



Monterey County

Board Order

168 West Alisal Street,
1st Floor
Salinas, CA 93901
831.755.5066

Upon motion of Supervisor Salinas, seconded by Supervisor Potter and carried by those members present, the Board of Supervisors hereby:

Received and accepted a report of the proposed Information Technology capital projects, which was received and accepted by the Capital Improvement Committee on April 7, 2014, and received and accepted by the Budget Committee on April 30, 2014.

PASSED AND ADOPTED on this 24th day of June 2014, by the following vote, to wit:

AYES: Supervisors Armenta, Calcagno, Salinas, Parker and Potter

NOES: None

ABSENT: None

I, Gail T. Borkowski, Clerk of the Board of Supervisors of the County of Monterey, State of California, hereby certify that the foregoing is a true copy of an original order of said Board of Supervisors duly made and entered in the minutes thereof of Minute Book 77 for the meeting on June 24, 2014.

Dated: June 30, 2014
File Number: 14-676

Gail T. Borkowski, Clerk of the Board of Supervisors
County of Monterey, State of California

By Denise Hancock
Deputy



Monterey County

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Board Report

Legistar File Number: 14-676

Agenda Date: June 24, 2014

Introduced: 6/12/2014

Version: 1

Current Status: Agenda Ready

Matter Type: General Agenda Item

Receive and accept a report of the proposed Information Technology capital projects, which was received and accepted by the Capital Improvement Committee on April 7, 2014, and received and accepted by the Budget Committee on April 30, 2014.

RECOMMENDATIONS:

It is recommended that the Board of Supervisors:

Receive and accept a report of the proposed Information Technology capital projects, which was received and accepted by the Capital Improvement Committee on April 7, 2014, and received and accepted by the Budget Committee on April 30, 2014.

DISCUSSION/SUMMARY:

On June 3, 2013, the Resource Management Agency - Public Works (RMA-PW) notified the Capital Improvement Committee of the intent to provide a complete picture of the infrastructure needs of the County with the common goal of presenting the findings for review, consideration, and prioritization. As part of the collective efforts, the Information Technology Department (ITD) has conducted assessment of the County-wide information technology (IT) related infrastructure in dire need of an upgrade and/or replacement.

The County of Monterey has not invested in IT related infrastructure in approximately fourteen years, and the replacement and upgrades have been on an emergency basis for a number of years. Unfortunately, within the last fourteen years, the IT needs of the County have grown exponentially. For example, the land line focused digital phone system has grown from an eight private branch exchange system with two separate nodes to over forty separate line interface modules with a network based voicemail system, Internet Protocol (IP) integration, and faxing capabilities. For another, the County data network reliance has increased significantly with advanced Internet technology, reliability, and expanded communications options. In addition, ITD has taken an enterprise approach to software use that meets the collective need of the County departments where applicable, such as SharePoint. The radio communications network originally consisted of a handful of microwaves and connectivity through leased circuits and today provides primary and redundant support for data networks, County phone system, and public safety communications middle mile and last mile support.

The legacy equipment across the enterprise phone, network, and radio systems are at the end of their useful life, and the proposed upgrades are required for continued reliability, performance, and security. The IT needs of the County departments will continue to increase, and the use of multimedia and unified communications over IP, such as video and telephone, will continue to expand. It is critical to have a reliable network infrastructure, and to that end the existing

infrastructure cannot support the anticipated convergence of the IT disciplines to include data, voice, video, and radio. The County departments need diversity in their technology options such as hosted solutions, virtualization, and remote access options, all of which increase the need for data security and the latest forensic software, while providing flexibility in today's mobile environment. The recommended IT upgrades will continue to factor in enterprise solutions to meet our collective needs for automation while factoring in data security which is essential for each County department.

OTHER AGENCY INVOLVEMENT:

The Director of Information Technology has presented the list of critical capital replacement for IT related projects with the estimated yearly impact to the IT Governance Committee and to the Department Heads. The IT Governance Committee and Department Heads have reviewed the critical replacement and upgrade list (Attachment I) and concur with the recommendation. The Capital Improvement Committee received and accepted the report at the April 7, 2014 meeting, and the Budget Committee received and accepted the report on April 30, 2014.

FINANCING:

The IT Director proposed leasing the equipment wherever feasible and cost effective in order to spread the cost of replacement out over the life of the equipment or software. The leasing options were presented to the IT Governance Committee and the Department Heads who reviewed the financing options and concur with the leasing option as well. The FY 2014-2015 Information Technology Budget reflects allocated leasing and purchase costs to the departments. Planned future year expenditures will be included in future budget cycles.

