



GOVERNOR
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STATE OF MONTANA

Governor's Executive Budget
Fiscal Years 2016 – 2017

Long-Range Information Technology Plan
LRITP

Governor's Office of Budget
and Program Planning



Volume 9

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LONG-RANGE INFORMATION TECHNOLOGY PROGRAM

The Long-range Information Technology Program (LRITP) is a program developed to fund large information technology (IT) projects. The LRITP consolidates large IT investments in one appropriation bill and defines those investments as capital projects. All projects included in the LRITP bill are overseen by the state chief information officer (CIO) within the Department of Administration (DOA).

The consolidation of major IT projects is intended to achieve several goals. First, IT projects are complex and require significant and time-intensive planning, design, and management efforts. By designating the projects as “capital projects,” the appropriation continues until completion of the project as statutorily authorized in 2-17-560, MCA. Second, centralized project oversight is expected to enhance project management and foster stronger partnerships between agencies and the state CIO. Finally, having major projects in one piece of legislation is anticipated to provide the legislature with a broad vision of state IT projects and related investments.

The executive recommendation for projects to be included in the LRITP HB 10 is summarized in the table below.

LONG RANGE PROJECTS					
AGENCY	Project	GF	SSR	FSR	TOTAL
DOA	Network Equipment	\$5,589,000			\$5,589,000
	Data Protection Initiative	\$1,887,000			\$1,887,000
	Statewide Public Safety Communications System	\$2,000,000			\$2,000,000
COR	Security System Replacements/Assessments	\$1,200,000			\$1,200,000
JUD	Court Technology Improvement Program	\$834,000			\$834,000
DOJ	Court Data Exchange Enhancement	\$490,000			\$490,000
MDT	PPMS, Risk Based Management, Linear Referencing System		\$650,000	\$4,350,000	\$5,000,000
	Financial Management Suite			\$3,000,000	\$3,000,000
	TOTAL	\$12,000,000	\$650,000	\$7,350,000	\$20,000,000

Projects were prioritized using the following criteria: maintaining or replacing critical infrastructure systems; end-of-life, end-of-support; public safety improvements; and federal mandates tied to funding.

SUMMARY OF PROJECTS FOR THE 2017 BIENNIUM

DEPARTMENT OF ADMINISTRATION

Network Equipment Upgrades and Maintenance

A major portion of this funding request will support equipment upgrades to the state's network, SummitNet, which provides voice, video and data services to 22,000 devices and 11,500 state employees in 600 offices across the state. This equipment has reached end-of-life/end-of-support and is no longer supported by vendors. Replacing and upgrading this equipment will allow the state to maintain existing network services, and in some cases, add additional bandwidth to support agencies' requests to enhance existing – or implement new – information technology applications. Equipment upgrades will also increase network security and disaster recovery services.

Statewide Data Protection Initiative

The Department of Administration is recommending the Legislature appropriate \$1.9 million in one-time-only funds to mitigate security gaps in State of Montana's IT systems. This support of an enterprise security program is designed to help prevent hackers from gaining access to Montanans' confidential information. State and local governmental entities have been primary targets for the hacker community over the last several years. Targeted attacks have increased significantly over the last two years with incidents taking place that affect millions of citizens and cost governments millions of dollars. This initiative will establish an enterprise security program to create consistency, align resources, coordinate situational awareness and incident response, and provide adequate information security for all agencies. This initiative will also provide web firewall services for all state web sites as well as some physical security enhancements for equipment located at remote sites.

Statewide Public Safety Communications System – Equipment Replacement and Upgrade

The Statewide Public Safety Communications System is an industry standards (APCO P25) compliant, trunked land mobile radio system. The system provides operational, tactical and interoperable communications for federal, state and local agencies. The system currently has approximately 6,000 federal, state and local subscribers. The system's initial deployment began in 2003. This request is to replace or upgrade radio and link sub-system components that is end-of-life and at risk of failure. Site equipment that requires replacement or upgrade includes radio base stations/repeaters, electrical equipment (rectifiers/inverters), antenna combiners and microwave components.

DEPARTMENT OF CORRECTIONS

Security system replacements and assessments

The department has a wide variety of security systems that are at the end-of-life and need to be replaced or updated, or require new installations. This funding request will address aging perimeter security systems at Montana State Prison.

MONTANA SUPREME COURT

Court Technology Improvement Program - Interactive Video

This proposal seeks funding to continue the Judicial Branch's efforts to modernize Montana courts. Modern technology included in the request are items such as upgrading interactive video equipment to replace existing six- to eight-year-old failing equipment; implementing audio technology where none exists and upgrading technology that is outdated or at end-of-life. This request would also implement new e-filing technology such as scanners, mobile devices and public workstations for filers that do not have the ability to e-file elsewhere; mobile device access to case information from anywhere with internet connectivity, and public access workstations for access to records at individual court locations.

