

**WASHINGTON STATE PATROL**

**INVESTMENT PLAN**

**REPLACEMENT OF EXISTING CAD SYSTEM**

***August 6, 2001.***



### ***Investment Plan***

This investment plan has been developed to comply with new ISB Investment Policy and is arranged in the format specified in the investment standard. The required elements are shown in bold with the Washington State Patrol comments and justification following each requirement

**A. A completed investment approval request form, available in the Appendix.**

See formal request on previous page.

**B. Purpose of the planned investment**

**1. Description of the business problem to be solved or opportunity to be gained.**

The Washington State Patrol (WSP) provides emergency communications services in support of troopers, other law enforcement officers, and citizens statewide. A central part of delivering those services is through Computer Aided Dispatch (CAD). The current CAD can no longer meet the needs of the agency or the demands for public safety. New capabilities are necessary to significantly improve officer safety, dispatcher efficiency, emergency services, and the collection of data to support performance-based budgeting and the State Patrol's Police Allocation Model (PAM). We need a new system primarily because of the following problems with the current system:

- The current CAD system is not able to adequately or safely support operations 24 hours a day, 7 days a week, 365 days a year. The CAD system is intentionally and routinely taken down for main frame maintenance causing dispatchers to resort to manual backup methods. That means they are using a paper and pencil solution instead of computerized functions. This significantly degrades the speed and accuracy of dispatching, the ability to keep track of troopers, and may compromise officer safety. Also CAD periodically goes down

unexpectedly because of network malfunctions or program conflicts. This exacerbates the problem because dispatchers can't prepare for manual operations, with an even greater adverse impact on job functions and officer safety. When automated capability returns all records must be manually input; there is no automated update. Unfortunately this updating occurs while normal business operations are continuing, thereby slowing down and complicating work processes further.

- Current CAD (Computer Aided Dispatch) is a misnomer. Current CAD primarily allows for recording information only. It is not an intelligent workstation that provides, synthesizes or analyzes information and makes rapid recommendations. It is not capable of assisting dispatchers with the complexities of requests, massive amounts of information to be considered or decision-making. It requires dispatchers to use slow, tedious work processes. These conditions adversely impact operations and efficiency particularly important in today's environment of high workloads (over 500,000 calls for service), large volumes of phone calls (about 3 million calls in FY 2000 and rising) and need for rapid emergency response (where seconds save lives).
- Current CAD is not able to integrate new technology such as mapping, automatic vehicle location, and enhanced 911. For example manual processes now used to handle 911 calls (requiring interrogating the caller and typing in information) take six times as long as compared with automated, integrated processes (that automatically provide the caller's cell phone number and location on a map without any typing). Call talkers are reduced to yelling across the room to indicate to the dispatcher a call was received and has been entered into CAD or the initial entry has been updated. A new CAD integrated with 911 would allow a call taker to automatically enter the call into CAD and alert the dispatcher of the call and/or any updates. Streamlined work processes would greatly improve speed, accuracy and efficiency.
- Current CAD does not capture all necessary data and does not make it readily available to users. The data is needed for key purposes including the agency's performance based budgeting and Allocation Model (used to determine how many troopers are needed, where,

when and for what purpose, etc.) used to develop budget requests for legislative approval. A new CAD would capture and make available needed data for analysis and reporting.

Basically the current CAD is not user friendly, efficient or intelligent. The current CAD increases liability and decreases officer safety. Also it doesn't leverage new technology necessary to meet current and future business needs of providing fast, accurate service to a rapidly expanding customer base.

**2. Description of background information and objectives.**

The current CAD was originally written around 1979-80, for a small police agency in New York. It was transferred to another small agency in Kansas and then acquired by North Carolina State Highway Patrol (NCSHP) in 1982. NCSHP expanded the program to operate in a statewide arena on a mainframe serving nine dispatch centers.

In 1985 the WSP acquired the software from NCSHP. It was still written in DMS with VSAM file structure. WSP modified it to meet Patrol's business needs.

Between 1991 and 1993, the WSP version was converted to COBOL II. The VSAM file structure was retained to assure sub-second transaction response time. In 1997-98 the system was modified for Y2K. There has been no significant change to the system since that time.

