WSRC-TR-99-00068

WSRC Information Technology Baseline FY2000-FY2002 (U)

April 1, 1999

UNCLASSIFIED

DOES NOT CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION

ADC/Reviewing Official: _____

Date: _____

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY UNDER CONTRACT NO. DE-AC09-96SR18500

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability of responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by the trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

WSRC-TR-99-00068

WSRC Information Technology Baseline

FY2000-FY2002

April 1, 1999

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

This page intentionally left blank

Contents

1.0 Executive Summary **1-1**

2.0 Plan Objectives **2-1**

3.0 Plan Responsibilities **3-1**

4.0 Plan Scope and Organization **4-1**

4.1 Applications Delivery and Support 4-1
4.2 Division Computing Support 4-1
4.3 Information Delivery Services 4-1
4.4 Computing and Communications Infrastructure 4-1

5.0 Enterprise IT Strategies **5-1**

5.00 Introduction: Situation Analysis and Key Issues 5-1
5.01 Architecture and Standards 5-1
5.02 Self Assessment and Benchmarking 5-2
5.03 IT Planning Integration 5-3
5.04 Data Planning and Management 5-3
5.05 Computer Security 5-4
5.06 Enterprise Management 5-4
5.07 Integrated Customer Service 5-5
5.08 Software Development Tools 5-5
5.09 Development Methodology 5-6
5.10 Business Process Alignment and COTS 5-6

6.0 IT Baseline – Applications Delivery and Support **6-1**

6.00 Introduction: Situation Analysis and Strategic Overview 6-1
6.01 Financial Systems Strategy 6-2
6.02 Human Resources Systems Strategy 6-2
6.03 Training Systems Strategy 6-3
6.04 Personnel Security Systems Strategy 6-3
6.05 Procurement and Materials Management Strategy 6-5
6.06 Maintenance and Facilities Systems Strategy 6-5
6.07 Materials Accountability Systems Strategy 6-5
6.08 Environmental Systems Strategy 6-6
6.09 Health Physics Systems Strategy 6-6
6.10 Industrial Hygiene and Medical Systems Strategies 6-6
6.11 Technical Systems Strategies 6-7

7.0 IT Baseline - Division Computing Support **7-1**

7.00 Introduction: Situation Analysis and Key Issues 7-1
7.01 Division Field Support 7-1
7.02 Small and Mid-range Systems Management 7-2
7.03 Division IT Planning and Business Engineering 7-2
7.04 Division Applications Support 7-3

8.0 IT Baseline - Information Delivery Services 8-1
8.00 Introduction: Situation Analysis and Key Issues 8-1
8.01 Document Management and Records Systems Strategies 8-1
8.02 ShRINE and Internet Services 8-2
8.03 Data Warehouse Services 8-3
8.04 (Blank) 8-3
8.05 Electronic Mail and GroupWare Strategy 8-4
9.0 IT Baseline: Computing and Communications Infrastructure 9-1
9.00 Introduction: Situation Analysis and Key Issues 9-1
9.01 MVS Computing Strategy 9-2
9.02 Business UNIX Computing Strategy 9-4
9.03 Consolidated VMS Computing Strategy 9-5
9.04 NT Computing Strategy 9-5
9.05 Desktop Computing Strategy 9-5
9.06 (Blank) 9-5
9.07 (Blank) 9-5
9.08 (Blank) 9.5
9.09 Scientific Systems Computing Strategies 9-7
9.10 Voice Services 9-6
9.11 Data Network Services 9-7
Appendix 1 - Plan Baseline A1
Appendix 1.1 - Plan Baseline/Cost Summary
Appendix 1.2 - Plan Baseline/Manpower Summary
Appendix 1.3 - Task Detail
Appendix 1.4 - Plan Baseline - Capital Crosscut
Appendix 2 - Plan Alignment A2
Appendix 2.1 - Architecture

1.0 Executive Summary

This Baseline Plan for Information Technology documents requirements and plans for information technology needed to support the mission of the Savannah River Site in fiscal years 2000 through 2002.

The plan has been developed by the Information Technology Department (ITD) in partnership with both DOE-SR and WSRC line organizations. In conjunction with the WSRC Strategic Plan for Information Technology, it serves as the primary support document in the SRS comprehensive planning process.

The plan outlines at a high level the key technical strategies that have been established for our four primary areas of IT-related business operation:

- Computing Infrastructure
- Communications Infrastructure
- Applications Delivery and Support
- Division IT Support

In addition, the plan presents detailed tasking with three year for realization of planning objectives in all functional areas.

Five areas of strategic focus, recently validated by the WSRC IT Steering Committee continue serve as strategic goals for the planning effort.

1. Alignment of IT resources to more directly enable accomplishment of site missions
2. Partnering of IT with site customers to optimize and integrate business processes
3. Alignment of IT infrastructure products and services to better meet an increasingly diverse set of business needs and expectations
4. Implementation and promotion of enabling information technologies that will support greater workforce collaboration and productivity
5. Improvement in the quality, integrity, and security of the site's IT resource investment

Cost and manpower estimates have been developed to support plan implementation through FY2002.

	FY1999 (EAC)	FY2000	FY2001	FY2002
Service Pool (IT Infrastructure)				
Baseline Plan		$61,994.0	$43,117.0	$44,180.0
Budget	$63,094.0	$59,800.0	$38,000.0	$39,000.0
Direct Work				
Baseline Plan		$12,695.0	$15,381.0	$14,932.0
Budget	$10,401.8	$12,064.0	$12,667.0	$13,301.0
Manpower				
Baseline Plan		361	362	341
Budget	333.0	333.0	333	333

In the service pool area, proposed costs will decline in FY2001 reflecting primarily the completed buyout of the site telephone system (RTS) system in FY2000. Additionally, however, declines reflect continuing WSRC strategy to redirect division unique scope and costs away from overhead funding and toward customer-controllable services wherever possible.

Discrepancies between plan requirements (outlined here) and IT funding targets will continue to be negotiated annually via the Annual Operating Plan process, and business justification for specific investments will be subject to the review and approval by the IT Steering Council, WSRC Senior Management, and, as required, DOE-SR.

2.0 Plan Objectives

The plan has the following objectives:

- Identify and validate a comprehensive long-term direction and expectation for SRS computing and communications services as part of the site's Comprehensive Planning Process.

- Act as an implementing document for the WSRC Strategic Plan for Information Technology and the WSRC Computing Architecture Plan.

- Provide an integrating technical framework around which specific product and service strategies and investments can be based.

This page intentionally left blank

3.0 Plan Responsibilities

Strategies and tasks proposed in this baseline are the responsibility of the WSRC Director, Information Technology Department reporting to the WSRC Vice President, Administration and Infrastructure Division.

Specific tasks identified in this plan are additionally subject to the review and approval of the WSRC IT Steering Council and, as required, the office of the Chief Information Officer (CIO) of DOE-SR.

This page intentionally left blank

4.0 Plan Scope and Organization

Strategies and tasking presented here are structured around WSRC's four primary areas of business operation:

- Applications Delivery and Support
- Division Computing Support
- Information Delivery Services
- Computing and Communications Infrastructure

4.1 Applications Delivery and Support

Scope of this functional area includes production support for the site's current portfolio of business and technical applications as well as proposed strategies and tasking for phased replacement and updating of applications in key business areas.

4.2 Division Computing Support

Scope in this area reflects WSRC continuing emphasis on shifting IT manpower and resources toward more direct, mission specific support activity in the field.

In addition to core businesses of direct-funded field support and mid-range systems facility management, new customer-requested focus areas have been identified including IT planning and reengineering support as well as division applications support.

4.3 Information Delivery Services

Scope here represents corporately managed systems and infrastructure to provide effective end user tools to access needed information more easily and to communicate more effectively with coworkers and other site stakeholders.

Included here are traditional Records and Document services, ShRINE (the SRS Intranet), the SRS Data Warehouse, electronic mail services, and new collaborative services based on the Lotus Notes environment.

4.4 Computing and Communications Infrastructure

Infrastructure services continue to be made up of those computing and communications needs that are most cost effectively supported by corporately sized and centrally managed IT utilities.

In the computing area, services include the traditional IBM mainframe environment as well the more strategic UNIX and NT platforms. Also included are the site's central desktop support function, legacy VMS work, and the Scientific Systems cluster in SRTC.

Within communications, standard site voice communications is included as well as the SRS Data Network (SRSNet) and site CATV video distribution system.

This page intentionally left blank

5.0 Enterprise IT Strategies

The WSRC Enterprise IT area guides provides planning activities across all IT business segments with critical, company-level focus on the areas of integrated planning and delivery of site information services, compliance with the many Federal regulations affecting IT acquisition and use, and the application of best business practices and disciplined processes in the management and protection of the site's information resources.

Included here are strategies for ongoing benchmarking and self assessment of WSRC's IT operations, planning integration and alignment with site reengineering activities, programs for effective data and computer security management, formalized software engineering and change management, project management, and integrated customer service and response.

5.00 Introduction: Situation Analysis and Key Issues

WSRC's focus on consolidated IT planning and management remains strong in the current environment, and moderate investment in these areas is producing significant results.

Planning at the architecture level has resulted in an unprecedented level of IT standardization within the SRS environment which has, in turn, lowered support costs and improved quality throughout the IT operation. Tactical IT planning is task-based and is already well integrated into the site Annual Operating Plan (AOP) processes.

All major IT business segments are actively benchmarked to support continuous improvement and the IT function is currently being validated as part of overall site validation activities.

Current efforts are focused on startup of the IT Steering Council who will insure that IT operations are appropriately aligned with the SRS Strategic Plan and the overall business planning.

Enterprise Management strategies, introduced in 1998, are already having positive impact on infrastructure monitoring and management processes, though the challenge of integrating individual "best of breed" solutions into an overall framework is proving to be difficult.

The Computer Security area continues to pose significant challenges in balancing a significant and growing need for more open access to systems and data exchange with external partners and DOE Headquarters with an also growing threat of data loss or compromise. ITD is continuing to actively partner with the Computer Security and customer organizations at all levels.

The Software Development and Management environment is once again an area of special attention as WSRC begins to focus on a more conservative strategy of making moderate, short term enhancements to in-house applications as a less expensive alternative to that of COTS replacements that have very high initial costs. Both here and in other systems areas, management attention on a more disciplined, systems engineering approach based on formal development methodology, project management, change management, and systems configuration control.

The following sections offer a more detailed analysis of the current situation and specific WSRC strategies in ten key IT management areas. Each is supported by a full three-year baseline of planned WSRC operations.

5.01 Architecture and Standards

The SRS Computing Architecture continues its focus on IT cost effectiveness and disciplined operations through its emphasis on computing standards, security, investment in end user enabling technologies, and support for business reengineering and automation.

In March of 1998, WSRC published an updated version in the WSRC Computing Architecture and a further update is underway in FY1999. Many tasks identified in the current IT Strategic Plan are in direct response to direction set in the Architecture, including Enterprise Data Management, the WSRC Computing Standards Program, Computer Security Coordination, and IT Configuration Management.

WSRC believes strongly in the value of architectural planning, and emphasis will continue to be placed on IT architectural direction, business process standardization, and a well-defined set of technical standards.

Architectural principles and strategies will be revalidated annually with the help of WSRC's IT Steering Committee.

Emerging technologies will be evaluated both for strategic use at SRS and as potential lower cost alternative to current products, and a Technology Solutions Center, originally discussed in 1998 will be implemented to provide customers with a hands-on laboratory to explore alternative business processing and information management approaches.

An Application Architecture is also planned in FY2000 to provide consistency and cost effectiveness across WSRC's entire software environment while insuring that site can derive maximum levels of integration with limited investment in technology infrastructure.

5.02 Self Assessment and Benchmarking

In an environment of where IT technologies and resources are undergoing enormous and accelerating change, it is essential that we measure and assess IT operations on a frequent basis to stay abreast of industry trends and best practices.

Independent benchmarking is also a key factor the current budget environment where IT is repeatedly asked to demonstrate not only its cost effectiveness (EM Validation), but also its value to the site's missions (Clinger-Cohen Act).

Active efforts to benchmark WSRC's IT operations began in 1996 and are now in their third year, supported by a formal self-assessment program. These benchmarks have been invaluable in providing WSRC an independent view of its competitive position in the IT area, while offering a wealth of "best practice" opportunities.

The Gartner Group performed the most recent Information Technology Overview Assessment (ITOA) in 1998. And while it indicated that WSRC's IT cost effectiveness in well ahead of peers in most areas, it also provided over seventy recommendations for further improvement, many of which are being implemented in this plan.

With completion of the last overview cycle in 1998 (ITOA), WSRC will focus on new, previously unexamined segments of the business including ShRINE. We will also revisit the SRS data center where commercially available solutions are offering ever-more attractive alternatives for strategic sourcing.

Our direction is to provide measurable and independently verifiable annual improvement in all strategic areas of our operation.

In all areas, WSRC believes that in this environment, it is essential that IT continue to communicate its value and its potential to management and the customer base to insure that IT will have the opportunity to fully enable future SRS operations.

5.03 IT Planning Integration

WSRC's IT planning is already supported by both a strong technical alignment with the WSRC Computing Architecture and sound baseline planning through the Accelerated Cleanup Plan (ACP), Future Use Plan, and Annual Operating Plan (AOP) processes.

In the current planning period, however, additional alignment and integration is expected as a result of creating the SRS Comprehensive Plan framework, anchored by the SRS Strategic Plan.

WSRC recognizes the role played by IT as a basic element of the site's strategic infrastructure and will, through the comprehensive plan (and any successors) maintain formal linkage between strategic and tactical planning efforts.

In addition, WSRC will continue to support active participation in IM planning at the Agency level as well as full crosscut reporting of IT operations via the annual call for the Outyear Budget and related IT investment requests.

The Government Performance Results Act (GPRA) is an important emerging issue for SRS. It (together with an implementing DOE Order and DII) requires the Agencies and their Subcontractors to set goals and to report on progress toward reaching such goals. The SRS Strategic Plan is a direct response to the requirements of the GPRA, and in support of that plan, DOE-Information Technology (IMTD) will prepare an Information Technology Strategic Plan (FY2000-FY2002) in 1999 and a more comprehensive Information Management Strategic Plan (FY2001-2003). Both will require active collaborative roles between WSRC and its fellow SRS stakeholders.

5.04 Data Planning and Management

Though WSRC has made significant progress in supporting data sharing and stewardship of the site's information resource, much remains to be done in these areas.

Data Planning and Management are key components of both DOE's 1997 Information Management Strategic Plan and the current DOE-Headquarters Information Architecture Project (HIAP). Data Management is also one of five areas of specific focus in the 1998 SRS Computing Architecture.

A company-level data policy is in place, and a number of shared data structures have been defined and implemented. A new Data Stewardship program is being initiated. The SRS Enterprise Repository has been populated with documentation of some, but not all, of the database structures that support the production business systems.

However, a strong data culture is not present in the software development community, and the strategic importance of improved data planning and stewardship has still not been embraced by site management.

In the database area, a clear Oracle standard has been in place for some time, but the site's portfolio of legacy applications leaves limited DBA resources and software costs spread across four DBMS systems (ADABAS, DB2, INGRES, Oracle).

Microsoft's SQL Server product presents yet a further challenge as it is already used in the LANMAS system, and it will be a growing strategic contender for other applications.

With limited resources available for top-down data and database investment, WSRC strategy will focus on solidifying its Data Standards and Data Stewardship programs while investing only in those shared operational data environments where there is already significant interest (SRS Buildings/Structures, Environmental Data, Master Equipment List, Subcontractor Personnel data).

Work will continue to further integrate Data Configuration Control within the larger ITD Configuration Management Program.

In the database area, WSRC will reluctantly maintain all current DBMS platforms necessary to support the legacy applications portfolio while offering solid, DBMS-centered arguments for the migration of obsolete applications to a smaller and more cost effective database infrastructure.

Oracle will remain the platform of choice for the site's core business portfolio, but core competencies will be maintained to support emergent SQL Server load, and the WEB-based data server environment will be closely monitored to maintain competitive strength and capability as this set of technologies continues to mature.

5.05 Computer Security

WSRC has implemented basic computer security processes and is compliant with current requirements.

However, most of the site's computer security infrastructure is still implemented in a platform-specific manner and does yet reconcile risk minimization with needed flexibility. Conflicts between an expansive philosophy of greater information and openness and the compromise of legitimate personnel and government interests remains heated, and is the subject of debate.

Internal security strategy continues to be based on a trusted SRS-resident model (minimal internal encryption, etc.). However, end user training in security matters remains minimal and is declining.

Significant opportunities for increasing the overall integrity and functionality of SRSnet and SRS systems exist through the adoption of relevant security standards, the implementation of a consistent cross-platform security infrastructure, improved efficiencies in processes, and user education.

In the current environment, ITD personnel have developed effective partnerships with WSRC Computer Security to improve the operation effectiveness of IT systems delivery while properly addressing legitimate security concerns.

In the future, security processes will be implemented consistently for all platforms. Manual processes will be automated where feasible. Also, WSRC's ITD and Security organizations will work actively to heighten end user awareness and understanding of site security concerns.

At the computer accounts management level, WSRC has suffered a major setback with the failure of recently acquired automated accounts software package (RAS) to meet internal security requirements. This process remains labor-intensive and will continue to do so until an acceptable automated solution is found.

5.06 Enterprise Management

WSRC's successful implementation of several enterprise-level tools has improved the management profile, However, many systems management functions still rely upon manual processes, and our systems management is still primarily platform-centric.

Greater stability of the distributed environment is an increasingly critical customer issue, and a sound systems management infrastructure is seen as a key enabler in meeting customer expectations.

Our approach, supported by industry experts, has been to acquire best of breed solutions with attractive payback, and to integrate this environment where possible as these individual products mature.

During 1998, WSRC completed implementation of enterprise-level systems management utilities in the areas of Event and Availability Management, Desktop Asset Management, and Integrated Job Scheduling. Most efforts have been successful in decreasing costs, reducing risks, and/or improving service levels, though the issue of cross-product integration is of increasing concern.

Improvement opportunities still exist in the areas of Storage Management, Backup and Recovery, Printing Architecture, and Capacity Planning. Enhancements to enterprise-level systems management will continue, with new initiatives being identified.

WSRC will continue to implement common, cross-platform system management utilities. Also, efforts will be initiated to address emergent opportunities in the areas of Storage Management, Backup and Recovery, Printing Architecture, and Capacity Planning.

In addition to investing in new technologies, however, WSRC will also focus on process changes and improvements in advance of/in lieu of product procurements.

Looking at the longer term, WSRC expects maturity of several Enterprise Management frameworks in FY2001-FY2002 and will implement broader based integrated management solutions (i.e., single sign-on) as these products evolve to support the full set of SRS requirements.

5.07 Integrated Customer Service

WSRC continues to improve its IT customer service operations, and has achieved broad recognition as a "best-in-class" performer. Increased standardization of the SRS desktop brought about largely by the PC Lease Program has been a major success factor.

Strategy has centered on expanding the effective use of technologies (including Vantive, Teloquent, and pcAnywhere) to automate business processes, improve information capture, manage call volumes, and increase first-call problem resolution.

Staff augmentation and WSRC employees currently man the CRC. Unfortunately, the staff augmentation employees must be rotated on an annual basis. Strategic outsourcing of these, and additional field support services will continue for the planning term.

WSRC will continue migration to proactive single point of contact for all service requests, while new strategy will integrate computer technologies with business operations and address increasing users' skill levels.

Support policies will be developed and implemented for non-standard products, and end user IT training in both generic and SRS-specific tools will be expanded through a computer-based training approach (CBT).

Technology will be upgraded and functionality will be enhanced as justified. However, overall operations will continue to be centered on the highly effective Vantive software environment that is already installed.

5.08 Software Development Tools

Though WSRC still believes that commercial off-the-shelf software (COTS) offers significant long term support advantages as an alternative of choice for legacy systems replacements, budget pressures will continue to limit the pace at which such replacements can be accomplished.

These factors, as well as the desire to make optimal use of limited developer resources, will continue to drive consolidation and refinement of our software development tool set. In addition, we will

continue to build our infrastructure of shared data structures and reusable software components, and begin to implement message-brokering technology to better integrate both in-house developed and commercial off-the-shelf software.

In the tool area, WSRC will build upon an already strong Oracle base, and will continue to move toward WEB-based delivery of applications through use of emerging Java-based tools. WEB-based delivery will improve both our internal software distribution and improve support for our external stakeholders.

In the area of integration, gateway products continue to provide near-seamless access to data across the ADABAS, DB2, and Oracle database environments and use of shared data structures has proven to be an effective means of achieving integration at the data level. While integration at this level greatly improves the quality of information shared among site applications, true process integration requires "message broker" technology to provide seamless transaction processing among core business systems, whether in-house developed or COTS.

5.09 Development Methodology

WSRC has just begun to implement an engineering-based approach to software development by creating and adopting a standard methodology based on the principles of WSRC's current E8 manual which will be retired as it is merged into the scope of an expanded E7. Creation of a central work request management system and definition of common software development, implementation, and management processes are also in process and will provide a consistent approach to managing application development activities across all of ITD's development groups, including those engaged in in-house development as well as COTS implementation.

As WSRC has continued to align IT support with SRS business operations and to implement the requirements of this methodology, we have seen significant improvements in consistency and standardization across our consolidated software development and maintenance environment. Implementation of standard practices in this area is key to maintaining software quality, ensuring compliance with customer requirements, maintaining control of cost and schedule, and appropriately managing integration issues.

Implementation of ITD's standard methodology and training of WSRC development staff in the revised software engineering practices contained in the methodology, including consideration of data sharing, COTS evaluation/selection, business process and software integration, component development and management, and active project management discipline, are key to overall program improvement.

5.10 Business Process Alignment and COTS

To date, the site has had moderate success in the implementation of commercial software to support specific functional requirements. However, such implementations have provided little integration within the larger SRS business environment. As many of the site's core systems approach obsolescence during the planning period, the challenges for new application delivery grow significantly.

Attrition of application developers with knowledge of site business, coupled with limited hiring in the applications development area, have significantly impaired our ability to maintain significant site systems or to replace them with site-developed systems.

Historically, custom software has always provided the site with the flexibility to meet both changing business needs and to respond to changes in federal regulations. This flexibility has helped develop a culture that relies on the ability of systems to change with the business. This flexibility has led to business practices that have diverged from those available in commercial software.

As budget pressures increase this culture is being challenged to re-look at business practices in the light of commercial software (COTS) that has embedded “best business practices”.

However, until the culture shifts, the risk of COTS customization is still substantial in any potential installation at the site. If the site cannot implement “out of the box”, the integration and support

overhead implied, particularly if multiple COTS systems are involved, will be especially great and will raise the cost of COTS implementation and support.

WSRC still believes that COTS solutions offer shorter implementation cycles and lower lifecycle costs that in house development, and we will continue to utilize COTS to optimize functional areas where possible.

Further integration will be supported at the data and process levels where technical solutions exist and a sound business case can be demonstrated. Ideally, this integration will be made possible through the use of solutions either from single suppliers or from supplier partnerships. A factor in the choice of COTS will be architectures that provide programmatic access to the functionality within the package.

Additionally, the site hopes to work with other DOE sites to influence suppliers to develop DOE specific versions of their software so site customizations can be avoided.

