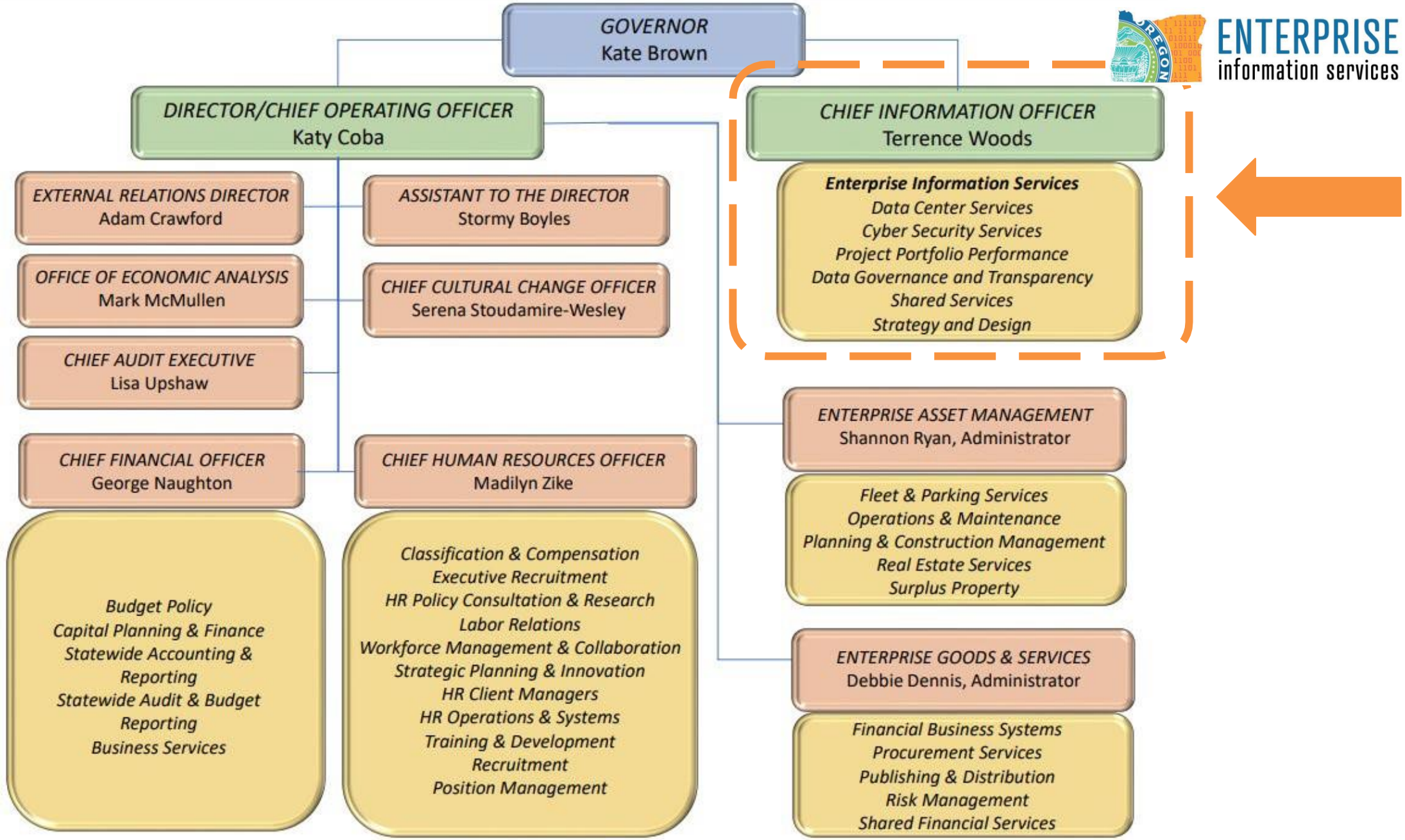
State of Oregon Enterprise Information Services (CDT)

Enterprise Information Services (EIS) provides statewide IT leadership by maturing enterprise technology governance, leveraging investments in shared services, ensuring transparency, providing oversight, and delivering secure and innovative solutions—enabling state agencies and partner jurisdictions to better serve Oregonians through enterprise technology solutions.

The State CIO's key responsibilities include:

- Ensuring alignment between statewide IT policy and operations
- Advising the Governor on enterprise technology and telecommunications
- Implementing the IT Governance framework
- Establishing the state of Oregon's long-term IT strategy through the Enterprise Information Services Strategic Framework 2020-2023.
- Providing oversight on project planning, quality assurance and implementation of the State Gate revew process for IT investments

https://www.oregon.gov/das/oscio/pages/overview.aspx



https://www.oregon.gov/das/Docs/DAS_Org_Chart.pdf

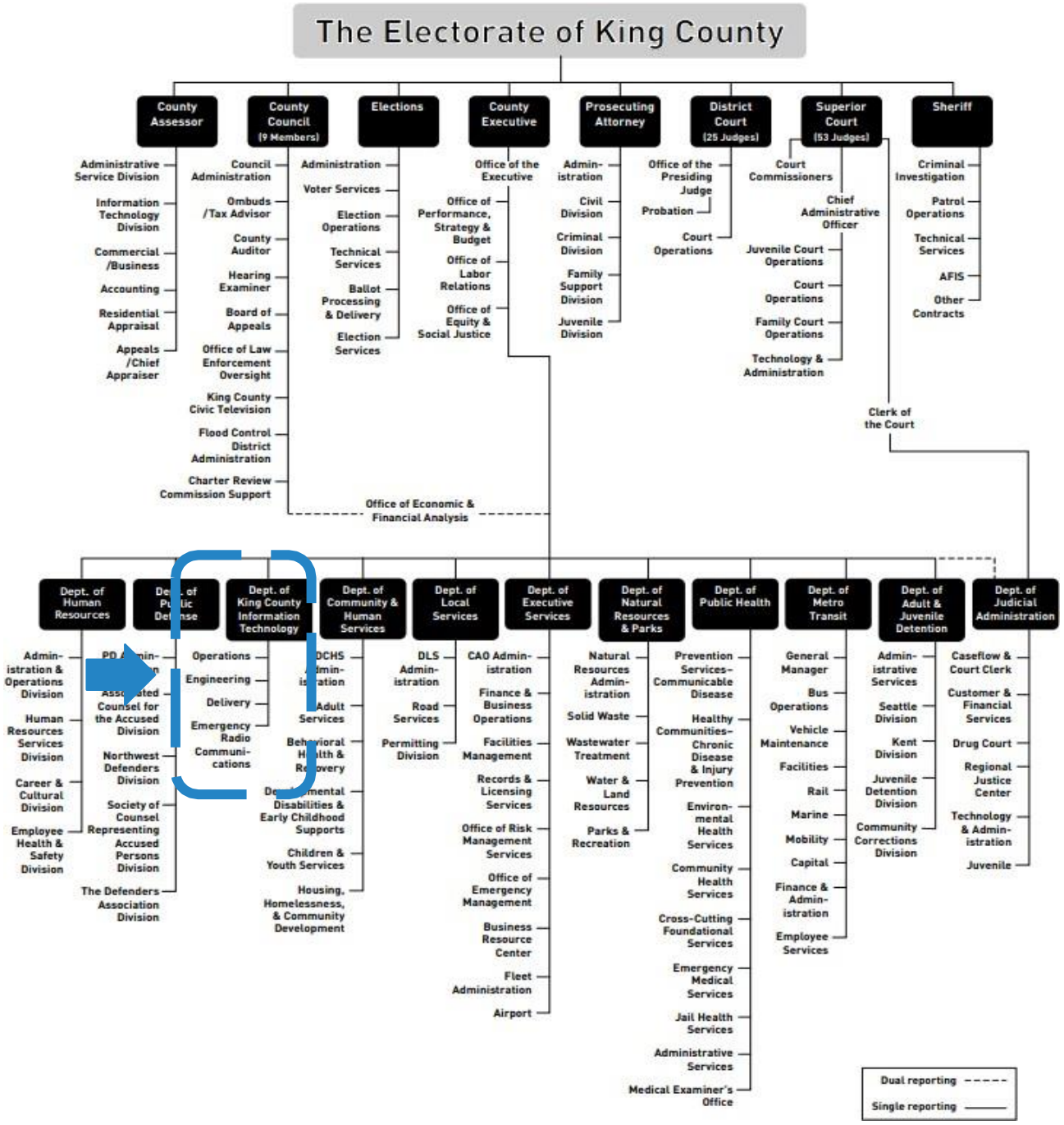
King County Department of Information Technology