While technology changes occurred behind the scenes, demands on dispatchers continued to increase. Calls for service increased 21% between FY's 1993 and 1999. Other related processes and databases increased in number and complexity of information available (ACCESS/WACIC/NCIC). Increased use of wireless communications on highly visible incidents such as highway accidents, generated 20-30 phone calls rather than two or three when people depended on land lines. Wireless 911 calls answered by WSP increased 94% in this same time.

The Patrol must update to meet these ever-increasing demands as evidenced by the recent feasibility study that is being transmitted with this investment plan.

**C. Business justification**

**1. Explanation of how the investment relates to the agency's IT portfolio and how it supports the agency business plan.**

### *Objectives*

This proposal directly supports one vital objective in the Washington State Patrol's Strategic Plan. That objective has continued to evolve from the initial published statement of:

- **Original** – “Modify Computer Aided Dispatch (CAD) for improved measurement of response time and stacked calls (Police Allocation Model)” to a view in the fall of...
- **1999** – “Explore a replacement to the current Computer-Aided Dispatch System to further our efforts toward public safety goals through comprehensive data collection and analysis in support of performance-based budgeting, and to allow the agency to integrate our records management and mobile information systems.” That view has been further modified to reflect the current objective...
- **2000** -- Provide a Computer Aided Dispatch (CAD) system that will enhance public safety and meet the business needs of the agency by integrating with new technology to improve officer safety, dispatcher efficiency, customer service, and the collection of data in support of the Department’s performance-based budgeting.
- **2001** – Replace the current Computer Aided Dispatch (CAD) system to improve data collection and analysis, officer safety, dispatcher efficiency, customer service, and deployment information, which will ensure support of performance-based budgeting and allow the agency to integrate our records management and mobile information systems.

A new CAD system would also help implement JLARC Recommendation 2 on performance measures:

*The Washington State Patrol should establish performance measures for Patrol that are related to outputs or outcomes that can be affected by the agency itself. Initial areas to focus on should include response availability by priority of call and response time, taking into consideration the characteristics of individual autonomous patrol areas.*

### *Business service goals*

Three of the five WSP Strategic Goals are addressed in the expected results of a new CAD:

- Goal 1 reflects the thrust of speed and safety when it specifies **“Increase responsiveness to citizens’ expectations for public safety and security.”**
- Goal 2 of **“Increase our ability to provide public safety through the acquisition of human, financial, technological, information, and physical resources”**
- Goal 4 specifies the need to **“Consistently improve performance, systems, and personnel.”**

*Statutory requirements*

Changing laws (i.e., 30-60-90 day impounds, .08 DUI, etc.), Joint Legislative Audit Review Committee (JLARC) interest, and growing administrative requirements add to the workload without realizing the impacts on CAD. Service delivery, enhanced by the use of CAD, is core to responding to the Mission Statement of “answering our citizen’s call for public safety.” The vision is for “continuous performance improvement...and ...effective communication.” CAD and the other tools for communication are key for the Patrol to carry out its statutory requirements.

*Strategic Focus (business & IT goals)*

The CAD system is core to the State Patrol’s efforts in meeting important agency needs and satisfying increased public safety demands. Updating CAD not only improves service today, but also prepares for continued improvements tomorrow by integrating with future technology. The focus is to maintain a CAD system that meets operational and safety needs while using the least amount of resources. Through proper training, equipment and technology Communications can provide the best, most efficient service for the least cost.

The #1 Strategic Goal of the Information Technology Division is to “Provide continuous, statewide voice and data information to the Washington State Patrol agency personnel.” ITD’s objective in reaching this goal is to “Develop Computer Aided Dispatch (CAD) Replacement Plan in FY2000 and FY2001.” ITD’s action plan through FY2001 is in progress and consists of: 1) Manage the CAD replacement project through the Planning Phase using ITD’s Project Management Methodology (PMM)

in FY2000 and FY2001; 2) Assist the Communications Division in conducting a CAD Replacement Feasibility Study.

