U.S. Department of Energy

Support Cost By Functional Activity Report

Fiscal Year Ending September 30, 2003

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This report available online at: <u>http://www.mbe.doe.gov/progliaison/scfa.htm</u>

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT INTRODUCTION

PURPOSE

The purpose of this report is to highlight the amounts of and trends in support cost incurred by 28 of the Department's largest contractors, classified by functional activity. These represent the majority of support costs for the Department. This report is issued in response to the House Report, 105-581, accompanying the Energy and Water Development Appropriations Act for FY 1999 commending the Department on the development of the Support Cost by Functional Activity (SCFA) System, and the annual report on Support Cost by Functional Activity. Support activities are functions that are necessary to be performed to enable Department of Energy (DOE) sites to accomplish their direct mission activities. Accounting, procurement, human resources, safety and health, and maintenance, are examples of support cost. Support costs do not include the costs of capital equipment or construction.

BACKGROUND

Prior to FY 1997, Department-wide support cost data showing the nature of, amount of, and trends in these costs was not available. For example, the Office of Environmental Management could not determine how much of its funding for environmental cleanup at DOE sites was being expended on actual "hands on" cleanup versus support-related activities. Recognizing the importance of managing these costs, and receiving many requests from Congress and the General Accounting Office (GAO), the Department's Chief Financial Officer implemented the SCFA System. In implementing the SCFA to track support-related costs, the Chief Financial Officer developed consistent functions for 22 specific cost categories—such as "facility management," "safeguards and security," and "site maintenance"—that contractors use in reporting their support-related costs. These 22 specific categories fall into three broad categories: "general support," "mission support," and "site specific support." The remaining cost incurred by the Department represents direct mission activity, as well as capital equipment and construction costs. Definitions for all the support cost categories are included at the end of this report.

The Support Cost By Functional Activity Report began as a way to identify the cost of the Department's support programs and the trends in those costs. The managing and reporting of support cost was initiated as a cooperative effort between the Office of Chief Financial Officer, the Department's program offices and the Financial Management Systems Improvement Council (FMSIC). This relationship is based on a belief that the appropriate le vel of each support cost was best determined at the levels closest to the activities, that is by the cognizant Departmental field offices and the contractors. It was never intended that the Support Cost By Functional Activity Report would be used primarily for one-to-one comparison purposes. There is significant disparity between our sites and it could be misleading to compare maintenance costs at a 50-year-old manufacturing facility with those of a modern research facility.

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT INTRODUCTION

Support costs have declined as a percentage of total costs by 4.2% since FY 1995, from 43.8% in FY 1995 to 39.6% in FY 2003. Support costs as a percentage of total costs have decreased most recently in spite of substantially rising post 9/11 security costs, environmental protection costs, and maintenance costs for the Department's aging, obsolete facilities. The Department has been able to meet the increasing requirements by reducing the costs in other support areas.

GAO recommended in its September 2002 Report (GAO-02-1000) that the Department "develop a system to analyze the merits of cost-saving initiatives implemented at contractor sites, identify those that have broader applicability in DOE, and work with program offices to promote those most likely to reduce support-related costs." In response, the Department collected, reviewed and highlighted cost-saving initiatives with broad applicability beginning with the FY 2002 annual report. It is the Department's intent to promote those initiatives that may provide opportunities for other contractors across the complex. The annual report is provided to all headquarters program offices, field locations and individual contractors. The FY 2003 transmittal memorandum for the annual report, signed by the Acting Director, Office of Management, Budget and Evaluation, states: "We are providing this information to assist in oversight of contractor operations and to assist in understanding the cost of supporting mission activities. GAO recommended that the Department share and promote any initiatives that have potential for application across all sites. Please consider all the initiatives included in the report and apply as appropriate at your sites."

In addition, National Laboratory Improvement Council members have prepared summaries of their lab's progress (on the Web and published), and regularly shared lessons learned and best practices in these areas and more detailed information on costs. The institutional planning process reviews lab progress with site offices and labs, and further encourages initiatives and communication of successes. Site offices, through performance based management, review and validate lab results and further promote lessons learned and best practices across labs. As a result, we view the Support Cost By Functional Activity Report as one of several tools to help improve support costs. We recognize other roles/tools of site offices, including institutional planning, performance appraisals, and broad sharing of lessons learned and best practices among labs/contractors who regularly update their progress. The functional cost report is not the only driver of improvement.

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT INTRODUCTION

Definitions of support cost categories were developed jointly by the Program Offices, the Office of Chief Financial Officer, and FMSIC to ensure that contractors conform to standardized definitions and categories in reporting their support related costs. FMSIC is a departmental financial management idea-sharing forum comprised of DOE Chief Financial Officer staff and contractors.

FMSIC provides a forum for contractors to share successful approaches (best practices) which could provide gains in budget and accounting economy and efficiency. FMSIC members meet annually and discuss support costs and peer reviews of support costs. The peer review program was designed to ensure consistency and data integrity, which includes site reviews by teams from different organizations.

The Department expanded the FY 2003 Results and Trends section of this report to include specific cost category discussions. In addition, supporting detailed information has been and is always available to all Departmental and contractor participants electronically for further review and analysis as necessary. The Department intends to expand the Results and Trends section further in future annual reports, including program office and/or field office comments as well as individual contractor submissions.

WHAT ARE SUPPORT COSTS AND WHY REPORT THEM?

Support costs are simply the cost incurred by our major operating contractors in support of direct mission efforts conducted at 28 of the Department's sites. DOE budget and accounting systems do not provide visibility for these costs. These costs represent a substantial amount of money, and do not have a single Departmental sponsor. Management of these costs is the responsibility of the predominant program at each site and represents 39.6% of the total cost of the 28 sites or approximately 30% of DOE's total \$22.2 billion budget.

The SCFA System provides DOE with the capability of identifying the magnitude and trends of these costs. This allows the Department the opportunity to analyze these costs to identify potential savings. Cost savings in these areas result in more dollars available for direct mission work.

While support costs are not overhead, they do reflect trends in overhead. In September 2002, the General Accounting Office (GAO) published a review of overhead incurred by DOE's management operating contractors. GAO accepted support cost as a proxy for overhead on the basis that controlling support cost automatically resulted in control of overhead.

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT LIMITATIONS

Functional support activities are operations required to be performed at DOE sites that benefit more than one program. These functions do not include the costs of capital equipment and construction. The purpose of this report is to quantify the cost of supporting program activities at DOE's major sites. This report is a cost management tool and is not intended for use in determining individual program funding requirements or for budget formulation purposes.

Instead of classifying costs as direct or indirect, they are classified as either mission direct or support costs. This recognizes that the classification of direct cost and indirect cost are not relevant to measuring the activity required to support direct mission programs in the Department.

Functional support cost is not determined based on fully allocated cost and cannot automatically be interpreted as indirect/overhead costs as this term is defined by the Cost Accounting Standards (CAS) included in the Federal Acquisition Regulations. The contractors are subject to CAS and do not budget, accumulate, or distribute costs in their formal accounting system in the manner reflected in this report. In the formal accounts, the amounts reported as functional cost are distributed, directly or indirectly, to program activities and lose their identity. Therefore, the functional support costs are reported on a prime cost basis (i.e., prior to any cost distribution) and, by definition, may include both direct and indirect costs.

The data reflected in the reports was obtained by analyzing information contained in the contractors' financial management systems and apportioning costs into the Support Cost by Functional Activity categories. While the total cost for each contractor is accurate and a standard set of definitions was used, apportioning the costs to functional categories required the exercise of management judgment. Numerous factors affect the mix and volume of expenditures at a given site. These factors vary from site-to-site in both applicability and relative magnitude. For example, cost differences across sites will result from differences in the type, size, nature, environment, etc., of actual work activities.

Field offices are responsible for the quality of the functional cost and cost savings initiative data. The accuracy of this data has not been verified by Headquarters. The goal for data accuracy is 100 percent, although it is recognized that it may not be possible to achieve an overall accuracy greater than 90 to 95 percent. However, the current level of accuracy is sufficient for comparison of a given site over time, but not necessarily across sites.

SUMMARY NOTES

The 28 largest DOE contractors' total support costs for FY 2003 are \$6.9 billion. Support costs are divided into three major groupings; general support, mission support and site specific. General support costs (\$2.1B in FY 2003) include management and administrative activities such as executive direction and human resources. Mission support costs (\$3.9B in FY 2003) include activities more closely associated with site operations such as safety and health, environmental compliance, and maintenance. Site specific costs (\$.9B in FY 2003) include contractors' fees, local taxes, and the cost of laboratory directed research and development.

Based upon the schedules and charts included in this report, total support cost for the 28 submitting contractor locations increased by almost \$1.2 billion since FY 1999. While the Department's mission activities increased by \$2.2 billion over the same time period, the ratio of total support cost to total cost declined by 1.1%. As a result of the participating contractors' and Departmental efforts, DOE has exhibited increased control over costs, resulting in more funds being available to expend on direct mission activities.

Two sites within the Ohio Field Office complex, Mound and Fernald, that contributed cost data in the FY 2002 Support Cost by Functional Activity report, are not included in the FY 2003 report. Both sites are scheduled for closure in FY 2006. Accordingly, all Mound and Fernald data has been eliminated for comparison purposes in prior year information.

Overall, support costs as a percentage of total costs continued to decline in FY 2003:

40.7%
40.4%
39.8%
39.7%
39.6%

I. Four Largest Support Cost Categories

In FY 2003 the four largest support cost categories (Maintenance, Safety and Health, Information Services & Safeguards and Security) accounted for approximately 44% of the total support costs by the 28 contributing sites. Here are the four largest cost categories and the major contributing sites:

#1 - Maintenance \$890.2M (12.9% of Total Support Costs) Savannah River Lawrence Livermore National Lab Y-12 Hanford Los Alamos National Lab

Many of the Department's facilities are aging and obsolete. There is a large infrastructure of inactive nuclear reactors, analytical laboratories, mobile offices and storage and administrative facilities. The burden of maintaining older facilities in accordance with current standards will continue to be costly.

#2 - Safety and Health\$748.2M (10.8% of Total Support Costs)Savannah RiverLos Alamos National LabLos Alamos National LabHanfordOak Ridge Environmental Management Enrichment FacilityY-12

Costs reflect a heightened emphasis on safety. Several sites reported large investments in emergency vehicles and equipment in the Fire Protection area.

#3 - Information Services \$739.5M (10.7% of Total Support Costs) Los Alamos National Lab Sandia National Lab Lawrence Livermore National lab Savannah River Hanford

These costs are due to the continued support for computer-based systems that will integrate, unify, modernize, and streamline the way the Department handles administrative functions, including financial records, time-and-effort reporting, project management, property management, and facility maintenance. Costs rose as a result of increased customer demand for software and associated licenses, desktop services, and integrated computing network services.

#4 - Safeguards and Security

\$677.0M (9.8% of Total Support Costs)

Los Alamos National Lab Savannah River Y-12 Lawrence Livermore National Lab Pantex

A significant change to the Safeguards and Security functional category was the decision to direct fund the safeguards and security scope of work. With Safeguards and Security having direct funding status, many of the critical unfunded needs in this area are receiving attention and consideration for funding. The events of September 11, 2001, and increased emphasis on Homeland Security continue to drive Safeguards and Security costs higher.

II. Four Support Cost Categories with the Largest % Increase

Overall, from FY 1999 to FY 2003, support costs increased by approximately 21%. Here are the four categories (Facilities Management, Safeguards and Security, LDRD, and Executive Direction) with the largest percentage increases in support costs from FY 1999 to FY 2003 and the top contributing sites:

#1 - Facilities Management (64.7% increase from FY 1999 to FY 2003)
Los Alamos National Lab
Oak Ridge National Lab
Sandia National Lab
Idaho National Engineering and Environmental Lab
Strategic Petroleum Reserve

These costs are associated with facilities and their ability to function effectively, such as plant and maintenance engineering, facilities remodeling (if it does not meet the capitalization criteria), facilities utilization analysis, modification and upgrade analysis, facilities planning and condition determinations, and the rental of buildings/land.

#2 - Safeguards and Security(61.1% increase from FY 1999 to FY 2003)Yucca MountainOak Ridge Environmental Management Enrichment FacilityPacific Northwest National LabY-12National Renewable Energy Lab

The events of September 11, 2001, and increased emphasis on Homeland Security continue to drive Safeguards and Security costs higher.

#3 - LDRD/PDRD/SDRD (47.7% increase from FY 1999 to FY 2003)

Brookhaven National Lab Idaho National Engineering and Environmental Lab Sandia National Lab Los Alamos National Lab Pacific Northwest National Lab

The PDRD (Plant Directed Research, Development and Demonstration Program) was initiated in FY 2001 and SDRD (Site Directed Research, Development and Demonstration Program) commenced in FY 2002. Both reflect costs incurred in accordance with legislative authority. In addition, in FY 1999 the LDRD limitation was restricted to a cap of 4% rather than the current 6% of the operating budget.

#4 - Executive Direction

(35.4% increase from FY 1999 to FY 2003)

Los Alamos National Lab Oak Ridge National Lab National Renewable Energy Lab Lawrence Berkeley Yucca Mountain

The increase in cost for the Executive Direction category is partially due to the addition of senior level Deputy and Associate Directors and the expansion of the Employee Concerns Program, essential to establishing a Safety-Conscious Work Environment as required by the Nuclear Regulatory Commission.

III. One Support Cost Category Decreased

Of the 22 support cost categories, one category "Laboratory Technical/Support" declined in both dollars (4.2M) and as a percentage (-2.6%) of total cost from FY 1999 to FY 2003. This category collects costs associated with the measurement and testing within the context of sampling, field investigations, analytical chemistry and other similar studies.

Five sites with the largest decrease:

Waste Isolation Pilot Plan Idaho National Engineering and Environmental Lab Fermi National Accelerator Lab Oak Ridge National Lab Rocky Flats

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT COST SAVING INITIATIVES

As part of the FY 2003 submission for the Report on Support Costs by Functional Activity, many of the Department's major contractors provided information related to initiatives implemented to manage and reduce functional support costs at their sites. The following five initiatives have broad applicability and may provide opportunities that could be used by contractors across the Department. In addition to the initiatives with the potential for broad applicability detailed below, 66 site specific cost saving initiatives were reported with aggregate savings of approximately \$60 million. These are included with the results for individual sites.

The reported cost savings were for FY 2003. As a result, any savings should already have been considered in midyear adjustments to financial plans, FY 2004 budget requests, or disposition of uncosted balances.

SIX SIGMA PROCESS

Initiative reported by Idaho National Engineering and Environmental Laboratory, Oak Ridge Environmental Management Enrichment Facility, and Savannah River Site. Aggregate savings reported were \$16.9 million.

Six Sigma is a rigorous, statistically based, customer-focused business methodology to improve work processes. Six Sigma allows for the design and monitoring of everyday business activities to minimize waste and maximize use of resources, while increasing customer satisfaction. Six Sigma is a methodology that applies advanced statistical tools to identify and eliminate defects, waste, rework, and non-value activities from business processes, resulting in improved customer satisfaction, employee satisfaction and cost savings. By applying the disciplined and rigorous Six Sigma methodology and performance-based leadership tools, sustainable solutions to business problems can be delivered. This approach focuses on identifying and eliminating the cost of poor quality embedded in current business and operational processes through the use of qualitative and advanced quantitative tools and techniques.

MAINTENANCE WINDOW SCHEDULE

Initiative reported by Lawrence Livermore National Laboratory (LLNL). Aggregate savings reported were \$2.4 million.

On an annual basis, Plant Engineering schedules a "maintenance window" for approximately 75 key facilities at LLNL. By carrying out preventive maintenance and small-scope repair work during this window, disruption to facility occupants (e.g. shutdown of research and development efforts) and Plant Engineering's mobilization costs are minimized.

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT COST SAVING INITIATIVES

<u>REDUCTION OF NON-OWNED SPACE AND MANAGED FLOOR SPACE</u> Initiative reported by Oak Ridge National Laboratory and Pacific Northwest National Laboratory. Aggregate savings reported were \$4.0 million.

Rented space has been closely scrutinized and significant efforts have been made to reduce occupancy of non-owned space and to renegotiate lower lease costs. In addition, sites have developed downsizing plans to reduce the total managed floor space, thereby increasing efficiency and reducing annual operating costs.

CONTRACT NEGOTIATIONS AND PROCUREMENT ACTIVITIES

Initiative reported by Argonne National Laboratory, Hanford, Idaho National Engineering and Environmental Laboratory, Oak Ridge National Laboratory, Lawrence Berkeley National Laboratory, Sandia National Laboratory, and the Waste Isolation Pilot Plan. Aggregate savings reported were \$5.6 million.

Sites have reported taking an aggressive approach to contract negotiations for subcontracts and purchase orders. Improvements have been made to overall acquisition strategies and the approaches used to manage contracts by improving use of objective performance incentives, decreasing subjectivity, minimizing barriers to completing tasks and eliminating non-value added requirements. Savings have also been achieved by negotiating new contracts to reduce the cost of procuring supplies and by performing stringent reviews of the level and scope of support to be provided prior to procuring services. In addition, ORNL reported the development and implementation of a basic order agreement (BAO) for analytical work to be performed by qualified commercial laboratories. The BAO provides for a comprehensive mechanism for project managers to utilize laboratories that offer the most efficient cost structures while ensuring generation of quality data.

EMPLOYEE HEALTH BENEFIT PROGRAMS

Initiative reported by Argonne National Laboratory. Aggregate savings reported were \$1.8 million.

Argonne has taken numerous steps to reduce the cost of employee health benefits by consolidating costs and negotiating better terms. Specifically, Argonne changed prescription drug vendors to implement group purchases for prescription drugs. The Laboratory also implemented the CIGNA Well Aware Disease Management program that provided screening for coronary disease and diabetes, resulting in reduced insurance premiums, and joined the CIGNA PPO dental plan, offering lower contract prices for participating dentists. Additional cost savings were achieved by merging two separate medical plans for retirees and joining a health purchasing initiative, enabling Argonne to take advantage of a negotiated reduction in fee increases.

SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT

DEFINITIONS

A. <u>General Support</u>:

- 1. <u>Executive Direction</u> Includes costs normally associated with the executive level of management. Examples of activities in this account may be the Laboratory Director, President, and other top level management and immediate staff (Secretary, Special Assistants, etc.), Science Advisors and Deputy Directors, Vice Presidents, etc. This category also includes total quality (TQM) type activities such as the development and administration of Total Quality Improvement Plans, Cost Savings and Reengineering Programs administration, etc.; institutional/strategic planning, including development and control; and any site specific development. All other management/supervisor activities, including related incidental costs, should be reported in the appropriate support/mission category.
- 2. <u>Human Resources</u> Includes costs associated with recruiting, wage and salary administration, equal employment opportunity and diversity activities, benefits administration, employee concerns programs, central training development services (job specific training development curriculum should be included in the specific category to which it applies), industrial relations, personnel records, employee claims, adjudications, grievances, arbitration, educational programs providing for undergraduate and graduate course work, and other personnel services
- **3.** <u>Chief Financial Officer</u> Includes costs associated with activities of a financial nature, such as general accounting, payroll, travel accounting, funds control, cost accounting, financial systems management, non-project/program specific budget coordination and control, such as indirects, and internal audit.
- 4. <u>Procurement</u> Includes costs associated with activities related to make/buy decisions, contracting, purchasing, contract administration (including prime), and acquisition of resources to conduct activities, as well as conduct audit and cost/price analysis activities.
- 5. <u>Legal</u> Includes costs associated with legal counsel support and litigation support. Includes outside legal support and ethics functions.
- 6. <u>Central Administrative Services</u> Includes costs associated with clerical support pools, travel reservation support, food service, printing and graphic support services, records management, and all library-related activities. Also includes cost-per-copy contracts (convenience copiers). Does not include secretarial and clerical costs; these are in the respective category they support.

- 7. <u>Program/Project Planning & Control</u> Includes cost associated with support and execution of program/project budgeting, funding requests, baseline control and preparation (including planning, scheduling, coordination, change control, reporting and analysis which is program specific). Also includes master scheduling, project management system administration, and baseline pricing and validation efforts. Does not include actual program/project management functions. These costs should be reported in the specific mission or support categories they relate to.
- 8. <u>Information/Outreach Activities</u> Costs associated with media communication, public relations, technology transfer, technical information management, educational programs, employee outreach program, stakeholder-related outreach, activities contributing to the development of the local/regional economy, and other information or outreach activities such as HBCU (Historically Black Colleges and Universities) and other university-related activities, including stakeholder agencies and Washington, DC, liaison activities. This category includes:

Information Outreach Activities

<u>Public Relations/Information</u> - Includes all costs associated with activities which provide non-technical information about the M&O Contractor, and its activities to the general public, news media, etc.

<u>**Technology Transfer</u>** - Includes all costs associated with activities that encourage the further development of promising technologies; disseminate information to appropriate researchers, organizations, industry, governmental bodies, and other institutions; and other activities that assist in effecting the introduction of technologies into the marketplace.</u>

<u>**Technical Information Management**</u> - Includes all costs associated with activities to develop and make available technical information.

<u>Employee Outreach Programs</u> - Includes all costs associated with activities by employees utilizing their technical expertise for the benefit of external stakeholders.

<u>Other Information Outreach Activities</u> - Includes all costs associated with other outreach activities that are not defined above.

Stakeholder-Related Outreach - Community relations and education programs to promote enhanced understanding of the site by local and state stakeholders.

9. <u>Information Services</u> - Costs associated with Automated Data Processing (ADP) Services (central computer facilities, and service organizations, including business and scientific), Communications (mail, both electronic and hard copy including postage, subcontracted delivery services, etc.), Networking (groups of computers that communicate with each other, share peripherals, and access remote hosts or other networks), and Telecommunications Services (communication by electronic submission of impulses over telephone/optic lines including cell phones). Include pagers and related systems, but not the maintenance of these systems. Also include computer leases. Do not include computer bill-out rates in any other functional category. This category includes systems analysts/programmers; however, specific systems management and administrative costs for various business and scientific systems should be included in their respective functional categories (Note: Dedicated scientific activities, experiments, analysis, etc., should be included in the appropriate category. Also computer hardware maintenance activities are to be reported within the maintenance category.)

10. <u>Other</u> - Costs which are not identified in another functional cost category. This includes legal settlements, workforce restructuring activities (severance, benefits, and outplacement services) and general company liability insurance expenditures. Specifically identify significant cost activities and provide footnotes.

B. <u>Mission Support</u>:

- 11. <u>Environmental</u> Includes costs associated with the development, implementation, and maintenance of effluent controls, environmental monitoring, and surveillance, permitting, auditing and evaluation to assure environmental compliance, and pollution prevention. These activities, performed on a routine basis, are necessary to maintain compliance with Federal State and Local regulations, as well as applicable DOE Orders and directives. This category does not include actual waste storage or cleanup activities. The category includes:
 - Auditing and Evaluation These audits are done as a routine mechanism to assure environmental compliance with internal and external directives, including the National Environmental Policy Act (NEPA). Encompasses costs associated with implementation of the Environmental, Safety and Health Compliance Assessment activities (such as related "Tiger Team" activities). Also includes the development of performance objectives and environmental auditing procedures.
 - Effluent and Environmental Monitoring and Surveillance Monitoring activities include data base monitoring as required by DOE directive or compliance monitoring as required by the environmental regulatory authorities, such as air and water monitoring. (Note: Actual sample analysis should be included in Laboratory Support or Other Technical Support Activities.)
 - **Permitting** Includes those activities involved in reporting the results of environmental monitoring, analysis, and evaluation. These activities are necessary to obtain permits from regulatory agencies regarding plant releases and/or discharges. (Note: Environmental Impact Statement costs and related activities are to be included in the appropriate category they support.)