King County Information Technology provide county-wide information technology solutions tailored to meet the business needs of a diverse list of county agencies, as well as regional services. The consolidated, centralized approach to IT services allows for a consistently high-quality customer experience, strategic IT resource planning, and a standardized approach to IT investments.

KCIT's strategies for accomplishing our vision focus on several audiences:

- Customers are the focus of our E-government, Customer Service, and Regionalization strategies; aligning with one of our core principles to be a service focused organization and a regional partner.
- King County employees are an additional focus area which is addressed through Collaboration, Mobility, Cloud, and Unified Communications strategies. Providing enabling technologies is critical to the countywide efforts around process improvement and employee engagement.
- Our final area of focus is internal and targets our new IT organization where we solidify and strengthen some of our foundational components. Strategies targeting this area include enterprise architecture, service improvement, IT Governance, technology modernization, and Information Assurance.

https://kingcounty.gov/depts/it.aspx



https://kingcounty.gov/~/media/elected/executive/equity-social-justice/Immigrant-and-Refugee/Commisssion-Work/Meetings-and-Materials/2019/Aug5-2019-StratPlngSession/2019-2020_King_County_Organization.ashx?la=en

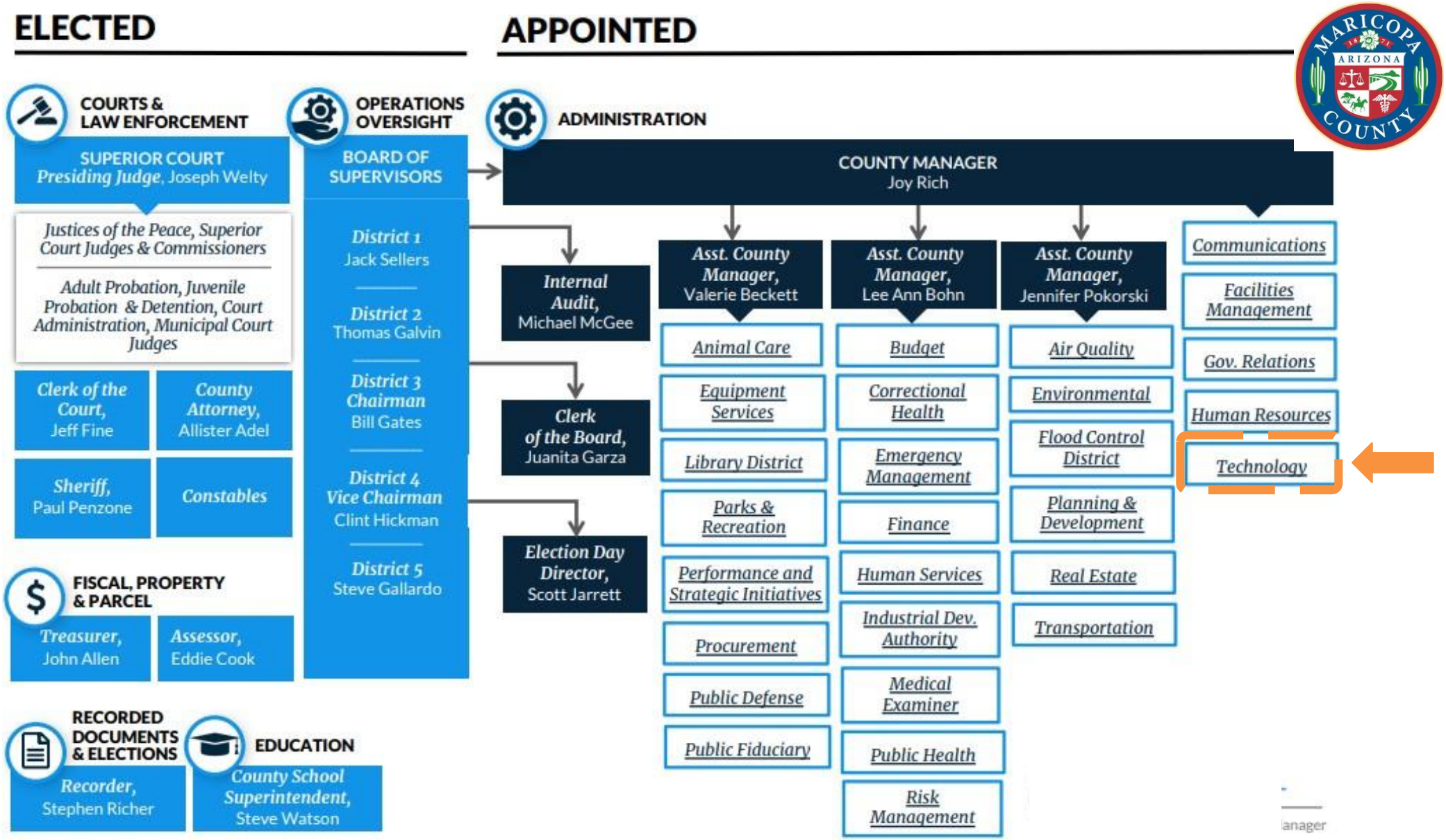
Maricopa County Office of Enterprise Technology

OET provides enterprise infrastructure and application support that allows the County to effectively operate on a daily basis. OET also provides IT consulting as a trusted advisor to over 30 County departments.