**a. Explanation of how the investment relates to the state's technology infrastructure.**

The technology must operate within and on an existing digital microwave network used by the WSP. Because it is a system totally within the WSP environment the state's technology infrastructure is not as large an issue. However, the RFP will place an emphasis on equipment that is compatible with existing WSP equipment and which is capable of interfacing with other state resources.

The digital microwave system provides a statewide network based on open standards, including TCP/IP, which comply with state guidelines. The use of the digital microwave is required due to the mission critical nature of this application in times of emergency and natural disaster. The vendors who provided demonstrations are using main-stream technology and most of them are utilizing Microsoft technologies, which follows the states general direction.

**b. Description of alternatives considered.**

Three alternatives were considered. They were (1) leave the system as is with some modifications (GUI front end), (2) replacement of the existing system with a new commercial off the shelf (COTS) system, and (3) custom development of a new system.

*Alternative 1*

To further consider the alternative of the current system with its limited functionality would require accepting many of the limits inherent in the current system. Such a development would seem to preclude the use of GIS, GPS, or preparation for E911 readiness. It would also keep the CAD dependent on the mainframe where there are scheduled outages of the system every month. Direct comparison to the other alternatives from a cost benefit perspective would not be valid since the costs of missing functions are not quantified. Such an analysis would go beyond the time and depth of this study.

If the WSP were to pursue adding a new front end and full development to overcome the functional deficiencies it would, in effect, be redefining Alternative 1 to be a variation of Alternative 3, the custom development alternative. This limited improvement to the current CAD falls far short of meeting the business requirements. Given these factors, this alternative of putting a new front end on the current CAD is not recommended.

*Alternative 2 (The chosen alternative)*

Alternative 2 is for the purchase of an existing commercial off the shelf solutions (COTS) which provides for integration of a number of modules. The WSP does not believe that they can simply purchase and install COTS and not make any modifications. There will be some modifications that will be both essential and possible. The modifications will be able to be accomplished within the base application or in some manner that will not inhibit the ability to utilize later versions of the COTS or interfere with the addition of optional modules at a later date.

There are a number of Vendors who can provide this solution and have proven products. The risks and uncertainties associated with modifying the existing system (alternative 1) or building a new system (alternative 3) are eliminated and we will benefit from the Vendor's continuous improvements to the modules.

Given the market forces for continued development, the needs for an open system design that can accommodate additions for the future, and the needs for an intelligent system that is fail proof, the commercial off the shelf product seems the best solution. It provides the next logical step in using technology advances to improve the delivery of services and safety measures for the State of Washington.



*Alternative 3*

The whole premise of developing a CAD that is unique to the WSP is inconsistent with the direction of acquiring and using commercial systems. Further, such an effort seems to assure the need for continual adjustments and "improvements" that lead an organization to depend on those changes, unique from the market driven improvements. One example is that current Communication Officers have come to depend on self-developed Macros to obtain additional functionality not otherwise available in CAD. These Macros have been a major source of frustration and disruption when they have created conflicts with other software running on the system, causing the PC to crash or lock up.

Market changes and technology demands are moving too quickly to develop a unique application that will end up on an island, watching the needs stack up and the solutions float by in the main market channel.

**c. Selected alternative and rationale for that selection (this information may be provided in a decision matrix format).**

Alternative two is clearly the best solution. The feasibility study explains in depth why this alternative has been selected. A comparison of the three alternatives is shown on the following page.

Alternative	Description	Implementation	Costs (thous.\$)
<p><b>Alternative 1. Modify Current CAD</b></p> <p></p>	Continue on with the current CAD application, with some changes	<p>18-109 staff mo. (6-22 mo. lapse) Assuming Vendor B-State as Low and "Other High as Upper.</p>	<p>\$397-1,483 one-time &amp; \$540-660/ yr. on going (DIS+1or2 staff) <b>AND inability to meet the functional requirements</b> such as mapping, automated vehicle location, and other modular additions.</p>
<p><b>Alternative 2. Commercial Off-The-Shelf (COTS)</b></p>	Go to the commercial software market and acquire software and associated technology	36 staff months (12-18 mo. lapse time)	<p>Basic CAD: \$ \$1,591-2,724 with \$2,234 proposed one-time \$278/yr.on going</p>
<p>Custom Developed</p> <p></p>	Develop a CAD application of its own	42-134 staff mo. (9-27 mo. lapse time)*	<p>\$390-1,629 one-time \$60+on going (Changes/adjustments ) to provide a unique solution. <b>High risk of cost being exceeded.</b> Once developed, <b>not enough incentive to progress.</b></p>