In all systems replacement situations, the Total Cost of Ownership will be a key component of the evaluation model. A standard methodology for determining Total Cost of Ownership will be selected and implemented for use in all ITD system replacements.

Components of such a methodology will include, at minimum:

- Product cost (make or buy)
- Integration/interface costs
- Cost of extending functionality
- Additional hardware & software required
- Consulting & internal support required for implementation and ongoing operation
- Costs for achieving architectural compliance
- Costs to business functions of missing functionality

Budget assumptions indicate that full replacement of the site's business software portfolio will extend beyond the planning period and extended dependence on site-developed systems will continue for some time. In order to support business process integration, continued efforts will be made to integrate existing site systems and new COTS as they are implemented. In addition to traditional methods of integrating systems, such as batch data transfers, newer methods, including message brokering, OLE automation and related components, will be evaluated and utilized as appropriate.

This page intentionally left blank

6.0 IT Baseline – Applications Delivery and Support

6.00 Introduction: Situation Analysis and Strategic Overview

While still meeting business needs in the short term, the site's current portfolio of business applications is in large part dated, inefficiently distributed across multiple hardware and software environments, and increasingly at risk. Obsolescence in this area is without question among the site's most significant strategic IT issues and the operating cost reduction achievable through consolidation and standards is an area of significant opportunity.

Year 2000 compliance issues, originally identified during 1997/98, have been successfully resolved, particularly in the areas of HR and Procurement.

Additionally, most systems accurately support current WSRC business practices. However, mandated freeze periods, to be imposed on all systems during late FY1999 and early FY2000 to insure Year 2000 compliance may have substantial near-term impact on our ability to make timely updates.

The site's implementation of PASSPORT during 1999 has provided an important first step, most obviously for WSRC's reengineered maintenance operations, but also for the site IT business community at large. Having replaced one of the site's oldest and largest mainframe applications, WMS, the UNIX-based PASSPORT product will substantially reduce the site's overall mainframe dependency. Further, as a commercial (COTS) software package, PASSPORT will require significantly fewer IT resources to support the base product over its life cycle.

However, PASSPORT implementation also raises new issues and opportunities in the areas of business process and data integration with related business functions. These issues will need to be confronted within this planning window.

Absent the significant front-end funding necessary for major, multi-system, COTS replacement, WSRC will continue to proceed carefully in the systems area.

However, it is also increasingly recognized that a broad replacement of the site's legacy applications portfolio will be inevitable due to the expected retirement of most of its underlying software infrastructure and the loss of remaining personnel with critical system-specific knowledge. Appropriate plans, methodology, and investment strategy for phased systems replacement are urgently needed to establish this migration path at the portfolio level. Such a focus will insure the operational readiness of the site's business activities in the coming decade and, perhaps more importantly, will provide the perspective necessary to insure that business operation and investments are optimized at the appropriate levels.

Specific strategies and tasks are provided in the following business areas:

- Finance
- Human Resources
- Training
- Personnel Security
- Procurement and Materials Management
- Maintenance and Facilities Management
- Materials Accountability
- Environmental Management
- Health Physics
- Industrial Hygiene and Medical
- Other Technical Systems

6.01 Financial Systems Strategy

The site's core financial systems are meeting the day-to-day operating requirements of both DOE and WSRC management. However, obsolescence of some critical underlying software infrastructure elements and revised DOE headquarters financial reporting requirements will drive several major system changes during the planning period.

Major legacy elements of the financial suite (IBARS and CLS) are mainframe-based and are expected to remain so through at least FY2002. More recent applications, (TACs and IBS) have been developed in the more strategic Oracle/UNIX platform.

All financial systems are Year 2000 compliant at this time.

With regard to TACS, support for the underlying software for this application has been withdrawn by the vendor, and this functionality must be ported to another environment as a matter of remediation as soon as possible.

The SRS Financial Warehouse, originally implemented in 1996 has assumed a dominant role in supporting the financial query and reporting needs of management. However, both the need for more training in the warehouse access tools and the relative complexity of the underlying business data are ongoing issues with the end user population.

The potential for emergent work exists with the introduction of the DOE-HQ Integrated Planning Accountability and Budgeting System (IPABS). Requirements for the system have been developed with field office input solicited and received. As field office financial personnel assess the requirements and data interface needs, requirements for automated data feeds to IPABS from site systems may emerge.

Though technically a financial function, WSRC's accounts payable activities are closely aligned with procurement, and systems supporting this area are primary candidates for replacement if funding can be identified.

Strategy in the financial applications area will focus on continued support of the existing portfolio, system modifications for emergent reporting needs, business re-engineering efforts, and active system replacements as necessary.

6.02 Human Resources Systems Strategy

Payroll and Human Resources systems remain firmly centered around the TESSERACT product and are expected to continue to do so for the planning term. The customer base indicates the system, despite its age, continues to meet current business requirements.

Considerable work related to Year 2000 compliance has been completed in FY1998/99, and during that process, some historically unique SRS requirements were replaced by functionality in the base TESSERACT product. These efforts notwithstanding, however, overall core system remains heavily customized, and continuing loss of technical staff with knowledge of the SRS-specific installation is a matter of growing concern.

Also of importance, SRS is one of the few remaining customers who run the TESSERACT product in the older mainframe-based ADABAS database environment. Most others have migrated, either to the more robust DB2 environment, or away from the mainframe altogether. Migration is especially difficult in view of the custom code in place at SRS, but such a move may become mandatory if vendor support in the older environment is withdrawn.

Reengineering activity in the HR area will continue at a modest level but new processes are expected to suggest major system replacement. However, requirements presented by the multi-company structure at SRS, as well as the emerging needs of new ownership structure may have system impacts that are still not known. In all areas, WSRC will pursue a strategy that minimizes future customization and relies more heavily on the business practices inherent in the standard commercial product.

The extreme sensitivity of personnel data is a growing concern in the data access and reporting area. To support management needs for more flexible access to such information, WSRC will develop a warehouse-based reporting environment specifically for "sensitive" people information to replace the current Intellect-based HR-INFO reporting environment.

6.03 Training Systems Strategy

TRAIN, the site's core training management application continues to meet the most basic operational needs of the WSRC's central training organization. However, this system is old and not readily upgradable. Further, it is one of the few legacy business systems still to be ported from a shrinking VMS environment.

In many cases, the facilities have independently developed applications to extend TRAIN functionality to meet specific needs. WSRC is already working aggressively to close this gap with site-wide solutions as coordinated by ITD Division Computing organization and the site Training Council.

Cost pressures are forcing the training customer toward a reengineered approach for training planning, scheduling, and registration, one that will require higher levels of electronic interaction by end users. ShRINE already provides direct end user access to training data, and plans call for the expanded use of this interface for actual course registration.

Automated logging of attendance using bar coding is another cost saving opportunity that is of particular near-term interest.

Extensive Data Warehouse development in the training area has eliminated most operational reporting, though this data store is not widely used outside of the site's own central training organization. Strategy will focus on repositioning this data around the customer's stated preference for a WEB-based interface to all central training resources and information.

6.04 Personnel Security Systems Strategy

Cost pressures in the personnel security area are already considerable and are likely to worsen over the planing period.

The "Questionnaire for National Security Positions System" (QNSP) continues to meet most current requirements, though the infrastructure is at moderate risk due to a shortage of technical skills in the niche software that underlies this system.

Tracking and reporting functions continue to be supported by a series of desktop databases, though electronic interfaces to the complex-wide Personnel Security System need to be improved.

For local processing needs, a competing system, the Personnel Security Information Tracking System is under development at Hanford, and this system has strong DOE-HQ support.

Given a situation of limited funding and a stable business environment, WSRC strategy will sustain the IT systems in this business area at their current functionality and will evaluate alternative solutions as they become available.

6.05 Procurement and Materials Management Strategy

WSRC's Procurement & Materials Management functions currently depend on three major business systems:

Procurement Cycle System (PCS) provides primary procurement and accounts payable functions and additional support for related procurement operations including Stores. This legacy mainframe system is now over seventeen years old, custom-coded, and based on the increasingly obsolete ADABAS database platform. An acute shortage of knowledgeable resources exists both for the application and its underlying programming infrastructure. Though it has been made Year 2000-complant, WSRC believes that PCS has a limited remaining useful life.

Field Materials Tracking System (FMTS) is a much newer system that provides support for field requisitioning and monitoring of procurement processing. It is four years old, Oracle based, and also custom coded.

Asset Management Information System (AMIS) provides support for asset control. It was originally custom coded at Lawrence Livermore, acquired by WSRC in 1995, modified for SRS use, and installed in 1996. It is also Oracle based.

Active efforts are underway to consolidate asset and materials management functionality around the core FMTS software into a Consolidated Materials Management System in the near future, beginning with a migration of Stores functionality out of PCS during FY99. Other systems to be migrated within this strategy will include AMIS (non-capital items), CEMCOM, Precious Metals, and the site Chemicals Inventory (CIIS)

Though this strategy is not consistent with an all-COTS approach, the solution does provide a close fit to existing business processes and offers what is broadly recognized as a more realistic approach than that of a full COTS replacement in the current budget environment. Additionally, the removal of SRS-specific functionality from PCS provides for a much cleaner migration of that system to more readily available COTS procurement and payables software.

WSRC currently plans to replace the procurement and accounts payable functionality of the PCS system during the later stages of the planning period (FY2000/01) pending the availability of funding. Interfaces between this new environment the recently acquired PASSPORT system are known requirements that will require site focus and active collaboration between IT and these key functional areas.

For the Procurement and Accounts Payable functions, WSRC believes that a strong business case can be made for replacement of remaining functionality with a commercial product, and, funding permitting, we will pursue that strategy during FY2000.

In the meantime, work will continue to develop and expand data warehouse structures in the procurement and assets areas. This expansion has already allowed WSRC to retire standard reporting in these environments and to prepare for data migration to a replacement system environment as it evolves.

6.06 Maintenance and Facilities Systems Strategy

Cost reduction is a major driver in the maintenance area where over 20% of the total SRS budget is consumed annually.

WSRC's implementation of Computerized Maintenance Management System (CMMS) is proceeding on schedule, and WSRC's rollout of the base PASSPORT product is expected to complete during FY1999.

At that time, WSRC will retire the WMS application, one of site's oldest and largest legacy mainframe systems, thereby completing a major step in the consolidation of core applications around a strategically positioned computing infrastructure.

Historical work order data has been successfully archived and will be on line and available indefinitely, as needed, through the SRS Data Warehouse. Similar effort will be made to extend the accessibility of PASSPORT through a set of Data Warehouse interfaces.

As the core PASSPORT rollout is completed, attention is already shifting to the process and data interfaces that will be required between the CMMS and related business functions (Materials Management, Finance, Human Resources, and Training). In most cases these requirement surface in the operating facilities (vs. the related support functions) where benefits from integration are at their highest. But, given current funding pressures, investment in these interface points will be challenging and a strong business case for further investment will be necessary in order to achieve the results envisioned during the maintenance reengineering effort.

6.07 Materials Accountability Systems Strategy

Successful completion of the LANMAS system in 1998, and the ongoing rollout of the system across the DOE complex has established WSRC as a leader and capable producer of corporate level software to support Departmental requirements.

At present the LANMAS product is installed at nine DOE sites, and the production product is stable and operating per design.

Work continues to tune the performance of the core software, and an SRS-specific version of LANMAS (SRSMAS) which has been implemented to support the site's own specific materials management requirements.

The ability to more efficiently transfer the large amounts of classified data maintained by LANMAS among DOE sites is an area of increasing concern, as is the need to more closely integrate and automate data transfers from instrumentation and other non-traditional input sources.

Looking ahead, WSRC hopes to leverage its success with the LANMAS project by participating in larger nuclear materials information and management integration scope at the national level, most immediately, the NMMSS contract.

Additionally, WSRC will work to consolidate complex-wide data in a secure NMIS Data Warehouse at SRS.

Another strategy will focus on the addition of dial-in capability to the consolidated LANMAS environment for the smaller DOE sites that do not have the resources to provide their own processing infrastructure

Transaction Based Waste Accounting is another area of strategic. This system is intended to provide a pilot design for the rest of the DOE complex in handling nuclear material waste in the MC&A records.

In all areas, WSRC's overriding strategy is actively promote IT-based solutions that will provide and encourage consistent materials accountability practices.

6.08 Environmental Systems Strategy

The site's portfolio of environmental applications remains distributed. Strong support from senior management and a funded program for systems and data integration has enabled WSRC to make solid progress in this key area.

A significant portfolio of departmental systems including the Geochemical Information Management System (GIMS), Air Emissions Inventory, Environmental Restoration Tracking, and Chemical Inventory still provide the bulk of this production environment. However, data is fragmented across these systems, and access to a more integrated view of this information remains challenging.

Data acquisition continues to be especially difficult where work is being performed by subcontractors Efforts to address this problem are currently focused on currently being addressed the Administrative and Financial Support Module (AFSM) and the Environmental Data Integration Project.

Streamlining of data uploads for environmental stewards and greater automation data extract processes also present opportunities for more efficient support operations.

WSRC strategy in the environmental area will remain application focused for the planning period, though efforts will continue to design and implement a fully integrated Environmental Database Environment.

Applications, which have been assumed from end user organizations, will be more fully documented, and they will be subjected to the more formal discipline of a production control environment.

Most functionality in the Chemical Information Inventory (CIIS) will be migrated to FMTS as part of the Consolidated Material Management System effort. Also, Oracle's commercially available Environmental Module will be implemented to support National Pollutant Discharge Elimination requirements (NPDES).

6.09 Health Physics Systems Strategy

Legacy systems supporting the site's Health Physics function remain largely VMS-based and are custom-written. Four systems, HPRED, HPAREH, RQB, and TLD support most current requirements but all have significant age.

Among them, the HPRED system is a primary candidate for replacement by the Total Exposure module of the recently acquired PASSPORT system, and this implementation will go forward in the current fiscal year. Gaps are known to exist in the product's ability to fully satisfy DOE requirements, and, given an extremely constrained budget environment, full implementation scope has not yet been finalized by the Total Exposure Team.

HP is also evaluating replacement of the TLD processing software and whole body count software

6.10 Industrial Hygiene and Medical Systems Strategies

In the Industrial Hygiene and Medical Area, WSRC's implementation of the commercial SENTRY system continues to provide major business benefit to this customer base and meets most site requirements for medical documentation and reporting. Additionally, the systems offers important productivity enhancing capabilities including automated scheduling and on-line test instrument data collection/storage.

Plans call for porting of all legacy medical system functions to the SENTY environment and retirement of the legacy mainframe medical system in FY1999.

WSRC also plans to use the Industrial Hygiene module of SENTRY to replace the existing VMS-based Flow Gemini system.

Other modules that are believed to hold significant opportunity include the Electronic Notes Module and the Work Restrictions Module. These extensions will be actively pursued as WSRC technical resources become available.

6.11 Technical Systems Strategies

In addition to the systems areas above, WSRC will continue to support a series of special purpose business and technical applications at the direct request of the customer base.

WIND, the site's Weather Information System, remains a dominant application. This Oracle/VMS system will also remain under routine maintenance.

The Fire Protection system (FPDS) is also a large system that will remain under routine maintenance.

Other systems include division-focused applications including ADMIN (DC&S), Automated Fuel Dispensing System (AFDS) , and METLAB (Strategic Materials).

In most cases, these applications are stable, though some are hosted in a very diverse set of legacy environments, many of will are planned to be retired. Where cost effective, these applications will be migrated to platforms that are more current and supported with WEB-based application interfaces based on Oracle's Web technology.

This page intentionally left blank

7.0 IT Baseline - Division Computing Support

7.00 Introduction: Situation Analysis and Key Issues

WSRC continues to place major strategic importance on improving both the quantity and quality of IT support provided directly to the operating divisions.

During 1998 the Division Computing organization was formed within the Information Technology Department (ITD). The organization's mission is to establish and grow stronger support relationships with the line customers and to leverage the strengths of the entire IT organization in addressing bottom-line information problems in the field.

With strong relationships established with its pilot customers, NMSS, ER, and SRTC, this organization will be responding to customer requests both by expanding its capabilities with new customers (HLW and Tritium) and by growing the breadth of its service offerings (Small and Mid Range Systems Management, IT Planning and Business Reengineering Support)

Site demand for IT services in the field already continues to exceed available IT resource availability and, funding cutbacks notwithstanding, demand is projected to grow moderately during the planning term.

Demand will rise for several reasons:

First, as new IT systems such and PASSPORT, Lotus Notes, and AIM take on a more central and critical role in supporting facility operations, greater technical knowledge will be necessary to manage and integrate these systems with overall operations.

Second, as continuing funding pressures on the centrally provided IT services force reductions in globally provided service levels, a much greater level of demand is expected in situations where line customers have both a justifiable need for higher support levels and the funding to support them.

WSRC will pursue this scope in four primary categories:

- **Division Field Support** – An extension of standard desktop support service and Level 2 technical support provided by dedicated, co-located, direct funded personnel in the field.
- **Small/Mid Range Systems Management** – Overall systems management for customer-dedicated servers/processors operating in the field (and outside of the scope and service levels provided by centrally managed IT).
- **IT Planning and Business Reengineering Support** – Direct funded IT Point of Presence in the customer location to provide planning and coordination of IT services (including Division funded PC leasing/maintenance) as well as specific IT focus division-centered reengineering efforts.
- **Division Applications Support** – Dedicated IT support for updating and standardization of applications software developed in the field.

7.01 Division Field Support

Demand for direct-funded field support has continued to grow in 1998 despite significant budget pressures in WSRC's line operations, and overall, this business is expected to continue to expand through the planning period as the needs of additionally divisions are identified and appropriately funded in Annual Operational Planing (AOP).

However, for most business customers, aggressive cost management and containment is a primary driver. The challenge for the IT Field support organization will be to provide those services which require both facility-specific knowledge and strong IT technical skills at a cost that remains less than that required to re-grow shadow computing staff in customers' home organizations.

While basic desk-side hardware and software support remains an important service deliverable, requests of IT field support are expanding into new business-specific areas.

Technical assistance with strategic site applications implementation and rollout (PASSPORT/AIM/ Documentum) has emerged as a substantial field requirement, and WSRC would expect similar demands as other new applications are deployed during the planning period.

Additional assistance is also being requested in supporting Divisional databases and small applications (discussed in 7.04) as well as support for the ShRINE provider program.

Increasingly, specialized desktop applications, complex query and reporting requirements, and/or automated workgroup processes have driven division need for technical support from other ITD organizations, and this matrix approach will be used increasingly to deploy central staff quickly and efficiently to augment field resources as needed for specific limited field engagements.

An additional critical success factor in this business area remains the continued availability of personnel with both a working knowledge of site operations and strong/current technical knowledge of the IT systems and technology that are actually in use. The importance of support staff training in both areas is of key importance and will receive special attention.

Strong customer contact and coordination of support efforts at the Division level is yet another key element of WSRC strategy, already improved by the completion of the Division Computing management team. It is essential that management communications in this area remains strong so that first, IT support staff fully understand the priorities of the business, and second, that field management understand how standards, training, and clear communications can maximize the effectiveness of the technology and support personnel that are available.

7.02 Direct IT Infrastructure Support

The need to provide direct support for division-owned systems operations continues to rise as in house technical resources in the customer organizations declines and applications reach levels of utilization that require higher availability and reliability.

In most cases this scope is based in non-strategic technologies (VMS/Apple O/S) and has evolved informally, though NT support is a growing requirement.

Some consolidation can be provided at a physical level through use of ITD's centralized VMS and NT hosts.

WSRC expects to provide this service on a facility-managed basis so long as the supported applications are deemed necessary by the customer.

7.03 Division IT Planning and Business Engineering

As the ITD's Division Computing Support Organization continues to expand its field presence and improve its dialog with Line Management, it is becoming increasingly clear to the customer base that are opportunities available to improve the cost effectiveness of their IT investments. However, such improvement will require a much closer working relationship with the IT organization and other divisions for planning, coordination, and reengineering support.

At present, there is a lack of standardization of platforms and products across divisions and division Management is often unaware of site IT standards or the long term consequences of a poor or nonstandard technology selection.

In many instances, applications are being developed redundantly by the divisions, and site system rollouts (i.e., PASSPORT or AIM) are having very significant technical and operating impacts in the field that must be well understood

To that end, a service offering has been identified in current WSRC strategy, to provide direct support for this aspect of the business.

Customers are cautiously embracing our direct funded, co-located service model. Customer IT task teams are already in place with more being created. Several already have strong strategic working relationships with department and, in some cases, division management.

7.04 Division Applications Support

A significant number of legacy systems exist in the field that, historically, have been developed and managed outside of the purview of WSRC's central computing organizations.

Though they appear to be unique because of singular customer focus and viewpoint, in reality, duplicate applications and redundant data exist across the site as a direct consequence of this activity.

Multiple development tools have been used to create these applications adding cost to the site's application support. With few exceptions, a consistent configuration management standard has not been followed, and standard DBA practices have not been used which would allow greater sharing of data among different customers.

As budgets continue to shrink, and resources grow more rare, ITD is being asked to assume support responsibility for more and more customer-originated applications.

WSRC will move aggressively to consolidate management of this application base where appropriate. Customer applications will be migrated to site standard software tools that can be more fully supported by the Customer Response Center and scaled easily if the size of the user base grows.

Standard ITD configuration management procedures will be implemented. Also, the integrity and reliability of data will be improved by leveraging ITD's centralized DBA functions to optimize data sharing and validation.

This page intentionally left blank

8.0 IT Baseline - Information Delivery Services

8.00 Introduction: Situation Analysis and Key Issues

WSRC's family of information delivery products, including the Electronic Document and Workflow Systems (EDWS), ShRINE, and the SRS Data Warehouse, continue to provide step change improvement in the productivity of the workforce. And with the introduction of Lotus Notes early in this planning period, the power of these enabling technologies will accelerate.

During the last planning cycle it was recognized that there is a significant and growing overlap in several of the underlying information delivery technologies, driven in large part by the explosion of WEB-based functionality available in the marketplace. The Information Delivery Services section was formed within the Information Technology Department to bring these technologies together in a more seamless and cost effective product set manner. Results have been significant. For example, SRS Data Warehouse contents are increasingly delivered through ShRINE. Also, the project to integrate the site's electronic mail system, cc:Mail, with the workflow and routing capabilities available in Lotus Notes, is on schedule for completion this year.

Growth in all of these areas is significant and user acceptance is already high and growing, although WSRC believes that further investment in ongoing end user training is needed.

Greater flexibility and the "ease of use" associated with these products continues to be a critical issue as more of the site gains access to the technologies and they are employed in more nontraditional uses.

WSRC's goal remains the same: to improve the productivity and information self-sufficiency of the entire workforce by making available a standard set of technologies and tools that are straightforward, easy to use, and highly customizable by the end user to more effectively respond to specific business needs.

WSRC will continue to place considerable effort on the consolidation of its information delivery services around a clearly defined and closely integrated family of technologies upon which longer term information delivery strategy can be implemented.

Strategic emphasis will also be placed on improving the reliability and availability of these increasingly critical services as both the size and complexity of this environment grows and its criticality to normal business operations expands.