- **Non-Environmental Management Waste Management** The Non-EM Waste Management functional area includes those activities addressing the treatment, storage, and disposal of wastes. Activities include characterization and certification of waste to ensure its proper treatment or disposal; waste handling and temporary storage activities, such as operation of 90-day satellite accumulation areas for the storage of hazardous waste; operation and management of all waste treatment and disposal systems; and final disposal of all wastes.
- 12. <u>Safety & Health</u> Costs associated with safety and health programs, such as emergency preparedness, fire protection, industrial hygiene, industrial safety, occupational medical services, nuclear safety, work smart programs, radiation protection, transportation safety (does not include traffic management functions include this item in logistics), and management oversight. Further definitions are as follows:

Emergency Preparedness - Emergency Preparedness includes all those activities that are intended to provide personnel with a special capability to respond to incidents and accidents. Activities in this area include maintenance inspection of emergency facilities and equipment; emergency response team personnel training, drills, and exercises; maintaining and updating of current emergency plans based on site specific safety analyses; coordination with State and local authorities and Federal Agencies. Plant and equipment that are part of safety systems relied upon to prevent or mitigate accidents (heating ventilation air conditioning process monitors, etc.) are not included in this area, but are addressed in Industrial Safety or Nuclear Safety. The physical plant and equipment provided for normal and emergency egress are addressed in Industrial Safety.

Fire Protection - Fire Protection includes all those activities that are intended to prevent, detect, alert, and suppress fires. Activities in this area include fire prevention; fire detection; fire suppression systems; related inspections and testing; fire fighting and emergency response, loss prevention; operation of ambulances and fire fighting equipment; testing and inspection of fire protection equipment and alarm systems; flammable and explosive material control; training certification to National Fire Protection Association, state and local requirements; review of construction and design plans for fire hazards; and mutual aid agreements with local authorities. This area excludes those fire protection activities and/or systems that are solely for the benefit or protection of nuclear systems, storage areas, and/or processes (e.g., glove box inerting systems). These excluded activities are to be included in Nuclear Safety.

<u>Industrial Hygiene</u> - Industrial Hygiene includes all those activities that are intended to provide protection to workers from physical and physiological hazards. Activities in this area include engineered/redesign of tasks,

ventilation, substitution of less hazardous materials (such as asbestos abatement program administration, but not removal), written and verbal communication of real and perceived hazards, personnel protection, radiological and non-radiological laundry services, laser protection, and physiological stress. This area does not include medical surveillance, employee medical records, and exposure of workers to radioactivity (note that non-ionizing radiation is included).

<u>Industrial Safety</u> - Industrial Safety includes all those activities that are intended for the protection of workers from physical trauma. Activities in this area include electrical safety; machinery and machine guarding; personnel protection; accident investigation; compressed gas and pressure system safety; hoisting, rigging, and material handling; lockout/tag-out; confined space controls; platform, man-lift and scaffolding usage; safe surfaces for walling and working; cutting, welding and boring safety; hand and portable power tool safety; explosives and hazardous material handling, storage and use; construction safety; firearms safety; and facility egress.

<u>Occupational Medical Services</u> - Occupational Medical Services includes all those activities that are intended to provide a comprehensive occupational medical program, including employee health examinations such as preplacement and qualification, periodic, return to work, fitness for duty, and termination examinations; diagnosis and treatment of occupational illnesses and injuries; employee health counseling (employee assistance program and wellness); maintenance of medical records; emergency medical treatment and triage; specialized medical equipment; and immunization programs.

<u>Nuclear Safety</u> - Nuclear Safety includes activities that are intended to maintain criticality safety and nuclear operations safety. Activities in this area include control of systems and parameters within subcritical limits, and use of systems, procedures, equipment, analyses, programs, and personnel to ensure safe nuclear reactor and nuclear non-reactor operations.

<u>Radiation Protection</u> - The Radiation Protection includes all those activities that are intended to control exposures of workers and the public to radioactivity. Activities in this area include control equipment and procedures for radiation sources; interlocks, instrumentation, and shielding for radiationgenerating devices; equipment and procedures used to minimize or mitigate external exposure; personnel dosimetry, bioassay program, and ALARA (As Low As Reasonably Achievable) programs; control of paths for inhalation or ingestion of radiation; radiation exposure records; fixed and portable instrumentation for radiation detection and measurement; and contamination control; effluent monitoring and release; and environmental monitoring and remediation. <u>**Transportation Safety</u>** - Transportation Safety includes all those activities that are intended to ensure safe packaging and transportation. Activities in this area include packaging certification; coordination of intra-building and on-site movements and transfers; off-site and international shipments; transportation (including marking and labeling) of material; maintenance inspection of transportation equipment; testing and technology of transportation operators; aviation safety; motor vehicle safety; water craft safety; and rail safety.</u>

<u>Management and Oversight</u> - Management and Oversight includes all those activities that are intended to coordinate, direct, integrate, and control Safety and Health (S&H) activities across multiple areas. Activities in this area include S&H documentation and document control activities; configuration management; S&H performance trending, analyses, and lessons learned feedback; corrective action tracking; S&H self-assessment activities; dedicated internal S&H personnel; coordination and communication with DOE, State, and local authorities; internal audits and surveillance; external S&H program reviews; operational readiness reviews; and performance and documentation of comprehensive safety analyses. Nuclear safety analyses are included in Nuclear Safety. Program elements such as quality assurance, management systems, oversight, and physical infrastructure are inherent to all areas and are intended to be accounted for in the specific areas.

13. <u>Facilities Management</u> - Costs associated with facilities and their ability to function effectively, such as plant and maintenance engineering, facilities remodeling (if it does not meet the capitalization criteria), facilities utilization analysis, modification and upgrade analysis, facilities planning and condition determinations, rental of buildings/land. Facilities Management includes:

Engineering - Activities including facility engineering such as HVAC systems, facility electrical/mechanical activities, and repair and maintenance analysis.

<u>Rental of Buildings/Land</u> - Activities including leases, rental, and any real property third party financing agreements. Lease costs should be foot noted since they materially affect year to year trends. (Note: Include trailer leases in this category; include set-up and tear down in maintenance.)

<u>**Other</u>** - Includes all other activities involving facilities management/plant engineering not defined above.</u>

(Note: Leases for facilities and land are to be included, all other leases should be reported in the appropriate category.)

14. <u>Maintenance</u> - Costs associated with day-to-day work that is required to sustain property, plant, and equipment in a condition suitable for it to be used for its designated purpose and includes preventive, predictive, and corrective maintenance. This category includes all maintenance activities regardless of source of funds. (Note: All maintenance is included even though it is recognized these costs are incurred in support of other support and mission categories.) Maintenance Activities include:

<u>**Preventive Maintenance**</u> - Includes all those systematically planned and scheduled actions performed for the purpose of preventing equipment, system or facility failure.

<u>**Predictive Maintenance**</u> - Includes actions necessary to monitor, find trends, and analyze parameters associated with equipment, systems, or facilities that are indicative of decreasing performance or impending failure.

<u>**Corrective Maintenance**</u> - The repair of failed or malfunctioning equipment, system, or facility to restore the intended function or design condition. This maintenance does not result in a significant extension of the expected useful life. Includes asbestos removal and material replacement.

<u>Maintenance</u> - Functions include supervision; planning and scheduling storage and staging of materials and supplies; calibration, care, repair, and storage of equipment used in monitoring or for the performance of maintenance work; and similar activities.

<u>General Maintenance</u> - Includes roads and grounds activities; regularly scheduled custodial services, such as cleaning and preserving facilities and equipment, and pest control.

(Note: Also includes computer hardware maintenance, vehicle maintenance, and utility maintenance. Cost for relocation of personnel is included in the respective category they support.)

15. <u>Utilities</u> - Costs include utility-related engineering associated with labor, operating plants and equipment, contract services for fuel, water treatment chemicals, or support needed to provide electric power, heat, steam, chilled water, potable water, process gases, and sanitary waste disposal to support business and research. This element includes all costs associated with contract services in support of utilities, such as fuel, water treatment chemicals, and control systems, (also include energy management related activities). Utilities include:

<u>**Central Steam Facility</u>** - Includes the fuel handling and storage facilities, all assigned personnel, and the main steam distribution system.</u>

<u>Central Chilled Water Facility</u> - Includes all assigned personnel and the main chilled water distribution system.

<u>Water Supply System</u> - Includes wells, treatment facilities, storage tanks, the main distribution system, and all assigned personnel.

<u>Sanitary Waste Disposal System</u> - Includes the main collection system, refuse collection (internal as well as contracted services), treatment facilities, and all assigned personnel.

Electrical Power - Distribution system including main substations and high-voltage distribution systems, and all assigned personnel, as well as all electricity purchases.

16. <u>Safeguards and Security</u> - Includes all costs associated with the development and implementation of a Safeguards and Security Program to protect nuclear materials, nuclear weapons, classified information, and government property from theft, sabotage, espionage, or other acts that may cause adverse impacts on national security or to the health and safety of the public and the employees. Specifically includes the following:

Program Direction - Includes all persons and operating costs for program management, vulnerability assessment, safeguards and security alarming process, professional development and training, inspections, surveys, assessments, facility approval (including Foreign Ownership, Control, or Influence), tests and evaluations, policy oversight and administration, and technology development oversight and program management, associated with the Safeguards and Security Program.

<u>Protective Forces</u> - Includes all personnel and operating costs associated with Protective Forces. This includes such things as salaries, overtime, benefits, travel, materials and supplies, uniforms, equipment, facilities, vehicles, helicopters, training, communications, federal and contractor management, and oversight of protective forces.

<u>Physical Security Protection Systems</u> - Includes all personnel and operating costs associated with designing, installing, performance testing, contraband detection, alarm communications and control, intrusion detection and assessment, barriers and access denial, entry and egress control, vital components tampering, and monitoring.

<u>**Transportation</u>** - All security-related transportation costs for transport of special nuclear materials, weapons, and other classified material. Includes such costs as personnel, equipment, facilities security upgrades to vehicles, and communications. Transportation costs associated with off-site shipment of wastes should be included in the Mission Category.</u>

Information Security - Includes all personnel and operating costs associated with classified documents and material, classification, unclassified controlled nuclear information, security infractions, computer security, technical surveillance countermeasures, and operations security.

<u>Material Control and Accountability (MC&A)</u> - Includes all personnel and operating costs associated with control and accountability of special nuclear materials (SNM), nuclear weapons, test devices, and weapons components. Includes MC&A access areas, surveillance, containment, detection, assessment, testing, transfers, verifications and measurements, inventories, reconciliation, and statistical analyses.

<u>Research & Development</u> - Includes all personnel and operating costs associated with research and development of physical security, information security, personnel security, material control and accountability, integrated systems, vulnerability assessment methods, technology application and tests, and technology transfer to users or potential vendors.

<u>**Personnel Security</u>** - Includes initial investigations, reinvestigations, adjudication, security education, personnel security assurance program, visitor control, national agency checks, and administrative review activities.</u>

<u>**Cyber Security</u></u> - Includes management of unclassified and classified data, information technology security assets, cyber information systems, including information technical utilities which include grid research, threat assessments, wireless networks, performance measures, risk management, configuration management, certification/accreditation, training, network monitoring and intrusion detection systems.</u>**

- 17. Logistics Support Costs associated with shipping, receiving, transportation (excluding maintenance which is included in the Maintenance category), warehousing, motor pools, office equipment pools, property management and excessing activities; routine inventory write-offs; and other logistic support activities. (Note: Final disposal costs for radiological/hazardous waste shipments are a Mission Direct cost.)
- 18. <u>Quality Assurance</u> Costs associated with all quality assurance, reliability, and regulatory activities. Included in this category are costs for quality engineering and inspection services, quality assurance audits, occurrence reporting (such as Occurrence Reporting and Processing System), development of quality program plans, operational readiness review coordination and other activities related to ensuring the quality assurance of site operations and facilities. This does not include costs incurred for weapons stockpile certification.

 Laboratory/Tech Support - Measurement and testing conducted within the context of sampling, field investigations, analytical chemistry, and other similar studies. Includes the cost of other technical support services/activities, such as non-destructive assay, electronics services, machine shops, etc

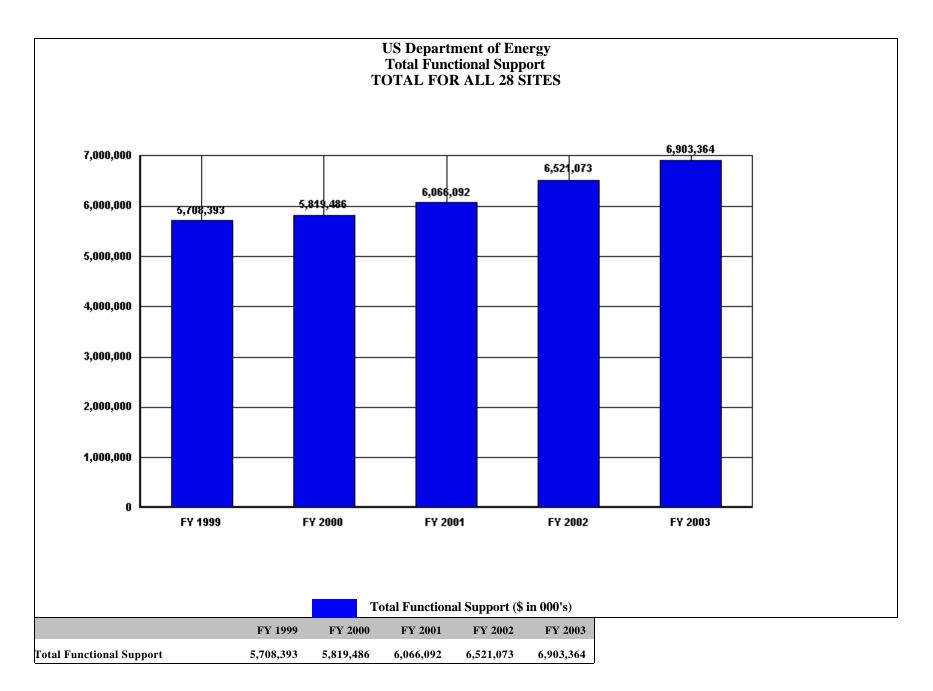
C. Site Specific

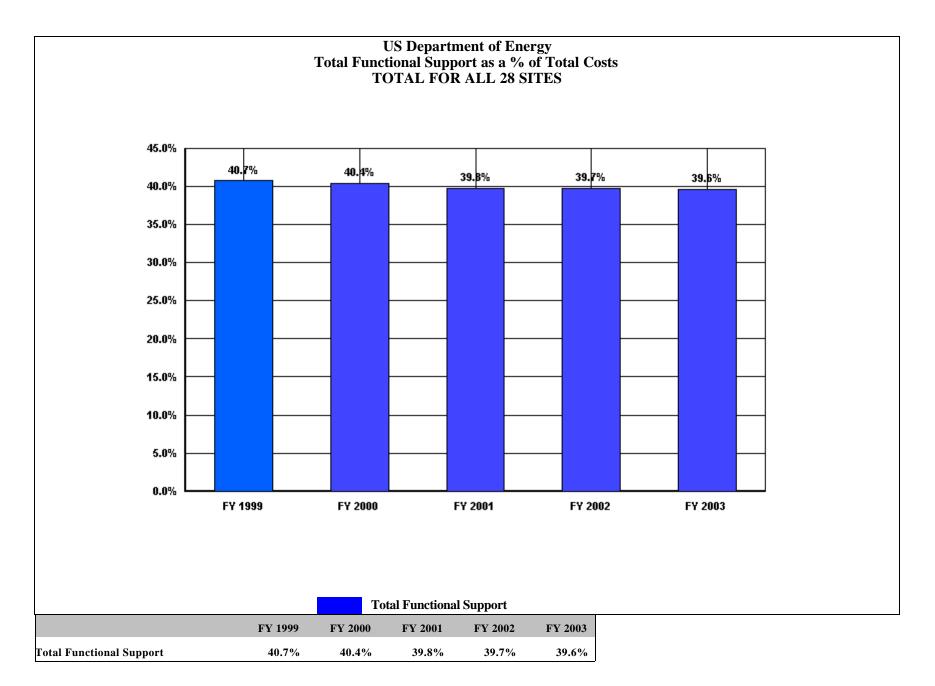
- 20. <u>Management/Award Fee/Incentive Fee</u> The management allowance is an amount paid to not-for-profit educational institutions for the equivalent of home or corporate office G&A expenses. The award and incentive fee is a fee that is paid to a contractor based on performance and includes shared savings incentive payments (such as cost savings incentives).
- **21.** <u>**Taxes**</u> Includes state and municipal taxes, as well as "payments in lieu of taxes." Does not include taxes that are payroll related.
- 22. <u>Laboratory Directed Research and Development (LDRD), Plant Directed Research, Development and Demonstration Program (PDRD), and Site Directed Research, Development and Demonstration Program (SDRD)</u> LDRD portion reflects costs incurred in accordance with DOE Order 413.2A for the purpose of pursuing new and innovative scientific concepts of benefit to the DOE. Excludes allocations of overhead. PDRD and SDRD portion reflect costs incurred in accordance with the legislative authority for these activities.

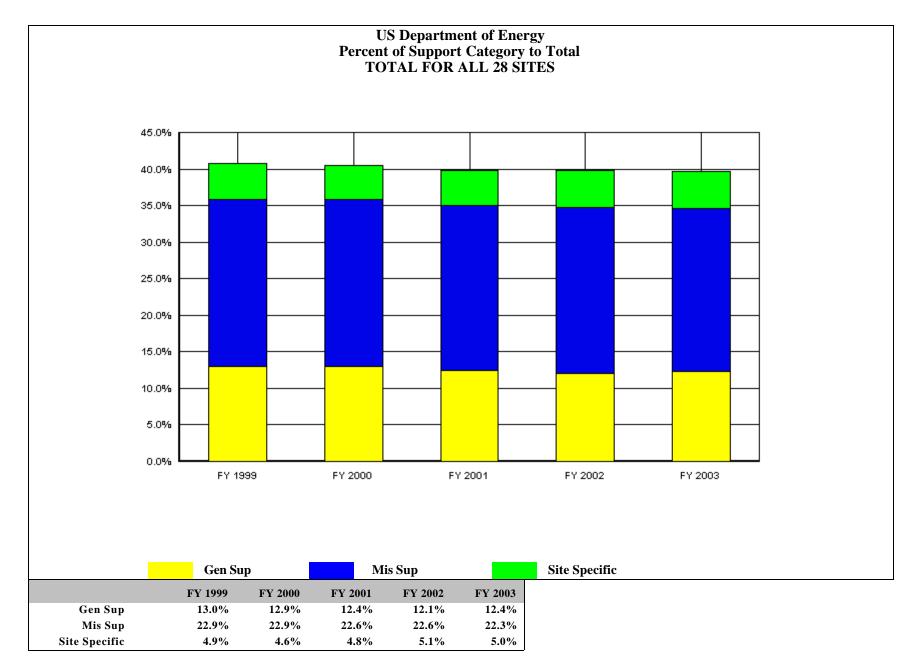
D. Mission Direct:

- 23. <u>Mission Direct</u> All costs not included in General Support, Mission Support or Site Specific categories. This section captures program activities which include scientific, engineering, production operations, decommissioning, decontamination, remediation, etc.
- 24. <u>Capital/construction</u> Prime capital and construction costs related to line items. Capital equipment (CE) and General Plant Projects (GPP). Does not include costs that more appropriately belong in a general support, mission support or site specific categories.

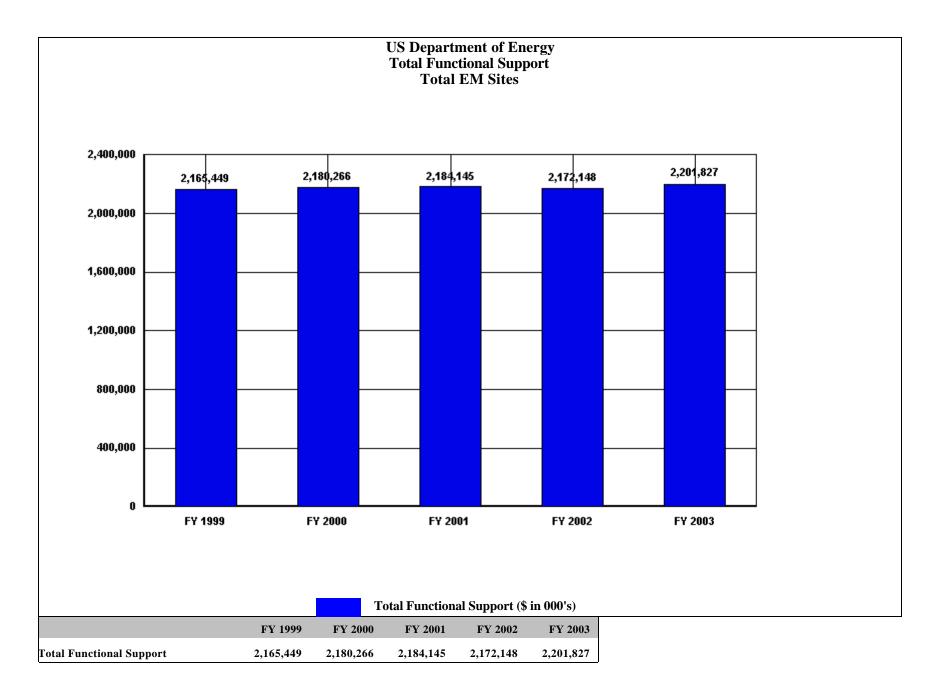
Trends in	Total Function	al Suppor	t Cost Ca	tegories					
TOTAL FOR ALL 28 SITES FY 2003									
	(\$ i 1	n 000's)							
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1			
EXECUTIVE DIRECTION	137,824	145,113	152,803	172,997	186,601	FY20 48,777	35.4%		
HUMAN RESOURCES	158,557	175,081	178,723	185,452	203,152	44,595	28.1%		
CFO	141,706	132,525	146,687	139,671	147,060	5,354	3.8%		
PROCUREMENT	121,145	123,605	125,446	126,403	142,273	21,128	17.4%		
LEGAL	54,852	57,257	58,404	59,034	65,104	10,252	18.7%		
CENTRAL ADMIN SERVICES	179,326	181,438	185,916	198,710	211,226	31,900	17.8%		
PROGRAM/PROJECT CONTROL	185,401	188,025	184,874	186,965	221,895	36,494	19.7%		
INFORMATION OUTREACH	138,024	136,586	136,092	144,341	146,407	8,383	6.1%		
INFORMATION SERVICES	617,903	629,442	629,748	692,003	739,528	121,625	19.7%		
OTHER	85,162	90,756	93,907	74,350	89,039	3,877	4.6%		
TOTAL GENERAL SUPPORT	1,819,900	1,859,828	1,892,600	1,979,926	2,152,285	332,385			
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20			
ENVIRONMENTAL	197,455	197,494	201,760	197,732	198,433	978	0.5%		
SAFETY AND HEALTH	629,394	650,259	683,442	721,137	748,248	118,854	18.9%		
FACILITIES MANAGEMENT	325,202	381,595	425,807	475,932	535,468	210,266	64.7%		
MAINTENANCE	880,512	844,607	817,884	868,932	890,196	9,684	1.1%		
UTILITIES	333,380	326,654	366,504	390,530	386,946	53,566	16.1%		
SAFEGUARDS AND SECURITY	420,180	471,173	508,706	609,813	676,954	256,774	61.1%		
LOGISTICS SUPPORT	142,146	150,458	161,145	163,267	163,761	21,615	15.2%		
QUALITY ASSURANCE	119,945	121,472	127,844	126,699	132,316	12,371	10.3%		
LABORATORY/TECHNICAL SUPPORT	158,041	152,838	155,510	157,637	153,865	-4,176	-2.6%		
TOTAL MISSION SUPPORT	3,206,255	3,296,550	3,448,602	3,711,679	3,886,187	679,932	21.2%		
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1			
MANAGEMENT/INCENTIVE FEE	398,402	436,060	406,432	454,564	465,405	FY2 67,003	16.8%		
TAXES	74,233	72,071	83,852	94,428	89,948	15.715	21.2%		
LDRD / PDRD / SDRD	209,603	154,977	234,606	280,476	309,539	99,936	47.7%		
TOTAL SITE SPECIFIC	682,238	663,108	724,890	829,468	864,892	182,654			
TOTAL FUNCTIONAL SUPPORT	5,708,393	5,819,486	6,066,092	6,521,073	6,903,364	1,194,971	20.9%		
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	1999 to		
	7 107 710	7 4 61 707	7.020.010	0.427.720	0.002.100	FY20			
Mission Direct Operation	7,137,713	7,461,707	7,838,010	8,437,720	8,983,198	1,845,485	25.9%		
Capital Construction	1,164,755	1,113,415	1,347,050	1,447,954	1,536,512	371,757	31.9%		
TOTAL MISSION DIRECT	8,302,468	8,575,122	9,185,060	9,885,674	10,519,710	2,217,242	26.7%		
Total Costs	14,010,861	14,394,608	15,251,152	16,406,747	17,423,074	3,412,213	24.4%		
Total Costs w/o Construction	12,846,106	13,281,193	13,904,102	14,958,793	15,886,562	3,040,456	23.7%		
General Support % Total Costs	13.0%	12.9%	12.4%	12.1%	12.4%				
Mission Support % Total Costs	22.9%	22.9%	22.6%	22.6%	22.3%				
Site Specific % Total Costs	4.9%	4.6%	4.8%	5.1%	5.0%				
Total Support % Total Costs	40.7%	40.4%	39.8%	39.7%	39.6%				
Total Support % Total Costs w/o Construction	44.4%	43.8%	43.6%	43.6%	43.5%				