Prepared by: Kathryn A. Wells, Finance Manager II, 796-1490

Kathryn A Wells

Approved by:

[Signature]

FOR DIANAH NEFF

Dianah Neff, Director of Information Technology

Dated: June 12, 2014

Attachment: ITD Capital Replacement Summary by FY & Project

ATTACHMENT I - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical description	Total
2014-15	Active Directory	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	Ensures continued secure access to county data and continued maintenance/support for issues.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	\$ 86,131
		Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Continued call accounting, archiving, and tracking capabilities.	Pinnacle call accounting server for application & reports upgrade -tracks all calls from county phone system. Provided billing for phone calls, equipment, and labor.	\$ 40,000
		Retrieval of archived email is not efficient. Hinders response times for departments/court requests, no additional features/functionality is allowed currently. Support will end for this product.	Hosting the emails within the county is secure, reduces the recurring cost, and managed directly by county. Retain the ability to properly archive and retrieve email as needed in a timely manner.	Email archiving & forensic toolkit to allow for retrieval of email for legal inquiries.	\$ 130,000
	Intrusion Detection System	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Allows Security to contain attack before department data is stolen. Another component of the Intrusion Detection System - Security "cameras" on the network, able to detect network-based computer attacks and alert Security.	Span Port Director.	\$ 30,000
		Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Allows Security to contain attack before department data is stolen. Intrusion Detection System - Security "cameras" on the network, able to detect network-based computer attacks and alert Security.	Core Intrusion Detection Sensors replacement.	\$ 47,532
	ITD Data Center upgrades	Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	\$ 243,540
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: Quad, Constellation system to Moffett, CES, Admin bldg Multiple Links: Seaside Water Tank, Lower Tower, ITD Stratex link	\$ 133,200
	Network Infrastructure Upgrade	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of network equipment at external sites.	\$ 58,489
					\$ 66,720

ATTACHMENT 1 - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical description	Total
	Phone System - Infrastructure Upgrade	Cannot utilize the network for phone system related use such as calls, video conferencing and reduced cost phone usage.	Reliability and continued maintenance/support from vendor. Reduced long distance fees.	Software & Hardware Session border controller for Session Initiation Protocol (SIP) services outside the County - Video conferencing, IP phones, reduced cost for phone calls outside of our network.	\$ 35,000
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites.	\$ 80,122
		Hardware and hosting costs will continue to increase due to the need to replace and upgrade. Software is currently at end of life without support.	Reduced hosting costs with ITD with the ability to have disaster recovery.	Licensing & implementation of server virtualization. Private cloud.	\$ 50,000
		Necessary for continued use of Sharepoint by Depts.	Ability to utilize the full Sharepoint features/functionality for document sharing, unified tool for collecting dept procedures, updates, information sharing and communications within the dept.	Standard Edition Option - licensing cost.	\$ 120,000
	Tivoli Storage Manager	Failure of existing equipment would prohibit archiving critical and confidential data that will need to be accessed. The duration of backing up critical information will prohibit all data to be archived. There is risk of loss since redundant data will not exist.	The recommended upgrade will ensure redundancy, reliability, and reduce off site storage costs of critical confidential data.	LTO - 5 Tapes & Drives for the back up of all county's data (3584).	\$ 25,000
		Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Continued reliability and maintenance/support by vendor.	Callixpress hardware and software, upgrade system to N+1 redundancy.	\$ 40,000
	2014-15 Sum \$ 1,185,734				
	Active Directory	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	Ensures continued secure access to county data and continued maintenance/support for issues.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	\$ 86,131
		Retrieval of archived email is not efficient. Hinders response times for departments/court requests, no additional features/functionality is allowed currently. Support will end for this product.	Hosting the emails within the county is secure, reduces the recurring cost, and managed directly by county. Retain the ability to properly archive and retrieve email as needed in a timely manner.	Hosted -On site Option - Office365 (3 year cost for 5000 users/\$6 per user may include Standard SharePoint & Lync).	\$ 950,000
	Intrusion Detection System	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Allows Security to contain attack before department data is stolen.	Remote field intrusion detection sensor replacement.	\$ 24,000
				Core Intrusion Detection Sensors replacement.	\$ 47,532

ATTACHMENT 1 - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of/Not Doing	Project Benefits	Technical description	Total
	ITD Data Center upgrades	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	\$ 177,480
				Multiple Links: Quad, Constellation system to Moffett, CES, Admin bldg	\$ 133,200
				Multiple Links: Seaside Water Tank, Lower Tower, ITD Stratex link	\$ 58,489
	Microwave Link Replacements	Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications. One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Ensure reliability and continued maintenance/support.	Replacement of certain network equipment housed in Data Center.	\$ 92,124
				Replacement of network equipment at external sites.	\$ 435,264
	Network Infrastructure Upgrade	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	\$ 9,312
				Replace telephone system PBX cabinets at County sites. Phase II	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase I	\$ 80,122
	Phone System - Infrastructure Upgrade	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support. Lapses in maintenance/support subscription will require retroactive payment to reinstate service by vendor.	Reliability and continued maintenance/support from vendor.	VoIP performance management software application - this is an intermediary step to VoIP.	\$ 50,000
				Rightfax software applications upgrade - allows faxing capability from pc. Software upgrades are necessary for continued support, maintenance and to ensure operability with upgraded operating systems on the server.	\$ 15,000

