



# San Luis Obispo County

FY 2021- 22



Information Technology Department Customer Guide



Given how much our lives changed in the last months, I decided to revisit my message from last year. I looked carefully at some of the statements like *"These are indeed exciting times for the County at large and our department in particular. With remediation and replacement efforts in the rear-view mirror, we can now apply the power of technology to help build a more powerful, effective, agile organization by delivering accessible, streamlined, and well-coordinated governmental services..."* and *"...Whether successfully expanding Office 365 collaboration capabilities, building web-based forms, developing an award-winning public facing website, implementing a new budgeting system, going electronic with health care records, starting major efforts to replace jail management and records management, or leading the charge in digitizing decades of paper history, last year was nothing but pure excitement..."* and moreover *"prioritize needs, explore viable options, and select sustainable, modern solutions to **meet the needs of the people we serve and enable the transformation of County services**"* and finally, almost an allegoric *"the County is ready to trust the Information Technology Department to lead the transformation of County business by delivering cloud based, secure, mobile*

*solutions."* Through a modern, reliable, well-maintained infrastructure, a capable workforce, and your support, we, the County, were able to fight and beat the Pandemic at least on the technology front. We took the gear home, put on our jogging suits, Zoomed it, Teamed it, VPN it, and remote desktop it to stay connected and keep essential services running and essential workers tele-working effectively. We never expected that the challenges defined last year as the need for *"deep change and renewal; continual, unrelenting change demanding we think beyond budgetary cycles and remediation. Such demand for change will require strong business acumen, proven leadership, and solid communication, collaboration, and negotiation skills..."* will ring so true, will be with us so unexpectedly, and that our main challenger will not be budgets or the adoption of new technology but rather an invisible and quite destructive enemy.

**Today more than ever**, in this new, brave, connected world, the evolving demands for services and fast structural changes are forcing us to rethink the role of technology and maximize its potential for delivering effective government services. In order to succeed, technology must align and respond effectively to the needs of business, **onsite, offsite, inline, or online**. As technologists and agents of change, it is our mission to adapt, morph, change our strategies, and help beat the enemy by not letting our guard or systems down.

Very truly yours,

A handwritten signature in blue ink that reads "Daniel Milei".

Daniel Milei, Director – Information Technology

# Information Technology Department Overview

## **Our vision**

*Delivering excellence to every customer*

## **Our mission**

*To provide accurate, reliable, cost-effective information technology services to County departments, boards, agencies, and special districts, champion the integration of technology into the business processes of County departments and promote excellence in the delivery of government services to the public.*

With an \$18 million-dollar budget and 87.5 full-time professionals, the Information Technology Department (ITD) is responsible for building and managing the computing infrastructure and enterprise applications that County departments need to effectively support and serve the citizens of San Luis Obispo County. ITD professionals perform a wide variety of functions including:

- Delivering enterprise technology solutions
- Designing, implementing, and maintaining an efficient and reliable technical architecture necessary to secure and support the County's workforce and data used in their daily jobs
- Maintaining a robust public safety communications infrastructure in direct support of law enforcement, fire, medical response, and general government operations
- Operating a Project Management Office leading enterprise-wide technology projects
- Providing departmental specific services including custom software solutions to help streamline processes, build innovative solutions, and improve operations
- Protecting assets and building awareness through the County's Security Program
- Building maps and apps, and delivering spatial solutions via the Geographical Information Systems (GIS) Program
- Supporting a centralized technical support "service desk" to address technical concerns, secure proper access to data, and provide guidance on hardware/software configurations.

**In short, ITD keeps County staff informed and connected, and digital assets safe.**

# Information Technology Department

## 20-21 Accomplishments and 21-22 Planned Activities at a Glance

1.9 Petabytes of data storage capacity or over 1 billion copies of War and Peace

7,442,630 spam messages and security threats intercepted (and counting)

3,292 email users

7,306 network devices

3,405 telephone lines

2,414 public safety and general government radios

195 locations supported

658 physical and virtual servers running in the County datacenter

### FY 2020-21 Accomplishments

In support of Pandemic related efforts:

- Migrated over 1,500 employees to telework mode in just 4 weeks; rolled out and supported BOS Chambers Zoom activities; deployed networking, phones, desktop, data, disaster worker related applications, GIS, and training to all EOC functions including the Alternate Care Center
- Implemented multi-factor authentication (MFA)
- Analyzed and consolidated multiple departmental Microsoft licensing agreements into a single M365 enterprise agreement and leveraged the renewed Microsoft M365 investment by implementing additional data sharing and collaboration modules (Teams, Power Automate, Flow) and security features (single sign-on, multifactor authentication) to simplify access, enhance security, and build the necessary mobile framework to enable data access from remote locations
- Continued the implementation of the Sheriff's Records and Jail Management Systems
- As part of the County's disaster recovery and business continuity efforts, retrofitted a secondary datacenter in the North County
- Provided extensive technology framework to support Vote Center rollout Supported GIS needs for redistricting of supervisorial districts
- Completed the replacement of enterprise network firewall cluster and implemented new, distributed firewall cluster at main and secondary datacenters
- Continued the multi-year Radio Modernization project to replace and upgrade the County's 20-year-old public safety radio infrastructure

### FY 2021-22 Objectives

- Continue to support the County's Emergency Operations Center in response to the COVID-19 pandemic including the development of software to address vaccination registration and administration needs
- Leverage the ongoing document management investment and expand the digitation of paper records to multiple departments including Administration Office and Public Defender
- Adopt standards and pilot the integration of building access control systems with video monitoring
- Established and commissioned a new radio repeater site at Mt. Lowe in preparation for the new Co-Located Dispatch Facility
- Plan and refresh Board of Supervisor Chambers audio-visual equipment
- Enable the access of Assessor's parcel data while in remote areas or without appropriate internet connection ("field mobile")
- Continue to project manage the following initiatives:
  - Jail Management/Records Management systems (Sheriff's Office)
  - Co-Located dispatch center technology (Law and safety partners)
  - Radio System modernization (Law and Safety partners)
  - Electronic Health Records (Health Agency)

For a copy of the SLO County IT FY 2019-2023 Strategic Plan, please visit:

<http://www.slocounty.ca.gov/Departments/Information-Technology.aspx>

## Countywide IT Strategic Plan

### Goals and Objectives

#### Talented Work Force

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

#### Customer Service Excellence

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

#### Agile Governance

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

#### Reliable Technical Foundation

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



# Information Technology Project Management Office

**94%+**

Customer Satisfaction  
Score

**10,000+**

Project Hours Managed

**\$20 Million+**

PMO Portfolio Value

The Project Management Office (PMO) is composed of a team of business analysis and project management specialists. Most members are certified as Project Management Professionals (PMPs) through the Project Management Institute (PMI). PMI is an internationally recognized organization requiring extensive hands-on experience, study, and testing for the PMP certification, with ongoing requirements for recertification so the team retains a discipline of PMI best practices.

The PMO team is focused on meeting customer expectations and delivering projects on time, within budget and with the functionality agreed upon in the statement of work. The team works collaboratively with project stakeholders to deliver projects which are initiated, planned, executed, monitored, controlled, and closed within the agreed upon scope, time, and cost.

The PMO offers a wide range of services including:

- Gathering and documenting requirements
- Managing vendor relationships and contracts
- Conducting Request for Proposal (RFP) projects
- Implementing Commercial-Off-the-Shelf (COTS) software packages
- Teaching the project management discipline through the County's Learning and Development Center.

The PMO's seamless execution of projects includes:

- Creating a plan based upon common understanding of the goals of the project
- Communicating clearly throughout the project
- Maintaining control of the project (scope, time, and cost)
- Moving the project toward successful completion
- Gathering lessons learned to continually improve our processes and methodology

# Information Technology PMO Projects

ITD's Project Management Office can help you gather requirements, present your project to the Information Technology Executive Steering Committee (IT-ESC), conduct a request for proposal or information, evaluate responses from vendors, navigate through contractual negotiations, and implement third-party software. For additional information on how to have your initiatives professionally managed, please contact Dan MacKirdy, Project Management Office Manager – ITD - dmackirdy@co.slo.ca.us / 805.781.4911