Specific strategies and tasks are proposed for each of the four primary products in this business segment:

- Document Management and Records Administration
- ShRINE and Internet Services
- Data Warehouse Services
- Integrated Mail/GroupWare

8.01 Document Management and Records Systems Strategies

The site's collection of document management and records systems continues to meet business requirements as currently defined. However, these systems are aging; they span multiple operating platforms (MVS, VMS, and UNIX); and the availability of staff who are knowledgeable of this highly customized environment is an area of growing concern.

Requirements for tighter integration between document systems are growing, and several needs have been identified to provide electronic document access to both the maintenance community (via PASSPORT) and engineering community (via AIM).

Performance is another recognized issue in the current environment. Storage requirements and system response times have reached upper thresholds of acceptability. WSRC will address this issue as a part of overall UNIX refresh strategy early in the planning period.

Significant funding constraints continue to limit the ability to significantly expand enterprise-level document management solutions in the short term. However, WSRC will closely evaluate all available opportunities to migrate legacy Document Control (DCR) and BASIS applications to a more strategically appropriate environment during this planning period.

The site's EDWS system will remain the system used as the repository for formal site electronic records and the index into paper site records. The implementation of the mail-enabled Lotus Notes product will add personal and work group document management capabilities as well as the introduction of both ad hoc and procedural work flow applications. These applications will utilize the electronic signature capabilities of Notes, and it is likely that they will generate site records. An interface between Notes and EDWS will be developed so that formal records-generating workflows in Notes result in the transfer of records to EDWS for statutory -driven retention.

8.02 ShRINE and Internet Services

ShRINE and related SRS Intranet services continued to mature during 1998/99 and the product is rapidly evolving into the site’s dominant information delivery vehicle.

Volume continues to expand at significant levels, and, with over 250,000 pages currently served, both the performance and the reliability of the environment are strategic issues.

Consistent with previously identified strategy, base ShRINE functions have been retooled in a standard JAVA development environment. A core set of JAVA objects have been created to support code reuse, a capability that will be increasingly important as the WEB emerges as the site’s primary vehicle for delivery of site applications.

Highly efficient search capabilities have replaced the increasingly cumbersome set of HTML linking structures, and the use of full text search is increasing as the user community becomes more comfortable with its use.

The ShRINE Provider Program, which supports broad user participation in posting information to a central and secure environment, has also been improved with a new, easy to use, set of publishing tools.

Access to offsite Internet information and services through the SRS firewall have improved moderately, but legitimate security concerns still exist, and further improvements must be made to support SRS participation in the more robust Internet-communications model of the site’s suppliers and stakeholders.

WSRC strategies in this area will focus on continued stabilization of the ShRINE infrastructure at both equipment and process levels, beginning with a refresh and upgrade of the ShRINE server environment.

To enhance the utility of information delivery services, we will continue to evaluate new data types and acquire and install plug-ins, data handlers, and viewers as required by anticipated need and customer demand, where it is determined to be cost effective.

Additional focus will be placed on further improving ShRINE's search capabilities, and tighter product integration with other information delivery services including the data warehouse and Lotus Notes.

Investment in JAVA-based object libraries will continue, and this significant strategic asset will be leveraged for use by the larger WSRC development community.

8.03 Data Warehouse Services

The SRS Data Warehouse continues to play an essential role in the delivery of information to end-users.

Production warehouses are available in most key business areas including people, finance, procurement, assets, training, and works management (maintenance). In addition, new warehouse development efforts are in process for PASSPORT data, Nuclear Materials Accountability, and "sensitive" human resources information.

The standard front-end to the warehouse, GQL, continues to provide flexibility for ad hoc query and analysis work. Standard reports developed within the product now provide on-demand reporting to the user community in most areas. Additional reporting requirements are continuously added to meet end-user needs.

Demand for information in new subject areas continues to rise, as does the need to present information in a manner that integrates data across separate operational systems (i.e., Finance/Procurement or Assets/Maintenance). The importance of integrated information for supporting management decisions is more widely recognized as budget constraints force more detailed examination of business transactions.

As data warehouse usage has increased, so have user expectations for warehouse performance and availability. Warehouse load requirements are already a major planning consideration. The crucial need for on-line access to archival data is placing growing demand on aggregate warehouse storage requirements.

Despite the easier access to data provided by the Data warehouse product family, the complexity of the data itself, and the perceived complexity of the tool set are seen as considerable challenges within the end-user community. Training and more comprehensive customer interaction will improve the value of the product in actual business settings. This training and customer interaction is a central element of WSRC strategy in this area.

Enhancements will occur in most existing warehouse subject areas over the planning period. Ongoing modifications to models, data, and end-user reporting are constantly identified and added to the existing warehouse models. These additions are necessary as the warehouses are used as a staging area to support additional downstream processing needs and related analysis requirements in the field.

Warehousing will continue to play a key role in WSRC's information access strategy throughout the planning period, though delivery of warehouse data will be handled through ShRINE as technology to support this integration matures.

Additionally, emerging tools for data mining and On Line Analytical Processing (OLAP) will be evaluated for use in meeting specific business requirements.

8.04 This section left blank intentionally

8.05 Electronic Mail and GroupWare Strategy

WSRC's announced path of migration from cc:Mail to the far more comprehensive Lotus Notes product set presents both significant challenges and significant opportunities in the current environment.

Site-wide reengineering activities clearly show a need to extend the basic capabilities of mail to a broader set of collaborative capabilities including calendaring, workflow, and electronic routing and approval (particularly in the electronic forms areas) if expected step change gains in productivity improvement are to be achieved.

The core Notes product set supports such capabilities already. However, a sound implementation strategy based on standard processes, company level directory structuring, and shared tools and data will be essential for success in the long term.

WSRC strategy will focus immediately on migration of the SRS user community to the base Lotus product during 1999. Concurrently, electronic routing and approval capabilities will be deployed within the generic Notes product for WSRC-internal approval requirements (E-forms).

Over the long term, SRS-specific development within the Notes environment will be supported and enhanced as appropriate based on business need.

Use of electronic routing and approval capabilities for formal records applications will be an area of specific interest as Federal policy in this area evolves over the next several years. WSRC believes, that with appropriate authentication mechanisms, the site will be in an excellent position to leverage the capabilities of the Notes environment in this critical and as-yet paper intensive environment.

Over the long term, it can be assumed that the current file-based architecture inherent in the site's NetWare environment will give way to a more robust document centered set of data structures. As this transition occurs, the balance between traditional file server infrastructure and a more strategic GroupWare server infrastructure will be re-balanced and, where possible, integrated.

9.0 IT Baseline: Computing and Communications Infrastructure

This business segment is made up of WSRC's centrally provided set of IT computing and communications utilities that are shared by all site customers.

These IT products fall into three major areas:

- Centralized applications processing
  - MVS Computing Services
  - UNIX Computing Services
  - NT Computing Services
  - VMS Computing Services

- Desktop services (Machine-based/Account-based)
  - Desktop Management (Software, File & Print, Help Desk)

- Network Services (Access Based)
  - Voice Communications (RTS)
  - The SRSnet Data Network

9.00 Introduction: Situation Analysis and Key Issues

Strategies for the site's IT infrastructure products reflect our continuing belief that a utility approach (i.e., one based on shared access to a central set of site resources) continues to represent the site's most cost effective and advantageous model for delivery of most IT commodities.

However, service levels in this environment are an increasingly important issue, as the legitimate needs of mission-critical business areas are left unmet by an increasingly constrained IT infrastructure.

The programs established here would continue to be subject to corporate sizing by executive management during the planning period. However, beginning in FY2000, these costs will no longer be distributed to customer organizations on an as-used basis. Instead, they will be treated as site overhead. As our third strategic goal would suggest, achieving an appropriate balance in functionality and service levels in this area of the business will be a significant challenge in the years ahead.

In most areas, independent benchmarking of our operations shows our cost/performance is still highly competitive. However, in that the site's IT asset base is aging and product lifecycles continue to shorten, refresh of an increasingly obsolete infrastructure will continue to be an issue of ongoing concern during the planning period. An aggressive refresh plan, based on recently approved leasing practices will preserve the capabilities of the site's core IT services while insuring and protecting a "lowest Total Cost of Ownership" for the long term.

The site's major risks and opportunities lie in other areas.

Technical competencies have eroded in many technical areas, and in some places technical expertise has reached "one-deep" levels. In recognition of the problem, WSRC Senior Management has implemented a formal employee retention program that we believe has stabilized attrition in the short term. A continuation of this management commitment is assumed in the baseline costs presented.

There is also considerable pressure from the site's program management community to redirect limited infrastructure funding toward direct program support activity at the expense of the legitimate

needs of the site's support organizations. Short term cost advantages must be carefully weighed against our ability to deliver quality infrastructure to the needs of the site at large over the long term.

Consolidation of platforms and technologies to be supported is also still a key strategic issue. Despite aggressive efforts toward consolidation, the site continues to support a portfolio of legacy applications spanning five independent operating systems (MVS, VMS, UNIX, NT, and NetWare) and four data base environments (ADABAS, DB2, Oracle, and SQL Server). Legacy applications continue to be a key determining factor in our ability to deliver lowest possible IT infrastructure costs and funding to support those replacement is an issue of increasing management focus.

WSRC remains committed to maintaining a current and readily scaleable IT base configuration at SRS, supporting our belief that this strategy will provide the lowest Total Cost of Ownership (TCO) for this technology regardless of future mission.

For this planning period, emphasis is placed on consolidation of technology around site standards (primarily UNIX and Microsoft NT) as delineated in the WSRC Computing Architecture Plan. Investment is required to allow us to maintain a current and appropriately positioned infrastructure while providing the same level of availability, reliability, and integrity in the distributed, client server environment that the site has come to expect.

Significant emphasis continues to be placed on greater investment in and use of an Enterprise Approach (read cross platform) to planning and management of our overall IT infrastructure operations. Already a common disk storage environment is in place and is readily shared by all of the site's primary business systems. We will aggressively pursue similar opportunities in an effort to leverage other areas of consolidated platform management.

Specific discussion of WSRC plans by product area follows.

9.01 MVS Computing Strategy

MVS has not been a strategic platform at SRS for some time in that this architecture remains proprietary and does not scale well in the current business environment. Nonetheless, in the absence of a clear direction to replace the site's portfolio of core mainframe applications, this plan suggests a continuing role for the platform at least through FY2002.

The environment is extremely stable, offers highest levels of availability (99.99%), and is supported by mature and security-proven operational processes.

While implementation of PASSPORT retired a major mainframe application (WMS) in FY1999, most of the site's major business systems (IBARS, CLS, TESSERACT, PCS,) continue to run in this environment, and, with few exceptions, these applications will be in place well into the planning term.

We do not believe that a forced migration of applications from this environment is required in the near term. The environment is mature and well supported by the vendor, and, as indicated in Section 6, the business customers are generally satisfied that their legacy systems are meeting immediate business requirements.

Nonetheless, it is clear that industry is moving away from this comparatively expensive environment and that the site will face higher relative costs over the long term by remaining mainframe-dependent.

Load has peaked in this environment due both to the retirement of applications (WMS) and to a continuing decline in the user-based mainframe access associated with shifting the site's reporting requirements.

Though software and hardware costs continue to fall moderately as market shrinks, MVS is still not a particularly scaleable environment, and WSRC would expect unit costs to rise in this area through the planning period as a fixed investment is distributed across a shrinking applications base.

Independent benchmarks confirm that ITD has already succeeded in reducing the staff that supports this environment to industry best. And, we do not believe this rate of reduction can be sustained without serious operational consequences. Moderate opportunities to share monitoring and operational load with other platforms has already been initiated under WSRC Enterprise Management strategy and these efforts will continue to produce moderate operating improvements.

Though not an immediate concern, replacement of the site's IBM 3090 mainframe (acquired circa 1995) will be an issue during the planning window as maintenance costs reach unacceptable levels. Absent real progress in retirement of the current mainframe portfolio, WSRC will active explore alternative sourcing arrangements including remote processing to contain costs and assure service levels.

To summarize, WSRC expects to maintain an MVS presence through FY2001, though at steadily reduced levels. Applications will continue to drive this environment. However, we will continue to maintain the product at current levels of performance and will pursue opportunities to reduce cost wherever possible while maintaining a strategic focus on migrating this business load as soon as practical.

9.02 Business UNIX Computing Strategy

UNIX continues to be the site's platform of choice for large-scale business applications as confirmed by the most recent WSRC Computing Architecture Plan.

This environment already supports major business applications including the most recently addition of current PASSPORT implementation for consolidated maintenance management.

As more of the site's critical business is conducted in this environment, increasing strain is being placed on performance and reliability issues. System monitoring, preventive maintenance, backup, and disaster recovery are areas of major concern that will need continuing attention and investment in the coming years.

Hardware obsolescence is also a significant issue in the near term, though an aggressive replacement strategy based on leasing is expected to mitigate this problem, budget permitting, for the immediate future.

Growing demand is also a problem, although it is being felt most acutely in the area of on-line storage as the site moves toward electronic document management and other data retention requirements grow.

Oracle remains the database of choice in this environment, unchallenged during the planning term for large application requirements.

Database gateway products will remain a part of the recognized software infrastructure in order to support seamless access across the site's three primary database environments. And ShRINE, the site's Intranet, will be used increasingly as the application delivery vehicle of choice from a centralized and UNIX-based database and application infrastructure.

WSRC believes that substantially improved reliability is critical if we are to succeed in moving core business systems workload from the mainframe to this platform. Management tools are maturing in this environment and we have already invested as necessary to achieve a site expectation of
99.5% availability.

9.03 Consolidated VMS Computing Strategy

The site's portfolio of VMS-based business and office applications have declined substantially during 1998, and significant steps have been taken to shrink this hardware platform further as we move forward.

However, absent the funding necessary to achieve a wholesale migration of remaining applications from VMS, it would appear that the site will continue to support a vestigial set of these applications for the planning term in both classified and unclassified environments.

Technical and business VMS workload has been in large part merged during 1999 and the production VMS environment is considered stable. Most of the legacy application code running on VMS is custom-developed and written specifically for SRS needs. COTS alternatives are considered to be limited, and drivers to do the substantial rewrites necessary for migration are not present.

Strategies in this platform will continue to center around containment and will focus on further system consolidation, though it is expected that overhead pool targets will seriously limit additional centralized investment here. Enterprise Management strategies discussed in Section 5.6 will be extended to this environment to the extent that they are available.

Looking longer term, we would expect to make further inroads in reducing platform requirements, particularly by migrating TRAIN and BASIS applications to support minimization of the remaining VMS load.

9.04 NT Computing Strategy

The NT operating environment continues to achieve strong growth in the commercial marketplace and is an area of strategic importance at SRS.

Though it is still not considered to be scalable to support the site's larger applications, NT continues to be a favored platform for COTS product development and it is already declared strategic by many of the site's strategic applications vendors.

WSRC has already had significant exposure to NT with the LANMAS application, and the convergence of server and desktop strategies around NT is a well-recognized strategic objective.

Coexistence of NT-based applications continues to be an area of concern in this immature platform, and too frequently, WSRC has found it necessary to dedicate hardware on a one-to-one basis to specific application environments, a situation resulting in poor hardware utilization and ineffective deployment of scarce operational resources.

Lack of corporately scalable directory resources capability is another well recognized problem with NT, although we would expect these issues to be resolved by the introduction of Microsoft Windows 2000 during the planning window.

During FY2000, WSRC will make moderate investments necessary to provide a centrally managed applications load, and will expand this infrastructure as expanding load warrants.

9.05 Desktop Computing Strategy

The site's strategic position in the desktop area continues to improve and is at present, recognized to be near best-in-class status.

Success of the standard desktop lease program has created a current environment where over 90% of the site's desktops meet current standards (Windows 95/98 capable).

The standard configuration is well received in the field, and extended warranties have allowed WSRC to reduce field support staffing levels by over 75%. Support for remaining non-standard machines has been outsourced.

NetWare continues to provide a stable file and print sharing environment, but a migration to NT is planned once directory services issues associated with that operating system have been resolved.

Cost remains a significant driver in this environment, and WSRC has focused heavily on a "lowest Total Cost of Ownership" strategy which has allowed overall cost of desktop service to fall by over 3 million dollars per year since 1997.

WSRC strategies to take the desktop business forward will leverage our progress in both cost and productivity improvements.

Remaining non-standard (Intel) systems are being retired in order to reach Year 2000 compliance and the site is expected to level out at a total population of 11,000 - 11,500 machines. Thereafter, leasing programs will be continued at current 36-month terms in order to support a three-year desktop refresh strategy.

Leasing contracts will continue to be multi-tiered in order support a diverse set of end user operating requirements, and a standard laptop configuration will be added as an option. In both cases, IT staff will work closely with end users to identify and validate future product offerings.

Hardware costs continue to decline rapidly in this area, and WSRC would expect continued gains in the price/performance of the "standard" configuration.

At the operating system level, Windows 95 will remain the site standard offering though WSRC continue to provide an NT client to customers with specific needs (primarily engineering and scientific).

Training is also a key issue in the end user community, and WSRC will continue to expand the use of Computer Based Training (CBT) to improve utilization of the technology in meeting everyday business needs.

Currently, printing is provided for desktop users by both the Novell and UNIX print services as well as host-based printing supported in the MVS, UNIX, and VMS environments. A consolidated printing architecture will be developed as basic network print services migrate from Novell and its proprietary protocols to NT and TCP/IP protocols. The goal is to establish all printers as shared network devices accessible for all standard desktops and host computers, regardless of operating system.

Lastly, in order to support lower administrative costs, while offering additional product flexibility, WSRC will improve the automated software distribution mechanisms to allow direct customer acquisition and automated of applications software on an as-needed basis.

9.06 This section left blank intentionally.

9.07 This section left blank intentionally.

9.08 This section left blank intentionally.

9.09 Scientific Systems Computing Strategies

This operation provides a highly available distributed computing environment to the site's scientific and technical community. Areas supported include secure distributed computing services, scientific data analysis and modeling, WEB services, and centralized data storage.

At present, approximately 300 users are supported, and moderate growth (10% per year) is projected during the planning period.

From a hardware/software perspective this environment has evolved, and a lack of standards is a major support issue. Network speed and a lack of disaster recovery capabilities is also a growing concern among customers.

Services are primarily UNIX/AIX based, although there is a growing need for the inclusion and integration of NT capabilities.

Strategically, it is highly desirable to migrate this user base toward a standard leased desktop, preferably in a way that allows closer integration with the site's more generic standard offering. Though many applications remain UNIX/AIX dependent, WSRC believes that such a migration, one covering as much as 50% of the user base is possible using tools such as Hummingbird Exceed and DFS Client software.

The establishment of a production computing environment comprised of NT, UNIX, and Cray processing capability will make scientific computing more efficient and cost effective, while offering users the ability to eliminate multiple desktops, multiple training requirements, and extra costs.

Funding will be a key issue in this environment as the legitimate needs of this relatively small user base are weighed against those of the site at large in competing for limited overhead budget. WSRC will work to insure the IT infrastructure needs of this critical user community are adequately supported and that SRS remains competitive within the complex in this key area.

9.10 Voice Services

The site's voice communications services remain stable in the current environment, but will undergo significant change during the planning period. Independent benchmarking of WSRC's telecom operations show the site to be consistent with industry in network and switching costs, though there appears to be room for reengineering-based improvement in the customer administration and support area.

While the overall condition of the site's outside plant and wiring infrastructure is considered good, corrective work is need in the site's fiber optic plant, and several of site's the permanent buildings have not yet been wired for high-speed network connectivity.

Significant capacity exists in the current system, and WSRC will use this capacity, where possible, to reduce support costs for activation/termination.

In the near term, software supporting the site's telephone switches is being upgraded to support known Year 2000 compliance issues. Plans will also be finalized for integration of telecom support operations with WSRC's overall Customer Response Center approach.

Looking ahead, operating expenses in the telecom area are projected to fall by 70% after buy-down of the RTS system is completed in FY2000. Additionally, WSRC will be revisiting the current Bell Atlantic Operations and Maintenance contract that expires in FY2000 and will significantly reengineer this aspect of the business at that time.

9.11 Data Network Services

SRSnet, the site's data network is well positioned technically, and both reliability and availability have improved during FY1998. Ethernet-level access is broadly available across the site, and both inbound and outbound access is supported albeit at reduced speed and functionality.

Adequacy of the site's network capacity is a strategic issue. Overall traffic loads on the backbone are increasing at over 20% annually, driven by greater traffic in image and binary traffic and emergent video applications. More importantly, congestion on local shared Ethernet segments is degrading performance in some areas.

The need for more robust connectivity with other DOE sites is another long-standing concern, made more visible today by the emergent requirements of LANMAS, APT, and Work for Others Programs.

These opportunities for effective sharing and collaboration of DOE resources test the balance between a strategy of greater openness and the clear need for adequate protection and control. Today, and for much of the planning period under consideration, this line will be drawn at the network level.

Looking forward, WSRC will continue the task begun in FY1998 to migrate customer network connections from shared Ethernet to dedicated Ethernet configuration in order to improve network performance. Additionally, WSRC plans to upgrade the SRSnet backbone to ATM technology in FY1999 in order to support anticipated traffic growth due, in part, to the dedicated Ethernet access being provided. Both steps will further WSRC strategies to simplify the network topology and reduce protocol overhead in order to improve reliability and reduce operating costs. In addition, site users with high-speed network access requirements will be offered a Fast Ethernet connection (100 MBPS), which will carry an increased cost recovery charge.

During the planning period, improved inter-site connectivity will become increasingly important due to collaborative missions such as the Advanced Production of Tritium (APT) project. WSRC will work with DOE-HQ for the establishment of a Department of Energy corporate network with appropriate security to permit its use for unclassified, but sensitive data.

An increasingly mobile workforce and partnerships with external organizations require a new remote access strategy. Private virtual LAN technologies will be employed with secure Internet connections to the site to allow SRSnet access from any Internet location, given that appropriate SRSnet authentication procedures are followed. This will also allow faster access to the site computer resources from the current dial-up community as off-site users gain fast access to a private Internet Service Provider (ISP).

Virtual networks provide the mechanism to logically separate classes of users for security or performance reasons, while maintaining a single physical network. The SRSnet upgrades forecast in this plan will provide the mechanism to implement virtual LANs.

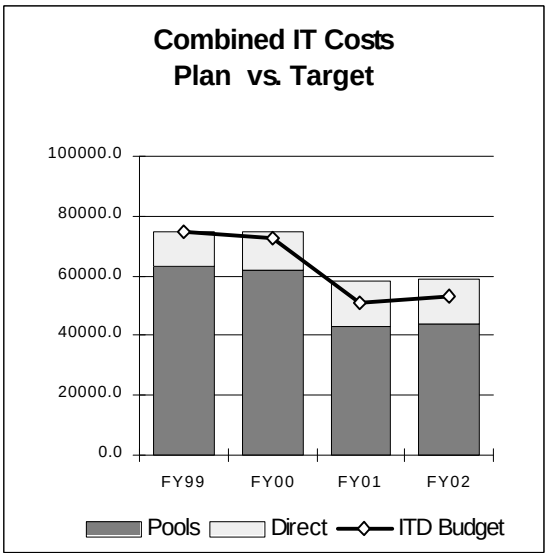
SRSnet will be managed as a component of the SRS enterprise and its management will be improved with ESM-oriented tools and processes. In particular SRSnet monitoring as well as change management procedures will be part of the overall Enterprise System Management strategy.