ATTACHMENT 1 - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical Description	Total
2016-17	Test Network	Without a test network, ITD cannot deploy hardware, software, and proprietary applications safely. This is essential for any IT environment with the critical data to properly support all county IT needs.	All equipment, software, firmware, software service update and proprietary tools can be tested and troubleshooting can be properly performed prior to deployment in live instance.	Hardware and software necessary for the Test Network. Test networks are industry standard to enable ITD to properly test hardware, software, operating systems, service pack upgrades, firmware in a test environment before deploying in a live environment.	\$ 50,000
	2015-16 Sum \$ 2,288,776				
	Active Directory	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	Ensures continued secure access to county data and continued maintenance/support for issues.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	\$ 86,131
	Intrusion Detection System	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Allows Security to contain attack before department data is stolen.	Core Intrusion Detection Sensors replacement.	\$ 47,532
	ITD Data Center upgrades	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	\$ 185,916
	Microwave Link Replacements	Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: Quad, Constellation system to Moffett, CES, Admin bldg	\$ 133,200
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Seaside Water Tank, Lower Tower, ITD Straterex link	\$ 58,489
				Multiple Links: Laurel Yd, 911	\$ 6,009
	Network Infrastructure Upgrade	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which	Replacement of certain network equipment housed in Data Center.	\$ 92,124
	Phone Set Upgrade	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Replacement of network equipment at external sites.	\$ 558,444
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.		Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	\$ 9,312
	Phone System - Infrastructure Upgrade	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites. Phase II	\$ 80,122
				Replace telephone system PBX cabinets at County sites.	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase I	\$ 80,122

ATTACHMENT 1 - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical description	Total
	Phone System Software Upgrade	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Continued support and maintenance.	Phone System Software upgrade.	\$ 25,000
	2016-17 Sum \$ 1,442,523				
2017-18	Active Directory	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	Ensures continued secure access to county data and continued maintenance/support for issues.	2012 User Client Access License (CALs) (Microsoft Core CAL & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	\$ 86,131
	Call Accounting System Upgrade	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Continued call accounting, archiving, and tracking capabilities.	Call accounting application tracks all calls from county phone system.	\$ 40,000
	Intrusion Detection System	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Allows Security to contain attack before department data is stolen.	Core Intrusion Detection Sensors replacement.	\$ 47,532
	ITD Data Center upgrades	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	\$ 185,916
	Microwave Link Replacements	Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: Quad, Constellation system to Moffett, CES, Admin bldg	\$ 133,200
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Marina Airport	\$ 3,005
				Multiple Links: Seaside Water Tank, Lower Tower, ITD Stratex link	\$ 58,489
				Multiple Links: Laurel Yd, 911	\$ 6,009
	Network Infrastructure Upgrade	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which	Replacement of certain network equipment housed in Data Center. Replacement of network equipment at external sites.	\$ 92,124 \$ 558,444
	Phone Set Upgrade	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	\$ 9,312

ATTACHMENT I - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing Performance Project Expenses	Project Benefits	Technical description	Total
2018-19	Phone System - Infrastructure Upgrade	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Telephone set replacement.	\$ 69,804
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites. Phase I	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase II	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase III	\$ 80,122
				2017-18 Sum \$ 1,530,332	
	Active Directory	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	Ensures continued secure access to county data and continued maintenance/support for issues.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	\$ 86,131
	Intrusion Detection System	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Allows Security to contain attack before department data is stolen.	Core Intrusion Detection Sensors replacement.	\$ 47,532
	ITD Data Center upgrades	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	
	Microwave Link Replacements	Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: Admin Bldg.	\$ 185,916
				Multiple Links: Quad, Constellation system to Moffett, CES, Admin bldg	\$ 25,038
				Multiple Links: Marina Airport	\$ 133,200
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Seaside Water Tank, Lower Tower, ITD Stratex link	\$ 3,005
2019-20	Network Infrastructure Upgrade	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which	Multiple Links: Laurel Yd. 911	\$ 58,489
				Replacement of certain network equipment housed in Data Center.	\$ 6,009
	Phone Set Upgrade	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Replacement of network equipment at external sites.	\$ 92,124
				Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	\$ 558,444
					\$ 9,312