**989**

Video Cameras Managed

**1.4 Petabytes**

Video Surveillance  
Data Storage Capacity

**3,358**

EFS Users

**2,339,117**

Web Site Annual Visits  
40 percent more than 2019

**1,198,326**

Web Site Individual Users  
50 percent more than 2019

**186,284**

Property Tax Assessments

**2,399,600**

CJIS Transactions  
1,238 Users from 27  
Agencies

Updated 6/3/21	2021						2022					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>ACTIVE / APPROVED PROJECTS</b>												
Access Control Consulting - Doorknobs	0.01	0.01	0.01	0.01	0.01	0.01						
Aerial Imagery Refresh												
Co-located Dispatch Center - Technology Only	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Department Head Intranet Resource Center												
Disaster Recovery Planning: BIA update and BAR	0.33	0.33	0.33									
Disaster Recovery Site Setup												
DUI - Application Replacement	0.20	0.20	0.20									
Electronic Signature Implementation	0.50	0.50										
Energov 2.0												
Epidemiologist Survey Tool												
Field Mobile - Assessor (Shifting to PBA team)												
GIS Environment Setup (Dana/Kathryn)												
JMS/RMS - Implementation	0.75	0.75	0.75	0.75	0.75	0.75	0.50	0.50	0.50	0.50		
Millennium Migration - Health (upcoming)?	0.50	0.50	0.50	0.50	0.50	0.50	0.25	0.50	0.50	0.50	0.50	0.50
Multi Factor Auth (MFA)												
PGCM - Platform Assessment												
Radio System Modernization	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Skype Retirement												
<b>ASSIGNMENTS AND DEVELOPMENT</b>												
Body Worn Camera - Pilot oversight												
BOS A/V Refresh Assessment - (Bus. Case)	0.20	0.20	0.20	0.20	0.20							
CAD Replacement - Sheriff												
Data Strategy for Enterprise - (Bus. Case)												
Disaster Recovery / BCP with Depts - (Bus. Case)							0.25	0.25	0.25	0.25	0.25	0.25
M365 Deployment - Bundle 1 (Bus. Case)			0.25	0.25	0.25	0.25	0.25	0.25				
PBK - Karpel - Move to Cloud Implementation												
Probation CMS - Monitor Replacement (Bus. Case)												
Redistricting - GIS	0.25	0.25	0.25	0.25	0.25							
<b>HOLDING PATTERN</b>												
Agenda Management Solution - Bus. Case							0.25	0.25	0.25	0.25	0.25	0.25
Central Services - Project Concept Dev.												
Env. Health - System Migration - Bus. Case												
IAM - Identity and Access Management (Bus. Case)			0.25	0.25	0.25	0.25	0.25	0.25				
M365 - Roadmap												
Planning/Building Document Management					0.50	0.50	0.50	0.50	0.50	0.50		
PSPS Planning				0.25	0.25							
Public Defender CMS Implementation							0.50	0.50	0.50	0.50	0.50	0.50

# Information Technology Service Level Understanding

## 1. INTRODUCTION

### The Information

Technology Department (ITD) provides an array of centralized IT services and support to meet the complex technology demands of the County's enterprise. ITD accomplishes this with highly skilled and trained IT professionals. In many cases, a department may employ a Departmental Automation Specialist (DAS) who does not report through ITD. "Decentralized" staff often provide operational support for PCs, department specific servers and software applications, and perform other work as directed. ITD provides this support to multiple departments directly.

Key to the prioritization of activities undertaken by the ITD organization is the County's Information Technology Governance model. More information about the processes, procedures, and committees that are all part of Governance can be found on the County's Intranet website.

## 2. CONTACTS

Within ITD, the first point of contact when you are experiencing a problem is the ITD Service Desk. The ITD Service Desk serves as a consolidated "clearing house" for IT related services and support requests. The Service Desk can be reached at 788-2800 (x2800) or by addressing an email to the "Service Desk" address during business hours. For a limited number of mission critical services, after hours support is provided by the ITD Service Desk 24 hours a day, 7 days a week, 365 days a year (24x7x365) in support of critical infrastructure. See Hours and Support Levels below for additional details.

## 3. FINANCIAL PHILOSOPHY

ITD is a General Fund organization. However, ITD operates like an Internal Service Fund (ISF) because it accounts for and recovers every dollar it spends. Some of the fees charged by ITD represent real expenses to all departments, regardless of how they are financially structured. For instance, actual phone bills and Office 365 licensing costs are directly passed through ITD to the responsible department.