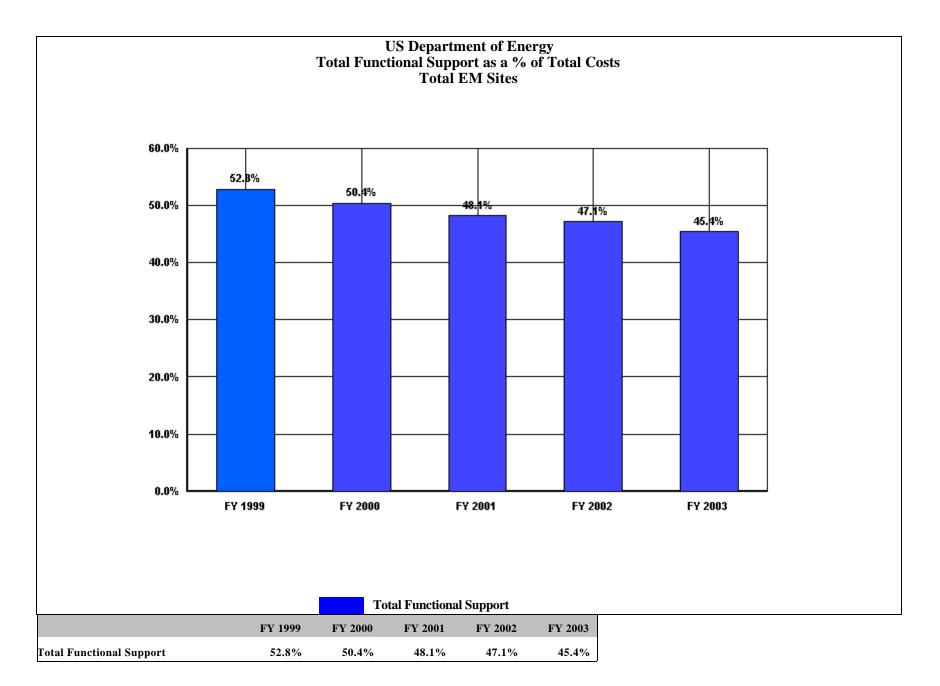


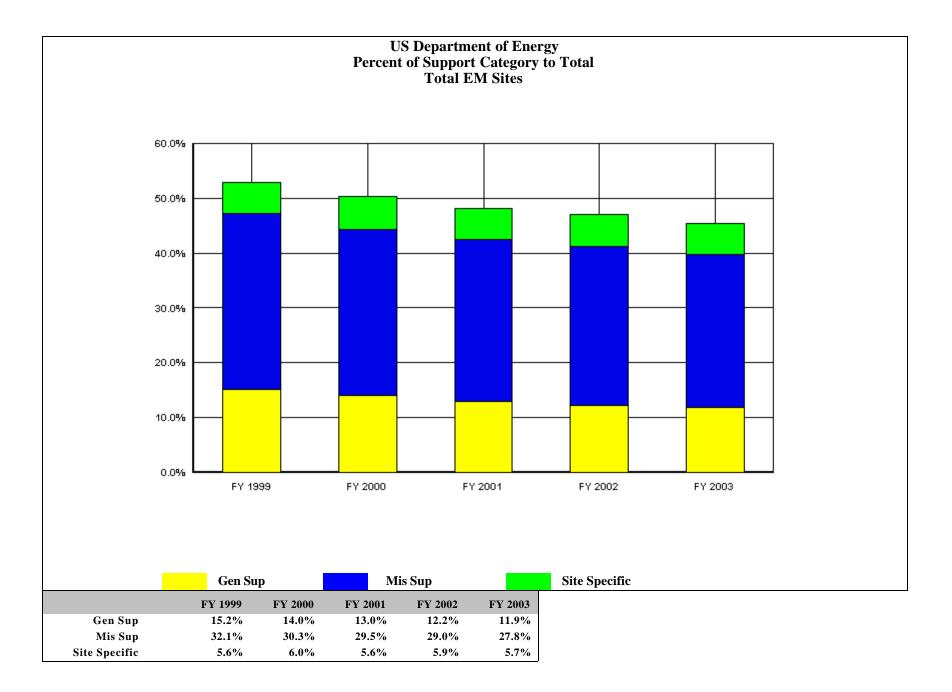




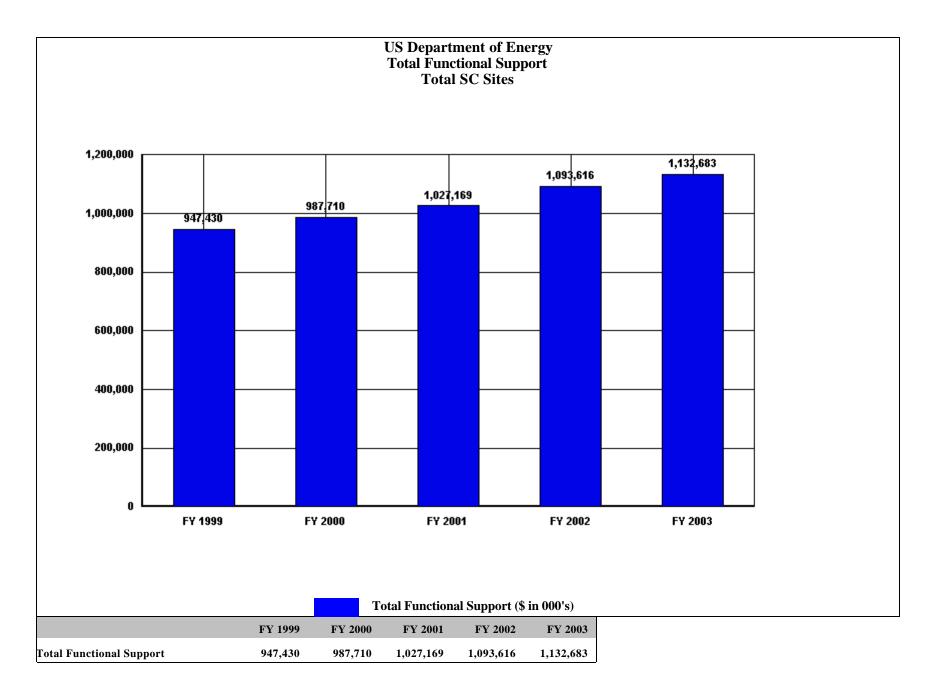
Trends in	Total Function	al Suppor	t Cost Cat	egories					
		EM Sites							
<u>FY 2003</u> (\$ in 000's)									
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	40,574	38,437	35,307	36,173	33,594	-6,980	-17.2%		
HUMAN RESOURCES	53,143	59,871	55,974	54,253	56,086	2,943	5.5%		
CFO	53,544	39,847	51,980	40,540	40,550	-12,994	-24.3%		
PROCUREMENT	38,052	40,156	41,558	39,939	42,938	4,886	12.8%		
	20,926	22,621	22,765	22,213	25,232	4,306	20.6%		
	66,707 95,270	62,286 94,701	59,700 97,473	60,169 96,626	67,051 93,838	344 -1,432	0.5% -1.5%		
PROGRAM/PROJECT CONTROL INFORMATION OUTREACH	34,544	94,701 36,202	29,958	90,020 27,861	93,838 24,685	-1,432	-1.5%		
INFORMATION SURVICES	189,983	185,404	177,301	164,880	169,817	-20,166	-10.6%		
OTHER	29,912	28,133	17,190	19,191	22,113	-7.799	-26.1%		
TOTAL GENERAL SUPPORT	622,655	607,658	589,206	561,845	575,904	-46,751	-7.59		
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	1999 to		
ENVIRONMENTAL	89.778	88,233	93.231	83,457	81,935	FY2 -7,843	03 -8.7%		
SAFETY AND HEALTH	306.224	305,522	333,897	345,275	334,331	28,107	9.2%		
FACILITIES MANAGEMENT	158,843	139,265	133,842	116,922	133,089	-25,754	-16.2%		
MAINTENANCE	324,276	330,619	309,199	308,796	304,468	-19,808	-6.1%		
UTILITIES	92,162	88,220	89,908	94,409	99,481	7,319	7.9%		
SAFEGUARDS AND SECURITY	148,011	159,925	174,080	190,564	208,714	60,703	41.0%		
LOGISTICS SUPPORT	57,426	61,283	66,276	61,799	60,786	3,360	5.9%		
QUALITY ASSURANCE	63,535	62,346	60,422	56,553	51,171	-12,364	-19.5%		
LABORATORY/TECHNICAL SUPPORT	73,327	76,713	79,429	79,386	75,046	1,719	2.3%		
TOTAL MISSION SUPPORT	1,313,582	1,312,126	1,340,284	1,337,161	1,349,021	35,439	2.7%		
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20			
MANAGEMENT/INCENTIVE FEE	201,783	244,375	212,651	231,932	238,698	36,915	18.3%		
TAXES	16,695	11,868	21,385	21,913	19,642	2,947	17.7%		
LDRD / PDRD / SDRD	10,734	4,239	20,619	19,297	18,562	7,828	72.9%		
TOTAL SITE SPECIFIC	229,212	260,482	254,655	273,142	276,902	47,690	20.8%		
TOTAL FUNCTIONAL SUPPORT	2,165,449	2,180,266	2,184,145	2,172,148	2,201,827	36,378	1.7%		
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change			
Mission Direct Operation	1,627,029	1,864,038	2,020,643	2,127,158	2,401,413	FY2 774,384	47.6%		
Capital Construction	305,027	280,913	331,611	307,985	245,417	-59,610	-19.5%		
TOTAL MISSION DIRECT	1,932,056	2,144,951	2,352,254	2,435,143	2,646,830	714,774	37.0%		
Total Costs	4,097,505	4,325,217	4,536,399	4,607,291	4,848,657	751,152	18.39		
Total Costs w/o Construction	3,792,478	4,044,304	4,204,788	4,299,306	4,603,240	810,762	21.4%		
General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	15.2% 32.1% 5.6%	14.0% 30.3% 6.0%	13.0% 29.5% 5.6%	12.2% 29.0% 5.9%	11.9% 27.8% 5.7%				
Total Support % Total Costs	52.8%	50.4%	48.1%	47.1%	45.4%				
Total Support % Total Costs w/o Construction	02.070	20	/ .						

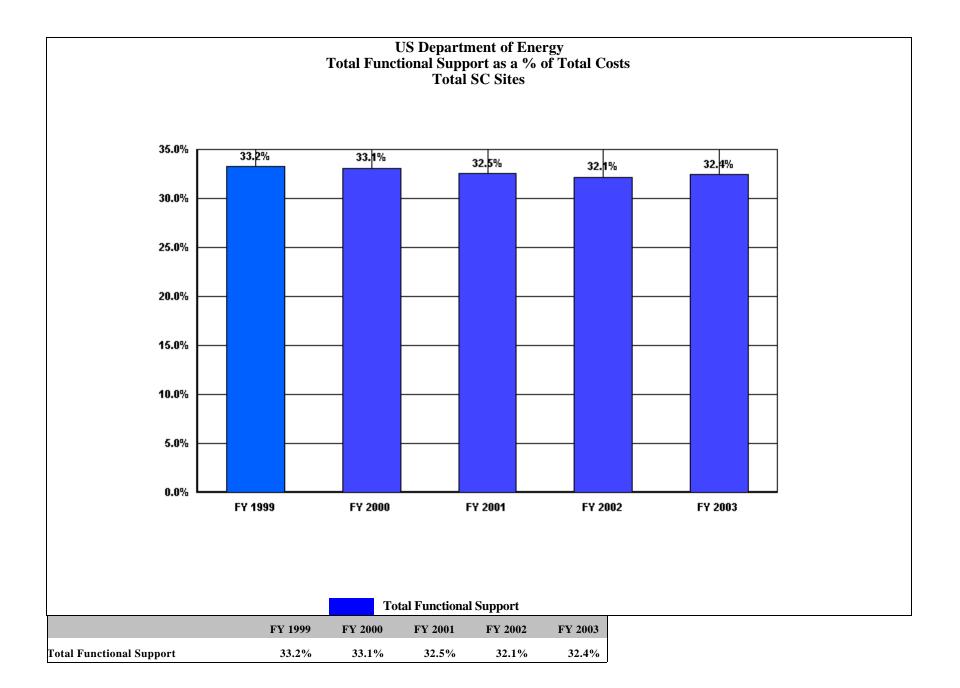


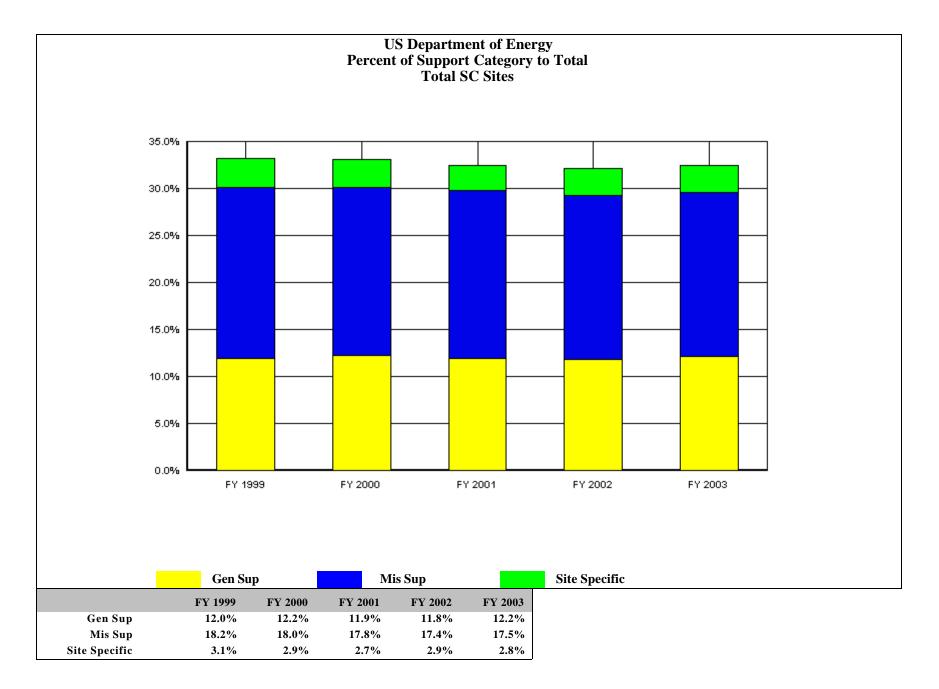




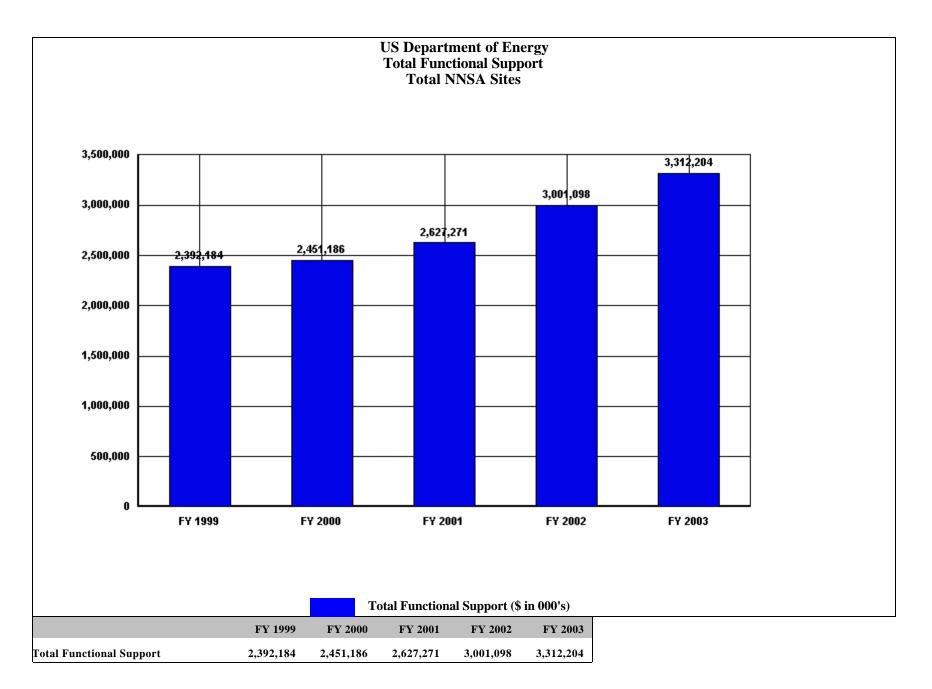
	SC Sites								
	2003								
(\$ in 000's)									
FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 EV20				
33,644	34,279	35,001	42,820	51,517	17,873	53.1%			
26,721	26,611	27,223	28,459	30,851	4,130	15.5%			
31,921	33,712	34,997	36,541	42,998	11,077	34.7%			
· · · · ·		· · ·		· · · · ·		-1.7%			
			· · · · · ·			7.6%			
· · · · · · · · · · · · · · · · · · ·		, , , , , , , , , , , , , , , , , , ,		· · · · ·		24.2%			
		-			· · · · ·	13.3%			
		-				34.7%			
	,	-				16.9%			
	-	,				46.6%			
		, ,				24.69			
FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20				
20,206	23,255	27,609	26,191	30,944	10,738	53.1%			
95,764	101,803	102,848	99,691	103,524	7,760	8.19			
48,669	50,661	65,229	76,991	88,843	40,174	82.59			
157,936	162,258	151,535	163,537	153,896	-4,040	-2.69			
88,112	í í	100,226	102,147	107,163	19,051	21.69			
		-		· · · · ·		75.59			
· · · · ·				í.	4,060	16.39			
· · · · ·	í í	,		· ·		12.89			
		2				-20.9%			
					1	17.89			
FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20				
41,120	40,472	39,191	40,795	40,109	-1,011	-2.5%			
3,439	4,014	2,212	3,648	1,578	-1,861	-54.19			
43,940	42,544	45,400	53,438	55,826	11,886	27.19			
88,499	87,030	86,803	97,881	97,513	9,014	10.2			
947,430	987,710	1,027,169	1,093,616	1,132,683	185,253	19.6%			
FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1				
1 642 491	1 720 743	1 798 594	1 905 741	1 947 046		03 18.59			
						58.09			
1,905,108			2,310,061	2,361,939		24.09			
2,852,538	2,987,102	3,161,664	3,403,677	3,494,622	642,084	22.59			
2,589,921	2,708,453	2,825,763	2,999,357	3,079,729	489,808	18.99			
12 በ0/	12 20%	11 00%	11 80%	12 20%					
12.0%	12.2%	11.9%	11.8%	12.2%					
18.2%	18.0%	17.8%	17.4%	17.5%					
	33,644 26,721 31,921 24,348 9,628 27,966 26,437 31,297 103,530 25,563 341,055 FY 1999 20,206 95,764 48,669 157,936 88,112 29,367 24,907 10,053 42,862 517,876 FY 1999 41,120 3,439 43,940 88,499 947,430 FY 1999 1,642,491 262,617 1,905,108 2,852,538	33,644 34,279 26,721 26,611 31,921 33,712 24,348 24,591 9,628 7,559 27,966 31,557 26,437 29,612 31,297 30,432 103,530 112,233 25,563 33,178 341,055 363,764 FY 1999 FY 2000 20,206 23,255 95,764 101,803 48,669 50,661 157,936 162,258 88,112 90,003 29,367 33,664 24,907 27,397 10,053 11,870 42,862 36,005 517,876 536,916 FY 1999 FY 2000 41,120 40,472 3,439 4,014 43,940 42,544 88,499 87,030 947,430 987,710 FY 1999 FY 2000 1,642,491 1,720,743	33,644 34,279 35,001 26,721 26,611 27,223 31,921 33,712 34,997 24,348 24,591 22,371 9,628 7,559 9,044 27,966 31,557 34,761 26,437 29,612 28,511 31,297 30,432 35,012 103,530 112,233 118,083 25,563 33,178 31,749 341,055 363,764 376,752 FY 1999 FY 2000 FY 2001 20,206 23,255 27,609 95,764 101,803 102,848 48,669 50,661 65,229 157,936 162,258 151,535 88,112 90,003 100,226 29,367 33,664 42,016 24,907 27,397 25,994 10,053 11,870 12,654 42,862 36,005 35,503 517,876 536,916 563,614 FY 199	33,644 34,279 35,001 42,820 26,721 26,611 27,223 28,459 31,921 33,712 34,997 36,541 24,348 24,591 22,371 23,147 9,628 7,559 9,044 9,725 27,966 31,557 34,761 34,617 26,437 29,612 28,511 28,649 31,297 30,432 35,012 37,797 103,530 112,233 118,083 125,258 25,563 33,178 31,749 35,664 341,055 363,764 376,752 402,677 FY 1999 FY 2000 FY 2001 FY 2002 20,206 23,255 27,609 26,191 95,764 101,803 102,848 99,691 157,936 162,258 151,535 163,537 88,112 90,003 100,226 102,147 29,367 33,664 42,016 50,075 24,907 27,397 25,9	33,644 34,279 35,001 42,820 51,517 26,721 26,611 27,223 28,459 30,851 31,921 33,712 34,997 36,541 42,998 24,348 24,591 22,371 23,147 23,941 9,628 7,559 9,044 9,725 10,361 27,966 31,557 34,761 34,617 34,730 26,437 29,612 28,511 28,649 29,945 31,297 30,432 35,012 37,797 42,160 103,530 112,233 118,083 125,258 121,072 25,563 33,178 31,749 35,664 37,466 341,055 363,764 376,752 402,677 425,041 95,764 101,803 102,848 99,691 103,524 48,669 50,661 65,229 76,991 88,843 157,936 162,258 151,535 163,537 153,896 88,112 90,003 100,226	No. No.			