**2. Risk**

- a. **A risk assessment using the severity and risk criteria in Appendix C and risk mitigation plans.**

The severity criteria help to gauge the proposed investment's impact on citizens and state operations, its visibility, and the consequences of doing nothing. It could be argued in this case that CAD as a technology, impacts one work group (directly). The higher severity is because the results are statewide and impact multiple agencies.

**Severity Level**

Shading and outline indicates the ratings within the table [Italics and/or blue has been added to further indicate where this project fits]

	<b>Impact on Citizens</b>	<b>Visibility</b>	<b>Impact on State Operations</b>	<b>Nil Consequence</b>
<b>High</b>	<ul style="list-style-type: none"> <li>Direct contact with citizens – including benefits to, payment by, and transactions with individuals.</li> </ul>	<ul style="list-style-type: none"> <li>Highly visible to Legislature and public.</li> <li>Total budget cost of \$10 million or more.</li> <li>Multiple agency involvement.</li> </ul>	<ul style="list-style-type: none"> <li><i>Statewide or multiple agency impact.</i></li> <li>Mainframe acquisitions and networks.</li> </ul>	<ul style="list-style-type: none"> <li>Inability to meet legislative mandate or agency mission.</li> <li>Loss of significant federal funding.</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li><i>Indirect impact on citizens – activity management systems that support decisions that are viewed as important by the public.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Some visibility to the Legislature;</i> the system or the program(s) it supports likely to be subject to hearings.</li> </ul>	<ul style="list-style-type: none"> <li>Agency wide.</li> </ul>	<ul style="list-style-type: none"> <li>Potential failure of aging systems.</li> </ul>
<i>Low</i>	<ul style="list-style-type: none"> <li>Agency operations only.</li> </ul>	<ul style="list-style-type: none"> <li>Internal agency only.</li> </ul>	<ul style="list-style-type: none"> <li><i>Work group.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Loss of opportunity for improved service delivery or efficiency.</i></li> </ul>

The agency assessment of risk, using the DIS Portfolio Structure and Content indicates a Low to Medium level of Risk. The solution proposed is expected to be technology that has been proven in a situation similar to the WSP. Detailed charts are shown on the following pages.

Risk Level Criteria

Shading and outline indicates the ratings within the table [Italics and/or blue has been added to further indicate where this project fits]

	<b>Organizational Impact</b>	<b>Development Effort</b>	<b>Technology</b>	<b>Capability</b>
<b>High</b>	<ul style="list-style-type: none"> <li>Significant change to business rules.</li> <li>Complex business processes.</li> <li>Multiple organizations involved.</li> </ul>	<ul style="list-style-type: none"> <li>High development/ system integration costs (\$10 million or more).</li> <li>Over 3 years in development. *</li> <li>Level of effort. For example, more than 30 staff years (Full-Time Equivalent (FTE) &amp; Contractors) and/or more than 4000 function points.</li> </ul>	<ul style="list-style-type: none"> <li>Emerging.</li> <li>Unproven.</li> <li>New for state.</li> </ul>	<ul style="list-style-type: none"> <li>Immature organization.</li> <li>Uses ad-hoc processes.</li> <li>Agency track record suggests inability to mitigate risk on project requiring a given level of development effort.</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>Moderate changes to business rules.</li> <li>Medium complexity.</li> </ul>	<ul style="list-style-type: none"> <li>Up to 29 staff years (FTE &amp; Contractors).</li> <li>2-3 years in development*</li> <li><i>\$2-\$10 million.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Proven in industry or at state level.</i></li> <li><i>New to agency or program areas.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Maturing organization.</i></li> <li>Agency track record indicates reasonable level of success but without the structure for repeatability.</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li><i>Insignificant or no change to business rules.</i></li> <li>Low complexity business process(es).</li> </ul>	<ul style="list-style-type: none"> <li><i>Under 10 staff years (FTE &amp; Contractors).</i></li> <li>Under \$2 million.</li> <li><i>Under 2 years in development.*</i></li> </ul>	<ul style="list-style-type: none"> <li>Standard, proven agency technology</li> </ul>	<ul style="list-style-type: none"> <li>Mature organization.</li> <li>Agency track record indicates strong ability to mitigate risk to a project requiring a given level of development effort.</li> <li>Stable organization, documented and</li> </ul>



