

**COUNTY OF MADERA  
BUDGET UNIT DETAIL  
BUDGET FOR THE FISCAL YEAR 2020-21**

Department: Information Technology  
Security (00243)  
Function: General  
Activity: Other General  
Fund: General

	<b>BOARD APPROVED <u>2019-20</u></b>	<b>CAO BASELINE <u>2020-21</u></b>	<b>DEPARTMENT REQUEST <u>2020-21</u></b>	<b>CAO RECOMMENDED <u>2020-21</u></b>
<b><u>ESTIMATED REVENUES:</u></b>				
CHARGES FOR CURRENT SERVICES				
662800 Interfund Revenue	10,239	10,239	10,939	10,939
662802 Interfd Rev - Comp Svc				
<b>TOTAL CHARGES FOR CURRENT SERVICES</b>	<b>10,239</b>	<b>10,239</b>	<b>10,939</b>	<b>10,939</b>
MISCELLANEOUS REVENUE				
670000 Intrafund Revenue	1,729,220	1,729,220	1,613,328	1,613,328
<b>TOTAL MISCELLANEOUS REVENUE</b>	<b>1,729,220</b>	<b>1,729,220</b>	<b>1,613,328</b>	<b>1,613,328</b>
<b><u>TOTAL ESTIMATED REVENUES</u></b>	<b><u>1,739,459</u></b>	<b><u>1,739,459</u></b>	<b><u>1,624,267</u></b>	<b><u>1,624,267</u></b>
<b><u>EXPENDITURES:</u></b>				
SALARIES & EMPLOYEE BENEFITS				
710102 Permanent Salaries	317,145	317,145	326,199	326,199
710200 Retirement	115,564	115,564	122,996	122,996
710300 Health Insurance	34,197	34,197	42,444	42,444
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>466,906</b>	<b>466,906</b>	<b>491,639</b>	<b>491,639</b>
SERVICES & SUPPLIES				
720300 Communications	3,600	3,600	54,800	54,800
720800 Maintenance - Equipment	57,100	57,100	34,633	34,633
721200 Miscellaneous Expense	16,383	16,383	12,291	12,291
721300 Office Expense	20,000	20,000	22,400	22,400
721400 Professional & Specialized Services	853,084	853,084	181,275	181,275
721426 Software	0	0	562,957	562,957
721900 Property Tax	0	0	8,151	8,151
722000 Transportation & Travel	35,470	35,470	5,500	5,500

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TOTAL SERVICES & SUPPLIES	985,637	985,637	882,007	882,007
OTHER CHARGES				
730302 Retire Capital Assets	664,036	450,278	450,278	450,278
730502 Interest on Capital Leases	25,341	25,341	0	0
TOTAL OTHER CHARGES	689,377	475,619	450,278	450,278
<b><u>TOTAL EXPENDITURES</u></b>	<b><u>2,141,920</u></b>	<b><u>1,928,162</u></b>	<b><u>1,823,924</u></b>	<b><u>1,823,924</u></b>
<b><u>NET COUNTY COST (EXP - REV)</u></b>	<b><u>402,461</u></b>	<b><u>188,703</u></b>	<b><u>199,657</u></b>	<b><u>199,657</u></b>

## INFORMATION TECHNOLOGY – INFORMATION SECURITY

### COMMENTS

In alignment with the organizational strategic plan “Mission 2023”, the Office of Information Technology (OoIT) will push forward with the continued implementation (year 3 of 5) of the Information Security Strategy. Over the first two years of Mission 2023, OoIT has significantly improved the organizations compliance. Compliance improvement will continue; however, the focus in fiscal year 2020/2021 will shift to improved security posture. The objectives of the information security program are to safeguard confidentiality of information, upkeep the integrity of data, and increase the availability of systems and operations. Leveraging compliance as a guide, the information security program will improve the security of Federal Health Insurance Portability and Accountability Act (HIPAA), Payment Card Industry (PCI), Criminal Justice Information Services (CJIS), Federal Tax Information (FTI – Publication 1075), and other privacy mandates to increase the confidentiality, integrity, and availability of the County’s networks, systems, and data.