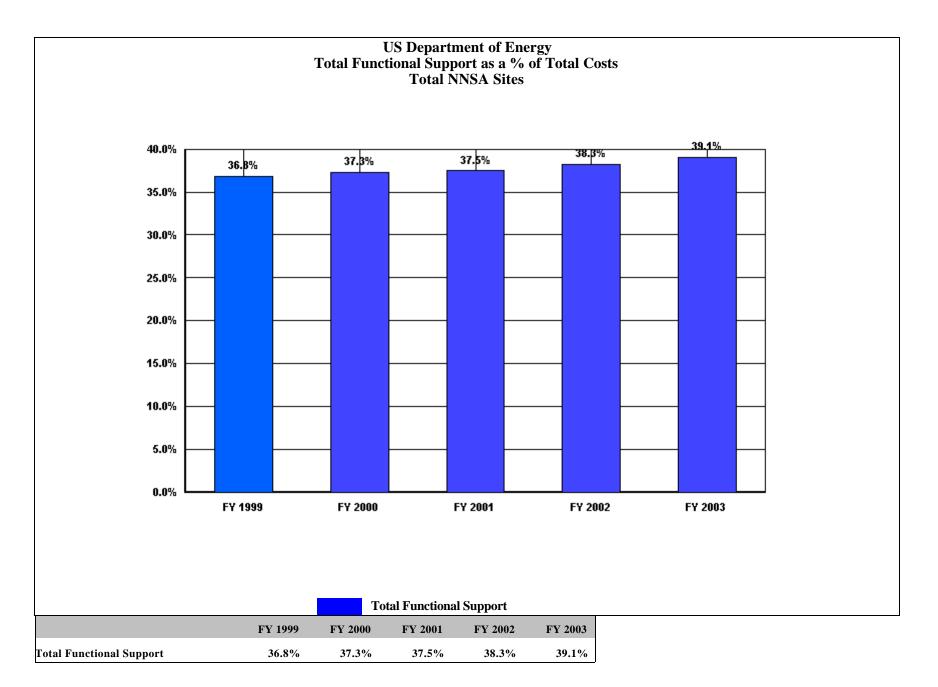


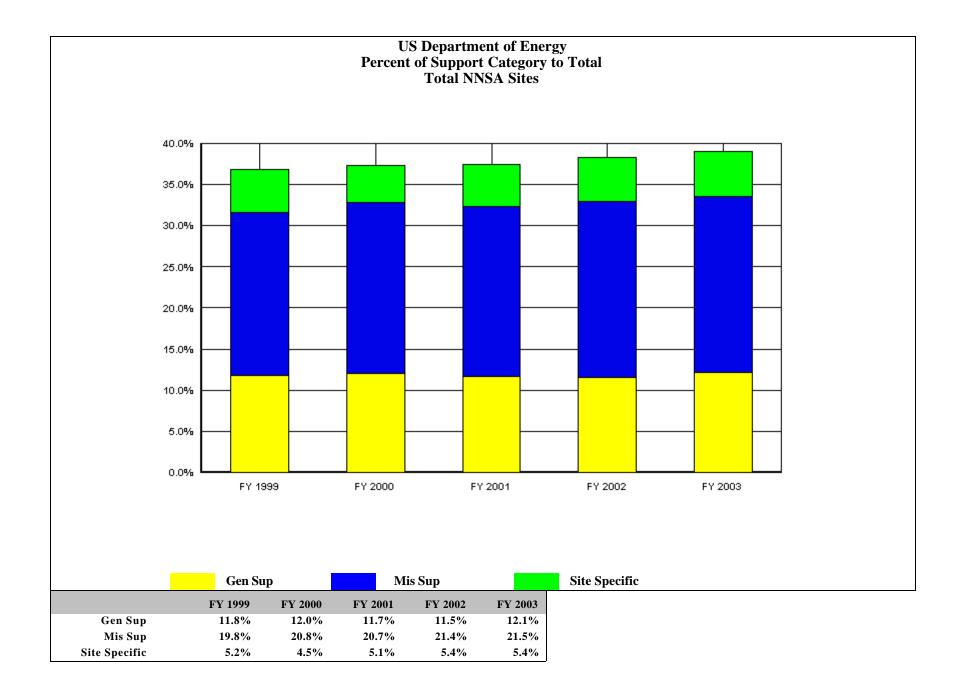




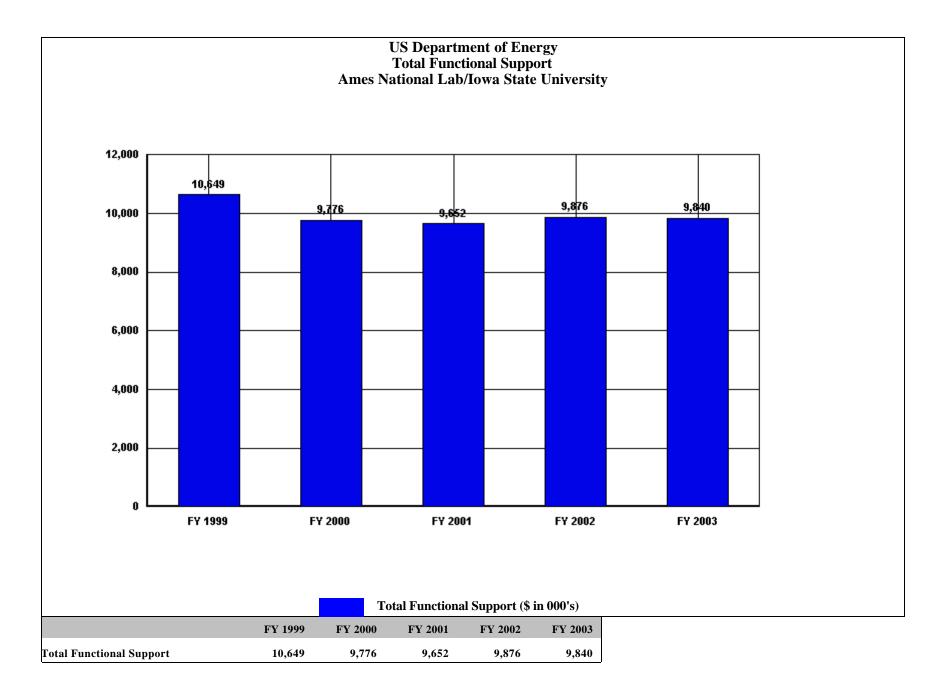
Trends in 7	Total Function	••		egories			
		NSA Sites 2003					
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	58,781	66,915	76,710	87,114	91,919	33,138	56.4%
HUMAN RESOURCES	74,411	83,213	88,278	94,725	106,924	32,513	43.7%
CFO	51,400	53,351	52,690	55,212	56,317	4,917	9.6%
PROCUREMENT	52,691	52,681	55,128	56,464	68,235	15,544	29.5%
	20,599	24,175	24,326	24,400	27,097	6,498	31.5% 21.5%
CENTRAL ADMIN SERVICES PROGRAM/PROJECT CONTROL	78,485 51,139	80,117 48,715	80,302 47,484	88,807 49,683	95,340 86,101	16,855 34,962	68.4%
INFORMATION OUTREACH	57,267	53,923	47,484 56,990	60,209	63,009	5,742	10.0%
INFORMATION SERVICES	290,738	300,421	304,760	368,544	409,777	119,039	40.9%
OTHER	28,619	26,635	34,594	17,749	25,404	-3,215	-11.2%
TOTAL GENERAL SUPPORT	764,130	790,146	821,262	902,907	1,030,123	265,993	34.89
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
ENVIRONMENTAL	78,349	77,307	73,969	80,965	79,447	FY2 1,098	1.4%
SAFETY AND HEALTH	221,787	236,405	239,448	270,482	302,122	80,335	36.2%
FACILITIES MANAGEMENT	101,124	176,295	210,956	264,971	295,480	194,356	192.2%
MAINTENANCE	365,012	323,468	322,556	363,856	398,509	33,497	9.2%
UTILITIES	150,092	145,395	172,320	190,000	176,589	26,497	17.7%
SAFEGUARDS AND SECURITY	231,095	265,612	279,663	347,300	395,685	164,590	71.2%
LOGISTICS SUPPORT	54,433	57,586	62,337	67,639	68,934	14,501	26.6%
QUALITY ASSURANCE	44,007	44,977	47,888	51,843	59,725	15,718	35.7%
LABORATORY/TECHNICAL SUPPORT	41,852	39,882	40,306	40,881	44,623	2,771	6.6%
TOTAL MISSION SUPPORT SITE SPECIFIC	1,287,751 FY 1999	1,366,927 FY 2000	1,449,443 FY 2001	1,677,937 FY 2002	1,821,114 FY 2003	533,363 Change 1	41.4%
SITE SPECIFIC		FI 2000	FI 2001	FI 2002	FI 2003	FY2	
MANAGEMENT/INCENTIVE FEE	133,013	129,745	127,853	143,976	157,538	24,525	18.4%
TAXES	53,879	56,174	60,126	68,537	68,278	14,399	26.7%
LDRD / PDRD / SDRD	153,411	108,194	168,587	207,741	235,151	81,740	53.3%
TOTAL SITE SPECIFIC	340,303	294,113	356,566	420,254	460,967	120,664	35.5%
TOTAL FUNCTIONAL SUPPORT	2,392,184	2,451,186	2,627,271	3,001,098	3,312,204	920,020	38.5%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
Mission Direct Operation	3,518,613	3,574,271	3,711,534	4,115,458	4,300,779	782,166	22.29
Capital Construction	585,434	549,330	673,316	725,250	867,559	282,125	48.2%
TOTAL MISSION DIRECT	4,104,047	4,123,601	4,384,850	4,840,708	5,168,338	1,064,291	25.9%
Total Costs	6,496,231	6,574,787	7,012,121	7,841,806	8,480,542	1,984,311	30.5%
Total Costs w/o Construction	5,910,797	6,025,457	6,338,805	7,116,556	7,612,983	1,702,186	28.8%
		.,,	.,,	.,	.,,	-,,	
Coporal Support 9/ Tatal Casta	11.8%	12.0%	11.7%	11.5%	12.1%		
General Support % Total Costs Mission Support % Total Costs	19.8%	20.8%	20.7%	21.4%	21.5%		
Site Specific % Total Costs	5.2%	20.8% 4.5%	20.7% 5.1%	5.4%	5.4%		
Total Support % Total Costs	36.8%	4.3%	3.1%	38.3%	3.4% 39.1%		

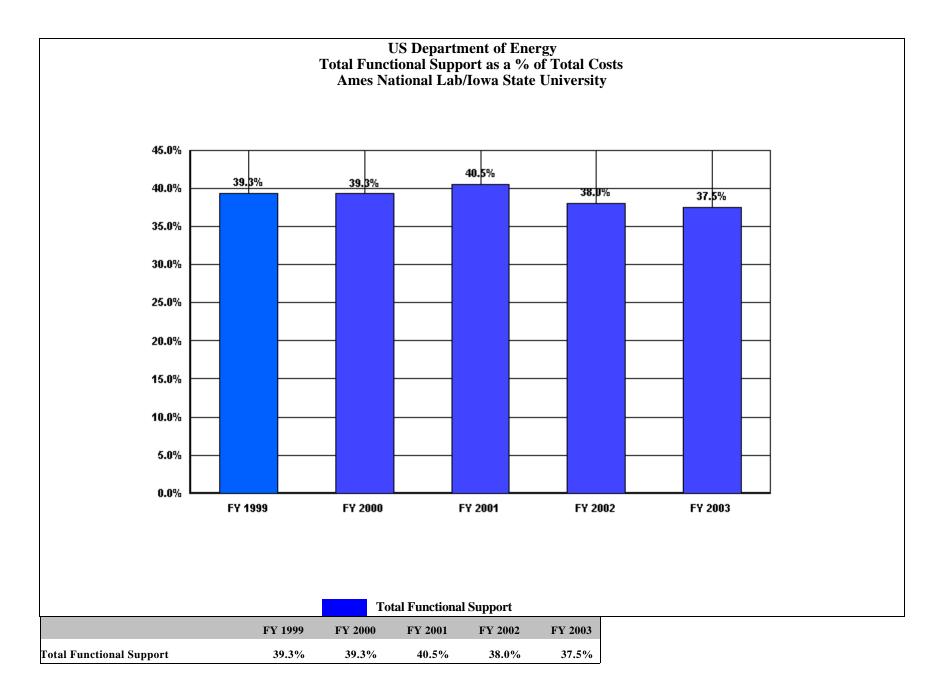


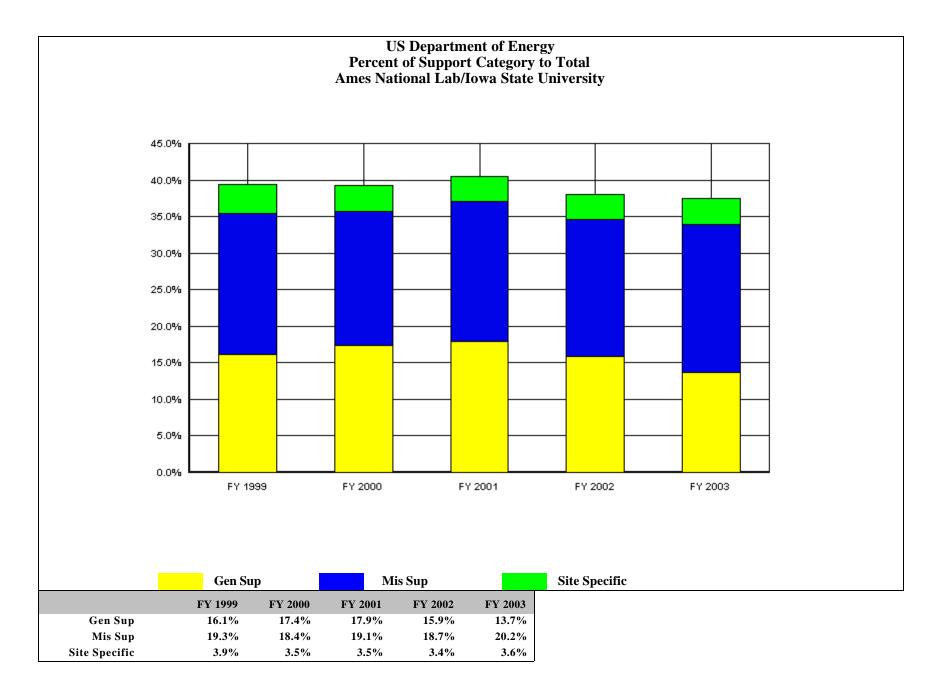




Trends in Tota	l Function	al Suppor	t Cost Cat	egories			
Ames Na	tional Lab FY	/Iowa Stat 2003	e Universi	ity			
	(\$ in	000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	668	656	653	639	654	-14	-2.1%
HUMAN RESOURCES	232	235	243	251	258	26	11.2%
CFO	692	802	867	901	932	240	34.7%
PROCUREMENT	191	164	179	187	188	-3	-1.6%
LEGAL	0	0	0	0	0	0	0.0%
CENTRAL ADMIN SERVICES	240	209	186	153	155	-85	-35.4%
PROGRAM/PROJECT CONTROL	1,303 364	1,217 348	1,230 360	1,220 366	1,195 362	-108 -2	-8.3% -0.5%
INFORMATION OUTREACH INFORMATION SERVICES	992	548 843	843	500 778	922	-2 -70	-0.3% -7.1%
OTHER	-317	-143	-310	-367	-1,073	-70 -756	-7.1% 238.5%
TOTAL GENERAL SUPPORT	4,365	4,331	4,251	4,128	3,593	-772	-17.7%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
						FY2(03
ENVIRONMENTAL	15	30	31	40	37	22	146.7%
SAFETY AND HEALTH	1,022	1,024	994	1,055	1,128	106	10.4%
FACILITIES MANAGEMENT	326	163	140	276	436	110	33.7%
MAINTENANCE	1,448	1,294	1,325	1,325	1,335	-113	-7.8% 6.5%
UTILITIES SAFEGUARDS AND SECURITY	903 128	860 142	902 152	965 212	962 219	59 91	6.5% 71.1%
LOGISTICS SUPPORT	303	289	299	324	353	50	16.5%
QUALITY ASSURANCE	59	58	59	60	62	3	5.1%
LABORATORY/TECHNICAL SUPPORT	1,032	711	656	602	765	-267	-25.9%
TOTAL MISSION SUPPORT	5,236	4,571	4,558	4,859	5,297	61	1.2%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
	802	050	942	880	050	FY20	
MANAGEMENT/INCENTIVE FEE TAXES	893 0	858 0	843 0	889 0	950 0	57 0	6.4% 0.0%
LDRD / PDRD / SDRD	155	0 16	0	0	0	-155	-100.0%
TOTAL SITE SPECIFIC	1,048	874	843	889	950	-98	-9.4%
TOTAL FUNCTIONAL SUPPORT	10,649	9,776	9,652	9,876	9,840	-809	-7.6%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	1000 to
MISSION DIRECT	F1 1999	F1 2000	F1 2001	F1 2002	F1 2003	FY2	03
Mission Direct Operation	13,730	13,056	12,498	13,559	14,750	1,020	7.4%
Capital Construction	2,692	2,066	1,654	2,538	1,650	-1,042	-38.7%
TOTAL MISSION DIRECT	16,422	15,122	14,152	16,097	16,400	-22	-0.1%
Total Costs	27,071	24,898	23,804	25,973	26,240	-831	-3.1%
Total Costs w/o Construction	24,379	22,832	22,150	23,435	24,590	211	0.9%
General Support % Total Costs	16.1%	17.4%	17.9%	15.9%	13.7%		
Mission Support % Total Costs	19.3%	17.4%	19.1%	18.7%	20.2%		
Site Specific % Total Costs	3.9%	3.5%	3.5%	3.4%	3.6%		
Total Support % Total Costs	39.3%	39.3%	40.5%	38.0%	37.5%		
Total Support % Total Costs w/o Construction	43.7%	42.8%	43.6%	42.1%	40.0%		
LOTAL SUDDOLT % LOTAL COSTS W/O CONSTRUCTION	43.7%	42.8%	43.6%	42.1%	40.0%		







Ames Laboratory is operated for the Department of Energy by Iowa State University. Ames is a single purpose laboratory engaged in basic research in a wide variety of scientific disciplines with a diverse customer base (EE, EM, FE, NN, SC, and Work for Others). The Laboratory's mission is to conduct fundamental research in the physical, chemical, materials, and mathematical sciences and engineering which underlie energy generating, conversion, transmission and storage technologies, environmental improvement, and other technical areas essential to national needs. These efforts will be maintained so as to contribute to the achievement of the vision of the Department of Energy and, more specifically, to increase the general levels of knowledge and technical capabilities, to prepare engineering and physical sciences students for the future, and to develop new technologies and practical applications arising from our basic scientific programs. The Laboratory will approach all its operations with the safety and health of all workers as a constant objective and with genuine concern for the environment.

Recent Scientific Achievements include:

- Development of an ultrathin biodegradable polymer with microscale grooves that promote nerve cell regeneration. The polymer film, which has been proven to work for peripheral nerve regeneration in laboratory rats, could help repair damaged or severed nerves.
- Investigation of mixed-phase solar cell materials a mixture of clusters of nanocrystalline silicon embedded in an amorphous matrix that have a much greater stability to light-induced degradation than traditional amorphous solar cell materials. The research efforts may even extend to manipulating the nanoscale structure of the material, allowing the design and creation of improved materials.
- Work on a new generation of highly selective and efficient heterogeneous catalysts that can be tailored to specific classes of chemical reactions, which may be used in the synthesis of new polymers and fuels and simultaneously advance the fundamental understanding of catalysis.
- Discovery of more than a dozen rare earth intermetallic compounds that are capable of easy molding at room temperature. Such materials could be used to produce practical materials from coatings that are highly resistant to corrosion or that maintain strength at high temperatures to flexible superconducting wires and extremely powerful magnets.
- Development of a novel, fluorescence-based chemical sensor that is more compact, versatile and less expensive than existing technology of its kind. The new sensor holds promise for myriad potential applications, such as point-of-care medical testing, high-throughput drug discovery, and detection of pathogens and other warfare agents.

The Ames site is located on approximately 10 acres of land owned by Iowa State University in Ames, Iowa that is leased to the Federal government on a long-term (99 year) basis. DOE-owned buildings include three research buildings; one building housing management, administration, and technical support groups; and several small auxiliary buildings housing material receiving areas, warehouse functions, and shop facilities. Some research space is also leased from Iowa State University. Ames Laboratory does not have a large noncost-recovery user facility, a nuclear criticality facility, or any production facilities. The Laboratory operates as a customer of the local utility providers and does not operate central heating/chilling/power plant operations, water supply/treatment facilities, or sewage systems. Nor does Ames have its own fire department, cafeteria, or library. Approximately 700 people (317 FTE's) worked at Ames Laboratory in FY 2003.

TRENDS

Ames Laboratory's total costs decreased from \$27,070K in FY 1999 to \$26,241 in FY 2003. This was a decrease of 3.1%. The Laboratory's total functional support costs dropped from \$10,649K in FY1999 to \$9,840K in FY2003, a decrease of 7.6%.

Functional support costs as a percentage of total site costs:

FY 1999 - 39.3% FY 2000 - 39.3% FY 2001 - 40.5% FY 2002 - 38.0% FY 2003 - 37.5%

ANOMALIES IN COST DATA FROM FY 1999 TO FY 2003:

Chief Financial Officer – \$240K

Multiple positions that were vacated in FY 1999 were filled in FY 2000. FY 2003 costs reflect a normalized level of effort.

Central Administrative Services - (\$85K)

The reduction in costs is a result of a decrease of 1.75 FTE's due to the reduced demand for printing services and graphic design.

Program/Project Planning & Control – (\$108K)

This functional category fluctuates relative to the funding levels of the Laboratory. Although, in FY 2002 the research in KC0301 and KC0302 was reorganized under one program director and one laboratory program director was eliminated, reducing program administrative costs.

Information Services – (\$70K)

FY 1999 included gigabit components procured to upgrade the efficiency and speed of the network backbone. With the completion of this onetime upgrade in FY 1999, FY 2000 costs were reduced.

FY 2001 costs included an upgrade to the mainframe computer (\$56K), software for monitoring network traffic and for an application development tool (\$20K), and an upgrade to 100 megabit components for faster desktop connections (\$20K). These items were onetime costs that were not repeated in FY 2002

Other – (\$756K)

This category includes:

- 1) The annual change in the Laboratory's accrued vacation liability costs. These costs are the result of the difference in the vacation earned and used by each individual employee in the laboratory and can vary significantly (+ or -) each year.
- The costs of the Early Retirement Incentive Plan. Costs have decreased as the initial participants have come to the end of their years of participation and fewer new participants have applied for the program.
- 3) Reimbursable services. These monies have increased significantly over the past five years. Environmental \$23K

EM-40 discontinued direct funding of certain activities related to environmental monitoring and stewardship. Those activities are now financed with the Laboratory's overhead funds in this functional category in FY 2000; they had been included in EM mission direct in prior years

Safety & Health – \$106K

Increase is due to normal escalation of a relatively stable budget that is comprised primarily of people.

Facilities Management – \$110K Two new research initiatives were funded in FY 2002; space rental costs have increased.

Maintenance -(\$113K)

FY 1999 included onetime costs of rewiring buildings with the latest category 5 data wire to accommodate 100 megabit speeds to the desktop and supplying additional cooling/venting in a computer room.

Safeguards/Security - \$91K

Security efforts have increased over the past five years with the major cost impacts being: enhanced cyber security efforts with the implementation and monitoring of the laboratory firewall, upgrade of radios to new Federal Communications Commission regulations for bandwidths, and the badging of Ames Laboratory personnel after the attack of 9/11.

Logistics Support-\$50K Increase is due to normal escalation of a relatively stable budget that is comprised primarily of people.

Laboratory/Technical Support – (\$267K)

Reductions in the need for Laboratory Technical Services parallel the reduction in research funding. The Electronic Engineers section in the Engineering Services Group was eliminated in FY 2000 due to reduced demand for these services by the scientific community (reduction of approximately 2.5 FTE's). The Auger services of the Materials Preparation Center were eliminated (0.6 FTE's) in FY 2002 due to reduced need for the service. FY2003 saw a reduction in the need for laboratory Technical Services. The Engineering Services Group (ESG) reduced staff by two FTE's late in FY 2003 and those two positions will not be refilled in the foreseeable future.

LDRD – (\$155K)

Due to declining research funds, Laboratory Management did not fund any new LDRD activities in FY 2000, FY 2001, FY 2002 or FY 2003. The \$16K in FY 2000 represents the carryover from prior years.