## 4. HOURS AND SUPPORT LEVELS

ITD support relies on two definitions of service hours:

**Normal Hours** – Coverage during regular County business hours, defined as 7:30 a.m. to 5:00 p.m., Monday through Friday, excluding Holidays.

**Extended Hours** – Coverage for all other hours outside of Normal Hours, including weekends, nights, and holidays.

ITD also defines three levels of support when dealing with problems:

**Level 1 Support** – Problems are initially handled by the IT Service Desk by calling 788-2800.

**Level 2 Support** – If Level 1 Support is unable to resolve the technology issue, the Level 1 person will contact Level 2 Support on your behalf. Level 2 support personnel are the County subject matter experts responsible for supporting the product or service needing problem resolution.

**Level 3 Support** – Most Level 3 support is provided by off-site suppliers and vendors from whom the product or service was purchased via maintenance agreements. For example, the County has maintenance agreements with Microsoft, IBM, Cisco, SAP, and AT&T. Response times will vary depending on the specific agreement.

Normal Hours				
	Emergencies, Incident Resolution, Public Safety, and Special Services		Non-Emergency	
	Average	Guaranteed	Average	Guaranteed
Initial Contact Response Time	Immediate	15 minutes	Immediate	15 minutes
Level 1 Support - Begin to work on issue	Immediate	15 minutes	Immediate	15 minutes
Level 2 Support - Begin to work on issue	5 minutes	30 minutes	1 hour	4 hours
Extended Hours				
	Supported Programs and Systems*		Non-Supported Programs and Systems	
	Average	Guaranteed	Average	Guaranteed
Initial Contact Response Time	Immediate	15 minutes	Immediate	15 minutes
Level 1 Support – Problem Identification	30 minutes	2 hours	4 hours beginning next business day	
Level 1 or 2 Support - Begin to work on issue	30 minutes	2 hours	4 hours beginning next business day	
Level 3 Support	Based on maintenance agreement		Based on maintenance agreement	
* For a complete list of the Programs and Systems that are supported during Extended Hours, contact the ITD Service Desk at 805.788.2800				

## 5. SERVICE CATALOG

**Service Desk** – The front line of ITD services is the IT Service Desk. Staffed with a technical team during Normal Hours and providing mission critical support 24x7x365 via telephone, the IT Service Desk provides limited support for PC desktops, mobile devices, logins and passwords, application use, website modifications, and general user issues.

**Application Development** – The Applications Team is staffed by a team of skilled software engineers. This team integrates systems, builds custom software solutions, and supports “Commercial-off-the-Shelf” (COTS) solutions.

**Communications** – The Communications team, located on Kansas Avenue, provides technical support for the General Government and Public Safety Radio Communications networks. This specialized team supports hand-held, fixed, and mobile radios across all departments within the County of San Luis Obispo. This team also provides critical support to departments with video surveillance equipment, Sheriff Dispatch, and Office of Emergency Services activities.

**Professional Consulting** – Trained, skilled, and professionally certified staff capable of performing complex project management, application design, development and maintenance, and business, process, and security analysis. Provides desktop, laptop, and printer support. This team may also provide supplement departmental DAS services during peak times and assist departments with workload balancing eliminating the need to recruit and hire outside assistance.

**GIS Program** – ITD oversees an enterprise GIS Program to support and enhance countywide business needs. Location based data, maps, and applications help departments visualize their data for better decision making as well as sharing critical information with the Public.

**Infrastructure (Telephones, Servers, and Network)** – High-speed fiber optic cable, voice communications (telephone) and wide-area-networking services are available under the ITD services structure. ITD can host your applications in a monitored, secured, and environmentally well-managed data center.

**Project Management** – ITD’s Project Management Office (PMO) furnishes IT Project Managers to help ensure the success of your IT project through the management of critical project constraints: time, cost, and scope. The PMO manages IT projects through the entire lifecycle: initiating, planning, executing, monitoring, and controlling, and closing.