DEPARTMENT OF JUSTICE

Court Data Exchange Enhancement (CDEE)

This request is for the Department of Justice to convert two existing data exchanges to be compatible with the FullCourt Enterprise Case Management System which will be upgraded by the Office of Court Administrator (OCA) using grant funding; and implement three new exchanges for protection orders, arrest/bench warrants, and no contact orders as required by the OCA grant.

DEPARTMENT OF TRANSPORTATION

Program and Project Management/Risk-based Asset Management and Linear Referencing Systems

This request seeks funding to replace three systems: Program and Project Management System (PPMS); Risk-based Asset Management (RBAM); and Linear Referencing System (LRS). PPMS and LRS will replace obsolete technology and RBAM will be developed to meet new federal requirements. They are packaged in one request as the three systems are uniquely and comprehensively connected. A concurrent replacement is a logical approach as many of the system requirements are dependent on data and information in the other systems. The LRS forms the core of the other two systems and should be developed with those system requirements in mind.

Financial Management Suite

This proposal seeks funding to replace various stand-alone software solutions in place today with a robust financial management system that is fully integrated with other MDT systems. The new system would provide essential information to managers for the critical functions of budget development, personal services projections, personal services allocation, and project cost scheduling.

NETWORK EQUIPMENT UPGRADES AND MAINTENANCE

Department of Administration – State Information Technology Services Division

TYPE OF Project:		Type of System:	
<input checked="" type="checkbox"/>	Enhancement	<input type="checkbox"/>	Mid-Tier
<input checked="" type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input checked="" type="checkbox"/>	New	<input type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input type="checkbox"/>	Web
		<input checked="" type="checkbox"/>	Network
		<input type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

SummitNet, the state's voice-video-data network, supports 22,000 devices and 11,500 employees across the state. This funding request will support replacement and upgrade of network equipment that has reached end-of-life, as determined by the manufacturer/vendor. This request will allow SITSD to maintain existing network capacity and add additional bandwidth necessary to support critical citizen services.

Nine hundred routers, switches and firewalls that support the state network have reached end-of-life. Replacing this equipment (within the funding appropriated by this request) will provide the capability to increase bandwidth in some CORE circuits beyond current capacities, as well as enhance network monitoring and security; and also augment disaster recovery services. Legacy frame relay/ATM services have been discontinued at some locations where SummitNet connects to local telecommunication services providers (i.e. local loop). These local loop connections are currently the slowest on SummitNet with some bandwidth speeds at 56 kb. This upgrade will provide higher, scalable bandwidth speeds; Multiprotocol Label Switching (MPLS), which prioritizes network traffic; Quality of Service (QoS); and enhanced security and disaster recovery services that support agency IT applications.

Business and IT Problems Addressed:

- Without equipment upgrades to support more bandwidth, the network does not have the capacity to maintain current applications, and support new IT applications and eGovernment services. Attempting to use the network beyond its capacity could result in lengthy delays in connectivity and data transport for state employees and Montana citizens.
- Some legacy frame relay/ATM services at the local loop level have been discontinued. There is no option to retain these services; they must be replaced. These older services do not support QoS, MPLS, scalability, security enhancements and disaster recovery.
- Current CORE and aggregate circuits do not support the cumulative amount of network traffic being generated from local loop (remote) locations; these circuits need to be continually monitored and analyzed for upgrades and proper sizing.

Alternatives Considered/Rationale for Selection of Particular Alternative:

SITSD held meetings with multiple vendor engineers to review low, moderate, and high-end equipment and software options as alternatives. Various equipment options were researched that have the capacity to scale to bandwidth that will support projected agency needs over the next two biennia. The equipment and software selected as the most viable alternative will allow the state to maintain current network services, and in some cases, increase bandwidth to support the projected IT needs of agencies and other government customers.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going	On Going
			2019 Biennium	2021 Biennium
IT Staff				
Non IT Staff				
Contracted Services				
SITSD Services				
Hardware		\$1,953,000		
Software		\$500,000		
Telecommunications				
Maintenance	\$288,000		\$292,950	\$307,598
Project Management				
IV&V				
Contingency				
Training				
Equipment		\$3,136,000		
Total Estimated Costs	\$288,000	\$5,589,000	\$292,950	\$307,598
FUNDING:				
Base Funding	\$0			
New Request:				
General Fund		\$5,589,000		
State Special Revenue				
Federal Special Revenue				
Proprietary			\$292,950	\$307,598
Total Project Cost		\$5,589,000	\$292,950	\$307,598
Net Funding Request		\$5,589,000	\$292,950	\$307,598

Notes:

The costs to maintain the request in on-going biennia, if approved, would be included in SITSD fixed costs as part of the network rate.