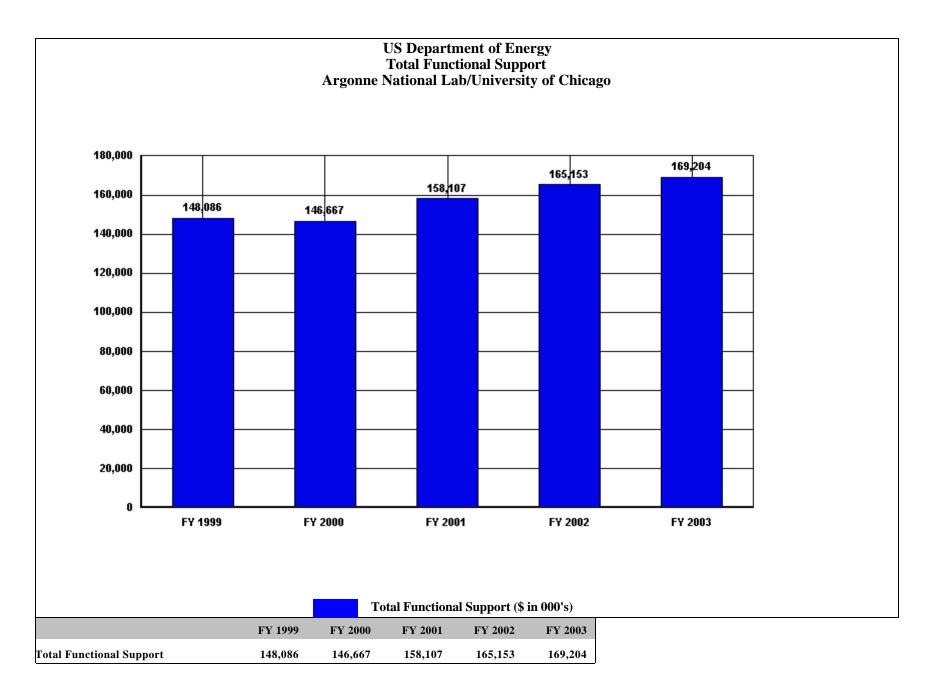
COST SAVINGS INITIATIVES

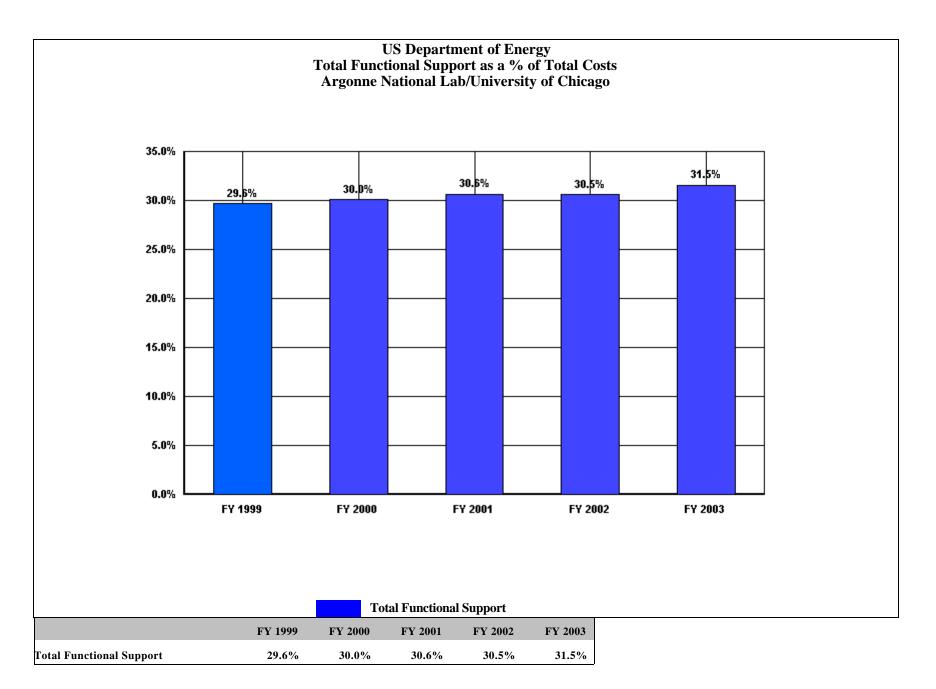
Cost saving initiatives include elimination of the automobile pool, reduction in the number of guards, and reduction of various other support positions at the Laboratory. In FY2000 one position each was reduced in procurement and printing services, a second full-time position in graphics design was decreased by 75% of an FTE in FY2002, and two fulltime positions in the Engineering Services Group were decreased by 0.5 FTE in FY2003 with the remaining 1.5 FTE reduction to be realized in FY2004. The Electronic Engineers section in the Engineering Services Group, the Auger service of the Materials Preparation Center, and efforts in the Graphics and Printing shop were eliminated due to reduced demand for these services by the scientific community (reduction of approximately 2.5, 0.6, and 1.75 FTE's respectively), as well as one administrative position in the Engineering Services Group. And finally, rented space has been closely scrutinized and significant efforts have been made to reduce the Laboratory's occupancy of non-owned space (note anomaly in the Functional Category – Facilities Management).

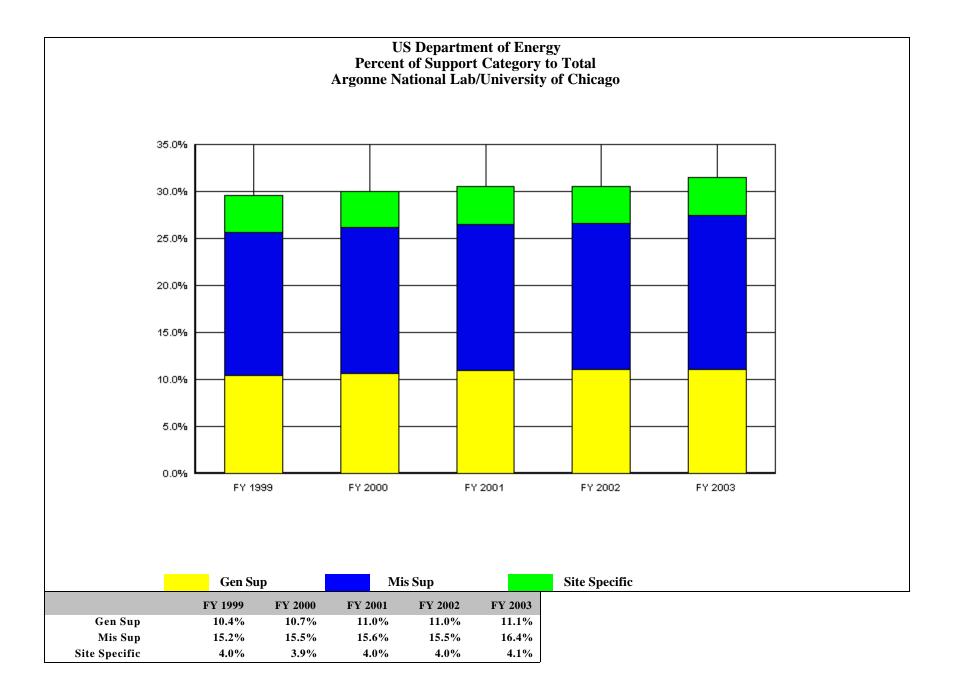
<u>OTHER</u>

Item	Value
Reimbursable Services	\$(972.6)K
Early Retirement Incentive Program, Accrued Vacation	21.7
Liability Change, Disability, Law Suit Settlement	
Workman's Compensation Refund	(15.0)
Lab residual	(106.8)
TOTAL	\$(1072.7)K

Trends in To Argonne	National La			Ŭ			
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
EXECUTIVE DIRECTION	4,977	5,170	5,857	8,024	9,716	FY2 4,739	95.2%
HUMAN RESOURCES	4,106	4,131	4,171	4,215	4,021	-85	-2.1%
CFO	5,171	5,043	4,982	5,043	4,448	-723	-14.0%
PROCUREMENT	4,204	4,191	4,107	4,216	4,333	129	3.1%
LEGAL	2,232	2,043	2,394	2,500	2,664	432	19.4%
CENTRAL ADMIN SERVICES	10,204	10,217	10,912	11,064	10,532	328	3.2%
PROGRAM/PROJECT CONTROL	785	787	797	696	975	190	24.2%
INFORMATION OUTREACH	4,296	4,233	4,102	3,963	4,157	-139	-3.2%
INFORMATION SERVICES	16,124	16,437	17,796	18,776	17,925	1,801	11.2%
OTHER TOTAL GENERAL SUPPORT	-34	-123	1,547	1,216	763	797 7,469	2,344.1% 14.3%
	52,065 FY 1999	52,129 FY 2000	56,665 FY 2001	59,713 FY 2002	59,534 FY 2003	Change 1	
MISSION SUPPORT	F1 1999	FI 2000	FI 2001	FI 2002	FI 2005	FY2	
ENVIRONMENTAL	4,052	4,532	5,120	7,462	7,353	3,301	81.5%
SAFETY AND HEALTH	16,469	17,313	16,702	13,365	14,951	-1,518	-9.2%
FACILITIES MANAGEMENT	8,158	7,322	8,233	9,942	11,087	2,929	35.9%
MAINTENANCE	16,711	16,627	16,769	17,481	18,599	1,888	11.3%
UTILITIES	17,895	16,838	18,495	19,070	19,913	2,018	11.3%
SAFEGUARDS AND SECURITY	7,086	7,224	9,079	10,566	9,630	2,544	35.9%
LOGISTICS SUPPORT	5,098	5,336	5,665	5,679	5,849	751	14.7%
QUALITY ASSURANCE	518	414	366	376	443	-75	-14.5%
LABORATORY/TECHNICAL SUPPORT TOTAL MISSION SUPPORT	0 75,987	0 75,606	121 80,550	119 84,060	0 87,825	0 11,838	0.0% 15.6%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
						FY20	
MANAGEMENT/INCENTIVE FEE	6,795	5,998	5,419	6,195	5,834	-961	-14.1%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	13,239	12,934	15,473	15,185	16,011	2,772	20.9%
TOTAL SITE SPECIFIC	20,034	18,932	20,892	21,380	21,845	1,811	9.0%
TOTAL FUNCTIONAL SUPPORT	148,086	146,667	158,107	165,153	169,204	21,118	14.3%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	322,432	322,621	329,642	349,502	341,298	18,866	5.9%
Capital Construction	29,402	19,045	29,182	26,194	26,001	-3,401	-11.6%
TOTAL MISSION DIRECT	351,834	341,666	358,824	375,696	367,299	15,465	4.4%
Total Costs	499,920	488,333	516,931	540,849	536,503	36,583	7.3%
Total Costs w/o Construction	470,518	469,288	487,749	514,655	510,502	39,984	8.5%
General Support % Total Costs	10.4%	10.7%	11.0%	11.0%	11.1%		
Mission Support % Total Costs	15.2%	15.5%	15.6%	15.5%	16.4%		
Site Specific % Total Costs	4.0%	3.9%	4.0%	4.0%	4.1%		
Total Support % Total Costs	29.6%	30.0%	30.6%	30.5%	31.5%		
Total Support % Total Costs w/o Construction	31.5%	31.3%	32.4%	32.1%	33.1%		







I. **Site Characteristics America's first national laboratory**

Argonne is one of the U.S. Department of Energy's largest research centers and is also the nation's first national laboratory, chartered in 1946. Argonne is a direct descendant of the University of Chicago's Metallurgical Laboratory, part of the World War Two Manhattan Project to build the atomic bomb. It was at the Metallurgical Laboratory where, on Dec. 2, 1942, Enrico Fermi and his band of about 50 colleagues created the world's first controlled nuclear chain reaction in a squash court at the University of Chicago. After the war, Argonne was given the mission of developing nuclear reactors for peaceful purposes.

Over the years, Argonne's research expanded to include many other areas of science, engineering and technology. Argonne is not and never has been a weapons laboratory. Today, the Laboratory has close to 4,000 employees, including about 1,400 scientists and engineers, of whom about 700 hold doctorate degrees. Argonne's annual operating budget of \$500 million supports upwards of 1900 research projects, ranging from studies of the atomic nucleus to global climate change research. Since 1990, Argonne has worked with more than 600 companies and numerous federal agencies and other organizations.

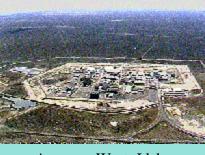
Argonne occupies two sites. The Illinois site is surrounded by 1,500 wooded acres of forest preserve and is located about 25 miles southwest of Chicago's Loop. It houses about 3,200 of Argonne's 3,900 employees. The U.S. Department of Energy's Chicago Operations Office is co-located on this site. Argonne-West occupies 900 acres about 50 miles west of Idaho Falls in the Snake River Valley. It is the home for most of Argonne's major nuclear reactor research facilities and approximately 700 of Argonne's employees.

Argonne research falls into four broad categories:

Basic science seeks solutions to a wide variety of scientific challenges. This includes experimental and theoretical work in materials science, physics, chemistry, biology, high-energy physics, and mathematics and computer science, including high-performance computing.

Scientific facilities like Argonne's Advanced Photon Source help advance America's scientific leadership and prepare the nation for the future. The Laboratory designs, builds and operates sophisticated research facilities that would be too expensive for a single company or

Argonne-West, Idaho





university to build and operate. They are used by scientists from Argonne, industry, academia and other national laboratories, and often by scientists from other countries. The Laboratory is also home to the Intense Pulsed Neutron Source, the Argonne Tandem Linear Accelerator System and other facilities.

• **Energy resources** programs help ensure a reliable supply of efficient and clean energy for the future. Argonne scientists and engineers are developing advanced batteries and fuel cells, as well as advanced electric power generation and storage systems. They are also working to improve the safety and longevity of both American and Soviet-designed nuclear reactors.

• **Environmental management** includes work on managing and solving the nation's environmental problems and promoting environmental stewardship. Research in this area includes alternative energy systems; environmental risk and economic impact assessments; hazardous waste site analysis and remediation planning and electrometallurgical treatment to prepare spent nuclear fuel for disposal.

• **Other** Industrial technology development is an important activity in moving benefits of Argonne's publicly funded research to industry to help strengthen the nation's technology base. Argonne's Division of Educational Programs provides a wide range of educational opportunities for faculty and students ranging from leading national universities to local junior high schools. Argonne is operated by the University of Chicago for the U.S. Department of Energy.

II. <u>Highlights Of Trends (\$ in thousands)</u>

	<u>FY1999</u>	FY2000	FY2001	FY2002	FY2003
General Support	\$52,065	\$52,129	\$56,665	\$59,713	\$59,534
Mission Support	\$75,987	\$75,606	\$80,550	\$84,060	\$87,825
Site Specific	\$20,034	\$18,932	\$20,892	\$21,380	\$21,845
Total Functional Costs	\$148,086	\$146,667	\$158,107	\$165,153	\$169,204
Mission Direct	\$322,432	\$322,621	\$329,642	\$349,502	\$341,298
Capital/Construction	\$29,402	\$19,045	\$29,182	\$26,194	\$26,001
Total Site	\$499,920	\$488,333	\$516,931	\$540,849	\$536,503
Functional Costs As % of Site	29.6%	30.0%	30.6%	30.5%	31.5%

Functional support costs have averaged about 30% of the total Laboratory budget for the period FY1999 through FY2003 with 1% growth in FY2003. The General Support costs maintained relatively flat budgets with some fluctuation between various categories.

Mission Support Costs experienced a 4.6% increase in FY2003 as a result of higher prices for coal and gas plus increased environmental monitoring and emergency management. Also contributing to the increase was the realignment of reporting category for facility costs and data processing machine maintenance.

The Site Specific Costs reflect a stronger emphasis on Laboratory Directed Research and Development (LDRD), which has increased at a steady rate from \$12.9M in FY1999 to \$16.0M in FY2003.

Argonne continues to control expenses and absorb inflation and salary adjustments throughout the support organizations. Increased productivity and reduced overheads have resulted in enhanced research programs and to some degree offset the impact of fixed costs (Allowances, Awards, etc.) in an era of relatively flat R&D budgets.

III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

Executive Direction

The nearly \$1.7M increase in Executive Direction is due to the addition of an Associate Laboratory Director for National Security, who also serves as Deputy National Security Coordinator, the addition of a Chief of Staff, and the cost of other Laboratory personnel (salaries, travel, etc.) assigned to Laboratory Management for development and implementation of special projects.

Human Resources and the office of the **Chief Financial Officer** reduced costs by \$789K by realigning the IT (Information Technology) functions into the Computing and Information Solutions (CIS) Division. CIS then reorganized and downsized which resulted in a reduction of \$851K in **Information Services** in FY2003.

Program/Project Planning and Control

The \$279K cost increase is associated with development of a lab-wide earned value and project management system.

Other

Other expenses decreased from \$1,216K to \$763K in FY2003. This category includes public liability insurance, miscellaneous income, cleaning of uniforms, postage and operating costs for ANL-West Nuclear Program Services as detailed below:

Description	FY2002	<u>FY 2003</u>
Nuclear Program General Expense	\$2,352	\$1,857
Public Liability Insurance	(\$102)	\$6
Miscellaneous Income	(\$1,034)	(\$1,100)
Laboratory General Expense	\$0	\$0
Total - Other	\$1.216	\$763

The cost reductions are a result of reduced purchases of supplies and construction subcontracts, a reduction of one-time costs for soft ware and hardware, and a reduction in support from other laboratories.

Safety and Health

Safety and Health expenses increased from \$13,365K in FY2002 to \$14,951K in FY2003, mainly due to maintaining compliance for safety systems, increasing environmental monitoring and internal and external dosimetry involving the collection and interpretation of analytical data for radiological dose assessments, and expanded health physics activities.

Facilities Management

The increase in Facilities Management of \$1.1M is due in part to a change in reporting the cost of building rental as recommended by the Functional Support Cost Peer Review. Building rental was previously reported in other functional cost categories and mission direct. The \$2.0M increase related to building rental was offset by reductions in Facilities, Planning and Engineering and Major Repairs.

Maintenance

Following a recommendation from the Functional Support Cost Peer Review, data processing machine maintenance costs of \$1.1M were transferred into the Maintenance category resulting in an increase from \$17,481K in FY2002 to \$18,599K in FY2003.

Utilities

In FY2003, we experienced a significant escalation in the cost of coal and natural gas. This resulted in a 4% increase in the cost for utilities from \$19,070K in FY2002 to \$19,913K in FY 2003.

Safeguards and Security

Safeguards and Security expenses decreased from \$10,566K in FY2002 to \$9,630K in FY2003. This category includes Counter-Intelligence as well as the guard forces at both sites. This reduction is mainly due to unique one-time costs incurred in FY2002.

IV. COST SAVINGS INITIATIVES

- Argonne takes an aggressive approach in contract negotiations for subcontracts and purchase orders. This has resulted in significant cost savings/cost avoidance each year. Savings in FY2003 totaled \$5,160,355.
- Argonne has taken numerous steps to reduce the cost of fringe benefits. The changes resulted in a direct savings to the Laboratory by consolidating costs, negotiating better terms, shifting expenses to employees or by reducing the benefit. A detailed list of the changes in FY2003 is provided below:
 - Argonne changed prescription drug vendors to implement group purchases for prescription drugs which resulted in annual savings of \$889,000.
 - Argonne limited the coordination of benefits for retirees and current employees to the amount covered by the primary insurer. This resulted in an annual savings of \$406,000.
 - Argonne increased the employee's portion of their co-pay payment on mail order prescription drug purchases resulting in annual savings of \$212,000.
 - Argonne implemented the CIGNA Well Aware Disease Management program that provided screening for coronary heart disease and diabetes. The initial cost of this program was \$70,000, however, we received \$257,000 savings in the insurance premiums that were paid.

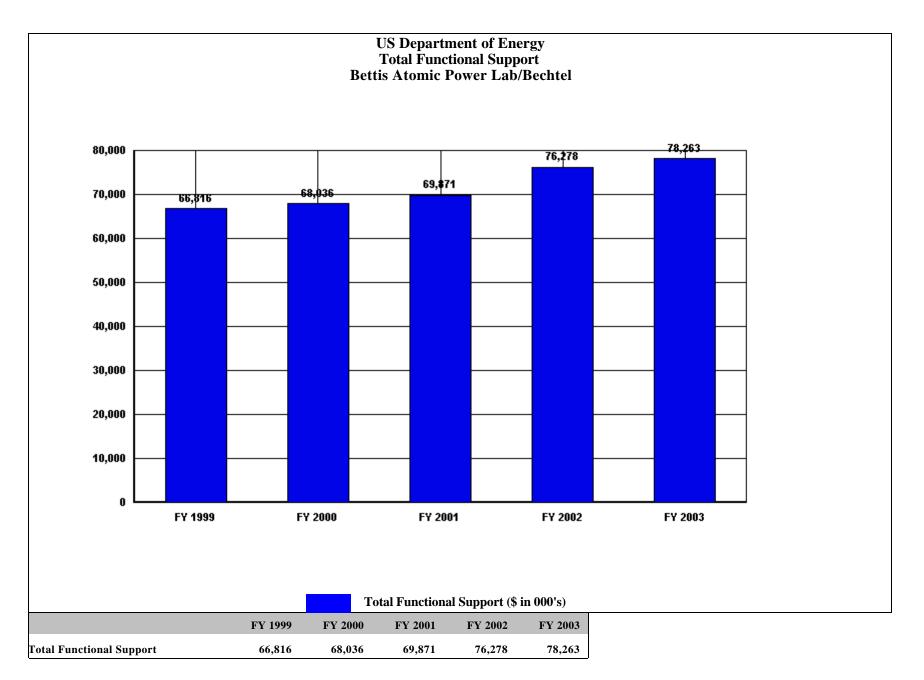
	FY2003
Savings	\$257,000
Investment	\$ 70,000
Net Savings	\$187,000

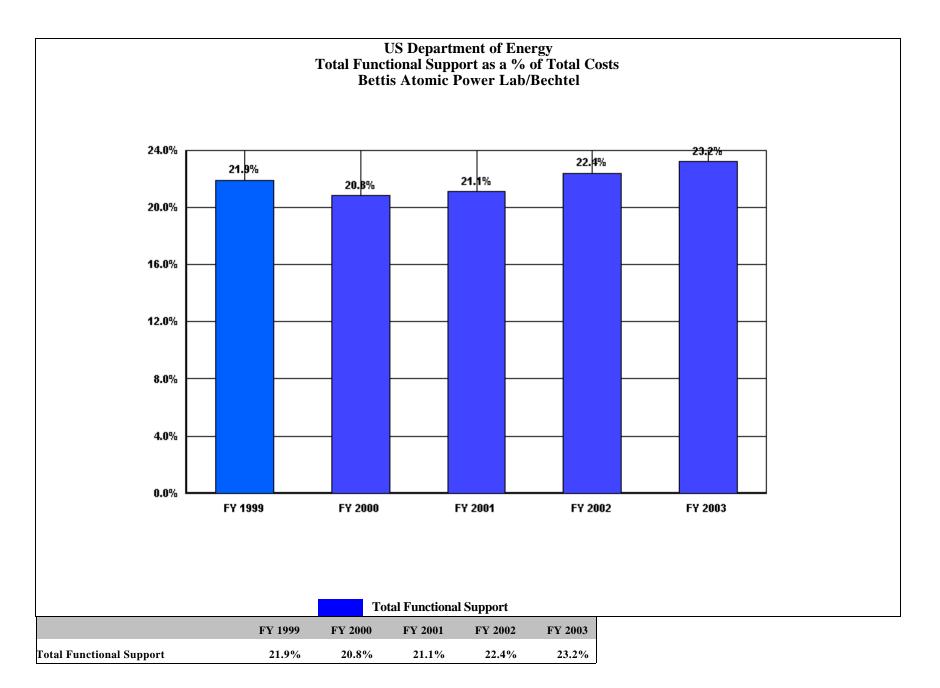
- For many years, Argonne maintained two separate medical plans for retirees. The two plans were merged into one new plan that saved \$38,000 annually.
- Argonne increased the employee HMO office co-pay, which saved the Laboratory \$30,000.
- Actions taken in FY2002 to reduce costs that continue to provide substantial savings include:
 - Argonne joined the Midwest Business Group on Health, a health purchasing initiative. Membership in this coalition enabled Argonne to take advantage of a negotiated reduction in a planned fee increase from 30.3% to 19.5% in the FY2003 premium. The annual membership fee of \$25,000 will result in a savings of \$703,000 annually.