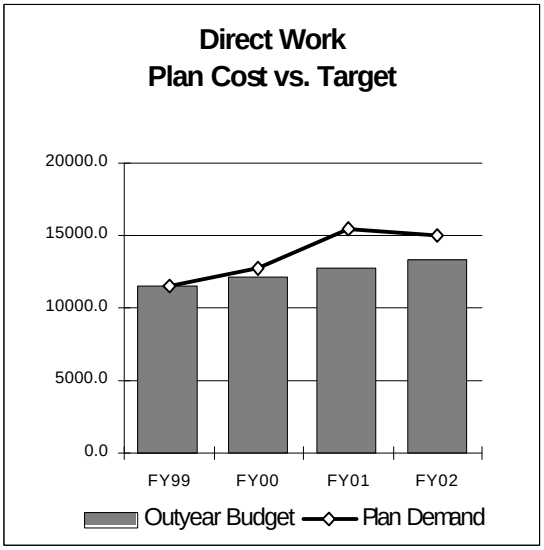
This page intentionally left blank

Appendix 1 - Plan Baseline

This page intentionally left blank

Appendix 1.1 - Plan Baseline / Cost Summary



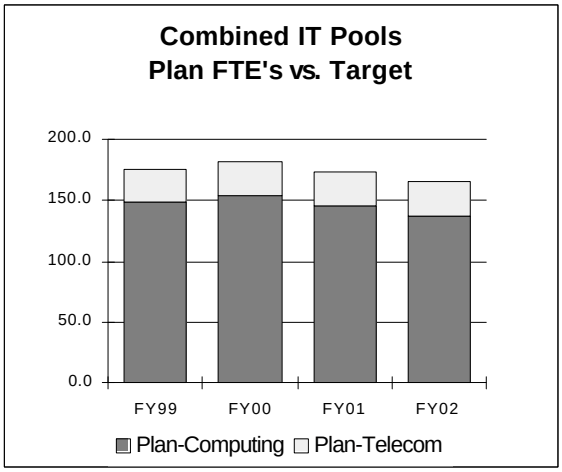


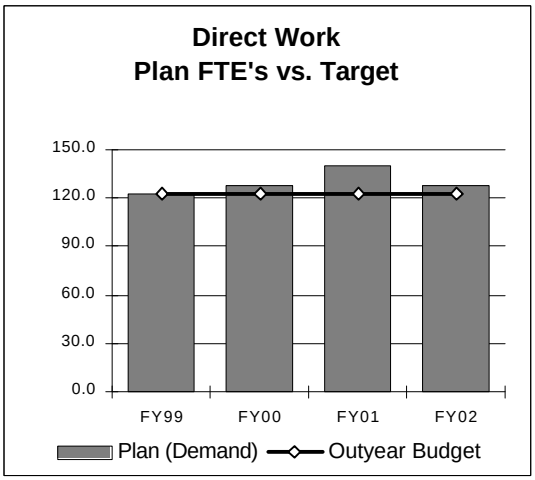
	FY00	FY01	FY02	Total
Total Plan	**$74,282.0**	**$59,016.**	**$59,192.**	**$192,491.**
5.0 Enterprise IT Strategies				
5.01 Architecture and Standards	$1,129.2	$1,187.7	$1,243.0	$3,560.0
5.02 IT Benchmarking and Self Assessment	$317.8	$303.5	$352.9	$974.2
5.03 IT Planning and Mission Linkage	$145.3	$154.0	$161.5	$460.8
5.04 Data Planning and Management	$680.8	$456.7	$467.5	$1,605.1
5.05 Computer Security Infrastructure	$1,467.0	$1,292.8	$1,102.1	$3,861.9
5.06 Enterprise Management Infrastructure	$1,204.9	$825.9	$832.5	$2,863.3
5.07 Integrated Customer Service and	$3,392.0	$3,455.5	$3,428.9	$10,276.4
5.08 Software Development Tools	$527.1	$495.9	$502.5	$1,525.5
5.09 Software Engineering and Management	$435.8	$199.3	$209.0	$844.1
5.10 Business Process Alignment and COTS	$213.6	$226.5	$237.5	$677.6
5.11 IT Configuration Management	$382.0	$439.5	$411.0	$1,232.5
	$9,895.4	**$9,037.2**	**$8,948.6**	**$27,881.2**

	FY00	FY01	FY02	Total
6.0 Applications Strategies				
6.01 Financial Systems	$1,217.6	$1,381.4	$1,306.4	$3,905.3
6.02 Human Resources Systems	$747.4	$851.5	$893.1	$2,491.9
6.03 Training Systems	$175.4	$362.3	$237.5	$775.3
6.04 Personnel Security Systems	$85.4	$90.6	$95.0	$271.0
6.05 Procurement and Materials Management	$742.5	$1,071.6	$1,013.1	$2,827.2
6.06 Maintenance and Facilities Management	$188.0	$452.9	$190.0	$830.9
6.07 Materials Accountability Systems	$640.8	$679.4	$522.6	$1,842.8
6.08 Environmental Systems	$1,332.9	$1,440.3	$1,320.7	$4,093.8
6.09 Health Physics Systems	$427.2	$452.9	$475.1	$1,355.2
6.10 Industrial Hygiene and Medical Systems	$299.0	$317.0	$332.5	$948.6
6.11 Technical Systems	$549.8	$709.5	$744.2	$2,003.6
	$6,406.0	**$7,809.5**	**$7,130.2**	**$21,345.7**
7.0 Division Computing Strategies				
7.01 Division Field Support	$1,109.0	$1,183.0	$1,254.1	$3,546.2
7.02 Direct Infrastructure Systems Support	$1,250.6	$1,454.1	$1,474.4	$4,179.2
7.03 Division IT Planning and Business	$324.7	$344.2	$342.0	$1,010.9
7.04 Division Applications Support	$418.7	$443.9	$484.6	$1,347.1
	$3,103.0	**$3,425.2**	**$3,555.2**	**$10,083.4**
8.0 Information Delivery Strategies				
8.01 Document Management and Records	$497.8	$520.6	$543.8	$1,562.2
8.02 ShRINE and Internet Services	$1,142.6	$1,521.7	$1,772.6	$4,436.9
8.03 Data Warehouse Services	$839.7	$885.7	$901.6	$2,627.0
8.05 EMail/Groupware	$1,863.7	$1,824.7	$1,810.6	$5,499.1
	$4,343.9	**$4,752.7**	**$5,028.6**	**$14,125.2**
9.0 IT Infrastructure Strategies				
9.01 MVS Applications Services	$3,372.0	$3,309.3	$3,265.7	$9,946.9
9.02 UNIX Computing Services	$5,090.7	$5,575.1	$6,011.2	$16,676.9
9.03 VMS Computing Services	$878.8	$745.2	$674.0	$2,298.0
9.04 NT Computing Services	$891.9	$1,372.2	$1,813.8	$4,077.9
9.05 Desktop Computing Services	$3,261.8	$6,164.0	$5,787.8	$15,213.6
9.09 Scientific Systems Computing	$341.8	$226.5	$142.5	$710.7
9.10 Voice Network Services	$31,285.7	$11,016.4	$11,091.9	$53,394.0
9.11 Data Network Services	$1,890.4	$2,010.3	$2,072.7	$5,973.4
	$47,013.1	**$30,418.9**	**$30,859.6**	**$108,291.6**

	FY00	FY01	FY02	Total
10.0 IT Management and Administration				
10.0 IT Management and Administration	$3,520.6	$3,572.8	$3,670.4	$10,763.8
	$3,520.6	**$3,572.8**	**$3,670.4**	**$10,763.8**

Appendix 1.2 - Plan Baseline / Manpower Summary





	FY00	FY01	FY02
Total Plan	**358.6**	**361.2**	**340.2**
5.0 Enterprise IT Strategies			
5.01 Architecture and Standards	4.5	4.5	4.5
5.02 IT Benchmarking and Self Assessment	1.2	1.2	1.2
5.03 IT Planning and Mission Linkage	1.7	1.7	1.7
5.04 Data Planning and Management	5.3	4.6	4.5
5.05 Computer Security Infrastructure	14.3	11.9	10.3
5.06 Enterprise Management Infrastructure	5.5	1.5	1.5
5.07 Integrated Customer Service and	17.5	15.5	14.5
5.08 Software Development Tools	1.3	1.5	1.5
5.09 Software Engineering and Management	5.1	2.2	2.2
5.10 Business Process Alignment and COTS	2.5	2.5	2.5
5.11 IT Configuration Management	3.3	4.3	3.8
	62.2	**51.4**	**48.2**
6.0 Applications Strategies			
6.01 Financial Systems	14.3	15.3	13.8
6.02 Human Resources Systems	8.7	9.4	9.4
6.03 Training Systems	2.1	4.0	2.5

	FY00	FY01	FY02
6.04 Personnel Security Systems	1.0	1.0	1.0
6.05 Procurement and Materials Management	8.7	11.8	10.7
6.06 Maintenance and Facilities Management	2.2	5.0	2.0
6.07 Materials Accountability Systems	7.5	7.5	5.5
6.08 Environmental Systems	15.6	15.9	13.9
6.09 Health Physics Systems	5.0	5.0	5.0
6.10 Industrial Hygiene and Medical Systems	3.5	3.5	3.5
6.11 Technical Systems	6.4	7.8	7.8
	75.0	**86.2**	**75.0**
7.0 Division Computing Strategies			
7.01 Division Field Support	13.0	13.1	13.2
7.02 Direct Infrastructure Systems Support	14.5	15.9	15.4
7.03 Division IT Planning and Business	3.8	3.8	3.6
7.04 Division Applications Support	4.9	4.9	5.1
	36.1	**37.6**	**37.3**
8.0 Information Delivery Strategies			
8.01 Document Management and Records	5.3	5.3	5.3
8.02 ShRINE and Internet Services	11.5	11.5	11.5
8.03 Data Warehouse Services	9.0	9.0	8.7
8.05 EMail/Groupware	13.0	11.5	10.5
	38.8	**37.2**	**36.0**
9.0 IT Infrastructure Strategies			
9.01 MVS Applications Services	15.0	13.5	12.5
9.02 UNIX Computing Services	40.5	39.5	39.5
9.03 VMS Computing Services	6.0	4.0	3.5
9.04 NT Computing Services	9.4	15.1	19.6
9.05 Desktop Computing Services	21.1	22.6	16.6
9.09 Scientific Systems Computing	4.0	2.5	1.5
9.10 Voice Network Services	15.3	15.3	15.3
9.11 Data Network Services	12.5	13.5	12.5
	123.7	**126.0**	**121.0**

10.0 IT Management and Administration

	FY00	FY01	FY02
10.0 IT Management and Administration	22.9	22.9	22.9
	22.9	**22.9**	**22.9**

Appendix 1.3 - Plan Baseline - Task Detail

5.0 Enterprise IT Strategies

5.01 Architecture and Standards

		FY00	FY01	FY02	Total
05.01.0.01 Maintain SRS Computing Architecture					
Plan, manage and coordinate activities required to attain the 1998 SRS Computing Architecture and development of extensions/modifications of the Architecture as required by changing mission requirements or new technologies. This plan anticipates a full revisit of the architecture in 2001.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	268.0	283.0	298.0	849.0
	Operating	**353.4**	**373.6**	**393.0**	**1120.0**
05.01.0.02 Implement and Manage SRS Computing Standards Program					
Reestablish and coordinate the WSRC IT Standards Program to identify and validate technical and product standards within WSRC and, to the extent possible, across the SRS IT community.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	212.7	222.9	233.1	668.7
	Operating	**255.4**	**268.2**	**280.6**	**804.2**
05.01.0.03 Evaluate and Pilot Emerging Technologies					
Continue to review emerging technologies and assess their ability to improve the cost effectiveness of site employees. Evaluate and pilot those technologies that have a high potential of providing payback. In particular, evaluate automated test tools and access to emerging data types.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	212.7	222.9	233.1	668.7
	Operating	**298.1**	**313.5**	**328.1**	**939.7**
05.01.0.04 Complete Architecture Compliance Assessment					
Review all project plans for formal ITD projects and all ITD software project management plans and software quality assurance plans for compliance with the Computing Architecture and Standards.	Manpower	0.0	0.0	0.0	0.0
	Labor	0.0	0.0	0.0	0.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**0.0**	**0.0**	**0.0**	**0.0**
05.01.0.05 Maintain Applications Integration Architecture					
Maintain an applications architecture that will enable tighter integration of disparate applications and that recognizes and supports 1) the move to COTS, 2) the increasing viability of object oriented databases, 2) component software, 4) evolving client / server architectures, and 5) emerging message brokering capability,	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
05.01.0.06 Maintain IT Solutions Center					
Provide a means for demonstrating current and emerging ITD products to potential customers, including capacity to develop prototype solutions and act as an IT laboratory for cooperative development with enduser computing personnel.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	51.3	51.3	51.3	153.9
	Operating	**94.0**	**96.6**	**98.8**	**289.4**

Total Section	**Manpower**	**4.5**	**4.5**	**4.5**	**13.5**
	Total Operating	**1129.2**	**1187.7**	**1243.0**	**3560.0**

5.02 IT Benchmarking and Self Assessment

		FY00	FY01	FY02	Total
05.02.0.01 Provide IT Self Assessment					
Coordinate ITD Self Assessment Program and provide WSRC IT performance reporting.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
05.02.0.02 Maintain IT Benchmarking Program					
Complete independent benchmarks of IT. Assess SRS IT performance against industry and plan/coordinate ongoing focus on best IT practices.	Manpower	0.4	0.7	0.4	1.5
	Labor	34.2	63.4	38.0	135.6
	NonLabor	184.5	194.8	205.1	584.4
	Operating	**218.7**	**258.2**	**243.1**	**720.0**
05.02.0.03 Maintain Customer Satisfaction Program					
Develop and manage customer satisfaction program for IT services	Manpower	0.3	0.0	0.3	0.6
	Labor	25.6	0.0	28.5	54.1
	NonLabor	30.8	0.0	33.8	64.6
	Operating	**56.4**	**0.0**	**62.3**	**118.7**
Total Section	**Manpower**	**1.2**	**1.2**	**1.2**	**3.6**
	Total Operating	**317.8**	**303.5**	**352.9**	**974.2**

5.03 IT Planning and Mission Linkage

		FY00	FY01	FY02	Total
05.03.0.01 Develop and Maintain WSRC I/T Strategic Plan					
Maintain and, as necessary, update the WSRC Strategic Plan for Information Technology. Support ITD participation in related SRS Comprehensive Plan deliverables including the SRS Strategic Plan, the SRS Information Management Plan, the SRS Infrastructure Plan, and the SRS Future Use Plan.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
05.03.0.02 Provide ITD Out Year and AOP Budget Planning					
Provide out year budget coordination and AOP cycle planning and budgeting for the Information Technology Department including IT Infrastructure Baseline Coordination, capital planning, Annual Operating Plan (AOP) coordination, and ITD Milestone development and negotiation.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
05.03.0.03 Provide DOE IT Planning Crosscuts & Detail					
Provide coordination and delivery of DOE-required IT plans and crosscuts as part of WSRC's annual AOP development. Support WSRC coordination and review of proposed WSRC IT expenditures requiring formal DOE notification/request.	Manpower	0.2	0.2	0.2	0.6
	Labor	17.1	18.1	19.0	54.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**18.1**	**19.0**	**54.2**
Total Section	**Manpower**	**1.7**	**1.7**	**1.7**	**5.1**
	Total Operating	**145.3**	**154.0**	**161.5**	**460.8**

5.04 Data Planning and Management

		FY00	FY01	FY02	Total
05.04.0.01 Provide Data Planning and Standards Program					
Establish and maintain the WSRC data management program including data policy, specification and review of COTS requirements as related to data, and representation of data issues in reengineering efforts.	Manpower	0.7	0.7	0.7	2.1
	Labor	59.8	63.4	66.5	189.7
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**59.8**	**63.4**	**66.5**	**189.7**
05.04.0.02 Establish WSRC Data Stewardship Program					
Establish and maintain the WSRC data management program including data policy, data stewardship program.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
05.04.0.03 Provide Data Administration and Configuration Control					
Provide Data Administration and Data Configuration Control services for all ITD-supported applications and databases. Assist development personnel in design of tables and views and perform data design reviews. Encourage appropriate use of shared site data structures and participate in design, implementation and management of shared site data structures.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
05.04.0.04 Maintain Data Repository					
Maintain the WSRC Data Repository and supporting infrastructure.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	28.0	0.0	0.0	28.0
	Operating	**53.6**	**27.2**	**28.5**	**109.3**
05.04.0.05 Maintain Site Personnel Roster					
Provide production support, maintenance and minor enhancements to the shared operational data store, SPR.	Manpower	1.0	0.3	0.2	1.5
	Labor	85.4	27.2	19.0	131.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**27.2**	**19.0**	**131.6**
05.04.1.01 Enhance Site Data Repository					
Implement Open Repository to support a more robust view of the Oracle environment. Extend Repository capabilities to enable end user access to the information contained in Repository and to more fully support the requirements of ITD's Configuration Management Program.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	200.0	40.0	40.0	280.0
	Operating	**225.6**	**67.2**	**68.5**	**361.3**
05.04.1.02 Develop SRS Master Building Data Store					
Support analysis , design, and implementation of a site wide "Master Building List". Identify optimal sourcing for identified data items. Modify and enhance existing STRUCTURE table to support the requirements of the MBL. Deliver and support as a shared site data resource.	Manpower	0.5	0.5		1.0
	Labor	42.7	45.3	0.0	88.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**0.0**	**88.0**

05.04.1.03 Plan and Develop Other Shared Data Structures

Provide analysis and design services for newly identified shared site data structure requirements. Identify optimal sourcing, design and implement required table structures, deliver and manage as shared site data resources.

Manpower	0.5	0.5	1.0	2.0
Labor	42.7	45.3	95.0	183.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**95.0**	**183.0**

Total Section	**Manpower**	**5.3**	**4.6**	**4.5**	**14.4**
	Total Operating	**680.8**	**456.7**	**467.5**	**1605.1**

5.05 Computer Security Infrastructure

		FY00	FY01	FY02	Total
05.05.0.01 Maintain Security on Unclassified Systems					
Prepare new protection plans and revise existing protection plans for all ITD-supported servers and as necessary, for ITD-supported applications. Perform periodic audits as required by protection plans, assist external organizations, respond to initial audit findings, and interface with WSRC and DOE Computer Security groups.	Manpower	4.0	3.5	3.0	10.5
	Labor	341.8	317.0	285.0	943.8
	NonLabor	30.0	5.0	5.0	40.0
	Operating	**371.8**	**322.0**	**290.0**	**983.8**
05.05.0.02 Perform account/access reviews and re-validations					
Review requests for special accounts (such as privileged and non-person accounts) and track those accounts. Perform periodic, required revalidation of computer accounts and associated accesses to validate need-to-know for sensitive information.	Manpower	1.5	1.0	1.0	3.5
	Labor	128.2	90.6	95.0	313.8
	NonLabor	30.0	5.0	5.0	40.0
	Operating	**158.2**	**95.6**	**100.0**	**353.8**
05.05.0.03 Provide Computer Accounts Management					
Add/modify/delete accounts and groups for all ITD platforms, databases, and e-mail. Includes MVS, Unix, Windows NT, NetWare, Notes, cc:Mail, Oracle, DB2, SQL Server, SecurID, etc.	Manpower	6.5	6.0	5.5	18.0
	Labor	538.6	526.4	504.0	1568.9
	NonLabor	22.0	12.0	12.0	46.0
	Operating	**560.6**	**538.4**	**516.0**	**1614.9**
05.05.0.05 Maintain Security on Classified systems					
Prepare/revise protection plans, perform audits, and manage accounts on classified computer systems. Prepare and conduct computer security training.	Manpower	0.2	0.2	0.2	0.6
	Labor	17.1	18.1	19.0	54.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**18.1**	**19.0**	**54.2**
05.05.1.01 Reengineer Computer Accounts Management					
Implement tool and/or process improvements to improve the quality and efficiency of computer account maintenance	Manpower	1.0	0.5	0.0	1.5
	Labor	85.4	45.3	0.0	130.7
	NonLabor	120.0	140.0	40.0	300.0
	Operating	**205.4**	**185.3**	**40.0**	**430.7**
05.05.1.02 Evaluate Security Impacts of IT Strategic Sourcing					
Identify and address security issues related to strategic sourcing of ITD functions.	Manpower	0.3	0.1	0.1	0.5
	Labor	25.6	9.1	9.5	44.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**9.1**	**9.5**	**44.2**

05.05.1.03 Evaluate Alternative Security for Sensitive Data

Investigate multilevel security mechanisms for unclassified data. This includes networking changes (such as VLANs), as well as application/ data/ infrastructure changes necessary to segregate the data. Initiate efforts to better identify and document where sensitive unclassified data is stored/used.