6. FEE SCHEDULE / DESCRIPTION

Information Technology – Fee Schedule					
Fiscal Year 2021-22					
Fee and Description		Units	Fee	Units Derived From	What It Covers
<b>Radio &amp; Video Communications</b>					
	Radio	Per Labor Hour	132.28	Hours worked	Services of Communications personnel, as well as services and supplies for the Communications Shop
	Video	Per Camera / Month	35.48	A count of video cameras for each department	Surveillance camera hardware and software support by Communications personnel including installation and programming, as well as video services and supplies for the Communications Shop. Enterprise video system server support and storage administration. Equipment replacement not included in fee.
<b>Voice Communications</b>					
REMOVED	<del>Voice Support (Centrex)</del>	<del>Per Phone Number / Month</del>	<del>9.17</del>	<del>Centrex phone numbers</del>	<del>Coordinate County's contract with AT&amp;T (moves, changes, deletes); Coordinate all Centrex equipment installation with AT&amp;T; manage County's AT&amp;T Centrex voice communication billings; update County telephone directory; voice mail boxes</del>
	Telephone Bills (Centrex)	Actual Costs	Actual	Direct pass through from provider (AT&T)	Centrex telephone services
	VoIP Telephone	Per Device / Month	13.73	VoIP phone numbers	VoIP telephony administration (moves, changes, deletes); External AT&T voice network connectivity; Coordinate all voice communications equipment installation by Network Team; manage County's voice communication billings; update County telephone directory; voice mail boxes

<b>Networked Services</b>					
	Third Party Software	Actual Costs	*See TPS Pricing Schedule below	Pass through of costs	Third party software including but not limited to: Microsoft Suite of Products (O365, Microsoft Project, Visio, EMS, Power BI) and Adobe Acrobat
	Network Connection	Per Device / Month	44.45	A count of all devices connected to the County LAN / WAN. A device is counted as any unique identifier assigned to a network interface controller using a network address in communications within a network segment. Example of a device would be a docking station.	Network management; firewall; internet access; County Intranet access; VPN access; Microsoft ADS; anti-virus; security; technical support; associated systems administration
	External User Access	Per Account / Month	5.73	A count of all External Users in each agency	Provide secure electronic access to County systems and services for external (non-County) agencies and organizations. Fee is independent of any application system usage charges and not dependent upon the system(s) being accessed.
<b>Enterprise Services</b>					
	Enterprise Services	Billed Quarterly	% of Total Enterprise Cost	% is calculated using the Allocation Units (Expenditures) in Schedule 10.6.3 of the County of San Luis Obispo Cost Allocation Plan prepared by the ACTTC.	This fee includes the following enterprise wide services: management of physically secure and environmentally controlled computing facilities, centralized design, development, deployment, and management of hundreds of enterprise physical and virtual servers; Disaster Recovery Planning (DRP); Security; SAP technical support; MySLO and public facing website maintenance; GIS program coordination; report generation and distribution, and all associated systems administration, software engineering, service desk, and enterprise desktop support.
	Storage	Per 1GB increment / Month	0.02	Disk storage allocated to a server	Database storage and administration

<b>Departmental Services</b>					
	Virtual Server CPU	Per CPU / Month	39.58	A base server CPU	Microsoft Windows Server software license; One CPU with computing infrastructure and hardware; Backup/recovery; Disaster Recovery Planning (DRP); associated systems administration and technical support
	Virtual Server Memory	Per 1GB increment / Month	18.50	Memory allocated to a server	Memory allocation to a virtual server
	SQL Server	Per CPU / Month	62.69	A SQL server CPU	Microsoft SQL Server software license: One CPU with computing infrastructure and hardware; Backup/recovery; Disaster Recovery Planning (DRP); associated systems administration and technical support
	IT Professional Consulting	Per Labor Hour	121.60	Hours worked	Provide business analysis and technology planning; project management; application development, integration, and existing systems enhancement services; department specific systems administration and network project support; desktop support services and certain end-user training activities
	Shared Data Lines	Actual Costs	Actual	Pass through of costs	Department and agency shared campus networks
	Out stationed staff	Per FTE	Actual	Actual costs plus overhead	Provide dedicated, full-time, on-site support staff to departments and agencies (minimum duration 6 months)

