

COUNTY OF MADERA
 BUDGET UNIT DETAIL
 BUDGET FOR THE FISCAL YEAR 2018-19

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

	<u>ACTUAL</u> <u>2016-17</u>	<u>BOARD</u> <u>APPROVED</u> <u>2017-18</u>	<u>DEPARTMENT</u> <u>REQUEST</u> <u>2018-19</u>	<u>CAO</u> <u>RECOMMENDED</u> <u>2018-19</u>
<u>ESTIMATED REVENUES:</u>				
MISCELLANEOUS REVENUE				
670000 Intrafund Revenue	0	352,105	1,319,426	1,319,426
TOTAL MISCELLANEOUS REVENUE	0	352,105	1,319,426	1,319,426
<u>TOTAL ESTIMATED REVENUES</u>	<u>0</u>	<u>352,105</u>	<u>1,319,426</u>	<u>1,319,426</u>
<u>EXPENDITURES:</u>				
SALARIES & EMPLOYEE BENEFITS				
710102 Permanent Salaries	0	0	228,284	228,284
710103 Extra Help	0	0	0	0
710105 Overtime	0	0	0	0
710106 Stand-By	0	0	0	0
710200 Retirement	0	0	75,246	75,246
710300 Health Insurance	0	0	37,137	37,137
710400 Workers' Compensation Insurance	0	0	0	0
TOTAL SALARIES & EMPLOYEE BENEFITS	0	0	340,667	340,667
SERVICES & SUPPLIES				
720800 Maintenance - Equipment	0	48,500	57,600	57,600
721300 Office Expense	0	13,200	10,000	10,000
721400 Professional & Specialized Services	0	287,897	565,066	565,066
722000 Transportation & Travel	0	12,000	36,149	36,149
TOTAL SERVICES & SUPPLIES	0	361,597	668,815	668,815

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OTHER CHARGES				
730302 Retirement	0	0	590,001	590,001
730502 Interest	0	0	22,043	22,043
TOTAL OTHER CHARGES	0	0	612,044	612,044
FIXED ASSETS				
740300 Equipment	0	166,500	82,500	82,500
TOTAL FIXED ASSETS	0	166,500	82,500	82,500
<u>TOTAL EXPENDITURES</u>	<u>0</u>	<u>528,097</u>	<u>1,704,026</u>	<u>1,704,026</u>
<u>NET COUNTY COST (EXP - REV)</u>	<u>0</u>	<u>175,992</u>	<u>384,600</u>	<u>384,600</u>

INFORMATION TECHNOLOGY – INFORMATION SECURITY

COMMENTS

The Office of Information Technology (OoIT) has developed a 5 year Information Security Strategy and implementation plan to improve our regulatory compliance sanctions; adherence to compliance will inherently increase our information security posture. The objectives of the information security program are to safeguard confidentiality of information, integrity of data, systems and operations, technical compliance for the 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.

Approximately 70% of Madera County Employees rely on information provided through Electronic Information Exchange Partners (EIEP) from Federal Agencies. Under the Federal Information Security Modernization Act of 2014 (FISMA), Federal Agencies are required to follow the National Institute of Standards and Technology (NIST) 800-53 Revision 4. The State of California has also adopted the NIST 800-53 Revision 4 Framework. In order to continue receiving information as an EIEP with a Federal Agency and to be in compliance with already executed agreements with Federal agencies, Madera County must also be in compliance with the NIST Framework.

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. The evolution of cybercrime has evolved into big business with an estimated market cost of \$2 trillion by 2019. A major shortage in the labor market is estimating 3.5 million unfilled cyber security jobs by 2021. To combat this shortage, OoIT has developed a strategy to staff a team with mixture of on staff engineers/analysts/technicians and specialized outsourced professionals.

INFORMATION TECHNOLOGY – INFORMATION SECURITY

COMMENTS (continued)

Moving towards compliance with the NIST Framework and required mandates will not ensure complete protection from cyber threats, but 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, the compliance with the NIST Framework 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.
- Inventory and System Development Life Cycle (SDLC)
- Business Impact Analysis (BIA) and Risk Assessment
- Threat, Vulnerability, and Impact Assessment
- Vulnerability Patch Management
- Network Monitoring Operations & Security Monitoring Operations
- Incident Management
- Security Awareness Training
- Backup management
- 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 1 of 5 roadmap implementation
- Deployment of network inventory, access control, and visibility tools for 1/3 of the County network
- Mobile Device Management to meet Federal Tax Information (FTI) Publication 1075 security requirements
- Upgrade and replacement of County partner firewalls (C-IV, State Mainframe, BHS Kingsview, etc.)
- External network penetration testing and vulnerability assessment

INFORMATION TECHNOLOGY – INFORMATION SECURITY

WORKLOAD (continued)

- Advanced training for perimeter and internal network defense visibility and security strategies
- Development of Incident Response partnership and business process design
- Computer room enhancement and physical security improvement
- Introduction of 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 4
- Development of Compliance Measurement Metrics
- Quarterly Written Compliance Metrics Report to Board of Supervisors and Department Heads containing status update of planned activities
- 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 malware systems
- Maintain backup process and offsite media (tapes) management for data restoration
- Remote access and vendor support management

STAFFING

In Fiscal Year 2017-18, the Information Security Budget did not include any allocated staffing resources. Due to the regulatory compliance and County risk, dedicated staff are necessary to complete Information Security requirements. The regulatory compliance requirements have created many additional job tasks and additional workload, previously unknown to the Office of Information Technology. In addition, additional positions are required to meet segregation of duty requirements as Information Security and Information Technology have different functions and purposes.