Services Provided:

- Information Security
- Enterprise Application & Database Management
- Enterprise Infrastructure Management
- GIS
- IT Advisor to County Departments
- Innovation Leadership
- Customer Support
- Desktop Support
- Public Safety Radio

https://www.maricopa.gov/1500/Technology



https://www.maricopa.gov/DocumentCenter/View/13710/County-Organizational-Chart?bidId=

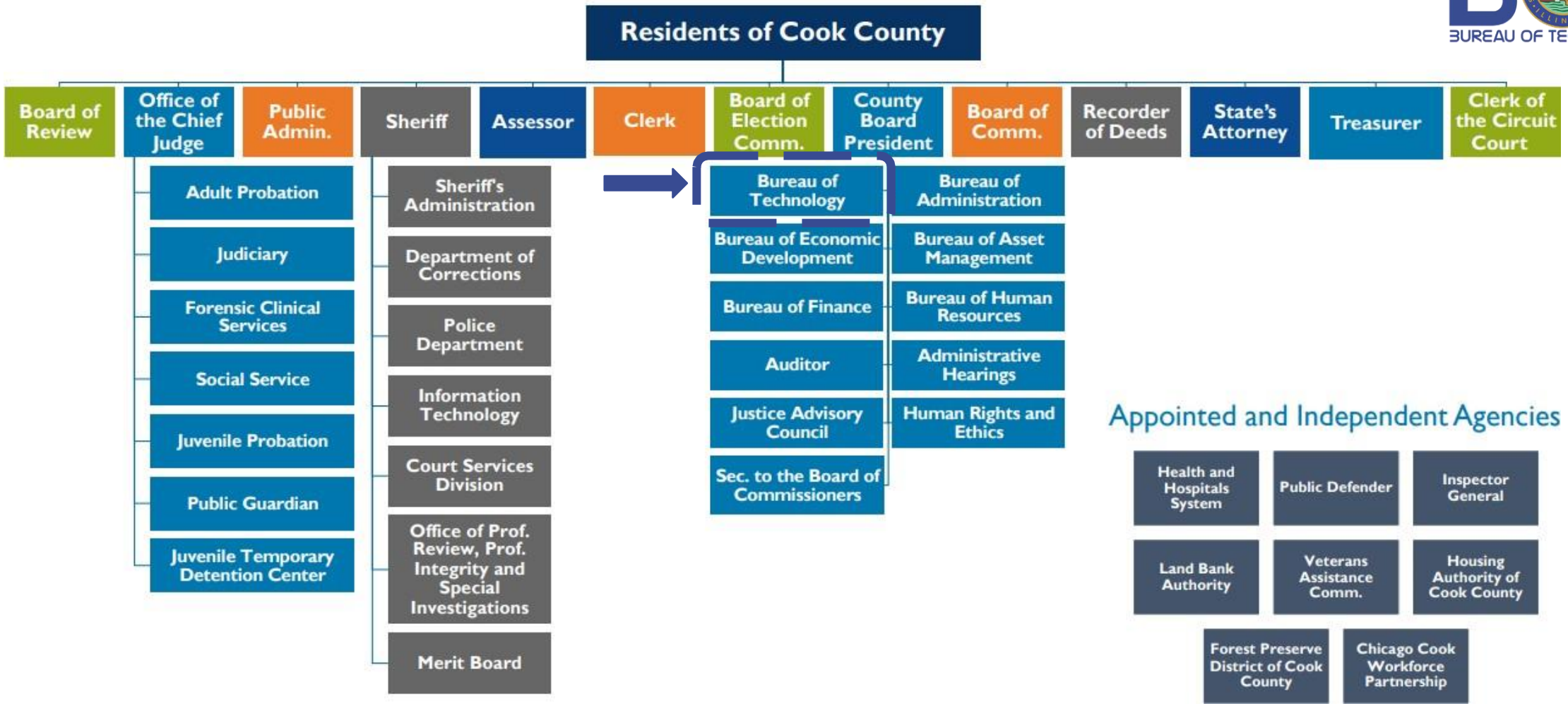
Cook County Bureau of Technology

The Bureau of Technology (BOT) plans, develops and maintains enterprise technology services according to its guiding principles: lifecycle management, cloud-first, shared-first, sustainability, transparency, continuity, Countywide standardization and reuse before buy and buy before build. BOT provides cost-effective and easy-to-use services for residents and County employees.

Key Activities:

- Deliver and manage Countywide shared technology resources
- Direct Countywide technology policy and the establishment of Countywide technology standards
- Review all technology procurements to discourage duplicative spending, encourage efficient returns on investment, and ensure compliance with County technology standards and policies
- Collaborate with the Information Security Working Group to establish and report on the Information Security Framework, as well as take appropriate actions to protect the County's network against security threats
- Facilitate the integration of an automated Cook County Criminal Justice System and update the Board on progress toward such goal
- Review all Software and Technology Hardware Asset Inventories and prepare a consolidated report and strategic document annually for submission to the Board
- Provide access to County GIS data in accordance with County ordinance

https://www.cookcountyil.gov/agency/bureau-technology



https://www.cookcountyil.gov/sites/g/files/ywwepo161/files/service/county-wide-org-chart-12-7-18.pdf