<b>Information Technology – Third Party Software Price Guide Fiscal Year 2021-22</b>				
<b>Product</b>		<b>Per Month</b>	<b>Per Qtr.</b>	<b>Per Year</b>
Office 365 E3	Licenses	\$ 29.49	\$ 88.47	\$ 353.88
Office 365 F3	Licenses	\$ 8.29	\$ 24.87	\$ 99.48
Visio	Licenses	\$ 11.17	\$ 33.51	\$ 134.04
PowerBI Pro	Licenses	\$ 7.44	\$ 22.32	\$ 89.28
Project	Licenses	\$ 22.34	\$ 67.02	\$ 268.08
Teams Audio Conferencing	Licenses	\$ 3.50	\$ 10.50	\$ 42.00
Power Automate (Flow Advance)	Licenses	\$ 35.05	\$ 105.15	\$ 420.60
Windows E5 (DSS only)	Licenses	\$ 4.31	\$ 12.93	\$ 51.72
Adobe Acrobat Pro	Licenses	\$ 5.56	\$ 16.68	\$ 66.72
Adobe Captivate	Licenses	\$ 29.13	\$ 87.39	\$ 349.56
Adobe All Apps	Licenses	\$ 55.69	\$ 167.07	\$ 668.28
Adobe Illustrator	Licenses	\$ 24.50	\$ 73.50	\$ 294.00
Adobe InDesign	Licenses	\$ 24.50	\$ 73.50	\$ 294.00
Adobe Photoshop	Licenses	\$ 24.50	\$ 73.50	\$ 294.00
Adobe Premier	Licenses	\$ 24.50	\$ 73.50	\$ 294.00

\* The above schedule is a sample of the Third-Party Software available to your department. Please contact ITD to discuss specific products which can be tailored to the needs of your department.

## 7. ASSUMPTIONS AND EXPLANATIONS FOR THE COST ESTIMATES

**Radio & Video Communications** – Estimates for Radio Support are based on the number of labor hours billed in fiscal year 2019-20. Camera count based on June 2020 inventory of IT supported cameras.

**Voice Communications** - Estimates are based on June 2020 inventory of the number of Centrex (landline) telephone numbers and Telephone bill amounts are estimated using fiscal year 2019-20 actual costs. Monthly landline telephone charges are directly passed through from AT&T. VoIP estimates based on June 2020 inventory of lines.

### **Networked Services**

- Third Party Software – Estimates are based on June 2020 inventory of software licenses.
- Network Connection - Estimates are based on the June 2020 inventory of devices connected to the County network.
- External User Access – Estimates are based on May 2020 inventory of Active Directory Services (ADS) accounts for external customers.

**Enterprise Services** – Estimates are based on Windows platform (Win-Tel). Enterprise is allocated based on FY 2017-18 reported Adjusted Expenditures per department. Cost recovery for physical server housing and printing services is now included in Enterprise Services fee.

- Storage – Estimates based on the storage quantity billed in May 2019.

The delivery of Enterprise Services requires labor from multiple disciplines as follows:

- Software engineers and system administrators allocation: this is due to enterprise applications whose costs are distributed enterprise wide like SAP, GIS, Neogov, web presence, security program, and/or enterprise initiatives which might require coding, building an application, extracting data such as Stepping Up, Homeless campsite mapping, County website maintenance, and Disaster Service Worker (DSW) related activities.
- IT Supervisory usage: service desk, server administration, security and GIS programs, enterprise applications teams are managed by supervisors whose costs are recovered by fees either within their area of expertise or as a general overhead allocation.
- Desktop Support usage: service desk, enterprise equipment ordering/shipping/receiving, Board Chambers support, to illustrate a couple of examples staffed by ITD's desktop support teams (DASs and IT techs). Those enterprise costs are spread across the organization (unlike the costs we incurred for providing direct support to 15 departments – Such departments pay their share directly.

### **Departmental Services-**

- Virtual Server – Estimates based on the number of CPUs, less SQL servers, on the Blade Center as of May 2020.
- SQL Server – Estimates based on May 2020 inventory.
- Virtual Server - Memory – Estimated based on the memory quantity billed in May 2020.
- IT Professional Consulting – Estimates are based on the actual hours billed in fiscal year 2019-20.
- Shared Data Lines – Estimates based on actual costs billed in fiscal year 2019-20.