ATTACHMENT I - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing performance, phone capabilities	Project Benefits	Technical Description	Total
2019-20	Phone System - Infrastructure Upgrade	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Telephone set replacement.	\$ 139,608
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites. Phase I	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase II	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase III	\$ 80,122
	2018-19 Sum \$ 1,585,174				
	Active Directory	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	Ensures continued secure access to county data and continued maintenance/support for issues.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	\$ 43,066
	ITD Data Center upgrades	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	\$ 34,500
	Microwave Link Replacements	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.	Ensure reliability and continued maintenance/support.	Multiple Links: MBAMS - Tri County, Creekbridge	\$ 38,058
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.		Multiple Links: Admin Bldg.	\$ 25,038
				Multiple Links: King City, Moffett, Bryant Canyon	\$ 75,114
				Multiple Links: Quad, Constellation system to Moffett, CES,	\$ 66,600
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Admin bldg Multiple Links: Marina Airport Multiple Links: Seaside Water Tank, Lower Tower, ITO StrateX link	\$ 3,005 \$ 29,245
	Network Infrastructure Upgrade	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Multiple Links: Laurel Yd, 911 Replacement of network equipment at external sites.	\$ 6,009 \$ 491,724

ATTACHMENT I - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical description	Total
2020-21	Phone Set Upgrade	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	\$ 9,312
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Telephone set replacement.	\$ 139,608
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites. Phase I	\$ 40,061
	Phone System - Infrastructure Upgrade			Replace telephone system PBX cabinets at County sites. Phase II	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase III	\$ 80,122
				2019-20 Sum \$ 1,161,584	
	ITD Data Center upgrades	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of certain network equipment housed in Data Center.	\$ 8,436
		End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.		Multiple Links: MBAMS - Tri County, Creekbridge	
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: Admin Bldg. Multiple Links: King City, Moffett, Bryant Canyon	\$ 38,058 \$ 25,038 \$ 75,114
	Network Infrastructure Upgrade	One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Marina Airport Multiple Links: Laurel Yd, 911	\$ 3,005 \$ 6,009
		Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	Replacement of network equipment at external sites.	\$ 123,180
		Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	Telephone set replacement.	\$ 139,608
2020-21	Phone Set Upgrade	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites. Phase II	\$ 80,122
				Replace telephone system PBX cabinets at County sites. Phase I	\$ 40,061
				2020-21 Sum \$ 538,631	

ATTACHMENT I - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical description	Total
2021-22	Microwave Link Replacements	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to	Ensure reliability and continued maintenance/support.	Multiple Links: MBAMS - Tri County, Creekbridge	\$ 33,491
				Multiple Links: MBAMS - Tri County, Creekbridge	\$ 4,567
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.		Multiple Links: Admin Bldg.	\$ 22,033
				Multiple Links: King City, Moffett, Bryant Canyon	\$ 66,100
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Admin Bldg.	\$ 3,005
				Multiple Links: King City, Moffett, Bryant Canyon	\$ 9,014
				Multiple Links: Marina Airport	\$ 2,644
				Multiple Links: Mty Courthouse, King City Ag	\$ 50,076
		Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.		Multiple Links: Laurel Yd, 911	\$ 3,005
				Multiple Links: Marina Airport	\$ 361
	Phone Set Upgrade	Equipment undre maintenance/support, continued interoperability with the phone system, and reliability.	Telephone set replacement.	\$ 139,608	
2022-23	Microwave Link Replacements	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Reliability and continued maintenance/support from vendor.	Replace telephone system PBX cabinets at County sites. Phase III	\$ 40,061
		End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to		2021-22 Sum \$ 373,965	
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.		Multiple Links: MBAMS - Tri County, Creekbridge	\$ 4,567
				Multiple Links: MBAMS - Tri County, Creekbridge	\$ 33,491
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: King City, Moffett, Bryant Canyon	\$ 66,100
				Multiple Links: Admin Bldg.	\$ 25,038
		Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.		Multiple Links: King City, Moffett, Bryant Canyon	\$ 9,014
				Multiple Links: Mty Courthouse, King City Ag	\$ 6,009
				Multiple Links: Marina Airport	\$ 1,322
				Multiple Links: Mty Courthouse, King City Ag	\$ 44,067
	Phone Set Upgrade	Equipment undre maintenance/support, continued interoperability with the phone system, and reliability.	Telephone set replacement.	\$ 180	
	2022-23 Sum \$ 259,592				
2023-24		End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.		Multiple Links: MBAMS - Tri County, Creekbridge	\$ 38,058