**Risk Management**

All development projects have risks. Early identification and mitigation of risks ensures successful project completion. The matrix below itemizes the risks identified for this project. It also provides a risk rating and describes how WSP plans to mitigate the risk.

WSP should review these risks on a regular basis and update the matrix as needed.

<b>RATING</b>	<b>RISK DESCRIPTION</b>	<b>MITIGATION PLAN</b>
High	WSP will not be able to hire/assign staff to the project to meet the assumptions and staffing estimates.	Begin reassigning staff resources in order to free up existing staff appropriate for the project. Establish a hiring plan for the additional staff needed.  Do not proceed with the RFP without commitment for adequate staffing. Included in the investment plan is a need for additional staffing that will be funded through DIS savings.
High	May have overestimated the capabilities, flexibility and productivity of the software tools and therefore underestimated the adaptation/customization time and or costs.	WSP will have to closely manage the scope of the enhancements to the application. If the forecast underestimates the costs, WSP will have to direct the Vendor to the highest priority enhancements  If code changes are required, a structured development methodology (including a detailed design specifications, feature prioritization and early proof of concept prototypes) will assist in mitigating this risk.
Medium	Agency resources will be diverted to other needs and will not be available for implementation and support	Dedicated staff could be hired by/assigned to ITD and the Communications Division (technical & non-technical).
Medium	Procurement process could take longer than planned.	Assign needed resources to ensure speedy review and approval of RFP, selection model and scoring.  Advertise the Vendors of timing to meet all project requirements. Prepare RFP in easy-to-address form.
Medium	WSP will not be able to agree on a common set of requirements that can be completed within the	Continue to revise requirements unique to some customers. Schedule implementation for Regional Business Service Centers that most closely fit the core requirements. Have the Management Team prioritize the

	Vendor's budget and time frame.	requirements at a more detailed level if necessary. Include "undiscovered" budget in project plan.
Medium	Staff will not enter the necessary data to make effective use of the software.	Provide staff with the information regarding how the software helps <u>them</u> . Seek their commitment one-on-one and in groups. Listen to concerns and make adjustments as necessary. Keep key software objectives visible.

RATING	RISK DESCRIPTION	MITIGATION PLAN
Medium	There is not sufficient ITD staff time to support the Centers and adapt releases.	ITD can rotate staff assigned to this application and have their expertise available as needed. The skills will then also be available for other WSP projects.
Medium	Vendor amounts will be higher than estimated.	Pre-RFP: Have Vendors review requirements statement and overall project plan for their input. Post-RFP: Establish contract with Vendors based on a fixed-price bid. Have the Vendor manage the scope of the changes.
Medium	Small band-width of wide area network may make performance too slow for practical use in regional/field offices.	After the initial tests have completed, have the Vendor or WSP staff prepare a demonstration of Center installation. As part of the design, plan for at least two separate and independent routes to be available for any one message.
Medium	Existing “desktop” computers may not support the client side of the application.	Give priority to Vendors who have solutions that do not require a "fat client". Integrate proof of concept testing (CAD functionality and fault tolerance) before actual installation. Continue with the normal equipment replacement as scheduled by WSP.
Medium	The staff WSP trains will not stay to support the application.	Look within WSP first for existing staff to assign to this project. Other state staff may have experience in using the tools selected for this project. This will help in finding and maintaining staff. If WSP has to hire staff for this project, staff should make a commitment to stay as part of the criteria for hiring. Ask permanent staff for a commitment equal to twice the length of the project.
Low	Funding not available or redirected to other projects.	WSP has committed to using savings from replacing a mainframe application to fund this project.
Low	May not have physical location to house state and contractor staff.	WSP is working on this issue now. Will need to locate space for an estimated 8 staff with equipment, meeting and workspace.