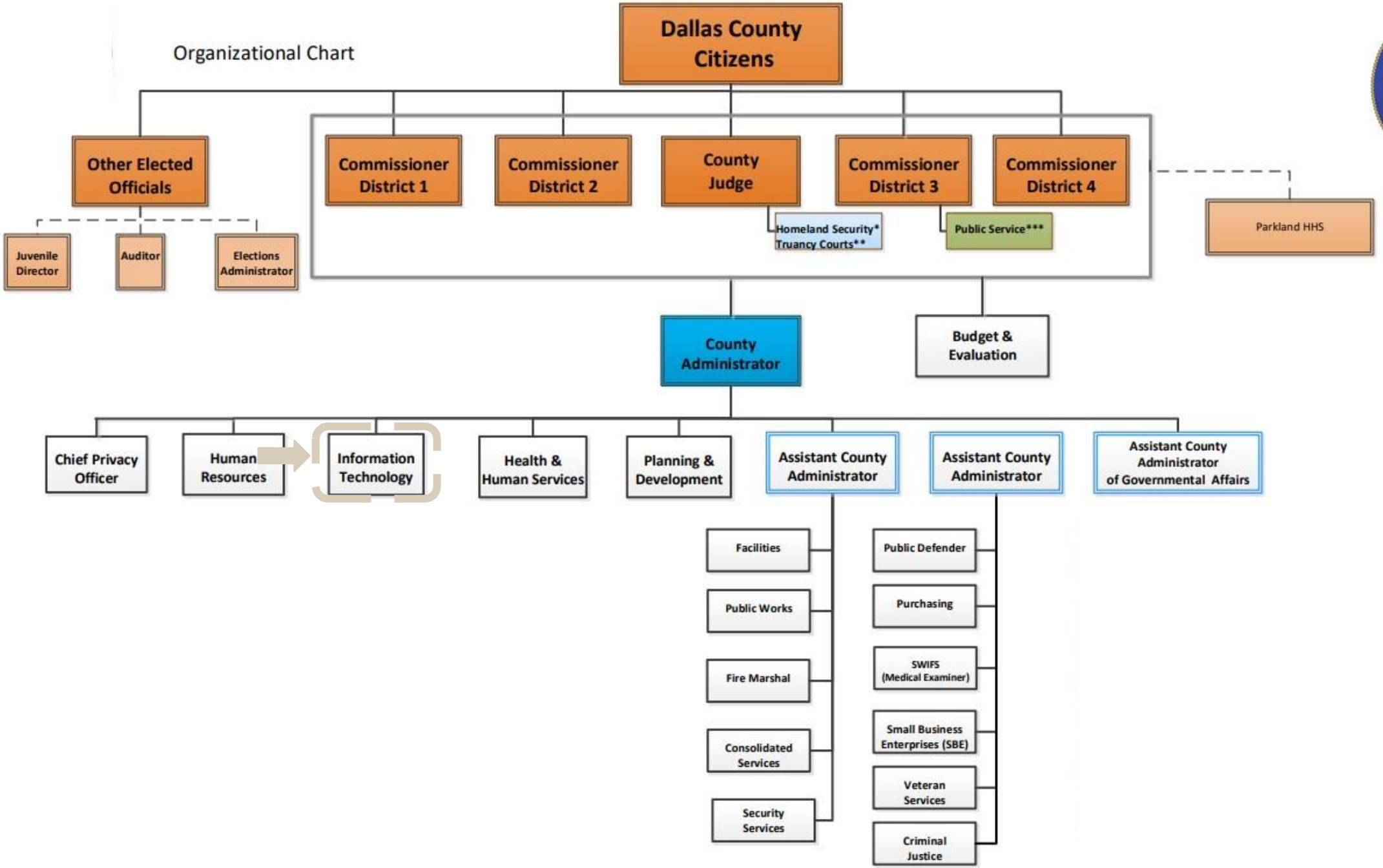
Dallas County Office of Information Technology

The Department is a Team of over 158 dedicated professionals who daily strive to empower our customers with innovative and timely solutions for greatly enhancing their delivery of services and ability to share and access information. As public servants, they are entrusted with developing, maintaining and managing the County IT Infrastructure, as a part of the County public trust, while providing world-class customer and information services, both internal and external to the Department.

County IT's Strategic Plan for FY2020-2024:

- Digital Transformation inclusive of leveraging Workflow Automation and Business Analytics
- Infrastructure Modernization & Consolidation inclusive of leveraging Cloud technologies
- IT Infrastructure Security and Compliance
- Mobile and Secure Systems Access for the County system end-users
- Increased Systems Reliability and Availability for the County system end-users
- Increased End-User Service and Support
- Staff Professional Development

https://www.dallascounty.org/departments/ITservices/



https://www.dallascounty.org/Assets/uploads/docs/comcrt/2021-Comm-Court-Org-Chart.pdf