ATTACHMENT 1 - ITD Capital Replacement Summary by FY

FY	Project Category	Project Needs - Impact of Not Doing	Project Benefits	Technical description	Total	
	Microwave Link Replacements	Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: King City, Moffett, Bryant Canyon	\$ 9,014	
				Multiple Links: King City, Moffett, Bryant Canyon	\$ 66,100	
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Admin Bldg.	\$ 12,519	
				Multiple Links: Mty Courthouse, King City Ag	\$ 6,009	
				Multiple Links: Mty Courthouse, King City Ag	\$ 44,067	
2024-25				2023-24 Sum	\$ 175,767	
	Microwave Link Replacements	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to	Ensure reliability and continued maintenance/support.	Multiple Links: MBAMS - Tri County, Creekbridge	\$ 2,283	
				Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: MBAMS - Tri County, Creekbridge	\$ 16,746
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: King City, Moffett, Bryant Canyon	\$ 37,557	
		Multiple Links: Mty Courthouse, King City Ag				
		2025-26				2024-25 Sum
	Microwave Link Replacements	One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Ensure reliability and continued maintenance/support.	Multiple Links: Mty Courthouse, King City Ag	\$ 44,067	
				Multiple Links: Mty Courthouse, King City Ag	\$ 6,009	
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		2025-26 Sum	\$ 50,076	
				Multiple Links: Mty Courthouse, King City Ag	\$ 22,033	
				Multiple Links: Mty Courthouse, King City Ag	\$ 3,005	
2026-27			2026-27 Sum	\$ 25,038		
Grand Total					\$ 107,723,854	

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
Sum of Purchase AND Lease Cost Project Category Active Directory	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2014-15	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	Ensures continued secure access to county data and continued maintenance/support for issues.	\$ 86,131
	2015-16	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	Ensures continued secure access to county data and continued maintenance/support for issues.	\$ 86,131
	2016-17	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	Ensures continued secure access to county data and continued maintenance/support for issues.	\$ 86,131
	2017-18	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	Ensures continued secure access to county data and continued maintenance/support for issues.	\$ 86,131
	2018-19	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	Ensures continued secure access to county data and continued maintenance/support for issues.	\$ 86,131
	2019-20	Support will not be available during this time. This would impose a critical security risk to county data access which is essential.	2012 User Client Access License (CALs) (Microsoft Core CAL) & Software (5000 Users) Impact SharePoint & Basic Exchange Access as well as EDS purview. Allows access to all county data resources within county & authorized outside agencies.	Ensures continued secure access to county data and continued maintenance/support for issues.	\$ 86,131
Active Directory Sum					
					\$ 43,066
					\$ 43,066
Call Accounting System Upgrade	Active Directory Sum				\$ 473,771
	2014-15	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Pinnacle call accounting server for application & reports upgrade - tracks all calls from county phone system. Provided billing for phone calls, equipment, and labor.	Continued call accounting, archiving, and tracking capabilities.	\$ 40,000
					\$ 40,000
					\$ 40,000

ATTACHMENT 1 - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
Email	2017-18	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Call accounting application tracks all calls from county phone system.	Continued call accounting, archiving, and tracking capabilities.	\$ 40,000
	Call Accounting System Upgrade Sum				
	2014-15	Retrieval of archived email is not efficient. Hinders response times for departments/court requests, no additional features/functionality is allowed currently. Support will end for this product.	Email archiving & forensic toolkit to allow for retrieval of email for legal inquiries.	Hosting the emails within the county is secure, reduces the recurring cost, and managed directly by county. Retain the ability to properly archive and retrieve email as needed in a timely manner.	\$ 130,000
	2015-16	Retrieval of archived email is not efficient. Hinders response times for departments/court requests, no additional features/functionality is allowed currently. Support will end for this product.	Hosted -On site Option - Office365 (3 year cost for 5000 users/\$6 per user may include Standard SharePoint & Lync).	Hosting the emails within the county is secure, reduces the recurring cost, and managed directly by county. Retain the ability to properly archive and retrieve email as needed in a timely manner.	\$ 950,000
Email Sum					\$ 1,080,000
Intrusion Detection System	Email Sum				
	2014-15	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Core Intrusion Detection Sensors replacement.	Allows Security to contain attack before department data is stolen. Intrusion Detection System - Security "cameras" on the network, able to detect network-based computer attacks and alert Security.	\$ 47,532
	Span Port Director.				
	2015-16	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Remote field intrusion detection sensor replacement.	Allows Security to contain attack before department data is stolen.	\$ 24,000
Core Intrusion Detection Sensors replacement.					\$ 47,532
Intrusion Detection System Sum					\$ 71,532

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2016-17	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Core Intrusion Detection Sensors replacement.	Allows Security to contain attack before department data is stolen.	\$ 47,532
				2016-17 Sum	\$ 47,532
	2017-18	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Core Intrusion Detection Sensors replacement.	Allows Security to contain attack before department data is stolen.	\$ 47,532
				2017-18 Sum	\$ 47,532
	2018-19	Inability to detect computer attacks or nefarious activity across the network. Increased chance of department data theft being undetected and unstopped.	Core Intrusion Detection Sensors replacement.	Allows Security to contain attack before department data is stolen.	\$ 47,532
Intrusion Detection System Sum					\$ 291,660
ITD Data Center upgrades	2014-15	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 243,540
				2014-15 Sum	\$ 243,540
	2015-16	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 177,480
				2015-16 Sum	\$ 177,480
	2016-17	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 185,916
2016-17 Sum					\$ 185,916