STATEWIDE DATA PROTECTION INITIATIVE
Department of Administration – State Information Technology Services Division

TYPE OF Project:		Type of System:	
<input type="checkbox"/>	Enhancement	<input checked="" type="checkbox"/>	Mid-Tier
<input type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input checked="" type="checkbox"/>	New	<input type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input checked="" type="checkbox"/>	Web
		<input checked="" type="checkbox"/>	Network
		<input checked="" type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

Statewide Security Program - There have been many breaches of data over the last two years that cost organizations tens of millions of dollars to defend and mitigate. A recent threat report by WebSense Security Company identifies top issues that need to be addressed: Web Threats – the number of malicious sites grew by nearly 600% in 2013; Social Media Threats – 85% of malicious sites were found on legitimate web hosts; Mobile Threats – apps downloaded abuse permissions on devices and have access to confidential information; Email Threats – only one in five emails sent in 2013 was legitimate; and Malware Behavior – half of web-connected malware downloaded additional executables in the first 60 seconds of contact of website. All of these threats and other identified recommendations indicate the need for a collaborative statewide security program that promotes education and awareness for staff, contractors, and Montana citizens. This approach will provide the most protection for data entrusted to the State of Montana.

Statewide data protection through Web Firewall Protection - As part of protecting web systems that are available to the citizens of the State of Montana, the current web firewall protection system needs to be implemented for all state web sites. This will provide an additional layer of protection for citizen data and address vulnerabilities that are not protected by any other system in place. A recent incident shows this system could have avoided unauthorized access from foreign sources. Additional equipment and licensing is needed to protect all web systems made available by the State of Montana.

Statewide data protection through physical security of network devices -The State of Montana has a responsibility to provide reliable and protected telecommunications infrastructure to state agencies for business use purposes. This includes physically securing all network devices so that deliberate or accidental disruptions of network service do not occur. The state has over 600 physical sites that contain networking equipment that provides data, voice, and video services to more than 19,000 users. Security of these systems is crucial to insure the integrity and reliability of telecommunications systems. Physical access to network devices can provide access to any information that is maintained on the state’s network. Many state connected sites maintain equipment in open office areas, janitor closets, or other unsecured locations. It is important that only authorized individuals have access to these devices so that data is protected and service is provided.

Business and IT Problems Addressed:

State and local government entities have been primary targets for the hacker community over the last several years. Targeted attacks have increased significantly with incidents taking place that affect millions of citizens and cost governments millions of dollars. A recent national study conducted by Deloitte Consulting, LLP and the National Association of State Chief Information Officers (NASCIO) on Cyber Security in State Government reports that despite heightened attention and unprecedented levels of security investment, the number of cyber incidents, their associated costs, and their impact on the lives of U.S. citizens continue to rise. The study goes on to recommend that states do more to identify collaborative approaches for addressing cyber security issues.

Alternatives Considered/Rationale for Selection of Particular Alternative:

An enterprise security risk assessment was conducted during the summer of 2014 and identified risks that need mitigation. Mitigation of risks follows the process of rejection, acceptance or resolution. The items identified in this budget proposal are risks that need to be resolved. Using the risk assessment protocol, the identified proposal includes items needed to mitigate enterprise security risk factors.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going 2019 Biennium	On Going 2021 Biennium
IT Staff				
Non IT Staff				
Contracted Services		\$600,000	\$600,000	\$600,000
SITSD Services				
Hardware		\$1,097,000	\$500,000	\$500,000
Software				
Telecommunications				
Maintenance				
Project Management				
IV&V				
Contingency				
Training		\$150,000	\$150,000	\$150,000
Other		\$40,000		
Total Estimated Costs	\$0	\$1,887,000	\$1,250,000	\$1,250,000
FUNDING:				
Base Funding	\$0			
New Request:				
General Fund		\$1,887,000		
State Special Revenue				
Federal Special Revenue				
Proprietary			\$1,250,000	\$1,250,000
Total Project Cost		\$1,887,000	\$1,250,000	\$1,250,000
Net Funding Request		\$1,887,000	\$1,250,000	\$1,250,000

Notes:

Current cost of operations for system being replaced: This request is for new security enhancements/programs; therefore, there are no like costs in the department's current budget. The costs to maintain the request in on-going biennia, if approved, would be included in SITSD fixed costs as part of the Enterprise rate. The estimated impact to agencies, via cost recovery, is \$93 per FTE/active directory annually.