Manpower	0.3	0.1	0.0	0.4
Labor	25.6	9.1	0.0	34.7
NonLabor	30.0	35.0	40.0	105.0
Operating	**55.6**	**44.1**	**40.0**	**139.7**

05.05.1.04 Evaluate SRS Remote Access and Data Exchange

Provide security support for the telecommuting pilot and the mobile workforce; investigate/support technology for information exchange within the complex (especially data encryption mechanisms) and with the public

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	30.0	35.0	40.0	105.0
Operating	**72.7**	**80.3**	**87.5**	**240.5**

Total Section	**Manpower**	**14.3**	**11.9**	**10.3**	**36.5**
	Total Operating	**1467.0**	**1292.8**	**1102.1**	**3861.9**

5.06 Enterprise Management Infrastructure

		FY00	FY01	FY02	Total
05.06.0.01 Provide I/T Capacity Planning					
Provide formalized assessment and forecast of computing capacity and requirements in key computing platforms and related infrastructure including processor requirements (MVS/ UNIX/ VMS/ NT Applications/ NT File & Print), Enterprise-Level Storage Planning (DASD).	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
05.06.1.01 Upgrade Enterprise Console Infrastructure					
Enhance the enterprise console to provide improve alert processing and notification. Upgrade NT probes, integrate additional probes (e.g. for Notes, Oracle, environmental monitoring, etc.), add automation, and pilot new objective view.	Manpower	0.5	0.0	0.0	0.5
	Labor	42.7	0.0	0.0	42.7
	NonLabor	110.0	65.0	65.0	240.0
	Operating	**152.7**	**65.0**	**65.0**	**282.7**
05.06.1.02 Develop a Printing Architecture					
Develop a print architecture to take into consideration platform migrations and provide the ability for any application (PC-based, server-based, or legacy host-based) can print to any printer.	Manpower	0.5	0.0	0.0	0.5
	Labor	42.7	0.0	0.0	42.7
	NonLabor	50.0	50.0	50.0	150.0
	Operating	**92.7**	**50.0**	**50.0**	**192.7**
05.06.1.03 Implement Upgraded Backup/Recovery Solutions					
Implement recommendations from Enterprise Backup study to upgrade backup/recovery hardware/software, potentially replacing or augmenting CAMS, ADSM, existing transports / silos, etc.	Manpower	2.0	0.0	0.0	2.0
	Labor	170.9	0.0	0.0	170.9
	NonLabor	575.0	575.0	575.0	1725.0
	Operating	**745.9**	**575.0**	**575.0**	**1895.9**
05.06.1.05 Evaluate Advanced Storage Solutions					
Investigate and implement enhanced, platform-independent storage solutions such as storage area networks, etc.	Manpower	1.5	0.5	0.5	2.5
	Labor	128.2	45.3	47.5	221.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**45.3**	**47.5**	**221.0**
Total Section	**Manpower**	**5.5**	**1.5**	**1.5**	**8.5**
	Total Operating	**1204.9**	**825.9**	**832.5**	**2863.3**

5.07 Integrated Customer Service and Response

		FY00	FY01	FY02	Total
05.07.0.01 Operate and Manage Customer Response Center					
Provide first-tier phone support to site computer users for both networked and stand-alone systems. This includes software, hardware, telecommunications, and user account troubleshooting for all ITD-managed services. This task is staffed by WSRC in-house resources supplemented by strategic subcontracting to meet service level objectives.	Manpower	1.5	0.5	0.5	2.5
	Labor	128.2	45.3	47.5	221.0
	NonLabor	1312.0	1512.0	1512.0	4336.0
	Operating	**1440.2**	**1557.3**	**1559.5**	**4557.0**
05.07.0.02 Provide Tier 2 Customer Support					
Improve customer service by providing second-tier computer support via the Customer Response Center for hardware, software, network, and computer account troubleshooting. CRC workstations will need ergonomic modifications. The voice response unit(VRU) will be integrated into daily CRC operations. This task is staffed by WSRC employees.	Manpower	4.5	4.5	4.5	13.5
	Labor	384.5	407.6	427.5	1219.7
	NonLabor	95.0	50.0	50.0	195.0
	Operating	**479.5**	**457.6**	**477.5**	**1414.7**
05.07.0.03 CRC Queue Management & Vendor Management					
Manage and optimize calling and problem resolution queues. Provide followup with user complaints, escalation, and any other issues associated with problem reports/work orders in Vantive. Support issue resolution between vendors, ITD, and the user. Meet and/or exceed service-level agreements.	Manpower	5.7	4.7	3.7	14.1
	Labor	487.0	425.7	351.5	1264.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**487.0**	**425.7**	**351.5**	**1264.3**
05.07.0.04 Provide Vantive Software Support					
Maintain Vantive per benchmarking commitments and the ITD Strategic Plan. This includes the modification of existing forms, the addition of forms to enhance current functionality, and the monitoring of Vantive day to day operations.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	115.0	115.0	115.0	345.0
	Operating	**200.4**	**205.6**	**210.0**	**616.0**
05.07.0.05 Implement Vantive Enhancements					
Complete Work Orders, PPP assignment notification, change management, and configuration management integration into the CRC's daily operations via the Vantive project plan.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	217.0	217.0	217.0	651.0
	Operating	**302.4**	**307.6**	**312.0**	**922.0**
05.07.0.06 Enhance Customer Response Center					
Coordinate ADPE Hardware Inventory reporting/management and interface with Property Management in allocation, redeployment and excessing of ADPE assets. Develop guidelines, policies & procedures for life cycle management of ADP Hardware/SW. Implement PC life Cycle Mgmt Program the the PC Review board. The use of the Asset Inset Insight client will enable the CRC to better analyze customer PC	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	90.0	90.0	90.0	270.0
	Operating	**132.7**	**135.3**	**137.5**	**405.5**

05.07.0.07 Manage SRS End User Communications and Education

Ensure successful deployment of existing and new software and hardware by transferring knowledge to Site user community. Provide communications and education services to include computer- and web-based training, websites, road shows, newsletters, posters, job aids, and other communications designed to transfer critical skills needed to complete job tasks.

Manpower	1.8	1.8	1.8	5.3
Labor	149.5	158.5	166.3	474.3
NonLabor	60.0	60.0	60.0	180.0
Operating	**209.5**	**218.5**	**226.3**	**654.3**

05.07.0.08 Manage Desk-side Service Contract

Provide coordination and contract administration (including subcontract administration) of the contract for site-wide maintenance of WSRC legacy desktops.

Manpower	1.5	1.5	1.5	4.5
Labor	128.2	135.9	142.5	406.6
NonLabor	12.0	12.0	12.0	36.0
Operating	**140.2**	**147.9**	**154.5**	**442.6**

Total Section	**Manpower**	**17.5**	**15.5**	**14.5**	**47.4**
	Total Operating	**3392.0**	**3455.5**	**3428.9**	**10276.4**

5.08 Software Development Tools

		FY00	FY01	FY02	Total
05.08.0.01 Maintain Application/Software Tools					
Evaluate, select, and implement Application Development Tool Suite . Define and implement methods by which tools can most effectively be used to support established standards and procedures. Incorporate additional tools (i.e.,Notes/ShRINE toolset) into the Application Development Tool Suite	Manpower	0.3	0.5	0.5	1.3
	Labor	25.6	45.3	47.5	118.4
	NonLabor	286.0	280.0	280.0	846.0
	Operating	**311.6**	**325.3**	**327.5**	**964.4**
05.08.1.01 Implement Web Application Server Environment					
Support in-house developed Web deployed applications using Oracle Web Application Server, Report server and Forms server. Install, configure and administer maintain Oracle web server . Migrate Oracle web application server to production . Install, configure and administer Oracle Forms and Report Servers . Migrate Oracle Forms and Reports Server applications to production	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	130.0	80.0	80.0	290.0
	Operating	**215.4**	**170.6**	**175.0**	**561.0**

Total Section	**Manpower**	**1.3**	**1.5**	**1.5**	**4.3**
	Total Operating	**527.1**	**495.9**	**502.5**	**1525.5**

5.09 Software Engineering and Management

		FY00	FY01	FY02	Total
05.09.0.01 Maintain Consolidated Software Engineering Program					
Establish a consolidated methodology for all software engineering projects within the department. Work toward a site-level procedure for software engineering which draws from existing procedures/methodologies including the ITD Software Development Methodology, as well as the SEI Maturity Model.	Manpower	0.1	0.1	0.1	0.3
	Labor	8.5	9.1	9.5	27.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**8.5**	**9.1**	**9.5**	**27.1**
05.09.0.02 Maintain Software Development Methodology Compliance					
Provide SDM Guidance and implementation support. Implement requirements of Standards, QA, Change Management and Configuration Management as well as Computing Architecture. Implement Project Management initiatives 4) Support implementation of standardized Code Repository management initiatives in conjunction with CM organization	Manpower	1.0	0.5	0.5	2.0
	Labor	85.4	45.3	47.5	178.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**45.3**	**47.5**	**178.2**
05.09.0.03 Maintain Application Inventory					
Develop and maintain inventory of all applications supported by ITD including future disposition (Maintain as is, Replace with COTS, Migrate to different platform, etc.). This inventory will also include descriptions of Applications Programming Interfaces (API) provided by the applications.	Manpower	0.5	0.3	0.3	1.1
	Labor	42.7	27.2	28.5	98.4
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**27.2**	**28.5**	**98.4**
05.09.0.04 Maintain ITD Applications Metrics Program					
Collect and maintain Function Points counts for ITD-managed applications. Provide application metrics, SDM Self Audits, Change Mgmt Audits, Configuration Mgmt Audit's	Manpower	1.5	1.0	1.0	3.5
	Labor	128.2	90.6	95.0	313.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**90.6**	**95.0**	**313.8**
05.09.0.05 Develop Work Request Application					
Refine the new SMT application to incorporate workflow capabilities to enable the SDM, CM and Change Management policies in place in ITD. This should include the efforts to tie the Application to the System Inventory Database, integrate with the Vantive Change Management Application, and provide for the appropriate approvals during the process.	Manpower	1.0	0.1	0.1	1.2
	Labor	85.4	9.1	9.5	104.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**9.1**	**9.5**	**104.0**
05.09.0.06 Build and Maintain ITD Applications Inventory					
Design and construct the database structures and associated application code and interfaces required to deliver and support a department wide database which facilitates documentation of the inventory, description, relationships and dependencies among configuration items (software, data structures, servers, etc.) and supports the business processes required to create, manage, and maintain this inventory.	Manpower	1.0	0.2	0.2	1.4
	Labor	85.4	18.1	19.0	122.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**18.1**	**19.0**	**122.6**

Total Section	**Manpower**	**5.1**	**2.2**	**2.2**	**9.5**
	Total Operating	**435.8**	**199.3**	**209.0**	**844.1**

5.10 Business Process Alignment and COTS

		FY00	FY01	FY02	Total
05.10.0.01 Provide SRS Business Reengineering IT Liaison					
Provide support to WSRC Business Engineering Resources and associated End User Organizations to exploit IT-based improvement opportunities and to coordinate potential software acquisitions driven by reengineering. Identify and champion cross-function integration opportunities at the business process level. Provide planning/support for SRS evaluation, selection, and potential integration of commercial applications	Manpower	0.8	0.8	0.8	2.4
	Labor	68.4	72.5	76.0	216.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**68.4**	**72.5**	**76.0**	**216.8**
05.10.0.02 Provide Business Process Innovation Analysis					
Evaluate site business processes to locate areas that can be improved through the application of information technology.	Manpower	0.2	0.2	0.2	0.6
	Labor	17.1	18.1	19.0	54.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**18.1**	**19.0**	**54.2**
05.10.0.03 Provide End-User Applications Planning					
Provide strategic and tactical planning/support for redeployment of user-developed or workgroup applications and planning and estimating for new workgroup applications.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
05.10.0.04 Coordinate IT Road show Program					
Identify topics, facilitate scheduling with SMEs and Customers, maintain materials, track attendance, maintain feedback trends and metrics for ITD Road show activities supporting the site.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
Total Section	**Manpower**	**2.5**	**2.5**	**2.5**	**7.5**
	Total Operating	**213.6**	**226.5**	**237.5**	**677.6**

5.11 IT Configuration Management

		FY00	FY01	FY02	Total
05.11.0.01 Coordinate ITD Change Management Program					
Coordinate department-wide processes for change management and configuration control including software change control, data configuration control, and infrastructure configuration planning, scheduling, and implementation.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
05.11.0.02 Implement and Administer Software Code Repositories					
Evaluate, implement and administer software code repositories. The product(s) will support software configuration management and reporting through a check-out/check-in process and maintain software change history reports.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	50.0	50.0	50.0	150.0
	Operating	**75.6**	**77.2**	**78.5**	**231.3**
05.11.0.05 Administer Configuration Management Program					
Develop, implement, coordinate, and maintain the new configuration management program by beginning with ITD applications. The process will allow a gatekeeper function to move all code in and out of production when all testing and approvals have been finalized. Monitor & update the procedures to ensure a total product. Quality assurance will be handled thorough this function.	Manpower	2.0	2.5	3.0	7.5
	Labor	170.9	226.5	285.0	682.4
	NonLabor	50.0	0.0	0.0	50.0
	Operating	**220.9**	**226.5**	**285.0**	**732.4**
05.11.0.06 Develop, Review, and Maintain ITD Internal Workflows					
Assist with the development of new workflows to establish a baseline and provide guidelines to be incorporated into the work flows. Continuously review changing workflows and procedures for accuracy.	Manpower	0.5	1.0		1.5
	Labor	42.7	90.6	0.0	133.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**90.6**	**0.0**	**133.3**

Total Section	**Manpower**	**3.3**	**4.3**	**3.8**	**11.4**
	Total Operating	**382.0**	**439.5**	**411.0**	**1232.5**

6.0 Applications Strategies

6.01 Financial Systems

		FY00	FY01	FY02	Total
06.01.0.01 Maintain Costed Labor Application (CLS)					
Provide operational support and minor enhancements for ITD supported CLS financial application software.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
06.01.0.02 Maintain Planning and Budgeting Applications (IBS)					
Provide ongoing support, development, process definition and implementation of the programs for supporting: Out year budget, Site change control, ABC, rates and PPP programs for IBS application.	Manpower	5.5	5.0	4.0	14.5
	Labor	469.9	452.9	380.0	1302.9
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**469.9**	**452.9**	**380.0**	**1302.9**
06.01.0.03 Maintain Project Management Applications					
Provide application support and minor enhancements for ITD supported project management applications including the Project Management Control System (PMCS).	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
06.01.0.04 Maintain Payroll Application					
Provide operational support for Payroll and Benefits Accounting in the Tesseract Payroll & Human Resources and related systems	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
06.01.0.05 Maintain Accounts Payable Portion of PCS Application					
Provide operational support and minor enhancements for Accounts Payable functionality of the Procurement Cycle System.	Manpower	1.0	1.5	1.0	3.5
	Labor	85.4	135.9	95.0	316.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**135.9**	**95.0**	**316.3**
06.01.0.06 Maintain TACS Application					
Provide operational support and enhancements for the Time and Attendance Collection System (TACS)	Manpower	3.0	3.0	3.0	9.0
	Labor	256.3	271.8	285.0	813.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**256.3**	**271.8**	**285.0**	**813.1**

06.01.0.07 Maintain DOE Financial Systems (Non-Core)

Provide miscellaneous services in support of DOE Management Systems in the Financial area.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

06.01.0.08 Maintain IBARS Integrated Budget System

Provide ITD maintenance support for the IBARS, ICBM, COBRA, etc. applications and provide minor enhancements including Project Archive and Annual DOE mandated changes (See 6.01.0.01 For CLS Support) .

Manpower	1.5	2.5	2.5	6.5
Labor	128.2	226.5	237.5	592.1
NonLabor	0.0	0.0	0.0	0.0
Operating	**128.2**	**226.5**	**237.5**	**592.1**

06.01.0.09 Maintain ARCS Application

Provide operational support for the Accounts Receivable-Cashbook System

Manpower	0.3	0.3	0.3	0.8
Labor	21.4	22.6	23.8	67.8
NonLabor	0.0	0.0	0.0	0.0
Operating	**21.4**	**22.6**	**23.8**	**67.8**

Total Section	**Manpower**	**14.3**	**15.3**	**13.8**	**43.3**
	Total Operating	**1217.6**	**1381.4**	**1306.4**	**3905.3**

6.02 Human Resources Systems

		FY00	FY01	FY02	Total
06.02.0.01 Maintain HR Application - TESSERACT					
Provide operational support and minor enhancements for all Human Resources applications including Tesseract	Manpower	4.0	5.0	5.0	14.0
	Labor	341.8	452.9	475.1	1269.7
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**341.8**	**452.9**	**475.1**	**1269.7**
06.02.0.02 Maintain HR Application - RP3					
Provide operational support and minor enhancements for RP3	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
06.02.0.03 Maintain HR Application - Compensation					
Provide operational support and minor enhancements for Compensation	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
06.02.0.04 Maintain HR Application - HOBS					
Provide operational support and minor enhancements for the HR-owned Organization Breakdown Structure application.	Manpower	0.3	0.5	0.5	1.3
	Labor	25.6	45.3	47.5	118.4
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**45.3**	**47.5**	**118.4**
06.02.0.05 Maintain HR Applications - Other					
Provide operational support and minor enhancements for ADDR, CIPS, CPI, IPS, SBHC, TCS,	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
06.02.0.06 Provide IT Operational Support to HR					
Provide operational support, table maintenance , and queries or HRINFO, and the migration to the People Sensitive Warehouse	Manpower	1.0	0.5	0.5	2.0
	Labor	85.4	45.3	47.5	178.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**45.3**	**47.5**	**178.2**
06.02.0.07 Maintain Royalty Sharing Application					
Provide operational support and table maintenance for HR	Manpower	0.2	0.2	0.2	0.6
	Labor	21.2	18.1	19.0	58.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.2**	**18.1**	**19.0**	**58.3**

06.02.0.08 Maintain House Hold Goods Applications

Provide operational support for the House Hold Goods Application

Manpower	0.1	0.1	0.1	0.3
Labor	6.4	9.1	9.5	25.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**6.4**	**9.1**	**9.5**	**25.0**

06.02.0.09 Maintain Craft Attendance and Overtime Systems

Provide operational support for the Craft Attendance and the Craft Overtime Systems

Manpower	0.1	0.1	0.1	0.3
Labor	10.6	9.1	9.5	29.2
NonLabor	0.0	0.0	0.0	0.0
Operating	**10.6**	**9.1**	**9.5**	**29.2**

Total Section	**Manpower**	**8.7**	**9.4**	**9.4**	**27.5**
	Total Operating	**747.4**	**851.5**	**893.1**	**2491.9**

6.03 Training Systems

		FY00	FY01	FY02	Total
06.03.0.01 Maintain Training Application (TRAIN)					
Provide operational support and minor enhancements for ITD supported Training application.	Manpower	1.6	2.0	2.5	6.1
	Labor	132.7	181.2	237.5	551.4
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**132.7**	**181.2**	**237.5**	**551.4**
06.06.1.04 Implement Personnel Qual Module of PASSPORT					
Provide planning and implementation support for the Personnel Qualification Module of PassPort.	Manpower	0.5	2.0	0.0	2.5
	Labor	42.7	181.2	0.0	223.9
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**181.2**	**0.0**	**223.9**
Total Section	**Manpower**	**2.1**	**4.0**	**2.5**	**8.6**
	Total Operating	**175.4**	**362.3**	**237.5**	**775.3**

6.04 Personnel Security Systems

		FY00	FY01	FY02	Total
06.04.0.01 Maintain Personnel Security Applications					
Provide operational support and minor enhancements for SRS badging office and related personnel security applications (QNSP) ($100,000). Additionally fund acquisition of needed equipment and software ($130,000) to support mission.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**

Total Section	**Manpower**	**1.0**	**1.0**	**1.0**	**3.0**
	Total Operating	**85.4**	**90.6**	**95.0**	**271.0**

6.05 Procurement and Materials Management Systems

		FY00	FY01	FY02	Total
06.05.0.01 Maintain Procurement Application (PCS)					
Provide operational support and minor enhancements for the procurement-related portions of Procurement Cycle System (PCS).	Manpower	2.5	4.0	3.0	9.5
	Labor	213.6	362.3	285.0	861.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**213.6**	**362.3**	**285.0**	**861.0**
06.05.0.02 Provide PCS Cleanup after "Stores" Migration					
Provide operational support and minor enhancements for the materials-related portions of Procurement Cycle System (PCS). Specifically provide cleanup to the PCS application after the Stores Function migration to FMTS.	Manpower	0.8	0.5	0.3	1.7
	Labor	70.1	45.3	31.6	147.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**70.1**	**45.3**	**31.6**	**147.0**
06.05.0.03 Maintain Asset Management Application (AMIS)					
Provide operational support and minor enhancements for the Asset Management Information System (AMIS).	Manpower	0.7	0.3	0.3	1.3
	Labor	57.2	29.9	31.4	118.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**57.2**	**29.9**	**31.4**	**118.5**
06.05.0.04 Maintain Field Material Tracking System (FMTS)					
Provide operational support and minor enhancements for Field Materials Tracking System (FMTS).	Manpower	4.7	4.0	4.0	12.7
	Labor	401.6	362.3	380.0	1144.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**401.6**	**362.3**	**380.0**	**1144.0**
06.05.0.05 Replace the PCS Application					
Procure and implement a replacement for PCS	Manpower	0.0	3.0	3.0	6.0
NOT CURRENTLY FUNDED	Labor	0.0	271.8	285.0	556.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**0.0**	**271.8**	**285.0**	**556.8**
Total Section	**Manpower**	**8.7**	**11.8**	**10.7**	**31.2**
	Total Operating	**742.5**	**1071.6**	**1013.1**	**2827.2**

6.06 Maintenance and Facilities Management Systems

		FY00	FY01	FY02	Total
06.06.0.01 Maintain Passport Application					
Provide support for installation and post-roll out issues on PassPort and associated modules by performing the following tasks: 1) Post rollout data loads; 2) Data cleanup & correction; 3) Hot Fixes analysis & implementation; 4) New release analysis and implementation; 5) Customization estimates	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
06.06.0.02 Implement PASSPORT Software Configuration Control					
Complete the development and implementation of a software configuration control process as well as an IT infrastructure (i.e. job scheduler) process, as required.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
06.06.0.03 Retire Works Management System					
Provide support to the remaining phase out and shutdown for the existing works management and facilities portfolio, including WMS .	Manpower	0.2	0.0	0.0	0.2
	Labor	17.1	0.0	0.0	17.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**0.0**	**0.0**	**17.1**
06.06.1.01 Interface PassPort with Existing Systems					
Provide analysis & support for interface and integration of PassPort and associated modules including, but not limited to: FMTS; AIM; IBARS; and DocuMint.	Manpower	0.0	3.0	0.0	3.0
	Labor	0.0	271.8	0.0	271.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**0.0**	**271.8**	**0.0**	**271.8**
06.06.1.02 Implement PASSPORT Data Warehouse Enhancements					
Provide IT expertise to develop additional data warehouse enhancements for PassPort.	Manpower	0.0	0.0	0.0	0.0
	Labor	0.0	0.0	0.0	0.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**0.0**	**0.0**	**0.0**	**0.0**
Total Section	**Manpower**	**2.2**	**5.0**	**2.0**	**9.2**
	Total Operating	**188.0**	**452.9**	**190.0**	**830.9**

6.07 Materials Accountability Systems

		FY00	FY01	FY02	Total
06.07.0.01 Maintain MC&A Application (SRSMAS)					
Provide operational support to and minor enhancements for SRSMAS, the Savannah River Site Material Accounting System. Perform monthly routine maintenance of production software and administrative data. Provide DBA support to current production versions *Facility support, as required. Support ad hoc query requests *Analysis of an automated data transfer from field equipment *Expansion of SRSMAS into new functionality and/or new facilities.	Manpower	2.5	2.5	2.5	7.5
	Labor	213.6	226.5	237.5	677.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**213.6**	**226.5**	**237.5**	**677.6**
06.07.0.02 Maintain LANMAS Application					
Provide operational support to and minor enhancements for the production LANMAS software, including: *monthly routine maintenance and releases of production software *minor upgrade support to current production versions *upgrades to underlying infrastructure software	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
06.07.0.03 Provide LANMAS Field Support- Complex-Wide					
Provide operational support and technical expertise to 15 DOE complex sites utilizing the LANMAS system, which may include, but is not limited to: *100 hours of dedicated site support, including site visits *installation of LANMAS at 5 additional sites *remote dial in support, where accessible *software configuration management *corrective maintenance	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
06.07.0.04 Develop enhanced LANMAS (3.0)					
Support the continued development of LANMAS version 3.0 to the extent possible without adversely affecting the current production environment, to be accomplished by: *Designing, coding, testing and implementing any new requirements determined to be within scope and budget from the LANMAS User's Group.	Manpower	2.0	2.0	0.0	4.0
	Labor	170.9	181.2	0.0	352.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**170.9**	**181.2**	**0.0**	**352.1**
Total Section	**Manpower**	**7.5**	**7.5**	**5.5**	**20.5**
	Total Operating	**640.8**	**679.4**	**522.6**	**1842.8**

6.08 Environmental Systems

		FY00	FY01	FY02	Total
06.08.0.01 Provide Environmental Applications Support (ESH&QA)					
Applications include GIMS, NPDES and CIIS. ITD will provide assistance in: problem determination, correction and oversight, adaptive maintenance, preventative maintenance, quality assurance, change management and configuration control, database administration, data repository management, security, and maintenance of application support products.	Manpower	5.6	6.0	6.0	17.6
	Labor	478.5	543.5	570.1	1592.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**478.5**	**543.5**	**570.1**	**1592.0**
06.08.0.02 Provide Site Evaluation System Data Support					
Support the Site Evaluation GIMS Module and Reports (Oracle Forms, RDB and Reports) as well as data maintenance activities.	Manpower	0.2	0.2	0.2	0.5
	Labor	12.8	13.6	14.3	40.7
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**12.8**	**13.6**	**14.3**	**40.7**
06.08.0.03 Provide GIMS/EPD Support					
Support GIMS, FIeld Computer Activities, ExR Contract Management, Data Loading and Delivery, EDD Definitions and Transitions, Data Filter, Cost Estimation, etc.	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
06.08.0.04 Provide Site Geotechnical Support					
Support efforts to generate SGS quarterly reports and other data management activities as appropriate.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
06.08.0.05 Provide Environmental Tracking Application Support					
Maintain and Support the Environmental Tracking System (ERTS) Application.	Manpower	0.3	0.3	0.3	0.8
	Labor	21.4	22.6	23.8	67.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.4**	**22.6**	**23.8**	**67.8**
06.08.0.08 Provide End User IT Support to ER					
Provide additional user support and other ER application support as needed.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**

06.08.1.01 Implement and Populate Environmental Warehouse

Implement and populate an environmental data warehouse. The data warehouse will contain integrated information from multiple distributed, autonomous, and heterogeneous data sources. The data warehouse will consolidate and make readily available data from geochemical, geotechnical, infrastructure and ecological data systems.