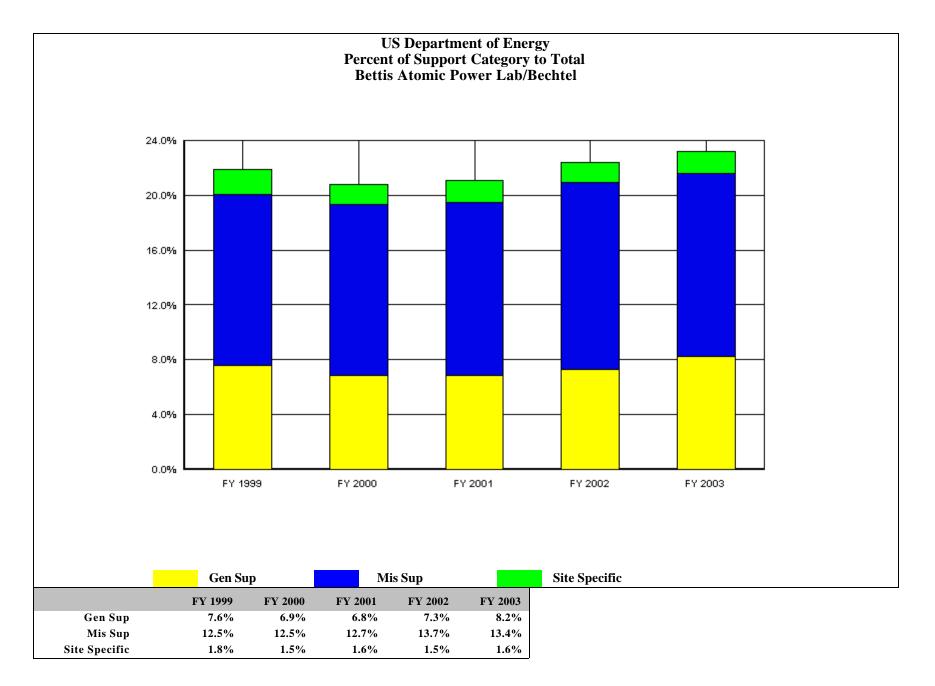
	FY2003
Savings	\$728,000
Investment	<u>\$ 25,000</u>
Net Savings	\$703,000

- Argonne coordinated the purchase of a site-wide Microsoft software license with the University of Chicago. This coordinated purchase eliminated the need for individuals and department to purchase individual Microsoft software licenses and has resulted in annual savings of \$400,000.
- Argonne joined the CIGNA PPO dental plan, which includes a significant number of dentists that charge a lower contract price for services. This has resulted in annual savings of \$133,000.
- Argonne reduced the number of HMO medical/dental carriers that are available to employees. This resulted in an annual savings of \$133,000 achieved through a 3% rate reduction from the one remaining HMO carrier (HMO Illinois).

Trends in T	otal Function	al Suppor	t Cost Cat	egories			
Bo	ettis Atomic P		/Bechtel				
		2003 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	1999 to
		F1 2000	FI 2001	F1 2002		FY2(
EXECUTIVE DIRECTION	2,978	3,002	3,193	3,206	3,330	352	11.8%
HUMAN RESOURCES	3,643	3,998	3,640	3,825	4,143	500	13.7%
CFO	2,694	1,892	2,233	2,236	2,785	91 284	3.4% 16.4%
PROCUREMENT LEGAL	1,728 73	1,850 89	2,100 122	2,178 137	2,012 157	284 84	10.4%
CENTRAL ADMIN SERVICES	1,616	1,331	1,229	1,427	1,324	-292	-18.1%
PROGRAM/PROJECT CONTROL	316	262	444	500	559	243	76.9%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	10,023	10,070	9,675	11,245	13,542	3,519	35.1%
OTHER	0	0	0	0	0	0	0.0%
TOTAL GENERAL SUPPORT	23,071	22,494	22,636	24,754	27,852	4,781	20.7%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
ENVIRONMENTAL	5,122	5,174	5,535	6,141	5,815	FY2 693	03 13.5%
SAFETY AND HEALTH	10,796	11,661	11,994	12,825	14,277	3,481	32.2%
FACILITIES MANAGEMENT	2,568	3,081	3,227	4,319	2,282	-286	-11.1%
MAINTENANCE	6,282	6,847	5,757	5,949	6,859	577	9.2%
UTILITIES	2,265	2,232	2,499	2,854	2,846	581	25.7%
SAFEGUARDS AND SECURITY	5,037	5,290	6,020	6,554	6,769	1,732	34.4%
LOGISTICS SUPPORT	2,017	2,134	2,459	2,950	2,423	406	20.1%
QUALITY ASSURANCE	4,144	4,374	4,411	4,965	3,902	-242	-5.8%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL MISSION SUPPORT	38,231	40,793	41,902	46,557	45,173	6,942	18.2%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	4,988	4,504	5,069	4,577	4,531	-457	-9.2%
TAXES	526	245	264	390	707	181	34.4%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	5,514	4,749	5,333	4,967	5,238	-276	-5.0%
TOTAL FUNCTIONAL SUPPORT	66,816	68,036	69,871	76,278	78,263	11,447	17.1%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	213,733	234,986	240,518	245,301	241,168	27,435	12.8%
Capital Construction	24,605	24,057	20,663	19,401	18,274	-6,331	-25.7%
TOTAL MISSION DIRECT	238,338	259,043	261,181	264,702	259,442	21,104	8.9%
Total Costs	305,154	327,079	331,052	340,980	337,705	32,551	10.7%
Total Costs w/o Construction	280,549	303,022	310,389	321,579	319,431	38,882	13.9%
				7.20	0.00/		
General Support % Total Costs	7.6%	6.9%	6.8%	/.3%	8.2%		
General Support % Total Costs			6.8% 12.7%	7.3% 13.7%	8.2% 13.4%		
Mission Support % Total Costs	7.6% 12.5% 1.8%	6.9% 12.5% 1.5%	6.8% 12.7% 1.6%	7.3% 13.7% 1.5%	13.4%		
	12.5%	12.5%	12.7%	13.7%			







SITE PROFILE BETTIS LABORATORY – BECHTEL

Bettis Laboratory is a research and development laboratory operated by Bechtel Bettis, Inc. (BBI), a subsidiary of Bechtel National, Inc., (BNI) for the Naval Nuclear Propulsion Program, a joint United States Navy-Department of Energy (DOE) organization. Bettis is primarily involved with the design, development, and operational follow of nuclear propulsion plants for naval vessels.

Bettis Laboratory is located in the Borough of West Mifflin, Pennsylvania, approximately 7.5 miles southeast of Pittsburgh, Pennsylvania. The Laboratory is situated on approximately 202 acres of land. All land and buildings on the site are the property of the Federal government.

The present site of the Bettis Laboratory was originally developed as Pittsburgh's first airfield. The Pittsburgh-McKeesport Airdrome opened there in August of 1925. A year later, the Airdrome was renamed Bettis Airfield in honor of Lieutenant Cyrus Bettis, a famous aviator who had died in a plane crash in central Pennsylvania. In 1940, most commercial traffic moved to the nearby Allegheny County Airport because the Bettis Airfield could not handle the increasingly larger, modern aircraft. Private aviators used the field until 1948.

The newly-formed Westinghouse Atomic Power Division bought the Airfield tract early in 1949 and purchased adjacent properties in 1952. The land was acquired according to a contract between Westinghouse and the Atomic Energy Commission (AEC) whereby Westinghouse was assigned certain responsibilities for engineering, design, procurement, and construction work on the prototype of the first naval nuclear propulsion plant. Later, in 1957, the AEC (now DOE) exercised its contractual option to purchase the site and has held title since then. Bechtel National, Inc. replaced Westinghouse Electric Company as the operating contractor on February 1, 1999.

The site evolved into a large-scale development, engineering, and design facility. The initial efforts of Bettis led to the development of the power plant for USS NAUTILUS, the world's first nuclear-powered submarine.

Since USS NAUTILUS, Bettis has worked on many aspects of the development of the nuclear navy. Advanced technology for submarine and surface ship nuclear propulsion plants has constituted a major portion of the work program. Bettis' work on the prototype nuclear propulsion plant for a surface ship, and successful operation of the prototype at the Naval Reactors Facility in Idaho Falls, Idaho, led to the development of the first nuclear-powered surface ship, the cruiser USS LONG BEACH, and the first nuclear-powered aircraft carrier, USS ENTERPRISE. Bettis currently provides design and engineering support for many of the Navy's operating propulsion plants including the propulsion plants in the NIMITZ class aircraft carriers and in the new SEAWOLF class of attack submarines, and is developing new technologies and designs for the Navy's

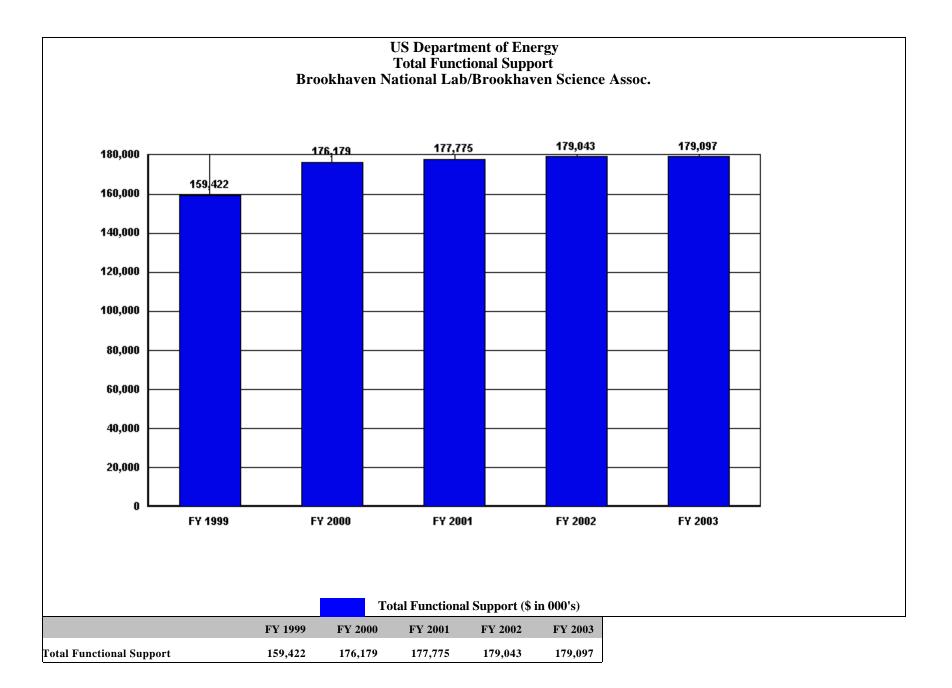
SITE PROFILE BETTIS LABORATORY – BECHTEL

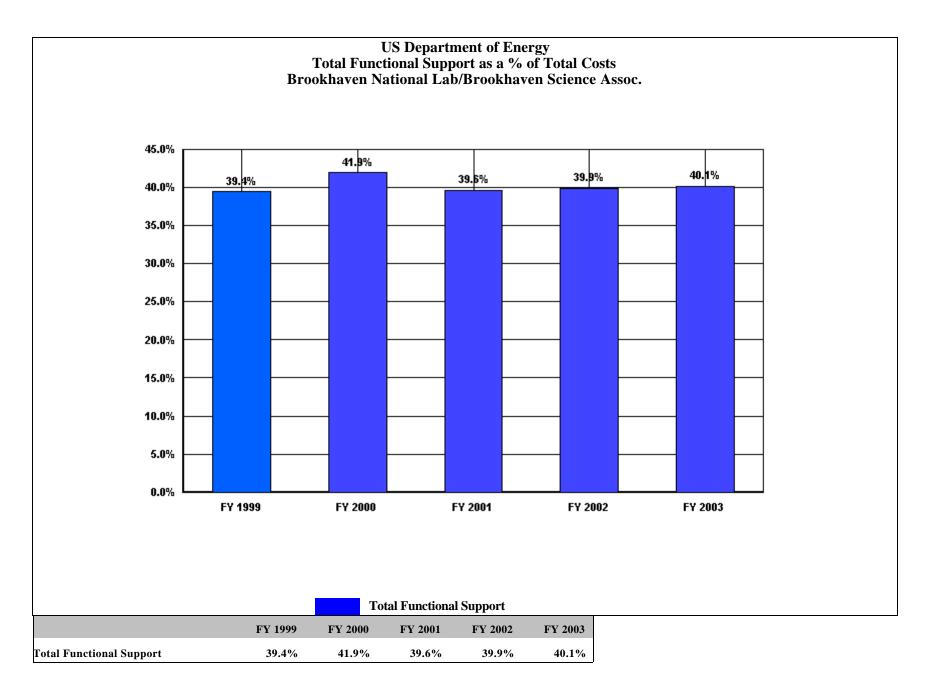
future ships including the VIRGINIA class of submarines and the CVNX class of aircraft carriers.

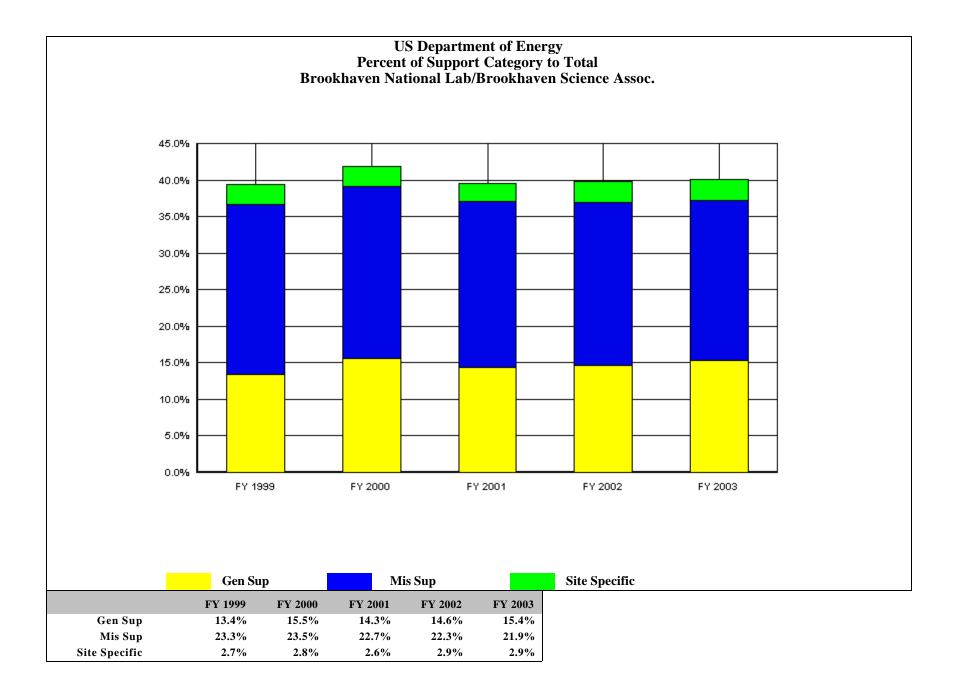
Bettis Laboratory has also played a role in the development of land-based nuclear reactor plants. Under DOE's Office of Naval Reactors, Bettis worked on the design and development of the first United States full-scale nuclear power plant for civilian use, the Shipping Port Atomic Power Station. Shippingport was also the site of the first light Water Breeder Reactor (LWBR) which was placed into operation in 1977 and operated until October 1982. This advanced reactor system was developed to improve significantly the utilization of fuel in light water reactors. The technology developed for the Shippingport program has been made available to industry for commercial application.

The broad spectrum of Bettis' activities has included work on core and component technology and design, thermal and hydraulic systems, materials, nuclear physics design, and training of naval personnel. Bettis currently employs approximately 3,000 people at all of its sites.

Trenus in Tota	l Function	al Suppor	t Cost Cat	egories			
Brookhaven Na	tional Lab	/Brookha	ven Scieno	ce Assoc.			
		2003					
	(\$ in	000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(1999 to
EXECUTIVE DIRECTION	8,081	7,383	7,428	7,386	7,665	-416	-5.1%
HUMAN RESOURCES	3,662	3,706	3,974	3,827	3,856	194	5.3%
CFO	1,899	2,564	2,560	2,262	2,187	288	15.2%
PROCUREMENT	1,969	1,911	1,343	1,573	1,592	-377	-19.1%
LEGAL	655	535	912	1,354	1,063	408	62.3%
CENTRAL ADMIN SERVICES	3,112	4,969	5,367	5,647	5,944	2,832	91.0%
PROGRAM/PROJECT CONTROL	16,564	19,241	19,884	19,557	20,283	3,719	22.5%
INFORMATION OUTREACH	5,120	3,387	3,593	3,724	4,397	-723	-14.1%
INFORMATION SERVICES	15,215	17,657	16,052	17,030	16,852	1,637	10.8%
OTHER	-1,910	3,937	3,198	3,343	4,696	6,606	345.9%
TOTAL GENERAL SUPPORT	54,367	65,290	64,311	65,703	68,535	14,168	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
ENVIRONMENTAL	2,184	2,968	2,852	2,746	2,671	487	22.3%
SAFETY AND HEALTH	15,427	17,924	18,040	18,616	17,457	2,030	13.2%
FACILITIES MANAGEMENT	3,520	3,796	3,965	5,491	4,980	1,460	41.5%
MAINTENANCE	27,084	29,136	30,261	29,626	28,035	951	3.5%
UTILITIES	23,854	23,472	24,458	20,479	21,691	-2,163	-9.1%
SAFEGUARDS AND SECURITY	5,630	5,952	6,339	7,173	7,099	1,469	26.1%
LOGISTICS SUPPORT	3,544	3,218	3,233	3,220	3,190	-354	-10.0%
QUALITY ASSURANCE	304	298	485	620	731	427	140.5%
LABORATORY/TECHNICAL SUPPORT	12,655	12,237	12,290	12,332	11,858	-797	-6.3%
TOTAL MISSION SUPPORT	94,202	99,001	101,923	100,303	97,712	3,510	3.7%
						<i>a</i>	000 4.
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	1999 10
						FY2(03
MANAGEMENT/INCENTIVE FEE	6,549	6,791	6,428	6,869	6,719	FY2 (170	0 3 2.6%
MANAGEMENT/INCENTIVE FEE TAXES	6,549 890	6,791 890	6,428 907	6,869 884	6,719 0	FY2 170 -890	03 2.6% -100.0%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD	6,549 890 3,414	6,791 890 4,207	6,428 907 4,206	6,869 884 5,284	6,719 0 6,131	FY2 170 -890 2,717	03 2.6% -100.0% 79.6%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC	6,549 890 3,414 10,853	6,791 890 4,207 11,888	6,428 907 4,206 11,541	6,869 884 5,284 13,037	6,719 0 6,131 12,850	FY2 (170 -890 2,717 1,997	03 2.6% -100.0% 79.6% 18.4%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT	6,549 890 3,414 10,853 159,422	6,791 890 4,207 11,888 176,179	6,428 907 4,206 11,541 177,775	6,869 884 5,284 13,037 179,043	6,719 0 6,131 12,850 179,097	FY20 170 -890 2,717 1,997 19,675	03 2.6% -100.0% 79.6% 18.4% 12.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC	6,549 890 3,414 10,853	6,791 890 4,207 11,888	6,428 907 4,206 11,541	6,869 884 5,284 13,037	6,719 0 6,131 12,850	FY20 170 -890 2,717 1,997 19,675 Change	03 2.6% -100.0% 79.6% 18.4% 12.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT	6,549 890 3,414 10,853 159,422	6,791 890 4,207 11,888 176,179	6,428 907 4,206 11,541 177,775	6,869 884 5,284 13,037 179,043	6,719 0 6,131 12,850 179,097	FY20 170 -890 2,717 1,997 19,675	03 2.6% -100.0% 79.6% 18.4% 12.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT	6,549 890 3,414 10,853 159,422 FY 1999	6,791 890 4,207 11,888 176,179 FY 2000	6,428 907 4,206 11,541 177,775 FY 2001	6,869 884 5,284 13,037 179,043 FY 2002	6,719 0 6,131 12,850 179,097 FY 2003	FY20 170 -890 2,717 1,997 19,675 Change 1 FY20	003 2.6% -100.0% 79.6% 18.4% 12.3% 1999 to 003
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation	6,549 890 3,414 10,853 159,422 FY 1999 193,743	6,791 890 4,207 11,888 176,179 FY 2000 210,940	6,428 907 4,206 11,541 177,775 FY 2001 2227,687	6,869 884 5,284 13,037 179,043 FY 2002 232,693	6,719 0 6,131 12,850 179,097 FY 2003 234,745	FY20 170 -890 2,717 1,997 19,675 Change 1 FY20 41,002	003 2.6% -100.0% 79.6% 18.4% 12.3% 1999 to 003 21.2%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847	003 2.6% -100.0% 79.6% 18.4% 12.3% 1999 to 003 21.2% -36.6%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396	6,428 907 4,206 11,541 177,775 FY 2001 2227,687 43,491	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622	FY20 170 -890 2,717 19,675 Change FY20 41,002 -18,847 22,155	003 2.6% -100.0% 79.6% 18.4% 12.3% 1999 to 03 21.2% -36.6% 9.0%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634 353,165	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515 387,119	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953 405,462	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038 411,736	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464 413,842	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634 353,165	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515 387,119	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953 405,462	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038 411,736	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464 413,842	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634 353,165	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515 387,119	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953 405,462	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038 411,736	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464 413,842	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634 353,165 13.4% 23.3% 2.7%	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515 387,119	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953 405,462	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038 411,736 14.6% 22.3% 2.9%	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464 413,842 15.4% 21.9% 2.9%	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%
MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	6,549 890 3,414 10,853 159,422 FY 1999 193,743 51,469 245,212 404,634 353,165	6,791 890 4,207 11,888 176,179 FY 2000 210,940 33,396 244,336 420,515 387,119	6,428 907 4,206 11,541 177,775 FY 2001 227,687 43,491 271,178 448,953 405,462	6,869 884 5,284 13,037 179,043 FY 2002 232,693 37,302 269,995 449,038 411,736	6,719 0 6,131 12,850 179,097 FY 2003 234,745 32,622 267,367 446,464 413,842	FY20 170 -890 2,717 1,997 19,675 Change I FY20 41,002 -18,847 22,155 41,830	03 2.6% -100.0% 79.6% 18.4% 12.3% 12.3% 21.2% -36.6% 9.0% 10.3%







SITE PROFILE BROOKHAVEN NATIONAL LAB – BROOKHAVEN SCIENCE ASSOCIATES

I. Site Characteristics

Brookhaven National Laboratory (BNL) is a multi-program National Laboratory founded in 1947 and currently operated by Brookhaven Science Associates for the U.S. Department of Energy (DOE). Five Nobel Prizes have been awarded for discoveries based on research conducted at the Lab.

The Laboratory's broad mission is to produce excellent science and advanced technology in a safe, environmentally benign manner with the cooperation, support and appropriate involvement of our many communities.

Specifically, the mission of BNL, which supports the U.S. Department of Energy's strategic missions, is to:

- Conceive, design, construct and operate complex, "leading edge", user-oriented facilities in a safe and environmentally benign manner that is responsive not only to the DOE, but also to the needs of the international community of users.
- Carry out basic and applied research in long-term, high-risk programs at the frontier of science that supports DOE missions and the needs of the Laboratory's user community.
- Develop advanced technologies that address national needs and initiate their transfer to other organizations and to the commercial sector.
- Disseminate technical knowledge to educate new generations of scientists and engineers, to maintain technical capabilities in the nation's workforce, and to encourage scientific awareness in the general public.