STATEWIDE PUBLIC SAFETY COMMUNICATIONS SYSTEM
Department of Administration – State Information Technology Services Division

TYPE OF Project:		Type of System:	
<input type="checkbox"/>	Enhancement	<input type="checkbox"/>	Mid-Tier
<input checked="" type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input type="checkbox"/>	New	<input type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input type="checkbox"/>	Web
		<input checked="" type="checkbox"/>	Network
		<input type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

System Overview

The Statewide Public Safety Communications System is an industry standards (APCO P25) compliant, trunked land mobile radio system. The system provides operational, tactical and interoperable communications for federal, state and local agencies. The system currently has approximately 6,000 federal, state and local subscribers. The system’s initial deployment began in 2003.

Issue

Due to the age of various communications site equipment that is approaching end-of-life/end-of-support, the risk for the system and its users is that key equipment will stop functioning and can’t be replaced causing reduced coverage. The degree of risk for any particular system is a combination of the equipment in the system, the age of that equipment, and the date the vendor stops repairing and replacing components. Until remedial action is complete, the risk of equipment failure will increase over time.

Some critical system equipment is no longer sold or supported by the equipment manufacturer/vendor. While there will always be some risk of equipment failure when operating a public safety radio system, the current elevated risk will not return to acceptable levels until all outdated equipment has been replaced. Thus, we must begin work now to avoid this otherwise inevitable increase in risk to the public and emergency responders (law enforcement, fire and emergency medical).

Communications site equipment that requires replacement or upgrade includes radio base stations/repeaters, electrical equipment (rectifiers/inverters), antenna combiners, and microwave components. For example, the base station/repeater radios that are currently operating at approximately 40 communications sites have not been produced since 2011 and are scheduled for end-of-support by the manufacturer/vendor in 2020. End of support means the manufacturer/vendor will no longer maintain the equipment, repair failed components, or provide technical “help desk” support.

Business and IT Problems Addressed:

Replacing or upgrading communications site equipment in phased approach will mitigate the risk of equipment failure.

Alternatives Considered/Rationale for Selection of Particular Alternative:

Several alternatives were considered and the rationale for selecting the particular alternative included risk mitigation, system reliability requirements, and cost.

Risk Mitigation: System communications site equipment is reaching end-of-support and end-of-life and certain critical components are no longer produced or supported by the manufacturer/vendor. The risk of equipment failure will increase significantly in 2018 - 2020 when manufacturer/vendor support for critical equipment is discontinued.

System Reliability Requirements: The system is mission critical and requires five nines reliability/availability. Five nines or 99.999% availability equates to 5.26 minutes of downtime per year; 25.9 seconds per month; 0.605 seconds per week.

Do Nothing: The doing nothing alternative does not mitigate the risk of equipment failure. If no action is taken the risk of equipment failure will increase significantly in 2018 - 2020 when manufacturer/vendor support for the equipment is discontinued. This alternative does not support the system's reliability requirements.

Replace Equipment Piecemeal as Equipment Fails: This alternative does not entirely mitigate the risk of equipment failure. As when the equipment fails, the availability of replacement equipment is unknown. The manufacturer/vendor has stopped producing the equipment. Original equipment and components are still available on the secondary market (ex: eBay); however, there is significant risk in relying upon secondary market equipment because the condition and service history of the components is unknown and the needed version of any particular component may not be available. Due to the time required to purchase and receive replacement equipment and components and to access the communications sites on an emergency basis, this alternative is unable to support the system's reliability requirements. This alternative will result in higher total costs as communication sites will have to be traveled to on an emergency basis and there is no potential for a volume pricing discount from the manufacturer/vendor.

Phased Replacement/Upgrade: Replacing/upgrading the communications site equipment in a phased approach in advance of equipment failure and before end-of-life/end-of-support mitigates the risk of equipment failure, satisfies system reliability requirements, and is the most cost effective alternative.

Recommendation: Phased replacement/upgrade of communications site equipment.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going	
			2019 Biennium	2021 Biennium
IT Staff				
Non IT Staff				
Contracted Services				
SITSD Services				
Hardware		\$2,000,000		
Software				
Telecommunications				
Maintenance				
Project Management				
IV&V				
Contingency				
Training				
Other				
Total Estimated Costs	\$0	\$2,000,000	\$0	\$0
FUNDING:				
Base Funding	\$0			
New Request:				
General Fund		\$2,000,000		
State Special Revenue				
Federal Special Revenue				
Proprietary				
Total Project Cost		\$2,000,000	\$0	\$0
Net Funding Request		\$2,000,000	\$0	\$0

Note:

There is no operating budget established for the maintenance of this system and it is currently maintained on a break/fix basis. This specific upgrade, affecting approximately 40 sites, will not require future funding other than maintenance that is covered under warranty agreement; therefore no on-going costs are anticipated.