The following chart represents Madera County Departments that have been identified as receiving and/or exchanging Federal information.

Sheriff's Department	Department of Justice
Department of Corrections	Department of Justice
Probation	Department of Justice
District Attorney	Department of Justice, Department of Treasury
Child Support Services	Department of Treasury, Social Security Administration
Department of Social Services	Department of Treasury, Social Security Administration, Department of Justice
Public Health	Social Security Administration and Women, Infants and Children
Behavioral Health Services	Social Security Administration

Cyber threats and criminal activity are prevalent in today’s world and government agencies are not immune from these exploits. According to the Verizon 2019 Data Breach Investigations Report, 71% of breaches were financially motivated; 16% were of Public sector entities (up 2%); 32% involved phishing. In addition, the evolution of cybercrime continues to grow; Experian estimates illicit cyber activity to generate at least \$1.5 trillion in annual revenue.

To combat the continued increase in nefarious cyber activity, OoIT has developed a strategy to staff a team with mixture of on staff engineers/analysts/technicians and specialized outsourced professionals. Moving towards compliance with the NIST Framework and required mandates will not ensure complete protection from cyber threats, but moving closer to compliance will assist us in developing a proactive approach to the prevention of nefarious cyber activity from internal and external threats. In addition to cyber threat prevention,

## INFORMATION TECHNOLOGY – INFORMATION SECURITY

striving for NIST compliance will allow us to better prepare should Madera County become a victim of an internal or external information breach or cyber-attack.

### **WORKLOAD**

Key components of the Information Security budget include:

- Development, upkeep, and success measurement of Information Security Program, including but not limited to: security governance, strategy, policies, standards, control implementation, etc.
- Vulnerability Patch Management
- Backup management – policy, retention development, auditing (report monitoring), validate recovery testing
- Inventory and System Development Life Cycle (SDLC)
- Business Impact Analysis (BIA) and Risk Assessment
- Threat, Vulnerability, and Impact Assessment
- Network Monitoring Operations & Security Monitoring Operations
- Incident Management
- Security Awareness Training
- Data room physical security and data protection
- Network threat detection and defense system management
- Security architecture, design, and control implementation

Planned activities:

- Security strategy and year 3 of 5 roadmap implementation
- Lessened threat surface through vulnerability identification and patch management
- Mobile workforce pilot and organizational requirements discovery
- Operationalize Mobile Device Management to meet Federal Tax Information (FTI) Publication 1075 security requirements
- Improved email security through the introduction of nefarious behavior identification via artificial intelligence
- Continued implementation of network visibility tools
- End-of-life hardware and software replacement

## INFORMATION TECHNOLOGY – INFORMATION SECURITY

### **WORKLOAD (continued)**

- Backup process improvement and architecture expansion
- Network segmentation and zero-trust network planning and pilot
- External network penetration testing and vulnerability assessment
- Incident Response partnership, business process design, and incident exercises
- Computer room enhancement and physical security improvement
- Security Awareness training as required by compliance agencies (e.g. FTI, FSMA, CJIS, HIPAA, etc.)
- Revision of Network Security Policy to align with NIST 800-53 Revision 5 (Draft)
- Maintenance and support for perimeter and internal firewall connections
- Maintenance and support for security appliances (SPAM, Web filters, IPS/IDS, Advanced Malware Protection)
- Maintenance and support for anti-virus and advanced malware systems
- Maintain backup process and offsite media (tapes) management for data restoration
- Remote access and vendor support management
- Security licensing for current level threat surface and current number of end points including known computers, laptops, cell phones, printers, IOT devices, etc.