Large Research Facilities located at BNL:

Alternating Gradient Synchrotron Relativistic Heavy Ion Collider National Synchrotron Light Source

BioMedical Facilities located at BNL:

Brookhaven Center for Imaging and Neuroscience High-Field MRI Facility Brookhaven Linear Isotope Production Facility Medical Radiation Facility Scanning Transmission Electron Microscope Transmission Electron Microscope Positron Emission Tomography (PET)

SITE PROFILE BROOKHAVEN NATIONAL LAB – BROOKHAVEN SCIENCE ASSOCIATES

Other Facilities and Centers located at BNL:

Laser-Electron Accelerator Facility (LEAF) Tandem Van De Graaff Facility Accelerator Test Facility Center for Radiation Chemistry Research Booster Applications Facility NASA Space Radiation Laboratory (NSRL) Center for Accelerator Physics Center for Data Intensive Computing Center for Spectroscopy in Molecular Science Environmental and Waste Technology Center RIKEN BNL Research Center Free Air Carbon Enrichment Facilities Center for Functional Nanomaterials

Background

Brookhaven National Laboratory (BNL) is a U.S. Department of Energy (DOE) research facility located on Long Island, New York (which is east of New York City), on a 5,300-acre campus. Approximately 30% of the total area is developed. BNL has approximately 3,000 employees. For financial purposes, the laboratory categorizes salary into Scientific, Professional, Technical, Management and Union categories. For FYE 2003, the Laboratory reported 2,818 FTE's.

Brookhaven Science Associates operate BNL for DOE, a partnership of the State University of New York at Stony Brook and the Battelle Memorial Institute.

BNL specializes in building and operating large research facilities that are used by our own staff and visiting scientists from academia, government and industry.

BNL has hundreds of research programs going on in fields such as high-energy and nuclear physics, physics and chemistry of materials, environmental and energy research, nonproliferation, structural biology and neurosciences and medical imaging. BNL contributes significantly to programs at other DOE laboratories, federal agencies, institutions, and industry. The work done for other agencies derives from our unique facilities and our core competencies. In FY03, the Laboratory received \$86.2m from Work for Others (WFO) which includes \$34.4M from other DOE laboratories/operations offices.

More than 4,500 visiting scientists come from all over the world each year to do scientific research at our research facilities and work with our staff. To support these researchers, there are 422 on-site housing units. They are comprised of 66 family-style apartments, 46 efficiency apartments, 265 dormitory rooms, 30 seasonal houses, 2 all year round private houses and 13 guest-house rooms. An off-site housing coordinator assists visitors in finding accommodations in the local area. Residents may be housed for periods from one day to two years. Many of the apartment units are over 50 years old, and replacements

SITE PROFILE BROOKHAVEN NATIONAL LAB – BROOKHAVEN SCIENCE ASSOCIATES

are planned through third party financing. Scheduled morning on –site transportation is provided from living quarters to research buildings. Morning and evening scheduled transportation is provided to a local railroad station. On request, on-site transportation is provided during the workday. Subcontractors operate food service facilities and provide on-site food and snack services. A quality of life coordinator provides a link between visitors and support services.

Safeguards & Security supports the basic scientific mission of DOE and the Laboratory by protecting DOE's Special Nuclear Materials, Classified Matter and property against theft, diversion or destruction, preventing the loss of information or sabotage of programs that could have significant financial impact and preventing radiological or toxicological sabotage that would endanger employees, the public or the environment. Safeguards & Security staff establishes guidelines, plans and strategies to protect sensitive or classified information, Cooperative Research and Development agreements, protocol visits, and Work for Others. Employee\Visitor badges are required to gain access to the site.

Because of the nature of the Laboratory's missions, BNL generates a wide range of wastes. BNL generates some of the same waste streams common to many business and industries, such as aerosol cans, batteries, paint and oils; however, due to our scientific mission BNL also generates waste streams requiring more restrictions, such as compatible radioactive waste, chemicals and solvents. The Waste Management Division provides a variety of waste management services to facilitate laboratory clean-outs by documenting, characterizing, and segregating wastes in preparation for removal at a fraction of the cost of a commercial vendor. They also manage problem or non-routine wastes to reduce management and disposal costs.

There are approximately 373 buildings in use with a total area of 4.2 million square feet. Approximately 77% of BNL's building space is over 30 years old, with one-third of that over 50 years old (World War II Army base structures).

Site-wide electrical, steam, sanitary sewer, storm sewer, and potable water utility systems serve the site. There are limited distribution chilled water and compressed air systems. The buildings served by these utilities are disbursed through out the campus site thereby requiring maintenance of an extensive distribution network.

Maintenance and energy costs for the older, wood frame buildings are higher than those for structures that are considered permanent. Retrofitting older facilities to comply with current ES&H standards is extremely costly.

The energy cost to operate the Laboratory in the northeast sector of the U.S. is significantly higher than other portions of the country. In addition, the large research facilities consume extraordinary amounts of electricity for their operation. Since the intent of this report is to include the electric power for large research machines with the traditional general use electric power, BNL's utility costs represent a significant percentage of the total costs. Many other labs do not have similar power costs for large research facilities and/or the high unit price of power that BNL experience. In addition, the Laboratory's unit price is

projected to increase approximately 60% beginning in the last quarter of FY 05. Over the years, the Laboratory has benefited from an agreement between the New York Power Authority (NYPA) and the local electrical utility. This agreement which expires in July 2005 provided power from upstate at a substantial savings to the Laboratory.

The costs reported on the functional cost report reflect the direct charges to DOE programs (operating, capital equipment, AIP, GPP and line items), work for others (B&R 40xxxxxx series), non-federal agencies (B&Rs in the 60xxxxxx, 65xxxxxx and WNxxxxxx series), other DOE labs (B&R 82xxxxxx) and indirect and other intermediate costs collected in B&R YN0100000 that are fully distributed.

In addition, BNL's cost ordinarily includes Payment in lieu of Taxes (PILT) that the Chicago Operations Office handles on behalf of the Laboratory. This fiscal year, payment in the amount of \$1,031,200 was made by DOE in October 2003 for tax years 2002/2003.

II. Highlights of Trends from FY 1999 to FY 2003

The change in support costs incurred after FY 1999 reflects Laboratory management actions to move the Laboratory in a direction that provides excellent science along with excellent standards for safety, health, environment and infrastructure. The Laboratory created a Post Doc fund, implemented a Standards Based Management System, a Program Development and Peoplesoft Financial System and a Labwide Integrated Safety Management System, augmented the LDRD program, and increased the effort and emphasis on Radiological Protection and Chemical Management Safety. Since FY 2001, the laboratory has made significant efforts to maintain sufficient support activities while controlling support costs. Increased support requirements, including increased support for user activities have been accommodated without raising support budgets.

III. Variance Analysis

1. Legal Services (FY02 - FY03 = 291k decrease)

The Legal Services functional cost category decreased by 291k. Legal fees vary from year to year depending upon the number of cases being tried. In FY 2002, the laboratory had three major cases that were being litigated.

2. Central Administrative Services (FY02 - FY03 = 297k increase)

The Central Administrative Services functional cost category increased by 297k. This increase was caused primarily by a change in the function of the administration group of the Information Services Division. Last fiscal year, the administration group was responsible

for coordinating the efforts of the Photography & Graphic Arts Division as well as the Research Library and the Records Management function. In FY03, the groups separated and the admin group is only responsible for Technical Info/Records Management functions.

3. Information/Outreach Activities (FY02 - FY03 = 673k increase)

The Information/Outreach Activities increased by 673k. This increase was caused primarily by the increase in Direct Funded student programs. In FY02, the direct funded education programs were erroneously recorded under Mission Direct. This fiscal year, we reclassified FY02 Education programs and recorded FY03 Education Programs in the Information/Outreach functional cost category.

4. Other (4.7M Cost)

The following FY03 costs are included in the category:

Laboratory Housing (net)	73
Year End Variance	(766)
Legal Settlements	230
Post Docs, Goldhaber Fellows	2,543
Program Development	2,616
	4,696

5. Safety & Health (FY02 - FY03 - \$1,159 decrease)

The Safety & Health functional cost category decreased by \$1,159k. The net decrease was caused primarily by reductions in Facility Support Contractor effort and material purchases. These reductions were prompted by a major customer, Environmental Restoration Division going into a Modeling phase. The reductions were offset by increases in personnel monitoring, Instrumentation & Calibration Special NonRad Services, and Radiation Generation Device efforts. In addition, funding priorities in the Special Maintenance program decreased from last fiscal year to this fiscal year. The Special Maintenance program is based on the "Project, Planning, Programming and Maintenance Budgeting Process" (3PBP). The 3PBP is the method used to document, track and prioritize project needs and the risk of associated unfunded activities. A database contains the list of all project needs that provides output to the various planning review processes that occur during the fiscal year.

6. Facilities Management (FY02 - FY03 - 511k decrease)

The Facilities Management category decreased by 511k. The decrease was caused primarily by the difference in funding priorities in the Special Maintenance program from last fiscal year to this fiscal year. The Special Maintenance program is based on the "Project, Planning, Programming and Maintenance Budgeting Process" (3PBP). The 3PBP is the method used to document, track and prioritize project needs and the risk of associated unfunded activities. A database contains the list of all project needs that provides output to the various planning review processes that occur during the fiscal year.

7. Utilities (FY02 - FY03 - 1,212k increase)

The Utilities functional cost category increased by 1,212k. This increase was caused primarily by the difference in the prepaid electric power variance. In Fiscal Year 2002, the lab recorded a credit of approx 1.5M in electric power expense while in Fiscal Year 2003, the lab expensed approx 36k.

8. Quality Assurance (FY02 - FY03 - 111k increase)

The Quality Assurance functional cost category increased by 111k. This increase was caused by the full year effect of the transfer of responsibilities for the Occurrence Reporting System (ORPS), Lessons Learned, administration of the institutional Assessment Tracking System (ATS) and Tracking and Trending to the Quality Programs Office.

9. Taxes (FY02 - FY03 - 884k decrease)

The tax functional cost category decreased by 884k. The PILT payment made for FY2002/ FY2003 tax year was not made in Fiscal Year 2003. It was paid in October 2003 in the amount of \$1,031,200 and it will be reflected in next years Functional Cost Report.

10. LDRD (FY02 - FY03 = 847k increase)

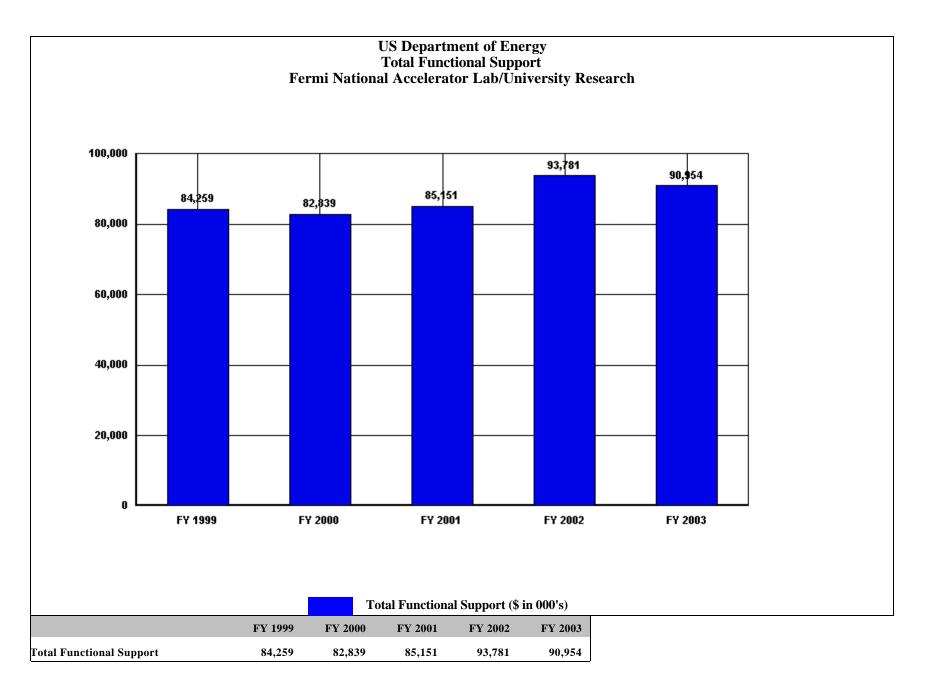
Lab management is making a concerted effort to steadily increase the LDRD program at the Lab. The increase of \$847k reflects these efforts.

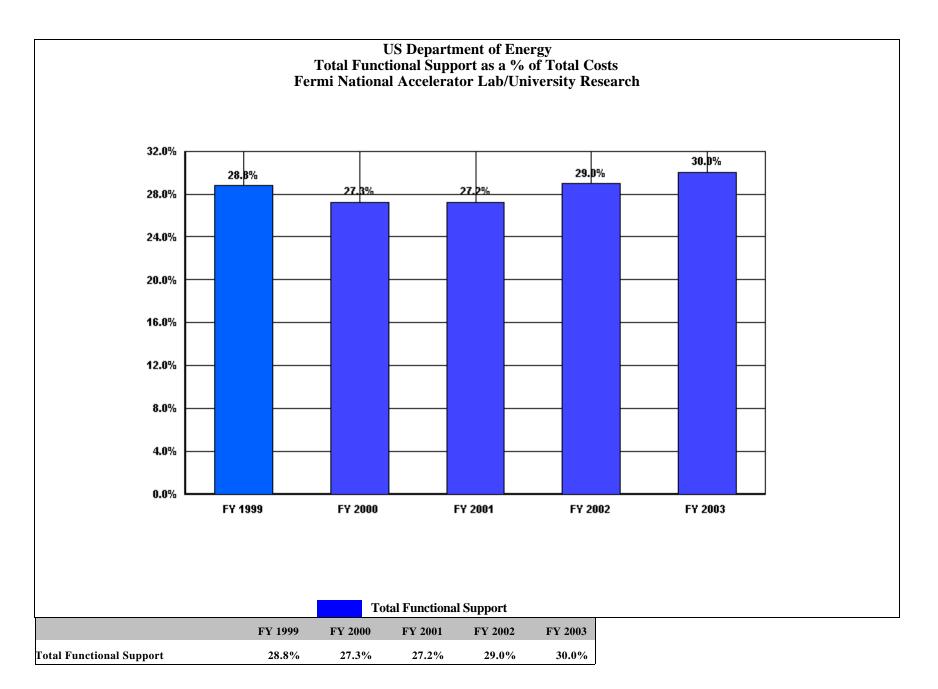
IV. Cost Savings Initiatives

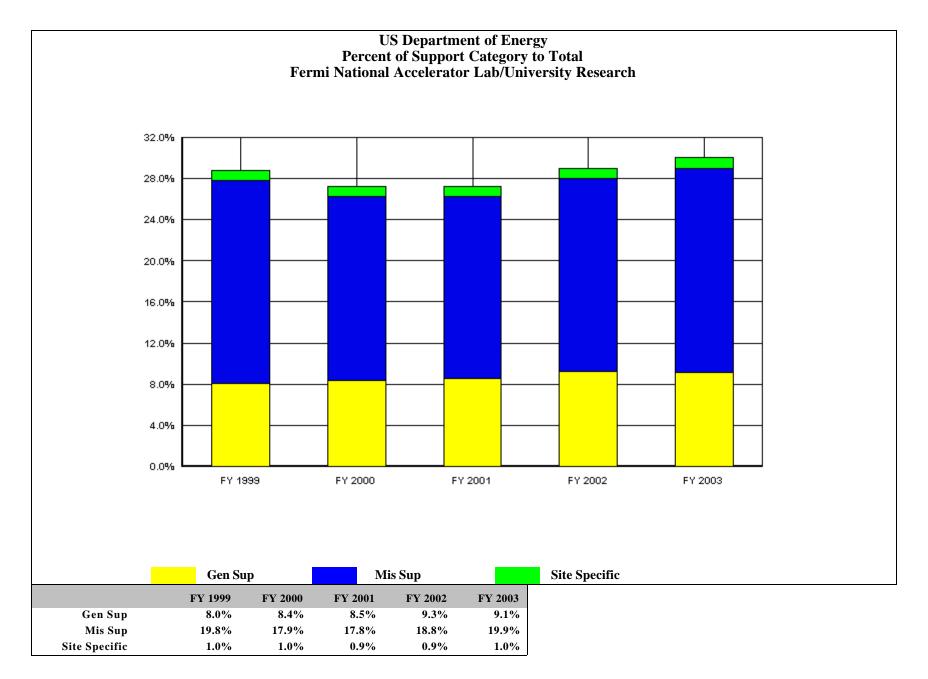
In response to double-digit escalations in Health Care Costs, the laboratory implemented a number of changes to the medical plans. The most recent changes effective January 2003 required employees to contribute a percentage of the plan cost based on the employee's annual base salary within pre-established salary ranges. In some plans, there are higher deductibles for out-of network expenses, prescription drug deductibles and elimination of the use of out-of-network pharmacies. Changes in medical plans saved the laboratory approximately 3.2M in FY2003.

The operation of the Central Steam Plant provides steam necessary for heating laboratory buildings and the operation of the centralized chilled water system. With the careful timing of oil purchases, along with select use of natural gas, the laboratory has been able to achieve annual savings of \$500,000 or above. The maximization of fuel oil on hand at the end of FY2003 enables Brookhaven to have an adequate amount of fuel oil on hand for the start of the 2003-2004 winter months. This allows the Laboratory to postpone significant new procurements of fuel until the end of the winter season thereby minimizing the amount of fuel that must be purchased during the highest priced part of the year.

Trends in To	tal Function	al Suppor	t Cost Cat	tegories			
Fermi Nation		or Lab/U1 2003	niversity R	Research			
		2005 1 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change (FY20	
EXECUTIVE DIRECTION	4,894	4,547	4,668	5,441	4,825	-69	-1.4%
HUMAN RESOURCES	2,426	2,589	2,880	3,202	3,484	1,058	43.6%
CFO	1,540	1,577	1,613	1,725	2,058	518	33.6%
PROCUREMENT	1,536	1,551	1,583	1,788	1,738	202	13.2%
LEGAL	374	418	451	1,080	1,994	1,620	433.2%
CENTRAL ADMIN SERVICES	1,774	1,938	2,090	2,455	1,734	-40	-2.3%
PROGRAM/PROJECT CONTROL	226 1,913	766 1,601	641 1,723	351 1,928	301 2,449	75 536	33.2% 28.0%
INFORMATION OUTREACH INFORMATION SERVICES	8,819	1,001	1,725	1,928	2,449 9,051	232	28.0%
OTHER	18	-685	35	65	9,031	-1	-5.6%
TOTAL GENERAL SUPPORT	23,520	25,466	26,675	30.058	27,651	4,131	17.6%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	1999 to
ENVIRONMENTAL	2,181	2,464	2,137	1,869	1,466	FY2 -715	0 3 -32.8%
SAFETY AND HEALTH	9,835	8,532	8,726	8,951	9,341	-494	-5.0%
FACILITIES MANAGEMENT	1,504	1,735	1,466	2,247	2,275	771	51.3%
MAINTENANCE	16,307	16,825	17,063	18,246	18,319	2,012	12.3%
UTILITIES	14,791	15,673	15,915	17,517	17,196	2,405	16.3%
SAFEGUARDS AND SECURITY	1,815	1,750	2,420	2,712	2,835	1,020	56.2%
LOGISTICS SUPPORT	2,782	4,434	4,518	4,629	4,657	1,875	67.4%
QUALITY ASSURANCE	0	0	0	0	41	41	100.0%
LABORATORY/TECHNICAL SUPPORT	8,676	2,877	3,296	4,572	4,042	-4,634	-53.4%
TOTAL MISSION SUPPORT	57,891	54,290	55,541	60,743	60,172	2,281	3.9%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change FY20	
MANAGEMENT/INCENTIVE FEE	2,848	3,083	2,935	2,980	3,131	283	9.9%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	2,848	3,083	2,935	2,980	3,131	283	9.9%
TOTAL FUNCTIONAL SUPPORT	84,259	82,839	85,151	93,781	90,954	6,695	7.9%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	
Mission Direct Operation	127,553	137,411	147,889	160,427	157,251	FY2 29,698	23.3%
Capital Construction	81,160	83,746	79,669	69,658	54,529	-26,631	-32.8%
TOTAL MISSION DIRECT	208,713	221,157	227,558	230,085	211,780	3,067	1.5%
Total Costs	292,972	303,996	312,709	323,866	302,734	9,762	3.3%
Total Costs w/o Construction	292,972	220,250	233,040	254,208	248,205	36,393	17.2%
	211,012	220,230	233,040	234,208	248,205	50,595	17.270
General Support % Total Costs	8.0%	8.4%	8.5%	9.3%	9.1%		
Mission Support % Total Costs	19.8%	17.9%	17.8%	18.8%	19.9%		
Site Specific % Total Costs	1.0%	1.0%	0.9%	0.9%	1.0%		
Total Support % Total Costs	28.8%	27.3%	27.2%	29.0%	30.0%		
Total Support % Total Costs w/o Construction	39.8%	37.6%	36.5%	36.9%	36.6%		







SITE PROFILE FERMI NATIONAL ACCELERATOR LABORATORY UNIVERSITIES RESEARCH ASSOCIATION, INC.

BACKGROUND:

Fermilab operates the world's highest-energy particle accelerator, the Tevatron. More than 2,600 scientists from 35 states and 30 countries use Fermilab's facilities to carry out research at the frontiers of particle physics.

Fermilab is a single purpose Laboratory whose mission statement is as follows:

"Fermi National Accelerator Laboratory advances the understanding of the fundamental nature of matter and energy by providing leadership and resources for qualified researchers to conduct basic research at the frontiers of high energy physics and related disciplines."

Groundbreaking for the original linear accelerator was December 1968. The site is 6,800 acres, or a little more than 10 square miles. Approximately 2,200 people are employed at the Lab. Fermilab has an on-site housing operation to accommodate users and their families, and an on-site cafeteria for employees, users and visitors.

Fermilab is operated by Universities Research Association, Inc. (URA), a consortium of 90 research universities. The level of non-DOE work at Fermilab is insignificant to the operation of the Laboratory.

TRENDS:

1. Trend in Functional Support Costs from fiscal year 1999 to fiscal year 2003:

Overall support costs in fiscal year 2003 were down \$2.8M. General Support costs had shown a slight upward trend into fiscal year 2002; however costs decreased in fiscal year 2003 due to the decrease in the Information Services cost category. Mission Support costs had also shown a slight upward trend into fiscal year 2002; however Total Mission Support costs decreased slightly in fiscal year 2003.

2. Trend in Functional Support Costs as a percentage of Total Site Costs from fiscal year 1999 to fiscal year 2003:

Overall support costs in fiscal year 2003 were 30.0% of total site costs, well within the historical range for the Lab of 27% to 31% since 1995. The lower rate for fiscal year 2000 is due to cost containment efforts in areas categorized as functional support, and due to diminishing of operating projects in anticipation of RUN II. The higher rate in 2002 and

SITE PROFILE FERMI NATIONAL ACCELERATOR LABORATORY UNIVERSITIES RESEARCH ASSOCIATION, INC.

2003 is due to increased power costs from increased "up-time" of the accelerator, and increases in legal and facilities management costs. See "Major Anomalies" below for information on FY03 fluctuations.

3. Major Anomalies in year-to-year data:

Legal

The increase in legal costs of \$914,000 in FY2003 is due to legal claims management costs associated with the NuMI tunneling subcontract.

Information Services

The decrease of \$2.9 million in FY2003 was largely due to a \$1.6 million reclassification, primarily in the Computing Division, consolidating the Web Group, Computer Operations and Computers Services groups into Project Accounting tasks that are Mission Direct. The additional decrease is due to the cessation of activities for the implementation of the Oracle Project Accounting system (\$500K), and lower costs in Telecommunications due to an unexpected, one-time vendor credit (\$114K) and the reversal of over estimated FY02 year-end accruals (approx. \$300K) for DOE telephone purchase orders.

Direct Mission

Costs in this category decreased \$3.2 million in fiscal year 2003 due to tighter operating budgets. However the percentage of Direct Mission costs to Total Site Costs in fiscal year 2003 increased to 51.8% from 49.5% in fiscal year 2002 due to the Information Services reclassification and lower costs in the Capital/Construction category.