Los Angeles County
Office of the Chief Information Officer

Integrated IT Organization

Attachment E: Critical Success Criteria

June 10, 2022

INFO~TECH

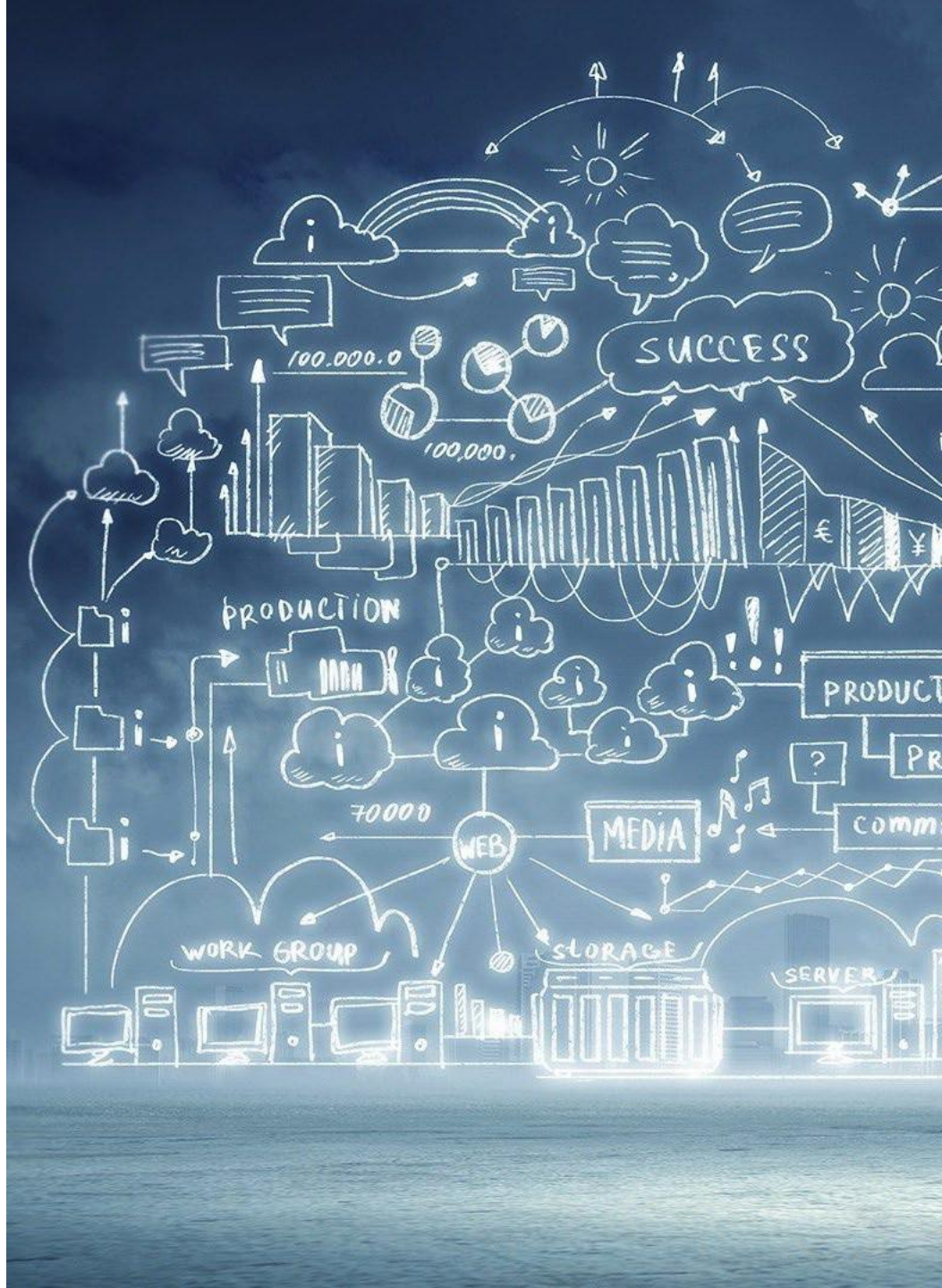


Table of Contents

Organizational Design Principles

Accountability & Transparency	Group functions and services in a way that increases transparency & improves accountability. For example, separate Cybersecurity governance, compliance and audit from Cybersecurity operations so that Cybersecurity is truly Countywide - acting on behalf of all departments.
Innovation	We will build a structure that will support the County in fostering an innovative culture outside of day-to-day processes, while creating the space for folks to partake in innovation.
Partnership	A collective relationship between Integrated IT and County Departments is a priority. Roles will be aligned clearly so that unity within IT can be reached. There will be a collaborative environment between Integrated IT and Department IT to achieve better results
Optimized Capacity	We will design a structure that will allow Integrated IT to grow its capacity and overall capability in different dimensions of the organization, to meet growing business needs.
Cybersecurity	We will foster an environment for specialized security knowledge as a means of ensuring security is proactive enterprise-wide. This will enhance collaboration and ensure team functionality.
Decision Making	We will create effective and efficient decision-making that involves escalation to key stakeholders when necessary. This will warrant decisions made at a lowest possible level.
Setting Standards	Efficient standards and processes enable the County for unified success. Standardization will be a focus for Integrated IT through a structure that is clear with streamlined processes and seamless hierarchy. We will create governance and leadership in IT Groups to address gaps

Background and Definitions

Integrated IT "Organization"
The new organization to be created by combining today's Office of the CIO with ISD's ITS organization.

County Department "Organization"
IT responsibilities are operated and managed from end-to-end within each unit.

Hybrid/Federated
Describes the operating model in which IT responsibilities in the County are shared between a central, Integrated IT Organization and departmental IT organizations. While many services may be only provided by one or the other, some will be provided by both.

Function
A group that has a discrete set of services or capabilities that it is responsible for, which don't overlap with any others.

Service
A collection of business and technology activities or support provided by IT for consumption by the departments

Key Activities
Detailed tasks completed to deliver a service – generally out-of-scope

Summary of Recommendations & Key Benefits

Info-Tech facilitated a series of six working sessions with 17 CIOs and Deputy Department Heads over the course of 2 months. Out of these sessions and based on industry best practices and Research provided by Info-Tech, we developed the following seven recommendations:

1	**Create a single, integrated Countywide IT organization reporting to the Board**	• Strategic alignment of Board priorities, County Strategy, Departmental strategies and IT strategy • Like HR, Payroll, Tax Collection or Elections Information Technology is a critical capability that enables the County in fulfilling its Mission.
2	**Maintain federated IT service delivery Countywide**	• Responsibility for business mission critical systems remains with departments • Large and "subvened" departments retain their independence and funding streams are not impaired • Commodity services and support for smaller departments can be delivered centrally
3	**Establish clear authority, roles and responsibilities**	• Standard setting and IT service delivery are within the same organization. Departments will have one single contact at the County level for any given Function or Service. This will lead to faster, more consistent and better integrated service delivery.
4	**Centralize cybersecurity accountability and operations**	• Cybersecurity will be elevated to be a county-wide responsibility with centralized standard setting and enforcement • Better visibility into the threat landscape, security posture and higher level of accountability at the county level
5	**Simplify funding and chargeback model for IT services**	• Implement a multi-tiered cost recovery model distinguishing between recovery of operating costs and chargeback for volume-based services • Replace current cost model with a value-based rate structure that reflects the true costs of providing a service
6	**Consolidate and streamline IT procurement**	• Consolidate strategic sourcing, MSAs for IT products and service within the new IT organization • Establish better guidelines for legacy replacements as to converge on fewer platforms • Streamline the procurement process for pre-approved solutions or extensions of existing platform solutions
7	**Establish a Center of Excellence for Innovation and Emerging Technology**	• Establish a forward looking, business-oriented organizational unit who works closely with departments on identifying and acting on innovative concepts and funding sources to better serve the County's constituents. • Create an innovation lab with formal processes for ideation, rapid prototyping and collaboration

Critical Success Factors and Criteria

Critical Success Factors

- **Critical Success Factors** are high-level goals that must be successfully met or accomplished to ensure an intended business outcome or objective achieved
- In some cases, they can be used as decision points to proceed to the next stage or phase

Critical Success Criteria

- **Critical Success Criteria** is what qualifies the deliverable or objective as successful or achieved

Critical Success Factors Examples

- County ordinance is developed and approved that empowers the CIO with the appropriate authorities and responsibilities
- County-wide IT policies, procedures and guidelines
- Governance and communications
- Service catalog with funding framework and transparent rate structure
- Workforce transition strategy and implementation plan
- Organization structure with clearly defined roles, responsibilities, accountabilities and performance
- Adequate resourced are required to provide each service IIT is accountable for
- Adequately plan, fund and resource the organization change

County Technology Services Enables County Services Delivery

Los Angeles County exists, as defined by the County Mission:

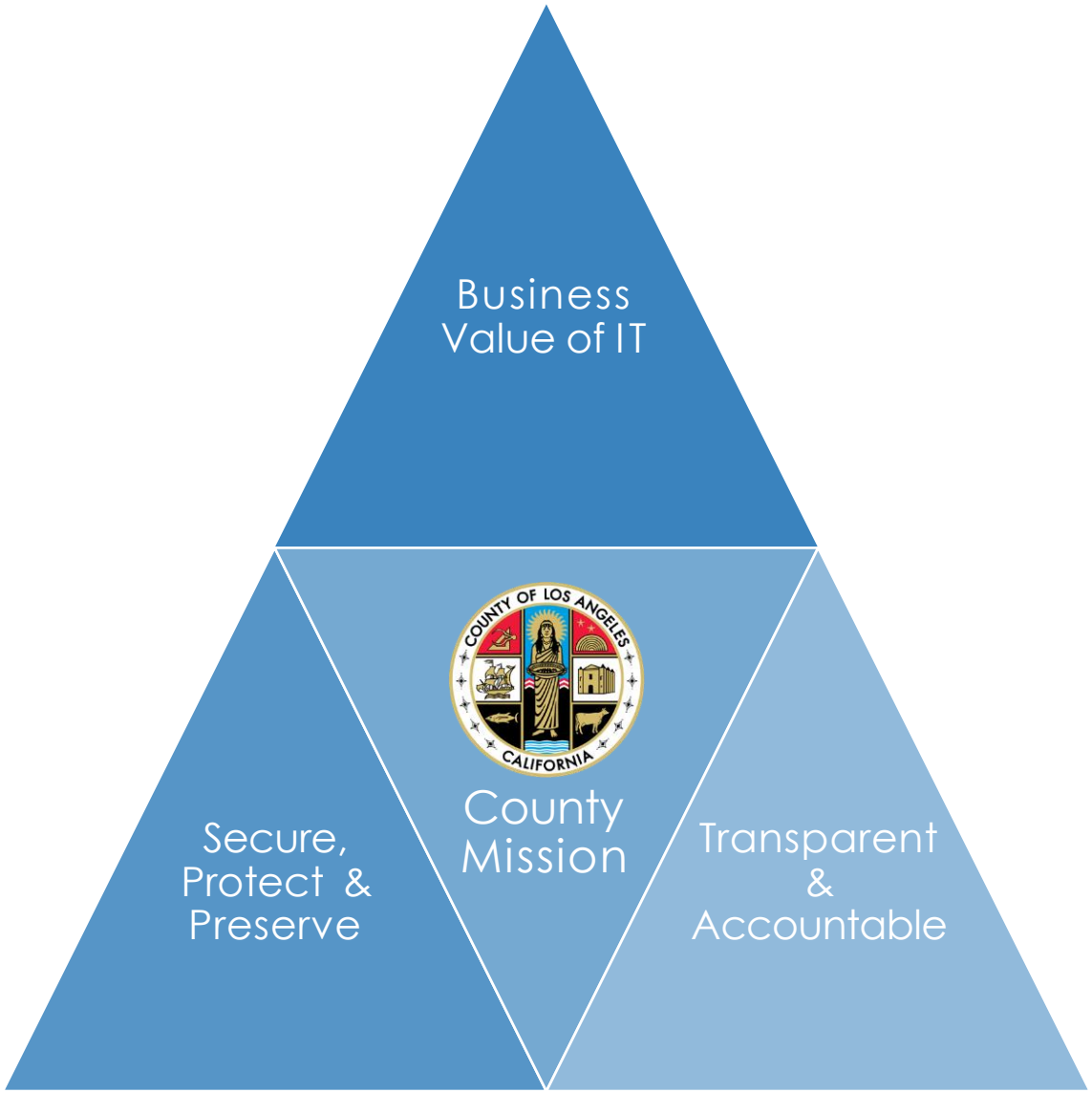
To improve the quality of life in the County of Los Angeles by providing responsive, efficient, and high-quality public services that promote the self-sufficiency, well-being and prosperity of individuals, families, businesses and communities

Public services are provided to individuals, families, businesses and communities by

People
Technology
Processes
Resources

Integrated, modern, cost-effective County Technology Services are critical to successful County Services delivery

Integrated IT Organization – Case for Action



County Mission

To improve the quality of life in the County of Los Angeles by providing responsive, efficient, and high quality public services that promote the self-sufficiency, well-being and prosperity of individuals, families, businesses and communities.

Business Value of IT

Enabler for conducting County business and delivering services that improve the quality of life in Los Angles County

Transparent & Accountable

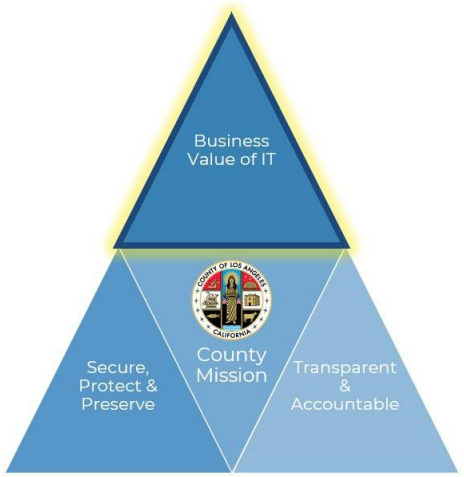
To ensure that IT is budgeted, funded, procured and delivered in a transparent manner and that there is clear accountability for all aspects of IT across all stakeholders.

Secure, Protect & Preserve

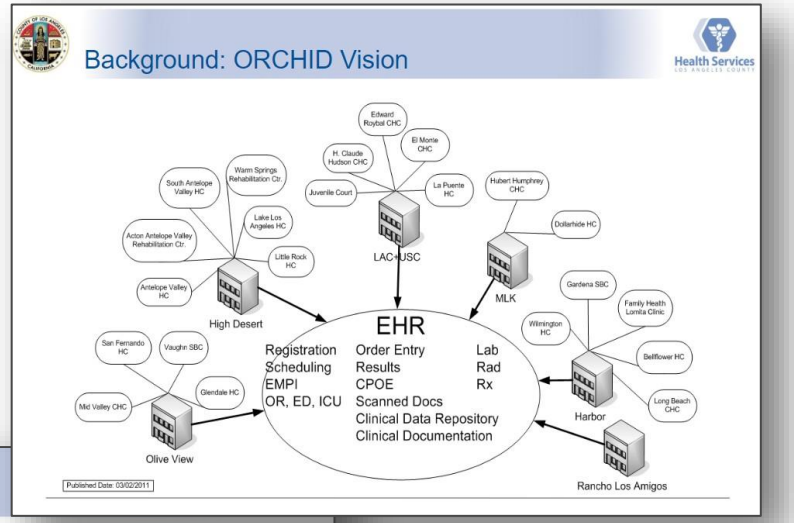
To implement processes and technologies that ensure County assets data are leveraged, safe and secure.