SECURITY SYSTEM REPLACEMENTS AND ASSESSMENTS

Department of Corrections

TYPE OF Project:		Type of System:	
<input type="checkbox"/>	Enhancement	<input type="checkbox"/>	Mid-Tier
<input checked="" type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input type="checkbox"/>	New	<input type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input checked="" type="checkbox"/>	Web
		<input checked="" type="checkbox"/>	Network
		<input checked="" type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

The department seeks funding to repair and/or replace various electronic security systems that are no longer functioning properly at the Montana State Prison. Perimeter security systems are critical components of protecting the public, staff, and inmates at Montana State Prison. Current electronic systems are in poor condition and severely out of date and need to be upgraded in order to ensure safety and comply with American Correctional Association (ACA) standards. The current systems are outdated, deficient, non-integrated, and in some cases have failed and can't be repaired. This request will allow the department to address needs to modernize our current environment with more efficient, effective, reliable, and integrated technology.

The perimeter of Montana State Prison must be protected to ensure there is no unauthorized entrance or exit from the facility. Physical and electronic controls are an important component of perimeter security. Physical controls can include gates, doors, fences, concertina wire, manned towers, and observation. Electronic controls can include motion sensors, barrier intrusion detection, infrared beam detection, motion sensors, fence stress detection, cut wire detection, and security cameras. These systems will generate an alarm when triggered.

Business and IT Problems Addressed:

Institutional security is augmented by multiple physical security systems. Many of these systems have reached the end of their useful life, use computer technology and software that is not compatible with modern systems, and is very difficult to keep operational.

The current perimeter security system at Montana State Prison is outdated, unreliable, and non-existent in some areas. The specific issues with the perimeter security systems are of a sensitive nature and have the potential to compromise institutional security if they were widely known. These issues are contained in a separate document that is provided as needed during this process.

The electronic perimeter monitoring systems at Montana State Prison need to be updated utilizing a systems approach that integrates all of the components at central monitoring locations. This funding will allow us to replace the existing system at the facility with a state of the art perimeter security system.

Alternatives Considered/Rationale for Selection of Particular Alternative:

The alternative considered is to continue to repair the perimeter control systems as they fail using any available parts and expertise of the maintenance staff. The concern is that many parts for these systems can only be found as used parts and are not always possible to find. Rationale for selection of the proposed alternative is to take an integrated systems approach that includes all modern components.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going	
			2019 Biennium	2021 Biennium
IT Staff	\$20,000	\$20,000	\$10,000	\$10,000
Non IT Staff	\$40,000	\$40,000	\$20,000	\$20,000
Contracted Services				
SITSD Services				
Hardware	\$10,000	\$1,200,000		
Software				
Telecommunications				
Maintenance			\$240,000	\$240,000
Project Management				
IV&V				
Contingency				
Training				
Other				
Total Estimated Costs	\$70,000	\$1,260,000	\$270,000	\$270,000
FUNDING:				
Base Funding	\$70,000	\$60,000		
New Request:				
General Fund		\$1,200,000	\$270,000	\$270,000
State Special Revenue				
Federal Special Revenue				
Proprietary				
Total Project Cost		\$1,260,000	\$270,000	\$270,000
Net Funding Request		\$1,200,000	\$270,000	\$270,000

COURT TECHNOLOGY IMPROVEMENT PROGRAM Montana Supreme Court

TYPE OF Project:		Type of System:	
<input checked="" type="checkbox"/>	Enhancement	<input type="checkbox"/>	Mid-Tier
<input checked="" type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input checked="" type="checkbox"/>	New	<input type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input type="checkbox"/>	Web
		<input type="checkbox"/>	Network
		<input type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

This proposal seeks funding to continue the Judicial Branch’s efforts to modernize Montana courts in a manner that meets the unique needs of the Judicial Branch while at the same time conforms to State of Montana information technology standards and the American’s with Disabilities Act.

The goals of this proposal are to maintain current technology and to continue to upgrade Montana’s courts and courtrooms with video and audio technology, as well as provide equipment and technology necessary for the courts, judges and the public to fully benefit from statewide E-filing.

In 2007, one time only funds provided funding for Interactive Video Conferencing and Courtroom Technology Upgrades. This current proposal predominantly requests funds for initiatives which can be characterized as “Court Technology Improvements”.

Case management systems often take center stage in discussions of court technology; however, equally important are those technologies found in the courtroom and used by judges and staff, counsel and jurors during formal judicial proceedings. These technologies include court recording equipment, interactive video, bench computers, sound systems, and ADA compliance components.