INFORMATION TECHNOLOGY – INFORMATION SECURITY

ESTIMATED REVENUES

670000 **Intrafund Revenue** (\$1,319,426) is recommended increased \$967,321 for charges to other departments for Network Information Security Services

SALARIES & EMPLOYEE BENEFITS

710102 **Permanent Salaries** (\$228,284) are recommended increased \$228,284 due to the additional work and regulatory compliance requirements associated with Information Security.

710200 **Retirement** (\$75,468) is recommended increased \$75,468 to fund Retirement costs.

710300 **Health Insurance** (\$37,137) is recommended increased \$37,137 to fund Health Insurance costs.

SERVICES & SUPPLIES

720800 **Maintenance - Equipment** (\$57,600) is recommended increased \$9,100 for the following:

\$16,000	Barracuda Appliances (SPAM & WAF)
\$6,000	Blue Coat Web Filter Maintenance Renewal
\$35,600	Cisco SmartNet & Security Maintenance Agreements

721300 **Office Expense** (\$10,000) is recommended decreased \$3,200 for the following:

\$10,000	Back Up Tapes
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721400 **Professional & Specialized Services** (\$565,066) is recommended increased \$277,169 for the following:

\$3,500	Commvault v.11 Upgrade
\$6,500	Commvault Virtual Machine Snapshot Backup Configuration
\$15,000	Backup Tape Libraries
\$10,000	Overland Backup Preventative Maintenance Professional Service
\$30,000	External Penetration Testing and Vulnerability Scanning

INFORMATION TECHNOLOGY – INFORMATION SECURITY

721400 Professional & Specialized Services (continued)

\$55,000	Microsoft SCCM (Patch Management/Inventory) Implementation
\$5,000	Hard Drive Destruction
\$24,000	SecureWorks Incident Response Retainer
\$16,000	External Consulting Services and Support
\$20,000	Security Awareness Training – Digital Defense Incorporated
\$50,000	Collective Sense
\$1,800	Cisco Any Connect
\$30,761	Cisco IPS/IDS/AMP
\$20,000	Digital Defense – VM
\$20,000	Symantec Software Antivirus Update Annual License
\$10,000	TrendMicro AntiVirus Annual License – Email AntiVirus
\$8,400	Cisco Advanced Malware Protection (AMP) Annual License
\$8,400	Network Infrastructure Monitoring and Mapping Yearly Maintenance – NetBrain
\$37,000	Server Infrastructure Network Management and Health - LogicMonitor
\$2,045	Server/Workstation Vulnerability patching – BatchPatch Annual License
\$20,560	Internet Web Content Filtering – BlueCoat Annual License
\$6,800	Microsoft Active Directory Auditing Tool – Annual License
\$40,000	Mobile Device Management
\$32,200	Cisco Annual Licenses (IPS, IDS, AMP, VPN, etc.)
\$45,000	Commvault Backup Software Annual Maintenance
\$35,000	Vendor Remote Access – SecureLink
\$1,500	Encrypt to DOC Public Website
\$10,600	SSL Certificates

722002 Transportation & Travel (\$36,149) is recommended increased \$24,149 for the following training:

\$15,522	Cisco Live Conference
\$6,924	ISACA Security Conference
\$6,314	Cisco Learning Credit Travel
\$7,389	Microsoft SCCM Administration Training

INFORMATION TECHNOLOGY – INFORMATION SECURITY

OTHER CHARGES

730302 **Rent** (\$590,001) is recommended increased \$590,001 for the following:

\$590,001 Cisco Capital Lease Agreement – ConvergeOne – Network and Security Infrastructure Upgrade

The Network and Security Infrastructure Upgrade will upgrade the overall County network to a Software Define Access and Data Center Architecture. The project will deploy various network inventory, access control, and visibility tools for 1/3 of the County network per regulatory compliance requirements.

730502 **Interest** (\$24,840) is recommended increased \$22,043 for the following:

\$24,840 Interest - Cisco Capital Lease Agreement – ConvergeOne - Network and Security Infrastructure Upgrade

FIXED ASSETS

740300 **Equipment** (\$82,500) is recommended for the following:

\$40,000 Mobile Device Management

\$25,000 Public Key Infrastructure (PKI) – Authentication and Encryption Certificate Implementation

\$17,500 Enterprise Back Up Storage Increase

**COUNTY OF MADERA
BUDGET UNIT POSITION SUMMARY
BUDGET FOR THE FISCAL YEAR 2018-19**

Department: Information Security
243
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Fund: General

<u>JCN</u>	<u>CLASSIFICATION</u>	<u>2017-18 Authorized Positions</u>		<u>2018-19 Proposed Positions</u>		<u>Y-O-Y Changes in Positions</u>		<u>Notes</u>
		<u>Funded</u>	<u>Unfunded</u>	<u>Funded</u>	<u>Unfunded</u>	<u>Funded</u>	<u>Unfunded</u>	
3380	Desktop Support Technician I or	-	-	-	-	-	-	
3381	Desktop Support Technician II or	-	-	-	-	-	-	
3335	Network Engineer I or	-	-	-	-	-	-	
3336	Network Engineer II	-	-	1.0	-	1.0	-	A
4109	Information Technology Division Manager	-	-	1.0	-	1.0	-	A
3337	Senior Network Engineer	-	-	1.0	-	1.0	-	A
TOTAL		-	-	3.0	-	3.0	-	

NOTES:

A - New positions recommended for the Board's consideration