### **UNFUNDED IN BASELINE BUDGET**

- Unstructured Data Discovery
  - Data Classification Software
  - Data Dependency & Assessment Software
  - Data Management, Manipulation, and Retention Software
- Layered Cloud Security
  - Multi Factor Authentication
  - Cloudlock
  - Stealthwatch
  - Cloud Firewall
- Overtime Coverage in case of a cyber security incident on a weekend, holiday, or after hours and ongoing vulnerability remediation after hours.

**INFORMATION TECHNOLOGY – INFORMATION SECURITY**

- Internet Usage Reporting Tool
- Additional security licensing for any **additional** end points added to the County threat surface including, but not limited to, computers, laptops, cell phones, printers, IOT devices, etc.

**ESTIMATED REVENUES**

- 662802**      **Interfund Revenue** (\$10,939) is recommended increased \$700 for charges to other departments for Network Information Security Services
- 670000**      **Intrafund Revenue** (\$1,613,328) is recommended decreased \$115,892 for charges to other departments for Network Information Security Services

**SALARIES & EMPLOYEE BENEFITS**

- 710102**      **Permanent Salaries** (\$326,199) are recommended increased \$9054 due to funding the security positions and moving one clerical support position from the Information Technology Budget, ORG Key 00240, to the Information Security Budget, ORG Key 00243.
- 710200**      **Retirement** (\$122,996) is recommended increased \$7,432 to fund Retirement costs.
- 710300**      **Health Insurance** (\$42,444) is recommended increased \$8,247 to fund Health Insurance costs.

**SERVICES & SUPPLIES**

- 720300**      **Communications** (\$54,800) is recommended increased \$51,200 for the following:
- |          |                    |
|----------|--------------------|
| \$4,800  | Cell Phone Service |
| \$50,000 | Redundant Internet |
- 720800**      **Maintenance - Equipment** (\$34,633) is recommended decreased \$22,467 for the following:

## INFORMATION TECHNOLOGY – INFORMATION SECURITY

### SERVICES & SUPPLIES (continued)

#### **720800**      Maintenance – Equipment (continued)

##### **Maintenance – Recurring Costs**

\$9,633	Barracuda Appliances (SPAM)
\$25,000	Backup Expansion (yearly growth)

#### **721200**      Miscellaneous Expense (\$12,291) is recommended decreased \$4,092 for the following:

\$12,291	ConvergeONE Lease – Sales Tax on Capital Lease
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#### **721300**      Office Expense (\$22,400) is recommended increased \$2,400 for the following:

\$15,000	Back Up Tapes
\$400	Office Supplies
\$7,000	Computer Equipment

#### **721400**      Professional & Specialized Services (\$181,275) is recommended increased \$13,975 for the following:

##### **Professional Services – Recurring Costs**

\$10,000	Overland Backup Preventative Maintenance Professional Service
\$5,000	Hard Drive Destruction
\$16,000	External Consulting Services and Support
\$800	ISACA Memberships – New
\$92,500	Cisco Talos Incident Response
\$15,000	Trace Digital Forensics Services

## INFORMATION TECHNOLOGY – INFORMATION SECURITY

### SERVICES & SUPPLIES (continued)

#### 721400 Professional & Specialized Services (continued)

##### Fiscal Year 2020-2021- Projects

\$10,000	Badge & Access Software Consolidation – New
\$3,975	Configuration Services – Insight Public Sector – Back-Up Expansion
\$28,000	Security Server Updates – Professional Services