Business and IT Problems Addressed:

- If the Office of Court Administer (OCA) cannot upgrade existing and install remaining video conferencing units, the state may be unable to realize the financial savings and personnel safety values that video conferencing accomplishes by mitigating travel by judges and just as importantly, by law enforcement transporting prisoners.
- If the OCA is unable to update and implement audio solutions, the quality of court records and transcripts are at risk; the potential for trial cancellations due to an inability to hear and understand the proceedings is increased; rescheduling trials will create additional financial burdens to the state and the county and will jeopardize the ability to hold hearings in a timely manner; and potentially create an inability for the OCA to meet ADA compliance requirements.
- If the OCA is unable to purchase E-Filing equipment, the efficiencies the system is designed to create for judges and staff will be unrealized, may create issues of access to justice if a

defendant cannot gain access to their case, and may cause courts an inability to transform all records to electronic as required within the E-Filing rules.

Alternatives Considered/Rationale for Selection of Particular Alternative:

This is an enhancement to an existing system to which there are no alternatives.

Project Cost and funding source:

This request is a one-time request for equipment only. To date, the Office of the Court Administrator has not advanced a legislative proposal requesting funding for consistent replacement of this equipment.

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going 2019 Biennium	On Going 2021 Biennium
IT Staff				
Non IT Staff				
Contracted Services				
SITSD Services				
Hardware		\$834,000		
Software				
Telecommunications				
Maintenance				
Project Management				
IV&V				
Contingency				
Training				
Other				
Total Estimated Costs	\$0	\$834,000	\$0	\$0
FUNDING:				
Base Funding	\$0			
New Request:				
General Fund		\$834,000		
State Special Revenue				
Federal Special Revenue				
Proprietary				
Total Project Cost		\$834,000	\$0	\$0
Net Funding Request		\$834,000	\$0	\$0

COURT DATA EXCHANGE ENHANCEMENT Department of Justice

TYPE OF Project:		Type of System:	
<input checked="" type="checkbox"/>	Enhancement	<input type="checkbox"/>	Mid-Tier
<input type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input type="checkbox"/>	New	<input type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input checked="" type="checkbox"/>	Web
		<input type="checkbox"/>	Network
		<input type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

The Office of Court Administrator (OCA) was awarded a federal grant to modernize their court case management system (FullCourt Enterprise). The new systems provide enhanced capability for data exchanges and significantly change the way legacy exchanges communicate.

The Department of Justice (DOJ) currently has two data exchanges with the courts which require upgrades to continue data exchanges with the new system. The current system allows the courts to electronically report findings on traffic citations and driver's license suspensions. If these exchanges are not in place, this information will have to be manually reported by the Courts and manually entered into the driver control system by DOJ employees.

The three new exchanges: 1) Orders of Protection, 2) Bench/Arrest Warrants and 3) No Contact Court Orders from the Courts, will be a real-time data exchange between the Courts and DOJ providing instant access to this data. As an example, one of the most dangerous times in a domestic abuse situation is when a victim first attempts to break away from the control of an abuser. This is why victims turn to Courts to request protection and also why it is so critical when a Court issues a Protection Order, that law enforcement be notified immediately for service, enforcement, and FBI National Crime Information Center (NCIC) record entry purposes. A Courts/DOJ interface will expedite the exchange of Protection Order information, changing the current 1-2 day manual process into an automated exchange that takes seconds. Timely entry of an NCIC Protection Order record could make the difference when a Respondent is attempting to purchase a firearm after a Court has issued a Protection Order federally disqualifying the individual from firearms. Transferring Protection Order data electronically ensures the Court's protection order conditions are clear and accurate, reduces manual data entry errors and ultimately improves the quality of Montana's NCIC Protection Order records. The electronic exchange of protection order data between Courts and law enforcement via CJIN is one more step Montana can take to fight domestic violence and keep our citizens safe.

Purpose:

- A. Replace the legacy Supreme Court data exchanges for: 1) Title 61 dispositions and driver's licenses suspensions and 2) District Court reporting of dispositions and pre-court data so they are compatible with the new FullCourt Enterprise Case Management System.
- B. Implement new data exchanges for: 1) Orders of Protection, 2) Bench/Arrest Warrants and 3) No Contact Court Orders from the Courts directly to the Criminal Justice Information Network (CJIN).

Objectives:

1. Replace the two current data exchanges with a real-time web services exchange which will make court data immediately available to law enforcement and public safety professionals.
2. Construct three new exchanges for (protection orders, arrest/bench warrants, and no contact orders) using the same web services architecture.
3. Provide the functionality for law enforcement to real-time query the Courts system.
4. Implement these exchanges so as a court is transitioned from the legacy FullCourt system to FullCourt Enterprise, the data exchange would be included in their go-live processing.