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2017-18	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 185,916 2017-18 Sum \$ 185,916
	2018-19	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 185,916 2018-19 Sum \$ 185,916
	2019-20	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 34,500 2019-20 Sum \$ 34,500
	2020-21	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 8,436 2020-21 Sum \$ 8,436
ITD Data Center upgrades Sum					
Microwave Link Replacements		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Constellation system to Moffett, CES, Admin bldg	Ensure reliability and continued maintenance/support.	\$ 1,021,704
	2020-21				\$ 133,200

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Tank, Lower Tower, ITD Stratex link	Ensure reliability and continued maintenance/support.	\$ 58,489
				2014-15 Sum	\$ 191,689
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Constellation system to Moffett, CES, Admin bldg	Ensure reliability and continued maintenance/support.	\$ 133,200
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Tank, Lower Tower, ITD Stratex link	Ensure reliability and continued maintenance/support.	\$ 58,489
				2015-16 Sum	\$ 191,689
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Constellation system to Moffett, CES, Admin bldg	Ensure reliability and continued maintenance/support.	\$ 133,200
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Tank, Lower Tower, ITD Stratex link	Ensure reliability and continued maintenance/support.	\$ 58,489
			Multiple Links: Laurel Yd, 911	Ensure reliability and continued maintenance/support.	\$ 6,009
				2016-17 Sum	\$ 197,698
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Constellation system to Moffett, CES, Admin bldg	Ensure reliability and continued maintenance/support.	\$ 133,200
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Airport	Ensure reliability and continued maintenance/support.	\$ 3,005
			Multiple Links: Seaside Water	Ensure reliability and continued maintenance/support.	\$ 58,489
			Multiple Links: Laurel Yd, 911	Ensure reliability and continued maintenance/support.	\$ 6,009
				2017-18 Sum	\$ 200,703
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 25,038
			Multiple Links: Constellation system to Moffett, CES, Admin bldg	Ensure reliability and continued maintenance/support.	\$ 133,200
			Multiple Links: Airport	Ensure reliability and continued maintenance/support.	\$ 3,005
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Seaside Water	Ensure reliability and continued maintenance/support.	\$ 58,489
			Multiple Links: Laurel Yd, 911	Ensure reliability and continued maintenance/support.	\$ 6,009
				2018-19 Sum	\$ 225,741

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2019-20	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.	Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 38,058
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 25,038
			Multiple Links: King City, Moffett	Ensure reliability and continued maintenance/support.	\$ 75,114
			Multiple Links: Constellation system to Moffett, CES, Admin bldg Quad,	Ensure reliability and continued maintenance/support.	\$ 66,600
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Airport Marina	Ensure reliability and continued maintenance/support.	\$ 3,005
			Multiple Links: Tank, Lower Tower, ITD Stratex link Seaside Water	Ensure reliability and continued maintenance/support.	\$ 29,245
	Multiple Links: Laurel Yd, 911		Ensure reliability and continued maintenance/support.	\$ 6,009	
	2019-20 Sum \$ 243,069				
	2020-21	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.	Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 38,058
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 25,038
Multiple Links: King City, Moffett			Ensure reliability and continued maintenance/support.	\$ 75,114	
Multiple Links: Airport Marina			Ensure reliability and continued maintenance/support.	\$ 3,005	
One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.		Multiple Links: Laurel Yd, 911	Ensure reliability and continued maintenance/support.	\$ 6,009	
2020-21 Sum \$ 147,224					
		End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.	Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 33,491
		Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 4,567	
		Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 22,033	

ATTACHMENT 1 - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
2021-22		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications. One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 66,100
			Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 3,005
			Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 9,014
			Multiple Links: Airport	Ensure reliability and continued maintenance/support.	\$ 2,644
			Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 50,076
			Multiple Links: Laurel Yd, 911	Ensure reliability and continued maintenance/support.	\$ 3,005
			Multiple Links: Marina Airport	Ensure reliability and continued maintenance/support.	\$ 361
			2021-22 Sum		\$ 194,296
			Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 33,491
			Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 4,567
2022-23		End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents. Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications. One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 25,038
			Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 66,100
			Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 9,014
			Multiple Links: Marina Airport	Ensure reliability and continued maintenance/support.	\$ 180
			Multiple Links: Marina Airport	Ensure reliability and continued maintenance/support.	\$ 1,322
			Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 44,067
			Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 6,009
			2022-23 Sum		\$ 189,788