**b. Description of quality assurance process.**

The implementation will be jointly managed by the vendor and a WSP project manager who is familiar with CAD and has been involved in this project since its inception. The project manager will report to a steering committee that includes the Technical Services Bureau Commander (executive sponsor), the Communications Division Administrator, and the Information Technology Division Administrator. WSP will also use its new project management methodology to closely monitor the vendor. Payments to the vendor will be based upon satisfactory completion of deliverables. Finally, WSP will hire an external quality assurance consultant.

**c. Explanation of how the investment conforms to the technical policies and standards of the ISB, DIS, and the acquiring agency.**

This investment conforms to the WSP existing microwave system and will require equipment that is compatible with existing WSP dispatching equipment and 911 telephone equipment.

**3. Costs and Benefits**

This investment will involve an initial outlay of approximately \$ 1,900,000 and will be funded by the State Treasurers Certificates of Participation Program. On an ongoing basis (6 years) the payments will be \$338,000 per year and other known operating costs (including salaries and benefits) of \$ 203,000 per year. DIS has estimated a reduction in mainframe operating costs of \$51,000 per month and we are using a conservative estimate of \$42,500 per month. If we realize savings of \$45,000 per month the system will be operating at breakeven by the third year.

The ten year life cycle indicates a net cash savings to the Patrol of approximately \$ 514,000. The entire feasibility study is being provided under separate cover.

The following table shows the various elements of cost and savings over the ten year life of the project

FYE	Development & operating costs	COP payment	Mainframe cost savings	Net for Year	Cumulative Net Savings
2002	213,596	0	0	(213,596)	(213,596)
2003	203,196	169,425	510,000	137,379	(76,217)
2004	203,196	338,850	510,000	(32,046)	(108,263)
2005	203,196	338,850	510,000	(32,046)	(140,309)
2006	203,196	338,850	510,000	(32,046)	(172,355)
2007	203,196	338,850	510,000	(32,046)	(204,401)
2008	203,196	338,850	510,000	(32,046)	(236,447)
2009	203,196	169,425	510,000	137,379	(99,068)
2010	203,196	0	510,000	306,804	207,736
2011	203,196	0	510,000	306,804	514,540

**a. Description of existing agency IT resources to be used, including internal agency staff.**

The agency will utilize one existing IT staff and will hire two new staff to support the CAD application. The application-related hardware will be housed at the DIS server farm or alternatively at WSP. The RFP will describe two possible scenarios (DIS based servers, and WSP based servers) and request that Vendors propose the preferred solution based on current physical and technological considerations, and provide justification and operating cost estimates for each alternative. The operating cost estimates will include network impacts, disaster recovery, staffing and all other related costs. Vendors will be provided with details regarding the DIS and WSP environments, existing equipment, services, staffing, etc. WSP will evaluate the vendor options and select the one which best meets their needs from an operational and fiscal standpoint.

The application will be carried on the WSP's digital microwave system. Digital microwave, as a component of the WSP Emergency Communication System, is a requirement due to the mission critical nature of the application. The digital microwave system is assumed to be transparent to the application. It is a transport mechanism of the WSP's wide area network (WAN). The WSP WAN is a TCP/IP-based network providing information to agency offices statewide.

The digital microwave system and the WSP wide area network will be supported with existing staff as a component of the Emergency Communication System.

**b. Description of IT resource(s) to be acquired, including internal agency resources.**

The acquisition is assumed to involve new hardware (servers, etc), software (COTS), and possibly software modifications. In addition Vendors will be asked to provide pricing for additional modules

which can provide the following functionality on an integrated basis.

Modules include but may not be limited to:

- Global Positioning System (GPS),
- Geographic Information Systems (GIS) for mapping
- Automated Vehicle Location (AVL),
- Records Management System (RMS),
- Enhanced 911
- Integrated Mobile Information System, currently represented as Mobile Computer Network (MCN)

These modules will not be initially purchased as part of this acquisition but it is the intent of the WSP to consider them in future periods and acquire them from the CAD vendor on a sole source basis.