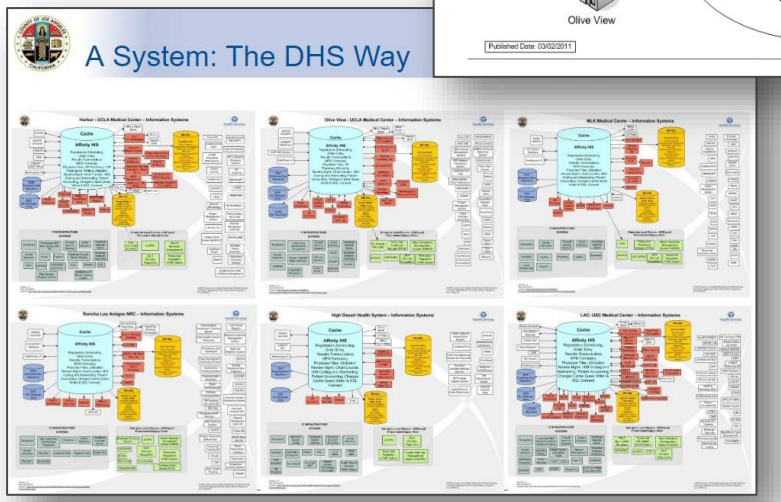
Integrated IT Organization – Business Value of IT

Enabler for conducting County business and delivering services that improve the quality of life in Los Angles County



IT systems have become the backbone for just about any service delivered to County constituents. From Elections to Taxes, Public Safety and Health departments rely on enterprise IT systems that manage transactions and processes, hold sensitive personal data, ensure public servants get paid and services are delivered.





The pandemic has demonstrated that technology is indispensable and has become the backbone for the County to interact with its constituents.

As reliance on technology increases, common standards, policies and governance become ever more important.

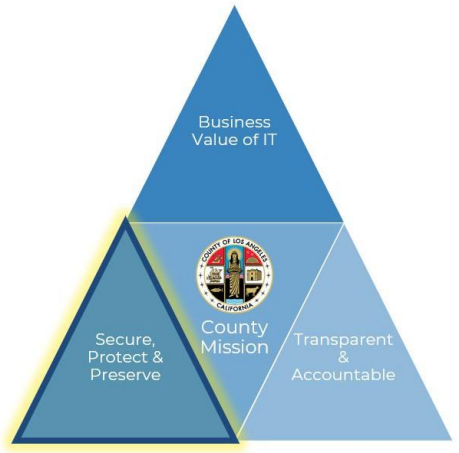
Integrated IT Organization – Business Value of IT

Enabler for conducting County business and delivering services that improve the quality of life in Los Angles County

	Benefit of Integrated IT Organization	Critical Success Factors
Information Technology is a Mission Critical capability	Like HR, Payroll, Tax Collection or Elections Information Technology is a critical capability that enables the County in fulfilling its Mission.	The CIO position and organization must be recognized as equivalent to other shared County functions like HR or Auditor-Controller.
Countywide IT must align with Board Priorities and Initiatives	Strategic alignment of Board priorities, County Strategy, Departmental strategies and IT strategy	Establish process that ensures alignment of IT strategies across departments and the County.
IT Services must be based on Countywide common standards	Standard setting and IT service delivery are within the same organization. Departments will have one single contact at the County level for any given Function or Service. This will lead to faster, more consistent and better integrated service delivery.	The integrated IT organization must be high enough in the County organization and have the proper authority.
Better use of shared technologies will shorten time to production	Elevate Application and Infrastructure Portfolio management to be a countywide, CIO owned activity.	CIO must be empowered to veto individual departmental initiatives before an internal alternatives analysis across existing capabilities has been done.
Continuous Innovation and use of emerging technologies		
Adequate Resourcing		The integrated IT Organization needs to be adequately resourced to provide the services it is accountable for.

Integrated IT Organization – Protect, Preserve & Enhance

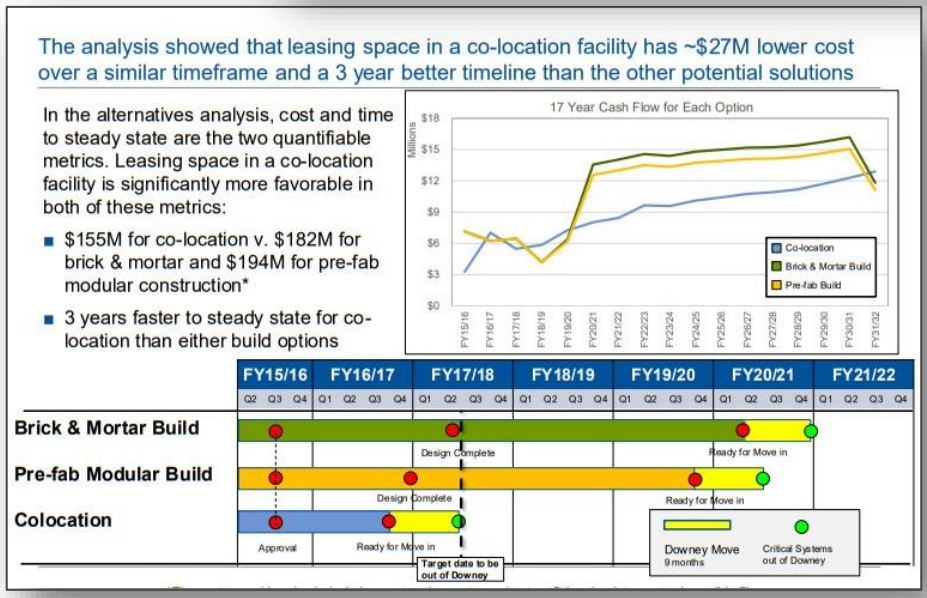
To implement processes and technologies that ensure County assets data is leveraged, safe & secure



Among the County's most strategic assets is the data and information it keeps on behalf of its constituents. This information is often sensitive, required to receive State, Federal and grant funding and to keep the County safe. The County has an obligation to keep constituent information safe and secure.

Similarly, technology assets such as hardware and software should be standardized and leveraged as much as possible to enable easier data sharing, data protection and multiple use of platform technologies across departments.

Building on common platforms and standards and central accountability for cybersecurity will simplify the technology landscape and improve the County's security posture.



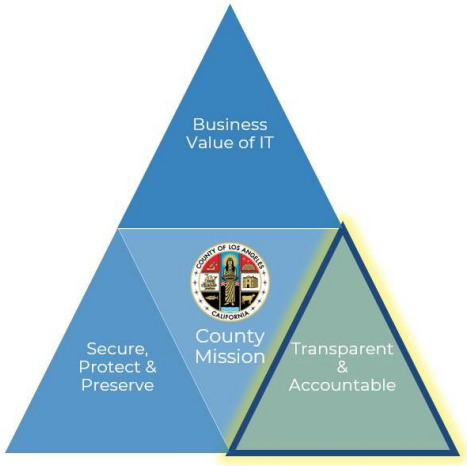
Integrated IT Organization – Protect, Preserve & Enhance

To implement processes and technologies that ensure County assets data is leveraged, safe & secure

	Benefit of Integrated IT Organization	Critical Success Factors
Cybersecurity	Clear accountability for cybersecurity at the policy and operational level	• The integrated IT organization must be high enough in the County organization and have the proper authority. • Fund Cybersecurity like nay other Risk Management function in the County (e.g. Counsel)
Data Sharing		• The integrated IT organization must be high enough in the County organization and have the proper authority. • Strong Counsel with understanding of various privacy regulations (HIPPA, CJIS, etc.)
Interoperability	Drive interoperability and data sharing across platforms	• Strong Enterprise Architecture function with tie-in to departmental IT organizations
Workforce Management	• Establish a countywide structured program to reduce employee turnover and remain an attractive IT employer • Coordinate IT Workforce talent acquisition, retention and ongoing development across departments	• Revisit IT classifications, update job descriptions and review hiring procedures. • Funding for training and continuing education
Asset Management	Implement Asset Management at a County-wide level	Asset Management •IT responsibilities are operated and managed from end-to-end within each unit.