Manpower	4.1	4.0	2.0	10.1
Labor	350.3	362.3	190.0	902.7
NonLabor	0.0	0.0	0.0	0.0
Operating	**350.3**	**362.3**	**190.0**	**902.7**

06.08.1.02 Implement Sample Tracking and Invoice Checking

A sample tracking and invoice checking module will be added to GIMS. The application will assist ER and ESH&QA with the preparation of laboratory and sampling delivery orders; cost estimation and allocation; sample tracking and invoice checking; project spend out plans; and contract management reporting. This module will provide reports to facilitate financial performance completion tracking for ER and ESH&QA. AKA

Manpower	2.5	2.5	2.5	7.5
Labor	213.6	226.5	237.5	677.6
NonLabor	0.0	0.0	0.0	0.0
Operating	**213.6**	**226.5**	**237.5**	**677.6**

Total Section	**Manpower**	**15.6**	**15.9**	**13.9**	**45.4**
	Total Operating	**1332.9**	**1440.3**	**1320.7**	**4093.8**

6.09 Health Physics Systems

		FY00	FY01	FY02	Total
06.09.0.01 Provide Health Physics Applications Support					
Provide Support for New HPT Systems.	Manpower	5.0	5.0	5.0	15.0
	Labor	427.2	452.9	475.1	1355.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**427.2**	**452.9**	**475.1**	**1355.2**

Total Section	**Manpower**	**5.0**	**5.0**	**5.0**	**15.0**
	Total Operating	**427.2**	**452.9**	**475.1**	**1355.2**

6.10 Industrial Hygiene and Medical Systems

		FY00	FY01	FY02	Total
06.10.0.01 Provide Industrial Hygiene Applications Support					
Provide support for the existing Industrial Hygiene system and provide data conversion from legacy FlowGemini system to replacement system (Sentry).	Manpower	1.3	1.3	1.3	3.8
	Labor	106.8	113.2	118.8	338.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**106.8**	**113.2**	**118.8**	**338.8**
06.10.0.02 Provide DOE-HQ Epidemiological Surveillance Support					
Provide DOE-HQ SENTRY ITD maintenance support to medical department.	Manpower	0.3	0.3	0.3	0.8
	Labor	21.4	22.6	23.8	67.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.4**	**22.6**	**23.8**	**67.8**
06.10.0.03 Maintain New Medical Application					
Provide operational support and minor enhancement for the Sentry medical records application, the instrument interfaces, the HEIDI drug surveillance system, and other related systems.	Manpower	2.0	2.0	2.0	6.0
	Labor	170.9	181.2	190.0	542.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**170.9**	**181.2**	**190.0**	**542.1**
Total Section	**Manpower**	**3.5**	**3.5**	**3.5**	**10.5**
	Total Operating	**299.0**	**317.0**	**332.5**	**948.6**

6.11 Technical Systems

		FY00	FY01	FY02	Total
06.11.0.01 Provide METLAB/Corrosion Evaluation Support					
Support existing MetLab/Corrosion Evaluation Systems.	Manpower	0.8	1.0	1.0	2.8
	Labor	68.4	90.6	95.0	253.9
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**68.4**	**90.6**	**95.0**	**253.9**
06.11.0.02 Provide Fuel Applications Support					
Provide application support for the Automated Fuel Dispensing System.	Manpower	0.6	0.8	0.8	2.2
	Labor	51.3	72.5	76.0	199.7
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**51.3**	**72.5**	**76.0**	**199.7**
06.11.0.03 Provide DC&S Admin Applications Support					
Provide operational support and minor enhancements for DC&S Department Application(s).	Manpower	0.9	1.2	1.2	3.3
	Labor	76.9	108.7	114.0	299.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**76.9**	**108.7**	**114.0**	**299.6**
06.11.0.04 Provide Fire Protection Application Support					
Provide operational support and minor enhancements for the SRS Fire Protection Application.	Manpower	0.5	0.6	0.6	1.7
	Labor	42.7	54.4	57.0	154.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**54.4**	**57.0**	**154.1**
06.11.0.06 Provide WIND Applications Support					
Provide Applications Support for the Weather Center.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
06.11.0.07 Maintain CSWE CTS/Self Assessment Application					
Provide operational support and minor enhancements for CSWE commitment tracking system (TRACK), including corrective software maintenance and database support.	Manpower	0.2	0.2	0.2	0.6
	Labor	17.1	18.1	19.0	54.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**18.1**	**19.0**	**54.2**
06.11.0.08 Provide Automated Engineering Applications Support					
Provide ITD support for DWPF Automated Engineering Environment applications.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**

06.11.0.09 Provide Proficiency WatchBill Database Support

Provide operational support and minor enhancements for the Proficiency WatchBill Database, including, but not limited to rolling out the application to other facilities (e.g., HB Line, 235-F), development of Help Files for Online Help, install version upgrades as required, and perform analysis and collect requirements for possible interface with TRAIN

Manpower	1.6	2.0	2.0	5.6
Labor	136.7	181.2	190.0	507.9
NonLabor	0.0	0.0	0.0	0.0
Operating	**136.7**	**181.2**	**190.0**	**507.9**

06.11.0.10 Provide Power Cost Distribution Application Support

Provide operational support and minor enhancements for the Power Quantity/Cost Distribution system (PQCD}.

Manpower	0.2	0.2	0.2	0.6
Labor	17.1	18.1	19.0	54.2
NonLabor	0.0	0.0	0.0	0.0
Operating	**17.1**	**18.1**	**19.0**	**54.2**

06.11.0.11 Provide MLS Applications Support

Provide computer and software support for CSWE's MLS System

Manpower	0.4	0.5	0.5	1.4
Labor	37.2	45.3	47.5	130.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**37.2**	**45.3**	**47.5**	**130.0**

06.11.0.12 Provide Transportation Applications Support (ATMS)

Provide computer software support for CSWE's Automated Transportation Management System

Manpower	0.2	0.3	0.3	0.9
Labor	17.1	30.2	31.6	78.9
NonLabor	0.0	0.0	0.0	0.0
Operating	**17.1**	**30.2**	**31.6**	**78.9**

Total Section	**Manpower**	**6.4**	**7.8**	**7.8**	**22.1**
	Total Operating	**549.8**	**709.5**	**744.2**	**2003.6**

7.0 Division Computing Strategies

7.01 Division Field Support

		FY00	FY01	FY02	Total
07.01.0.01 Provide Premier Field Support - NMSP/F-Area					
Provide 7x24 support for SOMs and STEs. Provide desktop help for local area users for software not supported by 5-HELP	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.01.0.02 Provide Premier Field Support - NMSP/H-Area					
Provide 7x24 support for SOMs and STEs. Provide desktop help for local area users for software not supported by 5-HELP	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.01.0.04 Provide Premier Field Support - HLWMD/AIM					
Provide desktop support, AIM technical support, and report generation.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.01.0.05 Provide Premier Field Support - DPD					
Provide desktop hardware and software support with CRC coordination in the Tritium Facility	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.01.0.06 Provide Premier Field Support - SFSD/AIM					
Provide desktop support, AIM technical support, and report generation.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.01.0.07 Provide Premier Field Support - ERD					
Provide collocated premium field support for ER desktop systems to include hardware and software troubleshooting, PC coordinator activities, ITD road show coordination and other requested support work.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**

07.01.0.08 Provide Premier Field Support - PE&CD/SGS

Provide collocated premium field support for SGS desktop systems to include hardware and software support.

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.01.0.09 Provide Premier Field Support - ESH&QA/EPD

Provide desk side computing support for EPD staff residing in 742-A and 773-42A. Services to include PC procurement/leasing and hardware troubleshooting

Manpower	0.7	0.7	0.7	2.1
Labor	59.8	63.4	66.5	189.7
NonLabor	0.0	0.0	0.0	0.0
Operating	**59.8**	**63.4**	**66.5**	**189.7**

07.01.0.10 Provide Premier Field Support - ESH&QA/HPT

Provide tier II premier field support to the Health Protection Technology Department.

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.01.0.11 Provide Premier Field Support - SRTC/Division

Provide tier II premier field support to the overall division.

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**95.0**	**271.0**

07.01.0.12 Provide Premier Field Support - SRTC/MTS

Provide desk side tier II premier support to the Materials Technology Section of SRTC.

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.01.0.13 Provide Premier Field Support - SRTC/EDS

Provide Tier II desk side support to the Engineering Development Section (Ebra).

Manpower	0.3	0.3	0.3	0.8
Labor	22.2	23.6	28.5	74.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**22.2**	**23.6**	**28.5**	**74.3**

07.01.0.14 Provide Premier Field Support - SRTC/ITS

Provide Tier II Premier Support for the Immobilization Technology Section of SRTC.

Manpower	0.4	0.5	0.5	1.4
Labor	35.0	40.8	47.5	123.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**35.0**	**40.8**	**47.5**	**123.3**

07.01.0.15 Provide Premier Field Support - SRTC/NTS

Provide Tier II Premier Support for the Nuclear Technology Section Weather Center (Boni)

Manpower	0.4	0.5	0.5	1.4
Labor	35.0	40.8	47.5	123.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**35.0**	**40.8**	**47.5**	**123.3**

07.01.0.16 Provide Premier Field Support - SPID

Provide Tier II premier support.

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.01.0.17 Provide Premier Field Support - A&ID/SUD

Provide Tier II premier desktop support for Site Utilities.

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**95.0**	**271.0**

07.01.0.18 Provide Premier Field Support - A&ID/FSD

Provide Tier I & Tier II support to the Facilities Services Department.

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**95.0**	**271.0**

07.01.0.19 Provide Premier Field Support - TSD/LANMAS

Provide field support to TSD in support of the LANMAS project.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.01.0.20 Provide Premier Field Support - Passport Rollout

Provide field support for the rollout of Passport and provide assistance for unique field and workstation configuration issues.

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**95.0**	**271.0**

Total Section	**Manpower**	**13.0**	**13.1**	**13.2**	**39.2**
	Total Operating	**1109.0**	**1183.0**	**1254.1**	**3546.2**

7.02 Direct Infrastructure Systems Support

		FY00	FY01	FY02	Total
07.02.0.01 Provide Systems Support - NMSP/F-Area					
Maintain backups and perform system updates for the Division servers that host the various databases used by the division.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	16.0	16.0	16.0	48.0
	Operating	**101.4**	**106.6**	**111.0**	**319.0**
07.02.0.02 Provide Systems Support - NMSP/H-Area					
Maintain backups and perform system updates for the Division servers that host the various databases used by the division.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.02.0.03 Provide Systems Support - Cray					
Provide operating system support for CRAY supercomputer user community in SRTC.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.02.0.04 Provide Passport Infrastructure Support					
Provide Systems support to PASSPORT Project for Program Management Integration	Manpower	1.0	2.0	2.0	5.0
	Labor	85.4	181.2	190.0	456.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**181.2**	**190.0**	**456.6**
07.02.0.05 Provide AFDS Systems Support					
Provide support for the Automated Fuel Dispensing System for CSWE as requested.	Manpower	0.1	0.1	0.1	0.2
	Labor	4.3	4.5	4.8	13.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**4.3**	**4.5**	**4.8**	**13.6**
07.02.0.06 Provide Division Systems Management - TSD/Loveland					
Support Documint system with technical support, backups, and system updates.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.02.0.07 Provide Division Systems Support (NT) - H-Area (NMSS)					
Provide systems support for H-Area NMSS NT systems operations, recovery and backup. These are systems that serve FileMaker and SYBASE Applications.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.02.0.08 Provide DC&SD Systems Support

Provide systems support to DC&SD as requested.

Manpower	0.1	0.1	0.1	0.3
Labor	8.5	9.1	9.5	27.1
NonLabor	0.0	0.0	0.0	0.0
Operating	**8.5**	**9.1**	**9.5**	**27.1**

07.02.0.09 Provide Systems Support to E&GIS (FALCON)

Provide systems support to the E&GIS systems FALCON. This is a digital UNIX box residing in the DFS cluster in support of E&GIS efforts.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.02.0.10 Provide Meteorologic Systems Support to SRTC/NTS

Provide systems support for WIND and other associated systems in the Weather Center.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.02.0.11 Provide System Support for Corrosion Evaluation

Provide licensing and support for SMPSS systems which houses the Corrosion Evaluation Module. This will remain until the option is added to METLAB.

Manpower	0.1			0.1
Labor	8.5	0.0	0.0	8.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**8.5**	**0.0**	**0.0**	**8.5**

07.02.0.12 Provide Systems Support to ESH&QA/EMS

Provide computer, printer, and network technical support to EMS users.

Manpower	2.0	2.0	2.0	6.0
Labor	170.9	181.2	190.0	542.1
NonLabor	0.0	0.0	0.0	0.0
Operating	**170.9**	**181.2**	**190.0**	**542.1**

07.02.0.13 Provide VMS Systems Support to FBLine

Provide systems support for F-Area NMSS systems operations, recovery and backup..... Application served here is FBLine Personnel Access System.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.02.0.14 Provide NT Systems Support for F-Area (NMSS)

Provide systems support for F-Area NMSS NT systems operations, recovery and backup..... These are systems that house FileMaker and SYBASE Applications.

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.02.0.15 Provide SGS Systems Support

Provide NT and UNIX systems support for SGS.

Manpower	0.5	1.0	1.0	2.5
Labor	42.7	90.6	95.0	228.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**90.6**	**95.0**	**228.3**

07.02.0.16 Provide NT Systems Support - Fire Protection

Provide Windows NT support to SRSOC/SFAS (Fire Protection System).

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.02.0.17 Provide Systems Support to SRTC/NTS

Provide area support for NTS to Weather Center Systems (WIND) and other functions. The majority of this is NT based work.

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**95.0**	**271.0**

07.02.0.18 Provide Systems Support to P&CT

Provide support to P&CT for E3S and other systems.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.02.0.19 Provide Systems Support - CRIS

Provide systems support for the CRIS Systems in the VMS environment.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.02.0.20 Provide Systems Suport - ERD

Maintain backups and perform system updates for the Division servers that host the various databases used by the division - primarily Macintosh.

Manpower	0.2	0.3	0.2	0.7
Labor	17.1	28.3	19.0	64.4
NonLabor	0.0	0.0	0.0	0.0
Operating	**17.1**	**28.3**	**19.0**	**64.4**

07.02.0.21 Provide Systems Support - HPT

Provide systems management support and hardware support for HPT systems.

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**95.0**	**271.0**

07.02.0.22 Provide Systems Support - SGS

Provide system management for SGS's NT workstations and servers. Maintain backups and perform system updates for the Division servers that host the various databases used by the division.

Manpower	0.4	0.3	0.4	1.1
Labor	34.2	28.4	38.0	100.6
NonLabor	0.0	0.0	0.0	0.0
Operating	**34.2**	**28.4**	**38.0**	**100.6**

07.02.0.23 Provide Reservoir Surveillance System Support

Provides support to RSO operations and RAISIN application.

Manpower	0.5	0.5		1.0
Labor	42.7	45.3	0.0	88.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**0.0**	**88.0**

Total Section	**Manpower**	**14.5**	**15.9**	**15.4**	**45.7**
	Total Operating	**1250.6**	**1454.1**	**1474.4**	**4179.2**

7.03 Division IT Planning and Business Engineering

		FY00	FY01	FY02	Total
07.03.0.01 Provide Division Computing Liaison - NMSP/F-Area					
Provide application and system integration guidance for the various facility databases and the Passport/AIM products. Interface with the customer regarding priorities and IT trends and standards.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.03.0.02 Provide Division Computing Liaison - NMSP/H-Area					
Provide application and system integration guidance for the various facility databases and the Passport/AIM products. Interface with the customer regarding priorities and IT trends and standards.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.03.0.03 Provide Division Computing Liaison - HLWMD					
Provide application and system integration guidance for the various facility databases and the Passport/AIM products. Interface with the customer regarding priorities and IT trends and standards.	Manpower	0.2	0.2	0.2	0.6
	Labor	17.1	18.1	19.0	54.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**18.1**	**19.0**	**54.2**
07.03.0.04 Provide Division Computing Liaison - SFSD					
Provide Division IT budget and resources, IT consulting, Division PC Coordination, and communicate with Division Management.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.03.0.05 Provide Division Computing Liaison - ERD					
Provide Division IT budget and resources, IT consulting, Division PC Coordination, and communicate with Division Management. Provide ER workflow analysis to affect improved business engineering using information technology.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.03.0.06 Provide Division Computing Liaison - PE&CD/SGS					
Provide Division IT budget and resources, IT consulting, Division PC Coordination, and communicate with Division Management.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**
07.03.0.07 Provide Division Computing Liaison - ESH&QA/EPD					
Provide Division IT budget and resources, IT consulting, Division PC Coordination, and communicate with Division Management.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.03.0.08 Provide Division Computing Liaison - Support Computing

Provide Division IT consulting, Division PC-Coordination, direction, leadership and assist (if needed) with coordination of activities for projects assigned with the Support Computing arena.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

07.03.0.09 Provide Division Computing Liaison - TSD/Fire Protection

Provide Division IT budget and resources, IT consulting, Division PC Coordination, and communicate with Division Management. Provide overall coordination of ITD support.

Manpower	0.5	0.5	0.3	1.3
Labor	42.7	45.3	28.5	116.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**28.5**	**116.5**

Total Section	**Manpower**	**3.8**	**3.8**	**3.6**	**11.2**
	Total Operating	**324.7**	**344.2**	**342.0**	**1010.9**

7.04 Division Applications Support

		FY00	FY01	FY02	Total
07.04.0.01 Provide Division Applications Support - NMSP/F-Area					
Perform modifications to various Filemaker Pro, Access and Access databases. Maintain Division Web pages as required.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.04.0.02 Provide Division Applications Support - NMSP/H-Area					
Perform modifications to various Filemaker Pro, Access and Access databases. Maintain Division Web pages as required.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.04.0.03 Provide Division Applications Support - HLW					
Maintain the EPS 2000 Database for	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.04.0.04 Provide Division Applications Support - SFSD					
Provide application development and support for SFSD as needed.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.04.0.05 Provide Division Applications Support - ERD					
Provide application development and support for new and existing ER applications as needed to include QA, technical and user documentation to include Lotus Notes.	Manpower	0.3	0.3	0.5	1.1
	Labor	25.6	27.2	47.5	100.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**47.5**	**100.3**
07.04.0.06 Provide Division Applications Support - Construction					
Maintain current construction-related applications portfolio with minimal modification.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.04.0.07 Provide Division Applications Support - ESH&QA/EPD					
Provide application development and support for new and existing EPD applications.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**

07.04.0.08 Provide Division Applications - ESH&QA/HPT

Provide application development and support for CCF applications.

Manpower				
Labor	0.0	0.0	0.0	0.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**0.0**	**0.0**	**0.0**	**0.0**

07.04.0.09 Provide Division Applications - SRTC/ITS

Database development and support for Immobilization Technology Section

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

Total Section	**Manpower**	**4.9**	**4.9**	**5.1**	**14.9**
	Total Operating	**418.7**	**443.9**	**484.6**	**1347.1**

8.0 Information Delivery Strategies

8.01 Document Management and Records Services

		FY00	FY01	FY02	Total
08.01.0.01 Maintain WSRC Records Administration Application					
Provide operational support and minor enhancements for all ITD-supported document control software including EDWS and electronic routing and approval support. Minor enhancements to include the addition of new customers as needed to support the MSD tasks.	Manpower	1.1	1.1	1.1	3.3
	Labor	94.0	99.6	104.5	298.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**94.0**	**99.6**	**104.5**	**298.1**
08.01.0.02 Maintain MSD BASIS Applications					
Provide operational support and minor enhancements for BASIS applications in use by Management Services Department. This includes the CRIS apps and DCR Web.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	45.0	45.0	45.0	135.0
	Operating	**87.7**	**90.3**	**92.5**	**270.5**
08.01.0.03 Maintain DOE BASIS Applications					
Provide operational support and minor enhancements for existing DOE BASIS applications.	Manpower	0.3	0.3	0.3	0.8
	Labor	25.6	22.6	23.8	72.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**22.6**	**23.8**	**72.0**
08.01.0.04 Maintain Document Control Register					
Provide 7 X 24 operational support and minor enhancements for the Document Control Register. Support to include design and maintenance of current functionality as well as expanded interfaces to COTS identified as necessary, e.g. AIM.	Manpower	1.1	1.1	1.1	3.3
	Labor	94.0	99.6	104.5	298.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**94.0**	**99.6**	**104.5**	**298.1**
08.01.0.05 Maintain Existing EDWS Applications					
Provide operational support and minor enhancements for existing EDWS applications including DOE CFO, DOE Focus Group, and WSRC Patent Group.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
08.01.0.06 Maintain Image Expansion Capability					
Provide operational support and minor enhancements for existing IE functionality. Additional task include work on scanners and printers for process improvements within the current processes.	Manpower	1.1	1.1	1.1	3.3
	Labor	94.0	99.6	104.5	298.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**94.0**	**99.6**	**104.5**	**298.1**

08.01.0.07 Maintain Documents Infrastructure

Provide the necessary support for sizing, planning, and procuring the necessary infrastructure to maintain the EDWS services. Task to include software maintenance, planning for new customers and applications requirements, maintenance and operations of EDWS specific servers and memory, and control of EDWS operations for all customers

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

08.01.1.01 Upgrade Records Admin Custom Code

Maintain the SRS-specific customization of Documentum and upgrade exiting Visual Basic code to current versions. Examine custom code for efficiencies to be gained by modification.