Business and IT Problems Addressed

- Data sharing restrictions due to current infrastructure implementation – (e.g. no real-time data exchanges; exchanges exclusively vendor coded and supported; statutorily required changes or inter-agency change requests cost prohibitive.)
- Local law enforcement will realize a more streamlined access to court records necessary to make critical public safety decisions.
- Will significantly enhance the Judicial Branch's ability to coordinate, communicate and share critical offender information at the local, state, and federal level.

Alternatives Considered/Rationale for Selection of Particular Alternative

DOJ did not consider alternatives to this solution, rather chose to request the sole source justification for a number of reasons.

- The current and new data exchanges will leverage existing technology within the Department and CourtView Justice Solutions provides the DOJ Integrate Justice Information Sharing (IJIS) Broker and Computer Product of Illinois provides the CJIN Message Switch. This approach maximizes efficiencies within DOJ systems and ultimately saves taxpayer dollars.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going 2019 Biennium	On Going 2021 Biennium
IT Staff	\$7,200			
Non IT Staff				
Contracted Services		\$490,000	\$49,000	49,000
SITSD Services				
Hardware				
Software	\$10,462			
Telecommunications				
Maintenance				
Project Management				
IV&V				
Contingency				
Training				
Other				
Total Estimated Costs	\$17,662	\$490,000	\$49,000	\$49,000
FUNDING:				
Base Funding	0			
New Request:				
General Fund		\$490,000	\$49,000	\$49,000
State Special Revenue				
Federal Special Revenue				
Proprietary				
Total Project Cost		\$490,000	\$49,000	\$49,000
Net Funding Request				

Note: The DOJ portion of the request deals with data exchanges between the courts and law enforcement, which has a direct public safety impact.

The IT Staff and software costs represented above reflect 10 percent of a DOJ technical FTE and a proportional share of the software licensing and annual maintenance agreement with CourtView Justice Solutions.

Contracted Services:	+ \$280,000 for CPI (DOJ exchange customization – CJIN)
	+ \$210,000 for Courtview (DOJ Criminal History exchange customization)
TOTAL Contracted	\$490,000

**PROGRAM & PROJECT MANAGEMENT SYSTEMS/RISK-BASED ASSET
MANAGEMENT/LINEAR REFERENCING SYSTEMS
Department of Transportation**

TYPE OF Project:		Type of System:	
<input type="checkbox"/>	Enhancement	<input checked="" type="checkbox"/>	Mid-Tier
<input checked="" type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input type="checkbox"/>	New	<input checked="" type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input checked="" type="checkbox"/>	Web
		<input type="checkbox"/>	Network
		<input type="checkbox"/>	Desktop

Project Description, Purpose and Objectives for the Program & Project Management System:

The Montana Department of Transportation (MDT) seeks funding to replace three systems: Program and Project Management System (PPMS); Risk-Based Asset Management (RBAM); and Linear Referencing System (LRS). PPMS and LRS will replace obsolete technology and RBAM will be developed to meet new federal requirements. They are packaged in one request as the three systems are uniquely and comprehensively connected. A concurrent replacement is a logical approach as many of the system requirements are dependent on data and information in the other systems. The LRS forms the core of the other two systems and should be developed with those system requirements in mind.

Alternatives Considered/Rationale for Selection of Particular Alternative:

Alternatives considered include:

1. Implement new management systems
 - Take advantage of technological advancements to become more efficient
 - Allow Integration with existing MDT management systems
2. Make significant enhancements to current management systems
 - Considering the foundation of the existing systems, technological obsolescence, and cost required to enhance in order to incorporate any current requirements.
3. Do nothing and continue performing at the current level
 - Although this is an option, it is not a realistic option since MDT would have federal compliance issues and jeopardize or drastically reduce the federal transportation funding to Montana.

Rationale for Selection of Particular Alternatives:

During the next phase of the project, MDT will determine the best alternative to pursue. MDT is in the process of completing the initial phase of developing a risk-based asset management plan, which consists of asset management training, evaluation of existing practice, a business gap analysis, and development of a Transportation Asset Management implementation plan. MDT is also in the beginning

stages of developing business requirements for the Linear Referencing system and the PPMS. Once those are complete, the final decision will be made on the project approach.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going	On Going
			2019 Biennium	2021 Biennium
IT Staff			\$300,000	\$300,000
Non IT Staff				
Contracted Services				
SITSD Services				
Hardware			\$25,000	\$25,000
Software			\$250,000	\$250,000
Telecommunications				
Maintenance				
Project Management				
IV&V				
Contingency				
Training				
Other				
Total Estimated Costs	\$0	\$5,000,000	\$575,000	\$575,000
FUNDING:				
Base Funding	\$0		\$575,000	\$575,000
New Request:				
General Fund				
State Special Revenue		\$650,000		
Federal Special Revenue		\$4,350,000		
Proprietary				
Total Project Cost		\$5,000,000	\$575,000	\$575,000
Net Funding Request		\$5,000,000	\$0	\$0