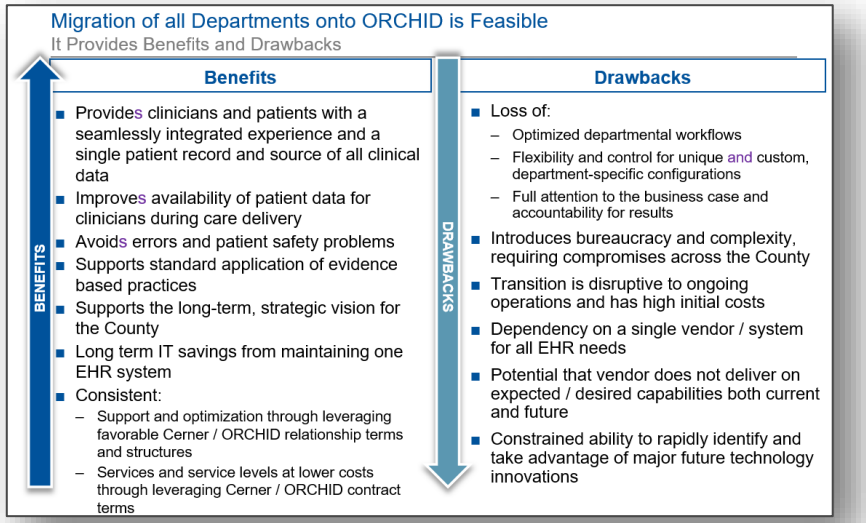
Integrated IT Organization – Transparent & Accountable

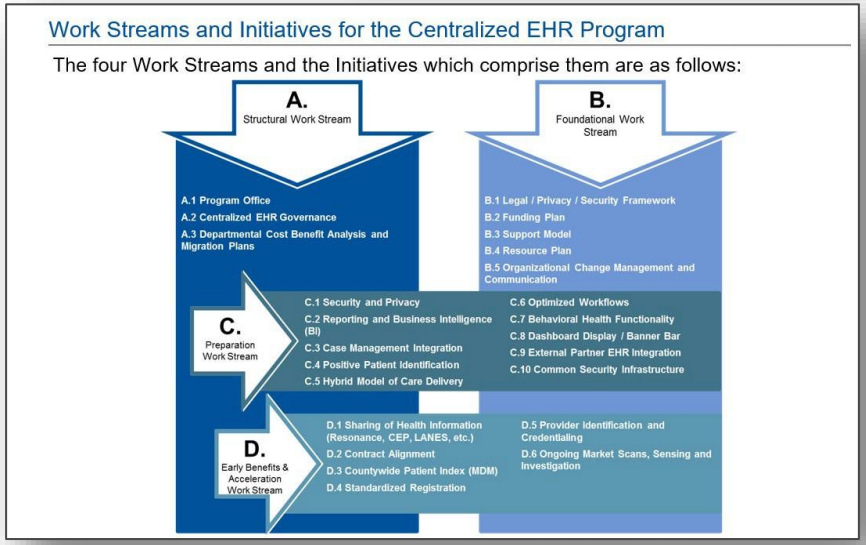
To ensure that IT is budgeted, funded, procured and delivered in a transparent manner and that there is clear accountability for all aspects of IT across all stakeholders.



Accountability for transparent procurement, delivery and pricing of technology services must be clear. Taxpayers, the Board and the County's constituents demand transparency and accountability. Today's federated and divided IT organizations diffuse both transparency and accountability.

A single, integrated IT organization that is accountable to the Board and has the authority to arbitrate and rule on initiatives that are not in the interest of departments *and* the County establishes the greatest level of accountability and transparency.





Integrated IT Organization – Transparent & Accountable

To ensure that IT is budgeted, funded, procured and delivered in a transparent manner and that there is clear accountability for all aspects of IT across all stakeholders.

	Benefit of Integrated IT Organization	Critical Success Factors
	Tighter coupling between strategic and operational aspects of IT service delivery	Needs to be its own department reporting directly to the Board
	Simplify service chargeback and increase value of services. There are hundreds of ways IT is currently charged. Over time, chargeback mechanisms have become overly complex and result in inefficiencies and lack of transparency.	Requires complete re-thinking of the funding model Need to establishing a service catalog and a rate structure that reflects the value provided by each service
	Consolidating contracts, leveraging assets across departments will enable to faster deliver solutions, better protect and leverage data and improve security	
Adequate Resourcing	The integrated IT Organization needs to be adequately resourced to provide the services it is accountable for.	

Appendix

High-Level Timeline & Milestones

- Board “Go” decision
- Solicit Contractor support
- Establish Task Force
- Set up governance

- Develop detailed Implementation Tasks
- Develop Resource Plan
- Develop Implementation Timeline
- Document Dependencies
- Develop OCM and Communications Plan
- Identify Key Transition Milestones

- Finalize org structure
- Identify leadership classifications and obtain approval
- Identify total headcount by classification (top down)
- Build out Charter
- Develop Ordinance
- Establish Governance
- Hire CIO
- Develop Strategy
- Establish admin functions
- Identify resource by service
- Move resources by Function / Service to new org

- Develop Service Catalog outline
- Develop comprehensive list of Functions and Services
- Identify Services to be kept
- Identify new services
- Identify Services to be adjusted
- Resource service delivery
- Cost out services (bottom up)
- Develop Service Catalog
- Create Rate schedule

- Map services and functions to funding sources
- Develop chargeback model for "Standard Operating Cost Recovery"
- Develop chargeback model for "Chargeback by Consumption"

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About Us

Info-Tech Research Group is the world's fastest growing information technology research and advisory company, proudly serving over 30,000 IT professionals.

We are, by far, the most innovative firm in the industry and we pride ourselves on providing better research than anyone.

Since 1997, we have been helping CIOs and their teams evolve from firefighters to innovation champions.

We produce unbiased and highly relevant research & tools to help IT leaders make strategic, timely, and well-informed decisions that drive business value.

We partner closely with IT teams to provide everything they need – from actionable tools to in-person analyst guidance–to deliver measurable results for their organizations.