Manpower	0.1	0.1	0.1	0.3
Labor	8.5	9.1	9.5	27.1
NonLabor	0.0	0.0	0.0	0.0
Operating	**8.5**	**9.1**	**9.5**	**27.1**

08.01.1.02 Reengineer and Replace Document Control Register

Examine possibilities for replacement of the MVS-based Document Control Register system. This effort to include the support of the customer for alternatives that meet customer business needs.

Manpower	0.1	0.1	0.1	0.3
Labor	8.5	9.1	9.5	27.1
NonLabor	0.0	0.0	0.0	0.0
Operating	**8.5**	**9.1**	**9.5**	**27.1**

Total Section	**Manpower**	**5.3**	**5.3**	**5.3**	**15.8**
	Total Operating	**497.8**	**520.6**	**543.8**	**1562.2**

8.02 ShRINE and Internet Services

		FY00	FY01	FY02	Total
08.02.0.01 Maintain SHRINE & Open SHRINE					
Coordinate plans, policy recommendations, project initiatives, training, and support issues for SHRINE and Open SHRINE products.	Manpower	4.0	3.0	3.0	10.0
	Labor	341.8	271.8	285.0	898.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**341.8**	**271.8**	**285.0**	**898.6**
08.02.0.02 Manage Shrine Provider Program					
Move providers to the new set of provider tools. This includes moving sites onto IRM-SRV52 and NT and Secondary Help Desk Support	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
08.02.0.03 Establish Environment for Core Objects					
Maintain infrastructure for sharing of ShRINE core objects in other application environments. This includes integration with and support of the Notes application and operating functions.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
08.02.0.03 Maintain MSD WEB Applications					
Support MSD initiatives including OSTI support. Provide support for maintenance of MSD functions on external web as well as scripts used for Access Manuals.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
08.02.0.04 Develop/Maintain WEB Applications (Walk-in)					
Provide direct funded WEB application development for WSRC initiatives. FTE requirements are estimated based on funding and ability to deliver.	Manpower	3.0	4.0	4.0	11.0
	Labor	256.3	362.3	380.0	998.7
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**256.3**	**362.3**	**380.0**	**998.7**
08.02.0.05 Provide Desktop Video Support					
Desktop Video Services supports common network delivery of multimedia assets and provides standard desktop tools for seamless integration of multimedia content in site groupware, intranet and office applications. And, Desktop Video Services supports integration of multimedia assets with traditional enterprise warehouse and archival applications and provides capabilities for intelligent searching and retrieval	Manpower	2.0	2.0	2.0	6.0
	Labor	170.9	181.2	190.0	542.1
	NonLabor	160.0	480.0	680.0	1320.0
	Operating	**330.9**	**661.2**	**870.0**	**1862.1**

Total Section	**Manpower**	**11.5**	**11.5**	**11.5**	**34.5**
	Total Operating	**1142.6**	**1521.7**	**1772.6**	**4436.9**

8.03 Data Warehouse Services

		FY00	FY01	FY02	Total
08.03.0.01 Provide Warehouse Subject Area Support					
Provide subject area-focused planning, design, implementation, metadata maintenance/reporting, load process performance monitoring and customer support. Support customer driven expansion and integration of the existing warehouses. Maintain warehouse compliance with technology upgrades.	Manpower	4.7	4.7	4.7	14.1
	Labor	401.6	425.7	446.6	1273.9
	NonLabor	75.0	75.0	75.0	225.0
	Operating	**476.6**	**500.7**	**521.6**	**1498.9**
08.03.0.02 Maintain Data Warehouse Infrastructure Support					
Manage and administer the SRS data warehouse supporting infrastructure environment. Provide tool standards, warehouse load processes, warehouse process schema, metadata management processes and structures and tool processes and standards. Provide analysis and deployment of tool suite upgrades . Provide monitoring and tuning of the warehouse infrastructure.	Manpower	1.5	1.5	1.5	4.5
	Labor	128.2	135.9	142.5	406.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**135.9**	**142.5**	**406.6**
08.03.0.03 Provide Support for Financial Warehouses					
Provide maintenance and modifications for the warehouses related to the Finance Department. Modifications will include work on Finance, TACS, Assets, and Sensitive People warehouses at the direction of Terry Swearingen	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
08.03.0.04 Provide Support for Procurement Warehouse					
Provide maintenance and modifications for the warehouses to PMMD Procurement Warehouse. Modifications related to or specifically caused by the FMTS migration is not included. Dupree Simmon will oversee these efforts.	Manpower	0.3	0.3	0.3	0.8
	Labor	21.4	22.6	23.8	67.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.4**	**22.6**	**23.8**	**67.8**
08.03.0.05 Provide Support for Sensitive People Warehouse					
Provide maintenance and modifications to the Sensitive People Warehouse as directed by Pat Morgan. This scope of work will include the HR driven changes to the Warehouse. Changes proposed and executed for the Finance Department will be funded from 08.04.0.03.	Manpower	0.3	0.3	0.3	0.8
	Labor	21.4	22.6	23.8	67.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.4**	**22.6**	**23.8**	**67.8**
08.03.0.06 Provide Support for Passport/WMS Warehouses					
Provide support for modifications, reports and migration for the Passport and WMS Warehouses. This task will include any customization necessary as the user base for these warehouses expands and requirements are further defined	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**

08.03.0.08 Implement End-User Warehouse Training

Supply expertise to end-user organizations for help with warehouse use. This task will require coordination between ITD orgs to identify the areas that are creating concerns/difficulties with reporting.

Manpower	0.3	0.3	0.3	0.8
Labor	21.4	22.6	23.8	67.8
NonLabor	0.0	0.0	0.0	0.0
Operating	**21.4**	**22.6**	**23.8**	**67.8**

08.03.0.09 Evaluate FMTS Impacts on Data Warehouse

Provide developmental support for changes to existing warehouses for changes needed to support the FMTS effort. This will include the tasks as defined and agreed upon by Dan Critchfield and the Data Warehouse contact for each of the areas impacted.

Manpower	0.5	0.5	0.3	1.3
Labor	42.7	45.3	23.8	111.8
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**23.8**	**111.8**

Total Section	**Manpower**	**9.0**	**9.0**	**8.7**	**26.6**
	Total Operating	**839.7**	**885.7**	**901.6**	**2627.0**

8.05 EMail/Groupware

		FY00	FY01	FY02	Total
08.05.0.01 Provide Production Support for ccMail:					
Provide daily operations and management support for the legacy ccMail environment. Monitor performance and system integrity. Resolve hardware, software, and user problems. Perform sanitation as needed.	Manpower	1.5	0.0	0.0	1.5
	Labor	128.2	0.0	0.0	128.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**0.0**	**0.0**	**128.2**
08.05.0.02 Maintain Mail Directory Services					
Provide directories to ccMAil, Notes, and other messaging services (external partners). Maintain consistency of SRS mail directories throughout all SRS entities and external partners.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
08.05.1.01 Implement ccMail Migration					
Develop and execute ccMail to Notes migration. Estimate data sizes. Develop pre and post migration verification utilities. Prepare/Train/Support help desk personnel. Test migration strategy. Establish migration order. Conduct pilot. Perform migration of all users. Validate migrations.	Manpower	3.5	0.0	0.0	3.5
	Labor	299.0	0.0	0.0	299.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**299.0**	**0.0**	**0.0**	**299.0**
08.05.1.02 Implement and Support Notes Infrastructure					
Design groupware infrastructure. Prototype, develop, and implement system administration functions in support of the notes deployment. Deploy, maintain, and operate the Notes environment. Monitor performance and system integrity. Resolve hardware, software, and user problems. Perform sanitation as needed. Support/Train help desk, department coordinators, site training personnel.	Manpower	3.0	4.0	4.0	11.0
	Labor	256.3	362.3	380.0	998.7
	NonLabor	678.0	778.0	808.0	2264.0
	Operating	**934.3**	**1140.3**	**1188.0**	**3262.7**
08.05.1.03 Implement End-User Development Environment					
Provide SRS specific helper applications, support libraries, procedures, policies, and instructions for the groupware end-user development environment. Promote the use of Notes standard databases, and the support Java applets as the development environment of choice for user developed groupware applications.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	25.0	0.0	0.0	25.0
	Operating	**110.4**	**90.6**	**95.0**	**296.0**
08.05.1.04 Implement E-Forms					
Implement electronic routing and approval of strategic forms (workflow) applications. Establish Notes as the site standard for electronic forms requiring any electronic routing and approval. Promote the use of electronic routing and approval and workflow mechanisms as reengineering opportunities are discovered.	Manpower	2.0	2.0	2.0	6.0
	Labor	170.9	181.2	190.0	542.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**170.9**	**181.2**	**190.0**	**542.1**

08.05.1.05 Implement Notes Interface to Records Administration

Define policy and implement functionality required for retention of designated Notes documents as records. Define and implement appropriate conduits to other document systems (EDWS).

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	50.0	5.0	5.0	60.0
Operating	**135.4**	**95.6**	**100.0**	**331.0**

08.05.1.06 Migrate Workgroup Servers to Notes Infrastructure

Develop, plan, and migrate site from shared file environment (Novell) to a shared document environment (Notes Doc Libraries). Estimate data sizes. Develop pre and post migration verification utilities. Prepare/Train/Support help desk personnel. Test migration strategy. Establish migration order. Conduct pilot. Perform migration of all users. Validate migrations.

Manpower	0.5	1.0	0.0	1.5
Labor	42.7	90.6	0.0	133.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**90.6**	**0.0**	**133.3**

08.05.1.07 Develop Groupware Applications

Develop applications in the groupware environment using shared data space, workgroup solutions, and basic document management and routing. Put into production site wide electronic forms tools and solutions.

Manpower		2.0	2.0	4.0
Labor	0.0	181.2	190.0	371.2
NonLabor	0.0	0.0	0.0	0.0
Operating	**0.0**	**181.2**	**190.0**	**371.2**

Total Section	**Manpower**	**13.0**	**11.5**	**10.5**	**35.0**
	Total Operating	**1863.7**	**1824.7**	**1810.6**	**5499.1**

9.0 IT Infrastructure Strategies

9.01 MVS Applications Services

		FY00	FY01	FY02	Total
09.01.0.01 Provide MVS Systems Engineering					
Provide MVS software engineering and management for the MVS Server environment including operating system software management, program products, middleware, second -level problem resolution, etc.	Manpower	6.0	5.0	4.0	15.0
	Labor	512.7	452.9	380.0	1345.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**512.7**	**452.9**	**380.0**	**1345.6**
09.01.0.02 Provide MVS Computing Operations					
Provide hardware maintenance and operational support for the MVS environment.	Manpower	5.0	5.0	5.0	15.0
	Labor	326.3	350.0	363.8	1040.1
	NonLabor	2131.3	2129.3	2129.3	6389.9
	Operating	**2457.6**	**2479.3**	**2493.1**	**7430.0**
09.01.0.03 Provide MVS Disaster Recovery Capability					
Provide off-site disaster recovery facility for the MVS environment including annual testing.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	60.0	60.0	60.0	180.0
	Operating	**102.7**	**105.3**	**107.5**	**315.5**
09.01.0.04 Provide DB2 Data Base Administration					
Provide ongoing operation, management, administration, and troubleshooting of the DB2 Data Base environment. Perform installation and update of DBMS and related software products.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
09.01.0.05 Provide ADABAS Data Base Administration					
Provide ongoing operation, management, administration, and troubleshooting of the ADABAS Data Base environment. Perform installation and update of DBMS and related software products.	Manpower	1.5	1.0	1.0	3.5
	Labor	128.2	90.6	95.0	313.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**128.2**	**90.6**	**95.0**	**313.8**
09.01.0.07 Provide MVS Contract Management					
Manage hardware maintenance, software licensing, and other contracts related to delivery of MVS services.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
Total Section	**Manpower**	**15.0**	**13.5**	**12.5**	**41.0**
	Total Operating	**3372.0**	**3309.3**	**3265.7**	**9946.9**

9.02 UNIX Computing Services

		FY00	FY01	FY02	Total
09.02.0.01 Provide Business UNIX Systems Engineering					
Provide comprehensive planning and management WSRC's Business UNIX Computing environment including operating system management, program product installation and support, change control, troubleshooting, etc.	Manpower	9.0	10.0	11.0	30.0
	Labor	769.0	905.8	1045.1	2719.9
	NonLabor	1339.0	1870.0	2085.0	5294.0
	Operating	**2108.0**	**2775.8**	**3130.1**	**8013.9**
09.02.0.02 Provide Central Computing Operations Support					
Perform computer operations and monitoring for Business Unix and other platforms supported by the Computer Center.	Manpower	11.0	9.0	7.0	27.0
	Labor	637.1	575.2	479.6	1691.8
	NonLabor	195.0	0.0	0.0	195.0
	Operating	**832.1**	**575.2**	**479.6**	**1886.8**
09.02.0.03 Provide Oracle Data Base Administration - UNIX					
Provide comprehensive Oracle Data Base management services for the Unix server environment. Perform installation and maintenance of DBMS software products and associated development toolset. Monitor and tune the data base environment. Provide ongoing administrative and technical support.	Manpower	6.0	7.0	8.0	21.0
	Labor	512.7	634.1	760.1	1906.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**512.7**	**634.1**	**760.1**	**1906.8**
09.02.0.04 Provide CCF Facility Support and Disaster Recovery					
Provide engineering and support for 703-44A, 703-A, 707-C and 702-C computer facilities. Provide Disaster Recovery for Critical Unix Applications. Provide baseline support for DR for other platforms.	Manpower	4.0	3.0	3.0	10.0
	Labor	341.8	271.8	285.0	898.6
	NonLabor	500.0	470.0	470.0	1440.0
	Operating	**841.8**	**741.8**	**755.0**	**2338.6**
09.02.0.05 Provide System Backup - UNIX					
Provide routine and Disaster Recovery backups of ITD managed systems.	Manpower	3.5	3.5	3.5	10.5
	Labor	265.4	282.7	295.4	843.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**265.4**	**282.7**	**295.4**	**843.6**
09.02.0.06 Provide Production Support - UNIX					
Manage work flow thru Operations and support applications used by Operations.	Manpower	5.0	5.0	5.0	15.0
	Labor	393.6	418.6	438.0	1250.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**393.6**	**418.6**	**438.0**	**1250.1**
09.02.0.07 Provide Contracts Management - UNIX					
Manage all contracts associated with Business UNIX.	Manpower	2.0	2.0	2.0	6.0
	Labor	137.2	146.9	152.9	437.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**137.2**	**146.9**	**152.9**	**437.0**

Total Section	**Manpower**	**40.5**	**39.5**	**39.5**	**119.5**
	Total Operating	**5090.7**	**5575.1**	**6011.2**	**16676.9**

9.03 VMS Computing Services

		FY00	FY01	FY02	Total
09.03.0.01 Provide VMS Systems Engineering					
Provide VMS Systems Engineering support for the Alpha cluster and other VMS systems. Applications running on this environment include the WIND System. This covers all systems and people that used to be Business VMS and Technical VMS.	Manpower	2.5	1.5	1.0	5.0
	Labor	213.6	135.9	95.0	444.5
	NonLabor	383.0	400.0	360.0	1143.0
	Operating	**596.6**	**535.9**	**455.0**	**1587.5**
09.03.0.02 Provide VMS Operations Support					
Provide engineering, management, operational, and production support for VMS environment including centralized transaction servers and distributed support systems. Tasks include operating and support utilities maintenance, system monitoring, production operation procedure development, and problem resolution.	Manpower	1.0	1.0	1.0	3.0
	Labor	68.6	73.4	76.5	218.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**68.6**	**73.4**	**76.5**	**218.5**
09.03.0.03 Provide VMS Oracle Data Base Administration					
Provide comprehensive Oracle Data Base installation, management, administration, and troubleshooting services for the SRS VAX/VMS environment.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
09.03.0.04 Provide VMS Infrastructure Systems Support					
Provide VMS systems engineering for VMS Infrastructure related systems such as Mail servers. These systems will be around through the first year of the Notes deployment.	Manpower	0.5			0.5
	Labor	42.7	0.0	0.0	42.7
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**0.0**	**0.0**	**42.7**
09.03.0.05 Provide Company-Level DEC Contract Management					
Manage the Site DEC Contract. This contract handles all DEC licensing site wide.	Manpower	1.0	0.5	0.5	2.0
	Labor	85.4	45.3	47.5	178.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**45.3**	**47.5**	**178.2**
09.03.1.01 Provide DBA Support for VMS Consolidation					
Provide DBA support for migration of remaining VMS-based business applications/databases to UNIX or other supported platform.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
Total Section	**Manpower**	**6.0**	**4.0**	**3.5**	**13.5**
	Total Operating	**878.8**	**745.2**	**674.0**	**2298.0**

9.04 NT Computing Services

		FY00	FY01	FY02	Total
07.02.0.04 Operations MC&A Systems Support					
Provide maintenance and enhancement support for the site nuclear material inventory client-server based information systems. This includes support of the NES boxes.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
07.02.0.05 NT Systems Support - SUD					
Provide NT systems support to the Site Utilities Department.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.02.0.07 LANMAS Support to DOE Complex					
Provide NT support for LANMAS users at other DOE Complex Sites.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
07.02.0.08 Calibration Server Support for S&H					
Provide support for the Instrument Calibration Server for Safety & Health Operations.	Manpower	0.3			0.3
	Labor	21.4	0.0	0.0	21.4
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.4**	**0.0**	**0.0**	**21.4**
07.02.0.09 NT Server Support - AIM (SFS Engineering)					
Provide NT Server support to the AIM project for SFS Engineering.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**
07.02.0.13 NT Server Support - AIM (HLWM)					
Provide Server Support to HLWM for AIM.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**
08.05.0.11 Notes Servers Engineering Support					
Develop and provide ongoing Systems Engineering in support of Information Delivery's Lotus Notes implementation.	Manpower	2.5	3.5	3.5	9.5
	Labor	213.6	317.0	332.5	863.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**213.6**	**317.0**	**332.5**	**863.2**

09.04.0.01 Provide NT Master Domain Services

Provide Master Domain authentication services, name resolution services, trust relationships, and global group management outside of managed desktops.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	56.0	16.0	16.0	88.0
Operating	**98.7**	**61.3**	**63.5**	**223.5**

09.04.0.02 Provide NT Operations Support

Provide engineering, management, operational, and production support for NT environment including centralized transaction servers and distributed support systems. Tasks include operating and support utilities maintenance, system monitoring, production operation procedure development, and problem resolution.

Manpower	1.5	5.0	8.0	14.5
Labor	128.2	384.3	611.7	1124.2
NonLabor	0.0	0.0	0.0	0.0
Operating	**128.2**	**384.3**	**611.7**	**1124.2**

09.04.0.03 Provide NT Oracle Data Base Administration

Provide comprehensive Oracle Data Base installation, management, administration, and troubleshooting services for the SRS NT environment.

Manpower	1.0	1.5	2.0	4.5
Labor	85.4	135.9	190.0	411.3
NonLabor	37.0	57.0	84.0	178.0
Operating	**122.4**	**192.9**	**274.0**	**589.3**

09.04.0.14 NT Systems Engineering

Provide NT Server support for emergent NT work.

Manpower	1.0	2.0	3.0	6.0
Labor	85.4	181.2	285.0	551.6
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**181.2**	**285.0**	**551.6**

Total Section	**Manpower**	**9.4**	**15.1**	**19.6**	**44.1**
	Total Operating	**891.9**	**1372.2**	**1813.8**	**4077.9**

9.05 Desktop Computing Services

		FY00	FY01	FY02	Total
09.05.0.01 Provide Desktop Server Operations Support					
Provide systems operations and management for file and print servers that support the site standard desktops with personal network file space and workgroup file space.	Manpower	3.0	3.0	3.0	9.0
	Labor	222.7	237.5	247.9	708.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**222.7**	**237.5**	**247.9**	**708.1**
09.05.0.02 Provide Desktop Server Systems Engineering					
Provide systems engineering function for desktop file and print (WISDOM) servers. This includes second level problem resolution, testing operating systems and associated program product changes, and turning changes over to server operations staff for implementation. NT systems engineering in support of SRS Domain and the NT standard desktop configuration, and conversion to NetWare Version 5 are also included in this task.	Manpower	4.0	4.0	4.0	12.0
	Labor	341.8	362.3	380.0	1084.1
	NonLabor	684.5	861.1	861.1	2406.7
	Operating	**1026.3**	**1223.4**	**1241.1**	**3490.8**
09.05.0.03 Provide Desktop Software Engineering					
Define, license, distribute, and manage the standard SRS desktop software environment including operating system configurations and standard application software. It is expected that basic application and operating system software costs will be charged direct to users' budgets after FY1999.	Manpower	6.0	6.0	5.0	17.0
	Labor	512.7	543.5	475.1	1531.2
	NonLabor	875.7	3359.1	3424.5	7659.3
	Operating	**1388.4**	**3902.6**	**3899.6**	**9190.5**
09.05.0.04 Coordinate PC Leasing Program					
Develop/maintain technical specifications, as well as STR function, with vendor. Administer lease program which includes maintaining catalog of available systems and options, customer order and billing, asset management, system setup and optional redeployment, initial software installs, hardware warranty program, and system returns.	Manpower	5.0	5.0	3.0	13.0
	Labor	359.9	384.3	247.9	992.2
	NonLabor	4.0	4.0	4.0	12.0
	Operating	**363.9**	**388.3**	**251.9**	**1004.2**
09.05.0.07 Coordinate the Personal Computer Review Board					
Plan and coordinate the activities of the Division-represented Personal Computer Review Board (PCRB) in the areas of hardware evaluation, specification, and allocation; software planning and evaluation, ITD desktop assessment and product planning, troubleshooting, and management communications on desktop issues.	Manpower	0.3	0.3	0.3	0.9
	Labor	25.6	27.2	28.5	81.3
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**25.6**	**27.2**	**28.5**	**81.3**
09.05.0.11 Manage Support Coordinator Program					
Plan and coordinate the activities of a site-wide PC support coordinator group. Representatives from around the site that have management approval may participate in the areas of software and hardware troubleshooting, and be provided early communications on new desktop issues and updates.	Manpower	0.3	0.3	0.3	0.8
	Labor	21.4	22.6	23.8	67.8
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**21.4**	**22.6**	**23.8**	**67.8**

09.05.1.01 Implement Commercial Desktop Software Distribution

Develop and implement a system that permits end users to purchase selected nonstandard software packages from the web. Define the list of software packages. This system will reduce the cost of procuring software and reduce the delivery time.

Manpower	1.0	1.0		2.0
Labor	85.4	90.6	0.0	176.0
NonLabor	0.0	0.0	0.0	0.0
Operating	**85.4**	**90.6**	**0.0**	**176.0**

09.05.1.02 Implement Netware to NT Desktop Migration

Design and implement the necessary Desktop changes to provide a smooth migration to a Windows 2000 or it's replacement infrastructure. This work will be done in coordination with ITD Systems Engineering to maintain a consistent Standard Desktop for endusers.