ATTACHMENT 1 - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total	
	2023-24	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.	Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 38,058	
		Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 66,100	
			Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 9,014	
			Multiple Links: Admin Bldg.	Ensure reliability and continued maintenance/support.	\$ 12,519	
		One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 6,009	
	2023-24 Sum \$ 175,767		Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 44,067	
		2024-25	End of life - no support. Failure of device will impede communications - both data and phone. This link is absolutely necessary for interoperable communications between Tri-Counties in the event of a disaster to support residents.	Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 16,746
			Microwaves are for data network redundancy, phone system primary and redundancy, and radio communications.	Multiple Links: MBAMS - Tri County, Creekbridge	Ensure reliability and continued maintenance/support.	\$ 2,283
				Multiple Links: King City, Moffett, Bryant Canyon	Ensure reliability and continued maintenance/support.	\$ 37,557
				Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 50,076
2024-25 Sum \$ 106,662			Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 44,067	
	2025-26	One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 6,009	
2025-26 Sum \$ 50,076			Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 22,033	
	2026-27	One of the primary links for radio communications - no longer supported, failure of device will impede radio communications.	Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 3,005	
2026-27 Sum \$ 25,038			Multiple Links: Mty Courthouse, King City Ag	Ensure reliability and continued maintenance/support.	\$ 2,139,440	
	Microwave Link Replacements Sum					\$ 2,139,440

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
Network Infrastructure Upgrade	2014-15	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 66,720 2014-15 Sum \$ 66,720
	2015-16	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 92,124
			Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 435,264 2015-16 Sum \$ 527,388
	2016-17	Critical equipment is either nearing the end of support and/or cannot be supported due to age.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 92,124

ATTACHMENT 1 - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2016-17	Device failure without support will impact network access for users.	Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 558,444 2016-17 Sum \$ 650,568
	2017-18	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 92,124
	2017-18		Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 558,444 2017-18 Sum \$ 650,568
	2018-19	Critical equipment is either nearing the end of support and/or cannot be supported due to age.	Replacement of certain network equipment housed in Data Center.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 92,124

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2018-19	Device failure without support will impact network access for users.	Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 558,444 2018-19 Sum \$ 650,568
	2019-20	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 491,724 2019-20 Sum \$ 491,724
	2020-21	Critical equipment is either nearing the end of support and/or cannot be supported due to age. Device failure without support will impact network access for users.	Replacement of network equipment at external sites.	All critical network equipment replacement will ensure reliability, proper support from manufacturer, increase bandwidth if applicable, and ensure ability to upgrade technology which either utilizes the network such as VoIP or is integrated as part of the network such as microwaves.	\$ 123,180 2020-21 Sum \$ 123,180
Network Infrastructure Upgrade Sum					
Phone Set Upgrade	2015-16	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshooting, develop implementation plan.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 9,312 2015-16 Sum \$ 9,312
	2016-17	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshooting, develop implementation plan.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 9,312 2016-17 Sum \$ 9,312
					\$ 3,160,716

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
	2017-18	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 9,312
			Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	
	2018-19	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 69,804
			Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 9,312
	2019-20	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Install VoIP telephones in preparation for handset replacement at all county facilities in the coming years - Phase I - test, troubleshoot, develop implementation plan.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 139,608
			Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 9,312
	2020-21	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 139,608
			Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 139,608
	2021-22	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 139,608
			Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 139,608
	2022-23	Current handsets are not supported, upgrade is absolutely necessary to ensure reliability and performance phone capabilities.	Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 69,804
			Telephone set replacement.	Equipment under maintenance/support, continued interoperability with the phone system, and reliability.	\$ 69,804
Phone Set Upgrade Sum					\$ 744,600

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
Phone System - Infrastructure Upgrade	2014-15	Cannot utilize the network for phone system related use such as calls, video conferencing and reduced cost phone usage.	Software & Hardware Session border controller for Session Initiation Protocol (SIP) services outside the County - Video conferencing, IP phones, reduced cost for phone calls outside of our network.	Reliability and continued maintenance/support from vendor. Reduced long distance fees.	\$ 35,000
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Replace telephone system PBX cabinets at County sites.	Reliability and continued maintenance/support from vendor.	\$ 80,122
				2014-15 Sum	\$ 115,122
	2015-16	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Replace telephone system PBX cabinets at County sites. Phase II	Reliability and continued maintenance/support from vendor.	\$ 80,122
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites. Phase I	Reliability and continued maintenance/support from vendor.	\$ 80,122
		Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support. Lapses in maintenance/support subscription will require retroactive payment to reinstate service by vendor.	VoIP performance management software application - this is an intermediary step to VoIP.	Reliability and continued maintenance/support from vendor.	\$ 50,000
				2015-16 Sum	\$ 210,244
	2016-17	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Replace telephone system PBX cabinets at County sites. Phase II	Reliability and continued maintenance/support from vendor.	\$ 80,122
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites.	Reliability and continued maintenance/support from vendor.	\$ 80,122
			Replace telephone system PBX cabinets at County sites. Phase I	Reliability and continued maintenance/support from vendor.	\$ 80,122
				2016-17 Sum	\$ 240,366
	2017-18	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Replace telephone system PBX cabinets at County sites. Phase I	Reliability and continued maintenance/support from vendor.	\$ 80,122
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites. Phase II	Reliability and continued maintenance/support from vendor.	\$ 80,122
			Replace telephone system PBX cabinets at County sites. Phase III	Reliability and continued maintenance/support from vendor.	\$ 80,122
				2017-18 Sum	\$ 240,366