FINANCIAL MANAGEMENT SUITE Department of Transportation

TYPE OF Project:		Type of System:	
<input type="checkbox"/>	Enhancement	<input checked="" type="checkbox"/>	Mid-Tier
<input checked="" type="checkbox"/>	Replacement	<input type="checkbox"/>	Mainframe
<input type="checkbox"/>	New	<input checked="" type="checkbox"/>	GIS
<input type="checkbox"/>	O&M	<input checked="" type="checkbox"/>	Web
		<input type="checkbox"/>	Network
		<input type="checkbox"/>	Desktop

Project Description, Purpose and Objectives:

Over the years, the Montana Department of Transportation (MDT) has implemented and supported various stand-alone software solutions that provide essential information to managers for the critical functions of budget development, personal services projections, personal services allocation, and project cost scheduling. The systems that support these financial processes are becoming obsolete or are no longer sustainable in the current state. Because of decreased usability, technological changes, and functionality issues, the efficient utilization of the software solutions has declined and, as a result, many of the processes are supplemented with manual workarounds to achieve the desired end result.

Recent interviews with Department divisions and districts have highlighted extensive deficiencies with the current systems that lead to risks in administering internal controls; efficiently using resources; producing timely and meaningful information; forecasting cash, revenues, and expenditures; and ultimately setting and monitoring financial goals and objectives. Based on current users of the MDT financial systems, approximately 550 MDT users would benefit from a more robust financial management system with the capability to interface with other MDT systems, produce ad-hoc reports, generate projections, and have information available at the touch of a button. The lack of accessible financial management information adversely impacts operating efficiency and costs, increases the risk of unplanned system outages, and does not adequately allow MDT to simulate what-if scenarios.

Business and IT Problems Addressed:

Financial data is contained in multiple internal, statewide, and federal systems, each with its own unique formats, structure, timeframes, and other parameters. Access to these systems is largely based on processing requirements as opposed to decision making needs. Financial data is contained in multiple systems. In order to convert the financial data into meaningful information, data must be extracted from multiple systems, converted into different formats/structures, manipulated or recalculated in a secondary tool such as Excel, and translated and refined into a usable message for department managers. Managing the finances of a large and complex organization such as MDT in this manner leads to many risks including:

- High probability of erroneous information due to the need to manipulate data outside of a system
- Inefficient use of resources to convert data to information using manual processes
- Timely and meaningful access to information by department managers
- Difficulty in setting and monitoring financial goals and objectives
- Inability to react quickly and appropriately to external financial inquiries of the department (audit, legislature, public, etc.)

Alternatives Considered/Rationale for Selection of Particular Alternative:

1. Implement a new Financial Management Suite.
 - Take advantage of technological advancements to become more efficient
 - Replace legacy agency financial systems that are obsolete and no longer sustainable in the current state.
 - Utilize analysis tools to administer internal controls more efficiently; produce timely and meaningful information; forecast cash, revenues, and expenditures; and ultimately set and monitor financial goals and objectives for the agency
2. Make significant enhancements to current financial systems.
 - Considering the foundation of the existing technology, a total re-write for these agency financial systems would be required.
3. Do nothing and continue performing at the current level.
 - Considering the fact that these financial systems were implemented over 25 years ago and technology and business processes have advanced, a new system would allow more efficient management of financial operations.

Rationale for Selection of Particular Alternatives:

The most cost effective and efficient solution, based on similar implementations by neighboring states to solving existing issues, would be to implement a new financial management system, option #1. A new system allows opportunity to rapidly incorporate new user-friendly technologies, along with ensuring that new business processes are adhered to in the most successful means possible.

Project Cost and funding source:

PROJECT COSTS	Current cost of operations for system being replaced	Estimated Cost of Project	On Going	On Going
			2019 Biennium	2021 Biennium
IT Staff			\$150,000	\$150,000
Non IT Staff				
Contracted Services				
SITSD Services				
Hardware			\$20,000	\$20,000
Software			\$200,000	\$200,000
Telecommunications				
Maintenance				
Project Management				
IV&V				
Contingency				
Training				
Other				
Total Estimated Costs	\$0	\$3,000,000	\$370,000	\$370,000
FUNDING:				
Base Funding	\$0		\$370,000	\$370,000
New Request:				
General Fund				
State Special Revenue				
Federal Special Revenue		\$3,000,000		
Proprietary				
Total Project Cost		\$3,000,000	\$370,000	\$370,000
Net Funding Request		\$3,000,000	\$0	\$0