- c. Provision of Cost-Benefit Analysis (CBA) from the feasibility study, if a feasibility study is required. As more current financial data become available, they should be used to update the CBA.**

The entire feasibility study is being provided under separate cover.

- d. Estimated first-year investment cost, as well as system life cycle costs for five years or the expected life of the resource, whichever is shorter.**

The estimated first year cost is approximately \$214,000 with annual recurring costs during the financing period of approximately \$542,000. Normal annualized costs (including salaries and benefits) are approximately \$542,000 with estimated reductions of \$510,000 yielding an annual cost of approximately \$32,000 per year during the financing period. System life cycle costs are negative as a result of an annual reduction of mainframe charges in the amount of \$510,000. DIS has estimated a reduction in mainframe operating costs of \$51,000 per month and we are using a conservative estimate of \$42,500 per month. If we realize savings of \$45,000 per month the system will be operating at breakeven. This will represent savings of approximately \$307,000 per year after financing is completed.

**e. If the investment will be leased, explanation of the financing and refurbishment plan.**

The investment is to be funded through the State Treasurer's Certificates of Participation Program. It is anticipated that the cost savings of a server based solution will be sufficient to fund the payments.

**D. Acquisition Process/Approach**

**1. Description of acquisition method to be used, including the rationale for its selection, and a list of companies to receive the solicitation document, if known.**

The agency has elected to acquire these resources using the two-stage (interactive) RFP method. This method was chosen for a number of reasons, with a primary reason being the high level of interaction provided by this method

While the exact vendor list is unknown it is anticipated that all or some of the following companies will chose to be involved in this acquisition; Cerulean Technologies, IBM, Intergraph, Litton PRC, New World Systems, Printrak, Public Safety Systems, SAIC, SCA, Spillman Technologies, Tiburon and Level II. There are several other companies who may also chose to participate.

Because of the large number of potential vendors, the two-stage RFP will allow an initial screening (using a request for qualifications) which will select a limited number (approximately 4 to 6) of companies who will be invited to respond to the RFP. This selection will be based upon a number of factors including installed base, number of available integrated modules, references, and company history. The interactive RFP involves substantial amounts of direct time with the companies so it is essential that the group have a limited size.

**2. Acquisition and investment implementation schedules.**

Event	Start	End	Vendor Time Deadline
Advertisement	08/01/01	08/02/01	
Vendor Contact	08/01/01	08/16/01	
Release RFQ to Vendor	08/16/01	08/16/01	
Deadline for complaints re RFQ	09/04/01	09/04/01	11:59 AM, PDT
References Returned	09/16/01	09/16/01	11:59 AM, PDT
RFQ Response returned	09/18/01	09/18/01	11:59 AM, PDT
Evaluation Period	09/18/01	10/15/01	
RFP Vendors Announced	10/16/01	10/16/01	
Hold Debriefings for RFQ	10/17/01	10/23/01	
Release RFP to Qualified Vendors	10/30/01	10/30/01	
Vendor Interactive Period	10/30/01	12/21/01	
Overview and Conference	11/06/01	11/08/01	
Answers to Conference Questions	11/12/01	11/12/01	
Deadline for complaints re RFP	11/30/01	11/30/01	11:59 AM, PDT
RFP References Due	12/20/01	12/20/01	11:59 AM, PDT
RFP Responses Due	12/21/01	12/21/01	11:59 AM, PDT
RFP Evaluations	12/21/01	2/15/02	
Announce Finalist Vendors (Optional)	2/17/02	2/17/02	
Finalist Interviews (Optional)	2/21/02	2/27/02	
Announce Apparent Successful Vendor	2/28/02	2/28/02	
Schedule Debriefings	2/28/02	3/4/02	
Hold Debriefings	3/05/02	3/06/02	
Protest Period	3/07/02	4/03/02	
Negotiate Contract	2/28/02	4/03/02	
Sign Contract	4/03/02		
Begin Work	4/15/02		
System Operational		12/31/02	