721426 Software (\$562,957) is recommended decreased \$127,852 for the following:

##### Software – Licenses, Support, and Subscription Services – Recurring Costs

\$12,096	Cisco AMP – Annual Subscription License – 750 Licenses (Year 2 of 4 @ \$12,096/yearly)
\$45,000	Commvault Backup Software – Annual License and Maintenance
\$33,000	Logic Monitor Server Infrastructure Health Monitoring – Annual Subscription
\$10,000	Digital Defense Incorporated Security Awareness Training – Annual Subscription
\$10,600	SSL Certificates
\$65,000	CISCO ISP and IDS Licenses – Annual Subscription
\$40,000	SecureLink Vendor Remote Access – Annual Subscription (\$5,000 increase in license cost)
\$15,000	Zoho Corp Manage Engine Desktop Central and Patch Management – Annual License
\$7,784	VMWare Licenses CISCO UCS Infrastructure (Prepaid Expense for Year 3 of 5)
\$14,000	NetBrain Network Infrastructure Monitoring and Mapping – Annual License and Maintenance
\$6,000	Penetration/Vulnerability/White Hat Training – Software Subscription
\$4,000	SANS/ICS2 Management Tech Training – Software Subscription
\$10,000	Ironport Email Encryption & DLP Annual License – Annual License
\$6,875	Cisco Advanced Malware Protection (AMP) (275 Additional Licenses; \$25/Device/Year)
\$25,448	Remote Access VMWareWorkspaceONE Mobile Device Management Licenses – 750 Devices, \$38/Device
\$9,750	Remote Access VMWare WorkspaceOne Mobile Device Management User License Maintenance (150 Licenses; \$65/User) – Annual License
\$9,000	Remote Access Devices - Symantec Software Antivirus Update Annual License - Mobile Devices
\$65,000	Tenable.IO External Penetration Analysis and Vulnerability Scanning – annual subscription (\$35,000 increase in cost for replacement product)



## INFORMATION TECHNOLOGY – INFORMATION SECURITY

### SERVICES & SUPPLIES (continued)

#### 721426 Software (continued)

\$20,000 Secure Works Device Logging – Annual Subscription (\$30,000 decrease in cost)  
\$20,000 Integrated Electronics - Badge Software  
\$2,000 Keeper Password Vault – New Annual Subscription  
\$65,000 SecureWorks Security Operations Center 24 Hour Monitoring – Annual Subscription

#### **Fiscal Year 2020-2021- Projects**

\$5,000 Commvault Data DeDuplication Software – New  
\$62,404 Cisco Cloud Email Security Appliance – New - \$28,206 Configuration Services; \$34,198 Subscription Fees

721900 Property Tax (\$8,151) is recommended increased \$8,151 for the Property Taxes associated with the Network and Security Project Lease

722002 Transportation & Travel (\$5,500) is recommended decreased \$29,970 to fund training needs throughout the year.

### OTHER CHARGES

730302 Rent (\$450,278) is recommended decreased \$213,758 for the following:

The current outstanding capital leases are as follows:

\$450,278 ConvergeOne Financial – Network Security Implementation Project (Final Payment June 2023)

### Fixed Assets

740300 Equipment (\$0) is recommended decreased \$0.

COUNTY OF MADERA  
 BUDGET UNIT POSITION SUMMARY  
 BUDGET FOR THE FISCAL YEAR 2020-21

Department: Information Security  
 00243  
 Function: General  
 Activity: Other General  
 Fund: General

<u>JCN</u>	<u>CLASSIFICATION</u>	<u>2019-20</u> <u>Authorized</u> <u>Positions</u>		<u>2020-21</u> <u>Proposed</u> <u>Positions</u>		<u>Y-O-Y</u> <u>Changes</u> <u>in Positions</u>		<u>Notes</u>
		<u>Funded</u>	<u>Unfunded</u>	<u>Funded</u>	<u>Unfunded</u>	<u>Funded</u>	<u>Unfunded</u>	
	Network Security Engineer I/II	1.0	-	1.0	-	-	-	
4108	Deputy Chief Information Officer - Network & Security Services	1.0	-	1.0	-	-	-	
	Senior Network Security Engineer	1.0	-	1.0	-	-	-	
3610	Administrative Assistant	1.0	-	1.0	-	-	-	A
<b>TOTAL</b>		<u>4.0</u>	<u>-</u>	<u>4.0</u>	<u>-</u>	<u>-</u>	<u>-</u>	

**NOTES:**

A Position moved from ORG Key 00240 to better meet the needs of the department