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
Phone System Software Upgrade	2018-19	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Replace telephone system PBX cabinets at County sites. Phase I	Reliability and continued maintenance/support from vendor.	\$ 80,122
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites. Phase II	Reliability and continued maintenance/support from vendor.	\$ 80,122
			Replace telephone system PBX cabinets at County sites. Phase III	Reliability and continued maintenance/support from vendor.	\$ 80,122
	2018-19 Sum \$ 240,366				
	2019-20	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer.	Replace telephone system PBX cabinets at County sites. Phase I	Reliability and continued maintenance/support from vendor.	\$ 40,061
		Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites. Phase II	Reliability and continued maintenance/support from vendor.	\$ 80,122
			Replace telephone system PBX cabinets at County sites. Phase III	Reliability and continued maintenance/support from vendor.	\$ 80,122
	2019-20 Sum \$ 200,305				
	2020-21	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites. Phase II	Reliability and continued maintenance/support from vendor.	\$ 80,122
			Replace telephone system PBX cabinets at County sites. Phase I	Reliability and continued maintenance/support from vendor.	\$ 40,061
	2020-21 Sum \$ 120,183				
	2021-22	Hardware must be upgraded to support the future software version. Version 6 software will not work with current hardware and is not supported by manufacturer. Hardware is linked to software upgrades.	Replace telephone system PBX cabinets at County sites. Phase III	Reliability and continued maintenance/support from vendor.	\$ 40,061
	2021-22 Sum \$ 40,061				
	Phone System - Infrastructure Upgrade Sum \$ 1,407,013				
	2016-17	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	Phone System Software upgrade.	Continued support and maintenance.	\$ 25,000
	2016-17 Sum \$ 25,000				
Phone System Software Upgrade Sum					\$ 25,000

ATTACHMENT I - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Technical description	Project Benefits	Total
RightFax Software Upgrade	2015-16	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	RightFax software applications upgrade - allows faxing capability from pc. Software upgrades are necessary for continued support, maintenance and to ensure operability with upgraded operating systems on the server.	Continued reliability and maintenance/support by vendor.	\$ 15,000 2015-16 Sum \$ 15,000
RightFax Software Upgrade Sum					
Server Virtualization	2014-15	Hardware and hosting costs will continue to increase due to the need to replace and upgrade. Software is currently at end of life without support.	Licensing & Implementation of server virtualization. Private cloud.	Reduced hosting costs with ITD with the ability to have disaster recovery.	\$ 50,000 2014-15 Sum \$ 50,000
Server Virtualization Sum					
Sharepoint	2014-15	Necessary for continued use of Sharepoint by Depts.	Standard Edition Option - licensing cost.	Ability to utilize the full Sharpoint features/functionality for document sharing, unified tool for collecting dept procedures, updates, information sharing and communications within the dept.	\$ 120,000 2014-15 Sum \$ 120,000
Sharepoint Sum					
Test Network	2015-16	Without a test network, ITD cannot deploy hardware, software, and proprietary applications safely. This is essential for any IT environment with the critical data to properly support all county IT needs.	Hardware and software necessary for the Test Network. Test networks are industry standard to enable ITD to properly test hardware, software, operating systems, service pack upgrades, firmware in a test environment before deploying in a live environment.	All equipment, software, firmware, software service update and proprietary tools can be tested and troubleshooting can be properly performed prior to deployment in live instance.	\$ 50,000 2015-16 Sum \$ 50,000
Test Network Sum					
Tivoli Storage Manager	2014-15	Failure of existing equipment would prohibit archiving critical and confidential data that will need to be accessed. The duration of backing up critical information will prohibit all data to be archived. There is risk of loss since redundant data will not exist.	LTO - 5 Tapes & Drives for the back up of all county's data (3584).	The recommended upgrade will ensure redundancy, reliability, and reduce off site storage costs of critical confidential data.	\$ 25,000 2014-15 Sum \$ 25,000
Tivoli Storage Manager Sum					
Voicemail System Upgrade	2014-15	Software applications require upgrades to ensure maintenance/support from the vendor & ensures compatibility with the operating system of the server & the integration with the phone system. Any lapse in the upgrades would increase costs for maintenance/support and put the phone system at risk of failure with no support.	CallXpress hardware and software, upgrade system to N+1 redundancy.	Continued reliability and maintenance/support by vendor.	\$ 40,000 2014-15 Sum \$ 40,000
Voicemail System Upgrade Sum					

ATTACHMENT 1 - ITD Capital Replacement Summary by Project

Project Category	FY	Project Needs - Impact of Not Doing	Grand Total	Technical description	Project Benefits	Total
						\$ 10,723,854