Manpower	1.5	3.0	1.0	5.5
Labor	128.2	271.8	95.0	494.9
NonLabor	0.0	0.0	0.0	0.0
Operating	**128.2**	**271.8**	**95.0**	**494.9**

Total Section	**Manpower**	**21.1**	**22.6**	**16.6**	**60.2**
	Total Operating	**3261.8**	**6164.0**	**5787.8**	**15213.6**

9.09 Scientific Systems Computing

		FY00	FY01	FY02	Total
09.09.0.01 Provide Scientific Cluster Operations Support					
Provide Operational support to the Scientific Systems Environment. This includes hardware configuration management and backups.	Manpower	0.5	0.5	0.5	1.5
	Labor	42.7	45.3	47.5	135.5
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**42.7**	**45.3**	**47.5**	**135.5**
09.09.0.02 Provide Scientific Cluster Systems Engineering					
Provide systems support for the Scientific Cluster of UNIX and NT systems. The cluster supports SRTC, PE&CD, ESH&QA, WSMS and others. The systems is used for scientific data analysis and modeling as well as serving of environmental information.	Manpower	3.5	2.0	1.0	6.5
	Labor	299.0	181.2	95.0	575.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**299.0**	**181.2**	**95.0**	**575.2**
Total Section	**Manpower**	**4.0**	**2.5**	**1.5**	**8.0**
	Total Operating	**341.8**	**226.5**	**142.5**	**710.7**

9.10 Voice Network Services

		FY00	FY01	FY02	Total
09.10.0.01 Operate and Maintain SRS Voice Network					
Provide telecom network oversight to maintain capacity and high reliability of existing site voice switching, transport facilities, and network systems supporting all operating areas at or above existing levels. Provide oversight for design and implementation of facility expansion required. Implement subcontract consolidation by adding work tasks to existing telecom contractor, BAFIS.	Manpower	6.0	6.0	6.0	18.0
	Labor	479.0	509.2	533.0	1521.2
	NonLabor	5378.1	7554.1	7594.1	20526.3
	Operating	**5857.1**	**8063.3**	**8127.1**	**22047.5**
09.10.0.02 Manage Telecommunications Contracts					
Provide contract oversight to maintain integrity and reliability of existing site telecom system & network interconnections to the public network, to FTS service, and for cellular services required by the site.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	1205.8	1262.8	1319.8	3788.4
	Operating	**1291.2**	**1353.4**	**1414.8**	**4059.4**
09.10.0.03 Complete RTS LWOP Lease Schedule					
Provide contract oversight for remainder of RTS LWOP lease schedule.	Manpower	0.0	0.0	0.0	0.0
	Labor	0.0	0.0	0.0	0.0
	NonLabor	18200.0	0.0	0.0	18200.0
	Operating	**18200.0**	**0.0**	**0.0**	**18200.0**
09.10.0.04 Complete RTS Buyout					
Buyout RTS early in October to realize a significant cost savings.	Manpower	0.0	0.0	0.0	0.0
	Labor	0.0	0.0	0.0	0.0
	NonLabor	4700.0	0.0	0.0	4700.0
	Operating	**4700.0**	**0.0**	**0.0**	**4700.0**
09.10.0.05 Provide Telecom Facility Support					
Maintain operating environment for telecom equipment which meets site criteria for safety and security. Oversee and coordinate the planning, implementation, and maintenance of the telecom infrastructure, Outside Plant Cable Management, Fiber Optic Facility Management, and Outside Cable Expansion. Provide for total site route and disaster diversity, initiate and maintain the telecom configuration management system, provide power reliability	Manpower	8.0	8.0	8.0	24.0
	Labor	666.7	707.5	741.5	2115.8
	NonLabor	485.0	490.0	315.0	1290.0
	Operating	**1151.7**	**1197.5**	**1056.5**	**3405.8**
09.10.0.06 Replace Telecom Terminal Equipmant and Cable					
Removal of CESL items abandoned by BellSouth on site that present potential safety problems. Upgrade and/or replace manufactured discontinued telephone key systems (old Merlins & all Spirits). Replace damaged GFE cables .	Manpower	0.0	0.0	0.0	0.0
	Labor	0.0	0.0	0.0	0.0
	NonLabor	10.0	325.0	415.0	750.0
	Operating	**10.0**	**325.0**	**415.0**	**750.0**

09.10.0.07 Provide Support for DOE Corporate Network

Provide technical assistance to the DOE Corporate Network to facilitate an expanded SRS role in the telecom opportunities to be gained from DOE telecom consolidation.

Manpower	0.0	0.0	0.0	0.0
Labor	0.0	0.0	0.0	0.0
NonLabor	50.0	50.0	50.0	150.0
Operating	**50.0**	**50.0**	**50.0**	**150.0**

09.10.0.08 Provide Direct Telecom Support for DOE

Provide direct telecom support for DOE-SR

Manpower	0.3	0.3	0.3	0.9
Labor	25.6	27.2	28.5	81.3
NonLabor	0.0	0.0	0.0	0.0
Operating	**25.6**	**27.2**	**28.5**	**81.3**

Total Section	**Manpower**	**15.3**	**15.3**	**15.3**	**45.9**
	Total Operating	**31285.7**	**11016.4**	**11091.9**	**53394.0**

9.11 Data Network Services

		FY00	FY01	FY02	Total
09.11.0.01 Provide SRSnet Operations Support					
Provide comprehensive site computer network and local area network (LAN) facilities for SRS and the associated network connections to other external facilities and organizations, including network design, installation, security, and repair.	Manpower	7.5	7.5	7.5	22.5
	Labor	640.8	679.4	712.6	2032.8
	NonLabor	770.7	735.9	833.5	2340.1
	Operating	**1411.6**	**1415.2**	**1546.0**	**4372.8**
09.11.1.01 Upgrade SRS Network Access - Large Buildings					
Improve customer access performance to SRSnet by installing switched 10Mbps Ethernet for each Universal Wiring drop. Migration from 24 customers sharing 10Mbps to dedicated 10Mbps will improve access to IT data center resources and customer-to-customer connections. Large buildings require more than 24 Ethernet ports for customer service.	Manpower	3.0	3.0	2.0	8.0
	Labor	256.3	271.8	190.0	718.1
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**256.3**	**271.8**	**190.0**	**718.1**
09.11.1.01 Provide Video Network Operations Support					
Maintain the site video network at the same or higher grade of service. Update obsolete video reception and headend equipment. Provide environmental conditions at the satellite satellite reception building to reduce the maintenance costs. Purchase the character generating equipment required by FCC. Start transition from analog video system to digital video system.	Manpower	2.0	2.0	2.0	6.0
	Labor	170.9	181.2	190.0	542.1
	NonLabor	51.6	51.6	51.6	154.8
	Operating	**222.5**	**232.8**	**241.6**	**696.9**
09.11.1.02 Upgrade SRS Network Access - Small Buildings					
Improve customer access performance to SRSnet by installing switched 10Mbps Ethernet for each Universal Wiring drop. Migration from 24 customers sharing 10Mbps to dedicated 10Mbps will improve access to IT data center resources and customer-to-customer access. SRS has 386 buildings requiring less than 24 Ethernet ports to service the customers.	Manpower	0.0	1.0	1.0	2.0
	Labor	0.0	90.6	95.0	185.6
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**0.0**	**90.6**	**95.0**	**185.6**
Total Section	**Manpower**	**12.5**	**13.5**	**12.5**	**38.5**
	Total Operating	**1890.4**	**2010.3**	**2072.7**	**5973.4**

10.0 IT Management and Administration

10.0 IT Management and Administration

		FY00	FY01	FY02	Total
10.01.0.01 Provide ITD Department Management					
Provide staff management of the WSRC Information Technology Department.	Manpower	7.0	7.0	7.0	21.0
	Labor	598.1	634.1	665.1	1897.3
	NonLabor	557.0	560.0	570.0	1687.0
	Operating	**1155.1**	**1194.1**	**1235.1**	**3584.3**
10.01.0.02 Provide ITD Department Administration (Secretarial)					
Provide clerical and administrative support for ITD operations as well as administration of WSRC employee policies and procedures including CLS time entry and time and attendance. Maintain department records required by site policy including attendance records, personnel records, safety audit records, etc.	Manpower	7.0	7.0	7.0	21.0
	Labor	310.8	394.0	405.4	1110.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**310.8**	**394.0**	**405.4**	**1110.2**
10.01.0.03 Coordinate ITD Personnel and Training Support					
Provide planning, management, and coordination of ITD personnel activities including training, recruiting, posting system liaison, external reporting, etc.	Manpower	2.0	2.0	2.0	6.0
	Labor	154.1	164.0	171.5	489.6
	NonLabor	900.0	930.0	960.0	2790.0
	Operating	**1054.1**	**1094.0**	**1131.5**	**3279.6**
10.01.0.04 Provide DOE I/T Liaison					
Support planning and coordination of Information Technology services and WSRC performance reporting to DOE-SR in the IT area.	Manpower	1.0	1.0	1.0	3.0
	Labor	85.4	90.6	95.0	271.0
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**85.4**	**90.6**	**95.0**	**271.0**
10.01.0.05 Maintain ITD Desktop Refresh Program					
Provide hardware maintenance for existing inventory of ITD-managed desktops and implement phased desktop replacement with new machines under PC lease program.	Manpower	0.0	0.0	0.0	0.0
	Labor	0.0	0.0	0.0	0.0
	NonLabor	300.0	300.0	280.0	880.0
	Operating	**300.0**	**300.0**	**280.0**	**880.0**
10.01.0.06 Manage ITD Asset Life Cycle Program					
Coordinate ADPE Hardware inventory reporting/management and interface with Property Management in allocation, redeployment and excessing of ADPE assets. Develop guidelines, policies & procedures for life cycle management of ADP Hardware/SW. Implement PC Life Cycle Mgmt Program through PC Review Board.	Manpower	0.2	0.2	0.2	0.6
	Labor	17.1	18.1	19.0	54.2
	NonLabor	0.0	0.0	0.0	0.0
	Operating	**17.1**	**18.1**	**19.0**	**54.2**

10.01.0.07 Provide IT FPEG Services

Review and process ADP requisitions for the site and generate and process all ITD purchase requisitions. Maintain requisition tracking database. Generate CCF H/W and S/W maintenance renewals. Utilize the Procurement Credit Card to buy ADP for the site.

Manpower	4.0	4.0	4.0	12.0
Labor	308.1	328.0	342.9	979.1
NonLabor	134.7	0.0	0.0	134.7
Operating	**442.8**	**328.0**	**342.9**	**1113.8**

10.01.0.09 Provide Site-wide IT Blanket Order Administration

Administer large maintenance/license blanket purchase orders for the site. Perform STR function and support end users of contract services: provide fiscal oversight & accountability; interface with PMM on all contractual issues; manage SW licenses for site VAX systems; and administer Site License SW agreements & renewals.

Manpower	0.5	0.5	0.5	1.5
Labor	42.7	45.3	47.5	135.5
NonLabor	0.0	0.0	0.0	0.0
Operating	**42.7**	**45.3**	**47.5**	**135.5**

10.01.0.10 Maintain IT Cost Distribution and Recovery Processes

Plan and administer IT costs collection and distribution systems of ITD-provided products and services.

Manpower	0.2	0.2	0.2	0.6
Labor	17.1	18.1	19.0	54.2
NonLabor	0.0	0.0	0.0	0.0
Operating	**17.1**	**18.1**	**19.0**	**54.2**

10.01.0.11 Coordinate ITD Project Management Program

Continue establishment of PM Infrastructure, incl tools, procedures, and busienss processes for effective PM in ITD. These will be required on certain designated projects, and optional on others, at management discretion. Task will include support, assessments, training, mentoring, and formal reviews, in addition to selective team particpation

Manpower	1.0	1.0	1.0	3.0
Labor	85.4	90.6	95.0	271.0
NonLabor	10.0	0.0	0.0	10.0
Operating	**95.4**	**90.6**	**95.0**	**281.0**

Total Section	**Manpower**	**22.9**	**22.9**	**22.9**	**68.7**
	Total Operating	**3520.6**	**3572.8**	**3670.4**	**10763.8**

Appendix 1.4 - Plan Baseline - Capital Crosscut

5.06 Enterprise Management Infrastructure	Project	FY00	FY01	FY02
05.06.1.04 Expand Platform-Independent Storage - FY2000		**541.0**		
Install expanded storage for infrastructure servers leveraging the flexibility of platform-independent storage arrays / subsystems. Site wide systems require greater storage capacity to handle increased automation as a result of reengineering. In addition, the need to store data for trending and analysis particularly in the environmental and financial systems requires expanded storage. To provide technical flexibility, platform independent storage will be procured such that existing data may be stored as well as offering a migration path for data as the infrastructure and applications migrate to newer technologies.				
05.06.1.06 Expand Platform Independent Storage - FY2001			**800.0**	
Install expanded storage for infrastructure servers leveraging the flexibility of platform-independent storage arrays / subsystems. Site wide systems require greater storage capacity. To provide technical flexibility, platform independent storage will be procured such that existing data may be stored as well as offering a migration path for data as the infrastructure and applications migrate to newer technologies. to handle increased automation as a result of reengineering.				
05.06.1.07 Expand Platform-Independent Storage - FY2002				**800.0**
Install expanded storage for infrastructure servers leveraging the flexibility of platform-independent storage arrays / subsystems. Site wide systems require greater storage capacity to handle increased automation as a result of reengineering. In addition, the need to store data for trending and analysis particularly in the environmental and financial systems requires expanded storage. To provide technical flexibility, platform independent storage will be procured such that existing data may be stored as well as offering a migration path for data as the infrastructure and applications migrate to newer technologies.				
Total Section		**541.0**	**800.0**	**800.0**

9.02 UNIX Computing Services

		Project	FY00	FY01	FY02
09.02.1.01	**Implement UNIX Expansion - FY2000**		**811.0**		
	This is a capital project designated to expand UNIX computing capacity to support the increase in load and application operations within this infrastructure due to a COTS migration from legacy systems. For example, Passport and the HP module along with other site level replacements would begin through this expansion as well as a replacement of obsolete equipment utilized today for site systems.				
	Total Section		**811.0**		

9.04 NT Computing Services

		Project	FY00	FY01	FY02
09.04.1.10	**Implement Large-Scale NT Capability - FY2001**			**200.0**	
	Position NT processing capacity as a full, strategic application host platform. As systems and applications migrate due to COTS implementation and replacement into the NT environment away from legacy platforms, this infrastructure requires expansion as well as the implementation of more rigid configuration management.				
	Total Section			**200.0**	

9.10 Voice Network Services

		Project	FY00	FY01	FY02
09.10.1.02	**A AreaTelephone Switch Upgrade - FY2001**			**1,500.0**	
	Provide upgrade and trunking expansion for site telephone switching system hub in A Area. Add support for PRI.				

09.10.1.03	**C Area Telephone Switch Upgrade - FY2002** Provide upgrade and trunking expansion for site telephone switching system hub in C Area. Add support for PRI.				**1,500.0**
	Total Section			**1,500.0**	**1,500.0**

9.11 Data Network Services

		Project	FY00	FY01	FY02
09.11.1.03	**Implement SRS Data Network Refresh - FY2000** Provide phased refresh of SRS network routing and switched Ethernet infrastructure including primarily building-specific equipment.		**541.0**		
09.11.1.04	**Implement SRS Data Network Refresh - FY2001** Provide phased refresh of SRS network routing and switched Ethernet infrastructure including primarily building-specific equipment.			**500.0**	
09.11.1.05	**Implement SRS Data Network Refresh - FY2002** Provide phased refresh of SRS network routing and switched Ethernet infrastructure including primarily building-specific equipment.				**500.0**
	Total Section		**541.0**	**500.0**	**500.0**

		Project	FY00	FY01	FY02
09.10.1.01	**Implement Alternate Route to FTS 2000 - FY2000** Implement alternate LATA access through Barnwell/Columbia to offer diverse routing access to FTS 2000.		**500.0**		
09.10.1.04	**Upgrade SONET Backbone Ring - FY2001** Implement OC48 Ring technology etween A and C area to support data network traffic laod, disaster recovery, and voice transport reliability.			**750.0**	
09.10.1.05	**Upgrade SRS Cable Video Head-End - FY2001** Implement digital head end equipment to meet current commercial standards.			**300.0**	
09.10.1.06	**Upgrade Site Backbone - FY2002** Upgrade site transport-multiplex infrastructure to an all SONET technology in support of commercial practice and compatibility with DOE and site strategy for migration to ATM standard.				**2,000.0**
09.10.1.07	**Implement Fiber Access for SRS Buildings - FY2001** Install fiber facilities to remaing site buildings (primarily mobile units) which will continue to house personnel in site occupancy plans through FY04.			**800.0**	

09.10.1.08	**Complete SRS Building Wiring Program - FY2001** Upgrade remaining site building wiring to Category 5 standards in order to enable high speed netowrk communications for site personnel and IT infrastructure.	**500.0**		
09.10.1.09	**Complete SRS Building Wiring Program - FY2002** Upgrade remaining site building wiring to Category 5 standards in order to enable high speed netowrk communications for site personnel and IT infrastructure.	**500.0**		
Total Section		**500.0**	**2,350.**	**2,500.0**
Total Plan		**2,393.**	**5,350.**	**5,300.**

Appendix 2 - Plan Alignment

This page intentionally left blank

Appendix 2.1 Architecture

Computing Infrastructure

Architectural Principle			Strategic Plan Sections
I1	**IT Standards Progran**	The development and purchase of information technology will be according to applicable site standards.	**5.01 – Architecture and Standards**
I2	**Enterprise Systems Management**	Site-wide systems, applications, data, and networks will be managed from a total enterprise perspective.	**5.06 – Enterprise Management**
I3	**Telecommunications**	Telecommunications will be constructed and centrally managed to provide convergence of voice, video and data. Highly reliable data transmission capabilities can be incrementally scaled to meet local demand and any new site mission requirements.	**10.01 – Voice Services** **10.02 – Data Network Services**
I4	**Consolidated Operating Environment**	We will optimize our server environment by considering reliability, availability, operating cost and migration costs.	**9.01 - MVS Computing Strategy** **9.02 - Business UNIX Computing Strategy** **9.03 - Consolidated VMS Computing Strategy** **9.04 - NT Computing Strategy** **9.06 - Scientific Systems Computing Strategies**
I5	**Managed Personal Computers**	Site personal computers will be fully functional, based on site standards for hardware and software, and centrally managed and supported.	**9.05 - Desktop Computing Strategy**
I6	**Disaster Recovery**	Plans, contracts, and infrastructure will be in place to enable full recovery of critical site applications within 48 hours of a disaster.	**5.06 - Enterprise Management** **9.02 - Business UNIX Computing Strategy**
I7	**Security Management Processes**	Information technology security management processes will be continuously improved to ensure site electronic information is protected, commensurate with the defined threat.	**5.05 - Computer Security**

Appendix 2.1 Architecture

Data

Architectural Principle			Strategic Plan Sections
D1	**Site Data Management**	Data and information will be managed as site resources that have value beyond the point of origination.	**5.04 - Data Planning and Management**
D2	**Data Stewardship**	Data quality and integrity will be assured through enterprise-level Data Stewardship.	**5.04 - Data Planning and Management**
D3	**Data Sharing**	Data sharing will be enabled through site policy and data administration and management at the enterprise level.	**5.04 - Data Planning and Management** **5.08 - Software Development Tools** **8.03 - Data Warehouse Services**
D4	**Data Access**	End user productivity will be enhanced through simplification of end user access methods and increased warehousing of key business data.	**8.03 - Data Warehouse Services**

Appendix 2.1 Architecture

Applications

Architectural Principle			Strategic Plan Sections
A1	**Standard Development Tool Set**	A limited number of standard tools will be utilized for application development and integration efforts.	**5.08 - Software Development Tools**
A2	**System Integration Infrastructure**	System integration technology and processes will be established as a middleware infrastructure layer.	**5.08 - Software Development Tools** **5.10 - Business Process Alignment and COTS**
A3	**Programmatic Systems Interfaces**	Applications must provide programmatic access equivalent to the access provided by the user interface.	**5.09 - Development Methodology** **5.10 - Business Process Alignment and COTS**
A4	**Preference for Commercial Off-the-Shelf (COTS) Software**	The use of commercial, off the shelf (COTS) software is the preferred method for providing software solutions, where such software can be found that effectively supports the business process and can be integrated into the site's current and projected applications portfolio.	**5.08 - Software Development Tools** **5.10 - Business Process Alignment and COTS**
A5	**Web Deployed Applications**	Web deployment is the preferred application delivery vehicle for new applications.	**5.08 - Software Development Tools** **6.03 - Training Systems Strategy** **8.02 - ShRINE and Internet Services**
A6	**Unified Software Development Methodology**	A Software Development Methodology (SDM) that reflects best industry practices throughout the software life-cycle will be implemented.	**5.09 - Development Methodology**
A7	**Enterprise Managed Components**	Managed Component Technology is Encouraged for New Development Initiatives.	**5.08 - Software Development Tools** **5.09 - Development Methodology** **8.02 - ShRINE and Internet Services**

Appendix 2.1 Architecture

Enabling Technology

Architectural Principle			Strategic Plan Sections
E1	**Robust Intranet**	Site Intranet capabilities will use established commercial technologies, modeled on industry accepted capabilities and practices.	**8.02 - ShRINE and Internet Services**
E2	**Support for Emerging Data File Types**	The site will establish and support technologies for creating, manipulating, and presenting a defined set of data formats, including non-traditional data. The site will also support the convergence of voice and video formats	**5.04 - Data Planning and Management** **8.02 - ShRINE and Internet Services** **8.05 - Electronic Mail and GroupWare**
E3	**Strong User Authentication**	A single user identity infrastructure will be maintained that is the sole source for information regarding user accounts, encryption keys, non-repudiation, authentication, authority, and access to protected data and resources.	**5.05 - Computer Security** **8.01 - Document Management and Records Systems Strategies** **8.05 - Electronic Mail and GroupWare Strategy**
E4	**Collaboration and Routing**	A collaborative infrastructure environment will be provided that enables team-based work activities.	**8.01 - Document Management and Records Systems Strategies** **8.05 - Electronic Mail and GroupWare Strategy**
E5	**Workgroup and End-user Strategies**	A set of recommended tools for end-user development and workgroup computing environment will be provided and supported.	**5.01 - Architecture and Standards** **8.05 - Electronic Mail and GroupWare Strategy**
E6	**End-user Education**	There will be an increased emphasis on user education in information technology and applications.	**5.07 - Integrated Customer Service**
E7	**Wider Availability of IT Resources**	Employees and external partners with legitimate business need will have robust access to site IT resources, regardless of location, on site or off site.	**10.02 -Data Network Services**

Appendix 2.1 Architecture

Business Alignment

Architectural Principle			Strategic Plan Sections
B1	**Importance of Information Technology**	IT systems are a recognized component of the site's infrastructure and play a supporting role in leveraging current and future missions.	**5.03 - IT Planning Integration** **6.0 - IT Baseline – Applications Delivery and Support** **7.0 - IT Baseline - Division Computing Support**
B2	**Support for Site Functional Requirements**	While IT initiatives will meet functional requirements, opportunities to support integrated processes will be maximized wherever possible.	**5.10 - Business Process Alignment and COTS** **6.0 - IT Baseline – Applications Delivery and Support** **7.0 - IT Baseline - Division Computing Support**
B3	**Attention to External Stakeholders**	IT investments will address the needs of external stakeholders as required by site processes.	**5.08 - Software Development Tools** **10.02 - Data Network Services**