Capital/Construction

The decrease of \$15.1 million from fiscal year 2002 to fiscal year 2003 is primarily due to the MINOS Project (-\$5.9M) as the project nears completion and in general Accelerator and Detector support equipment for the Tevatron (-\$5.9M).

4. Major Cost Drivers:

Major cost drivers at Fermilab are power usage for the Accelerator (category Utilities), and current projects categorized as Mission Direct.

SITE PROFILE FERMI NATIONAL ACCELERATOR LABORATORY UNIVERSITIES RESEARCH ASSOCIATION, INC.

COST SAVINGS INITIATIVES:

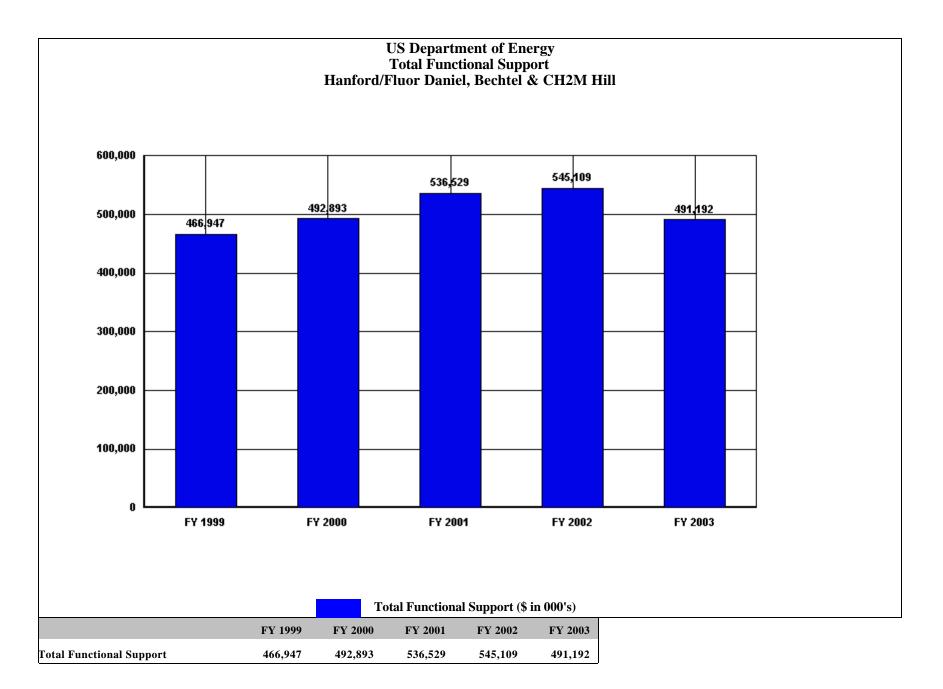
In Fiscal year 2003, Fermilab instituted a Vacation Reduction Program, which generated savings of approximately \$1.5 million. Travel reductions were made at a savings of \$.5 million. No vehicle replacements were made in 2003 saving about \$.35 million.

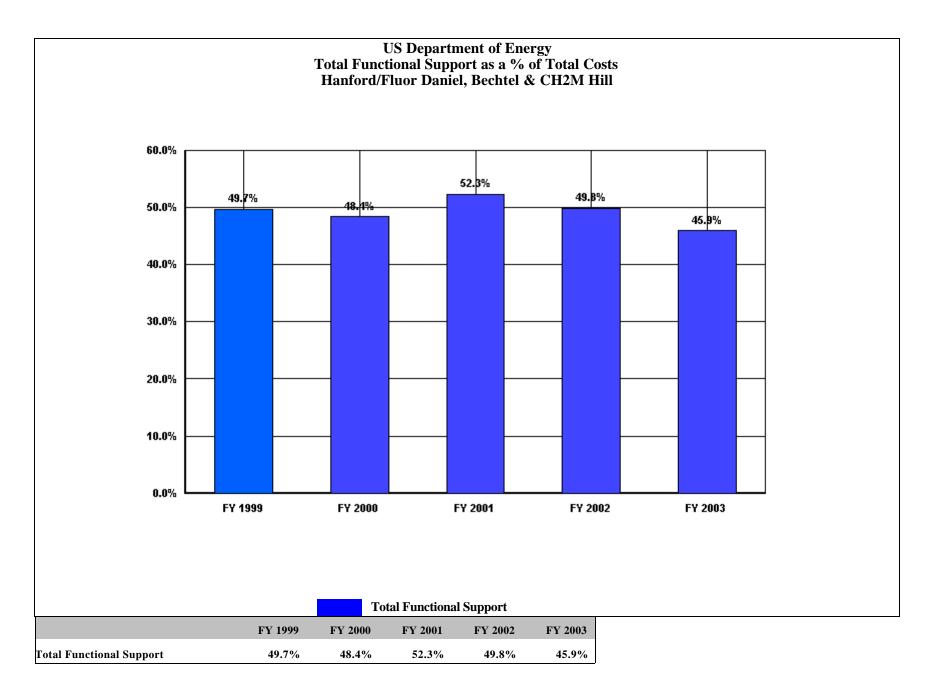
OTHER:

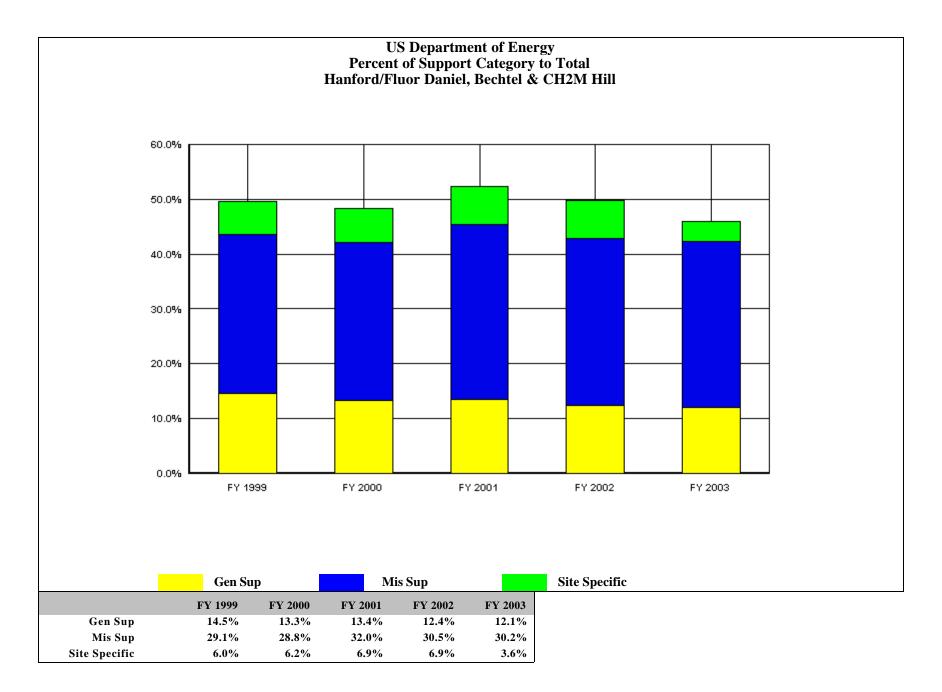
Table for General Support-Other category:

DESCRIPTION	2003	2002	2001	2000	<u>1999</u>
OTHER INSURANCE*	16,982	64,812	35,425	63,125	18,143
*To cover the costs associated with gener	ral liability i	nsurance.	The costs flu	uctuate base	ed on the
level of claims in a given year.					

Trends in Tota	l Function	al Suppor	t Cost Cat	egories			
Hanford/F		l, Bechtel 2003	& CH2M	Hill			
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	4,897	8,928	9,270	8,855	8,275	3,378	69.0%
HUMAN RESOURCES	17,111	16,020	15,790	14,574	14,630	-2,481	-14.5%
CFO	9,631	6,535	10,462	9,260	8,271	-1,360	-14.1%
PROCUREMENT	10,681	10,350	11,112	9,967	10,633	-48	-0.4%
LEGAL	2,316	3,992	3,647	4,866	4,780	2,464	106.4%
CENTRAL ADMIN SERVICES	13,284	10,327	10,407	10,689	10,001	-3,283	-24.7%
PROGRAM/PROJECT CONTROL	24,532	30,329	26,434	27,840	25,810	1,278	5.2%
	4,595	6,255	4,825	4,904	4,228	-367	-8.0%
INFORMATION SERVICES OTHER	47,551 1,719	43,016 58	43,614 1,955	40,563 3,930	40,913 1.696	-6,638 -23	-14.0% -1.3%
TOTAL GENERAL SUPPORT	136,317	135,810	1,955 137,516	135,448	129,237	-23	-1.3%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
					112000	FY2	
ENVIRONMENTAL	24,313	26,194	31,417	23,906	21,693	-2,620	-10.8%
SAFETY AND HEALTH	65,033	70,070	70,632	75,905	73,126	8,093	12.4%
FACILITIES MANAGEMENT	37,690	43,702	44,127	42,673	40,183	2,493	6.6%
MAINTENANCE	56,917	67,260	83,920	90,036	84,682	27,765	48.8%
UTILITIES	9,085	9,632	10,488	10,133	10,869	1,784	19.6%
SAFEGUARDS AND SECURITY	26,605	26,941	28,311	31,750	33,980	7,375	27.7%
	16,732	19,041	20,513	19,117	18,383	1,651	9.9%
	11,054 26,398	7,473 23,358	7,772 30,935	9,279 30,929	8,359 31,942	-2,695 5,544	-24.4% 21.0%
LABORATORY/TECHNICAL SUPPORT TOTAL MISSION SUPPORT	20,398	293,671	30,933 328,115	333,728	31,942 323,217	49,390	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
						FY2(
MANAGEMENT/INCENTIVE FEE	49,151	61,683	59,262	63,746	27,384	-21,767	-44.3%
TAXES	7,652	1,729	11,636	12,187	11,354	3,702	48.4%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	56,803	63,412	70,898	75,933	38,738	-18,065	-31.8%
TOTAL FUNCTIONAL SUPPORT	466,947	492,893	536,529	545,109	491,192	24,245	5.2%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
Mission Direct Operation	390,438	452,715	416,160	490,510	521,349	130,911	33.5%
Capital Construction	82,834	73,000	73,694	58,732	56,468	-26,366	-31.8%
TOTAL MISSION DIRECT	473,272	525,715	489,854	549,242	577,817	104,545	22.1%
Total Costs	940,219	1,018,608	1,026,383	1,094,351	1,069,009	128,790	13.7%
Total Costs w/o Construction	857,385	945,608	952,689	1,035,619	1,012,541	155,156	18.1%
General Support % Total Costs	14.5%	13.3%	13.4%	12.4%	12.1%		
Mission Support % Total Costs	29.1%	28.8%	32.0%	30.5%	30.2%		
Site Specific % Total Costs	6.0%	6.2%	6.9%	6.9%	3.6%		
Total Support % Total Costs	49.7%	48.4%	52.3%	49.8%	45.9%		
Total Support % Total Costs w/o Construction	54.5%	52.1%	56.3%	52.6%	48.5%		







I. <u>SITE CHARACTERISTICS</u>

The Hanford Site, a 586-square mile tract of land near Richland, Washington, was established during World War II to produce plutonium for America's nuclear weapons arsenal. The site reached peak production in the 1960s when nine reactors were in operation at the Hanford Site. Department of Energy (DOE) halted weapons material production in the late 1980s and is now engaged in environmental cleanup efforts to deal with the legacy of radioactive and hazardous wastes that resulted from the plutonium production era.

The Hanford Site has two separate DOE offices. The DOE Office of River Protection (ORP) manages the program to remove the waste from the tanks, vitrify the waste for long-term storage or disposal, and close Hanford's tank farms. The prime DOE contract for these activities is held by CH2M Hill Hanford Group, Inc.

The DOE Richland Operations Office (RL) oversees the bulk of cleanup, including plutonium stabilization, cleanup of contaminated soil and buildings, stabilization and storage of spent nuclear fuel, and waste treatment and disposal. Fluor Hanford Inc. and Bechtel Hanford Inc. complete cleanup activities for RL. As of this submittal, RL also oversees science and technology programs at the Pacific Northwest National Laboratory (PNNL). As requested beginning with the FY 2001 Functional Support Cost Report, the PNNL submittal is shown separately under "Pacific Northwest National Laboratory". The National Nuclear Security Administration (NNSA) is expected to have oversight responsibility of PNNL beginning in February 2004. Transition plans are already in place and are being implemented.

Hanford receives its funding primarily from Environmental Management (EM). The annual operating budget is approximately \$1.1B. In FY 2003, Hanford contractors employed approximately 6,000 employees.

The contractors manage and maintain over 2,000 facilities, many of which are 30 to 50 years old. The facilities include inactive nuclear reactors, administrative facilities, analytical laboratories, storage facilities, mobile offices, and trailers. The Hanford site struggles to maintain the older facilities with current standards and actively seeks ways to minimize its facility maintenance and repair costs.

Because of the large size of the Hanford site, DOE has been attempting to "reduce the government footprint" by accelerating cleanup efforts and transferring land to the Department of Interior. Three counties border the site: Benton, Franklin, and Grant. All three counties are paid an annual total of over \$3 million in Payments in Lieu of Taxes (PILT). These PILT payments allow counties to recoup some of the funds lost due to the property being owned by the government rather than tax-paying landowners.

The site continues to focus on its three primary objectives:

- Restore the River Corridor
- Transition the Plateau
- Prepare for the Future

The River Corridor encompasses approximately 210 square miles adjacent to the Columbia River. It is divided into three areas: the 100 Area, comprising nine shut-down plutonium production reactors and support facilities; the 300 Area, comprising manufacturing and research facilities; and the 600 Area, encompassing the mostly vacant land between the 100 and 300 Areas. Multiyear efforts are underway to remove sodium systems from Hanford production legacy.

The transition of the Plateau refers to an area in the center of the Hanford site, which includes the 200 Area and 400 Areas and is the location of Hanford's longer-term missions of waste treatment, storage and disposal operations. This is the location of the Fast Flux Test Facility, which DOE decided to shutdown, but is now in a stand-by mode for shutdown due to stakeholder intervention.

II. <u>HIGHLIGHTS OF TRENDS</u>

Year	Total Functional Support Costs	Total Functional Support Costs as a % of Total Costs
1998	\$465,081	50.2%
1999	\$466,947	49.7%
2000	\$492,893	48.4%
2001	\$536,529	52.3%
2002	\$545,109	49.8%
2003	\$491,192	45.9%

The Hanford site has had the following trends for Functional Support Costs:

As major capital projects are completed at Hanford (Spent Nuclear Fuel Project, Plutonium Finishing Plant, and others), operations have begun as evidenced by a significant reduction in "Capital/Construction" costs on the Functional Support Cost Report.

Major Cost Drivers that may Cause a Site's Costs to Appear Out of Line with Similar Sites

The FMSIC functional cost guidance states that the contractor that originates the costs should report functional costs. With several major contractors at Hanford (and another laboratory

contractor reflected separately in the Functional Support Cost Report), the costs could appear "out of line" with similar sites in certain categories, due to the fact that some functions have been centralized from a site perspective and reflected under the Hanford totals. Additionally, the geographic location and size of the site requires the performance of many fundamental infrastructure support activities that may not be required at smaller sites.

III. <u>ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR</u>

Updated Functional Support Cost guidance requested a summary of what types of cost are included in each cost category, as well as an explanation of significant changes. The Hanford site had major variances in six categories. Those significant variances are explained in detail.

Executive Direction

This category includes costs associated with the offices of the President, along with Systems Engineering, support to the Technical Advisory Panel, and Strategic Planning and Integration activities. There was a -7%, or (\$580K), variance in this section and no significant changes are expected in the future.

Human Resources

This category includes costs associated with the Human Resource department, operation of the company employee concerns program, operation of the central training services organization for the Hanford site, and labor relations. There was an immaterial .4%, or \$56K change in FY 2003 and no significant changes are expected in the future.

Chief Financial Officer

Category represents costs associated with the Payroll, Accounts Payable, Travel and Treasury, General Accounting, Financial Compliance, Benefits Accounting, Indirect Planning and rate development, Funds Control, Internal Audit, system management and integration support of the Business Management System. There was a -10.7%, or (\$989K) in this category resulting from G&A variance adjustments. Current levels of cost are anticipated to continue.

Procurement

This category represents costs associated with the administration of the prime contract, purchasing, sub-contracting, price reasonableness determinations, negotiations, and acquisition support to the projects. There was a 6.7%, or \$666K, increase in this category. No significant change to current levels anticipated in the future.

Legal

This category represents costs associated with centralized legal services and the associated legal fees paid to outside legal firms for support and expertise in legal matters. This category decreased 1.8%, or (\$86K). Future estimates for this category are dependent upon the amount of legal activity.

Central Administrative Services

This category represents costs associated with Records Management and Document Control, Record Storage, and Reproduction/Duplicating Services, and management and integration support costs to the Document Management Systems. This category changed -6.4%, or (\$688K).

Program/Project Planning & Control

This category represents costs associated with centralized and project specific planning, scheduling, budgeting, and performance reporting. It also includes costs of matrixed resource and technical support to projects, operations and services in the areas of project controls, estimating, project management, and construction management. This category changed -7.3%, or (\$2,030K). No significant changes to current levels are anticipated.

Information/Outreach Activities

This category represents costs of the Communication and Public Relations organizations, including stakeholder relations, support to community programs, production of the Hanford Reach site newspaper, and economic transition and technology development activities. This category changed -13.8%, or (\$676K), and no significant changes to current levels are anticipated. This reduction is attributed to reduced Economic Transition activities (\$800K).

Information Services

This category represents costs associated with telephone network operations, telecommunications maintenance, telecommunication infrastructure, workstation maintenance, and end user support, radio and pager services, delivery of interplant and US Postal mail to all Hanford customers, and for system analyst/programmer support for the operation, maintenance, and enhancements to many site and program specific systems and databases. This category increased \$350K, less than one percent. No significant changes to current levels are anticipated.

Other

This category decreased 56.8%, or (\$2,234K). This decrease is the result of various changes. First, \$6.7M was incurred by multiple contractors for severance and benefits paid to employees removed during an involuntary reduction of force and the restructuring of the remaining staff. A \$3.1M payment was made as a legal settlement. Finally, two contractors received a credit of (\$13.8M) for a Washington state tax incentive for development of advanced environmental technologies.

Environmental

This category represents costs associated with the Environmental Compliance program that provides management and leadership for resolution of site-wide regulatory issues; technical support to management and facilities on overall FH National Environmental Policy Act/State Environmental Policy Act (NEPA/SEPA) activities; coordination of environmental inspections, release reporting, and permitting; review environmental documentation and coordinate compliance issue resolution; performance of air and water permitting coordination and documentation for the Hanford Site; preparation of documentation required for monitoring and reporting hazardous waste and chemical information; performance of RCRA permitting coordination and documentation consolidation for the Hanford Site; monitoring liquid and gaseous effluents, and monitoring the environment immediately around the facilities and waste sites. This category decreased 9.3%, or (\$2,213K), and no significant change to current levels are anticipated.

Safety and Health

This category represents costs associated with Safety and Health operations that provide support to effectively avoid injuries and occupational illnesses and incidents while maintaining compliance with applicable requirements. S&H activities include Radiation Protection: Occupational Safety and Health; Nuclear/Criticality Safety programs; and Regulatory Compliance. It also includes Hanford Fire Department Services including fire suppression, emergency medical services, ambulance support, technical rescue, hazardous materials identification, containment, and stabilization, fire prevention and code compliance, ignitable and reactive waste site inspections, fire investigation and inspection, employee fire safety education, functional testing, and corrective and preventive maintenance of life safety fire protection systems and operability assurance and factory repair/maintenance of Site-wide respiratory protection equipment. This category also includes the Emergency Operations Center, Joint Information Center and Occurrence Notification Center, site exercises, site siren system maintenance, and site EP plans/procedures and off site interface support with local and regional emergency preparedness organizations. This category also includes various project specific safety and health activities. This category changed -3.7%, or (\$2,779). No significant changes to current levels are anticipated in the future.

Facilities Management

This category represents costs associated with providing building management, space planning and support services to approximately 3000 employees located in government owned and leased facilities. It includes coordination, integration and optimization of the use of general-purpose facilities among the various site contractors and operating projects plant engineering, support and facility costs. This category changed -5.8%, or (\$2,490K) and no significant changes to current levels are anticipated in the future.

Maintenance

This category represents costs associated with surveillance and maintenance of structures, systems, components, and processes to ensure operation within the approved safety and compliance requirements, including preventive maintenance and calibrations, repair of failed and malfunctioning equipment, walk down of safety systems, equipment and facility grounds, routine radiological surveys and procedure maintenance as required to maintain a safe and compliant facility. This category includes preventative and corrective maintenance activities for double shell tanks, single shell tank, and deactivated facilities, including field/shop equipment calibrations and testing. Also included is preventative maintenance and repair of Hanford site Vehicle/Equipment Fleets and all other identified program maintenance activities within the facilities/plants/programs. This category changed -5.9%, or (\$5,354K), and no significant changes to current levels are anticipated in the future.

Utilities

This category represents costs associated with providing a safe and reliable source of raw and potable water for customers on the Hanford Site including the maintaining the source water acquisition facilities, transmission mains, Washington State Department of Health licensed Group A water treatment plants, and potable and non-potable water distribution systems. It also includes compliant operations of Hanford sanitary sewer systems as mandated by the Washington Dept. of Health and the Washington State Dept. of Ecology. Other activities include flow data tracking, drain field rotations, filter inspection/cleaning, drain field monitor port inspections, tank pumping, electrical component inspection, lagoon surveillance and manipulation, and alarm response; electricity for customers on the Hanford Site, including operation, maintenance, engineering, and configuration management of the Hanford site. The cost of electricity is not included in this category. This category changed 7.3%, or \$736K, and no significant changes to current levels are anticipated in the future.

Safeguards and Security

This category represents costs associated with ensuring appropriate levels of protection for Project Hanford facilities against unauthorized access; theft or diversion of special nuclear materials (SNM); acts of sabotage; espionage; theft or loss of classified matter; theft or loss of government property; and other hostile acts that may cause unacceptable impacts on national security, or on the health and safety of employees, the public, or the environment. The Hanford Patrol (Patrol) armed protective force protects against the loss of special nuclear material (SNM), classified matter, and other adversarial acts. Protective force coverage is provided on a 24-hour basis. The Physical Security Protection System Program ensures compliance with requirements established in DOE M 5632.1C-1, Manual for Protection and Control of Safeguards and Security Interests and RLID 473.1, Protection of Safeguards and Security Interests. The Information Protection Program implements specific procedures to protect both classified and unclassified information products. The Project Hanford Operations Security (OPSEC) program implements and maintains procedures to assess business practices, and verifies how well those practices protect sensitive unclassified information. The Classified Computer Security Program ensures protection of classified information processed on classified information systems against unauthorized disclosure or compromise. The Personnel Security organization ensures compliance with requirements in CRD 472.1B, 'Personnel Security Activities' and 10 CFR 710, Subpart B, "Criteria and Procedures for Establishment of the Personnel Security Assurance Program and Determinations of an Individual's Eligibility for Access to a Personnel Security Assurance Program Position." The Material Control and Accountability (MC&A) organization ensures compliance with requirements in CRD 474.1, 'Control and Accounting of Nuclear Materials' and DOE M 474.1-2, 'Nuclear Materials Management and Safeguards System Reporting and Data Submission.' This category increased 7%, or \$2.230K, related to enhanced security at the Hanford site.

Logistics

This category represents costs associated with providing technical support on the Hanford Site for the transportation and packaging of hazardous materials and hazardous wastes, including those that are classified as radioactive. This also includes centralized shipping, receiving, storage, issuance, and distribution of materials, parts, and components required to support the Hanford Site, Warehouse Operations, and transportation needs for the Hanford Site which consists of heavy equipment operators (road graders, excavators, dump tankers, tractor/trailers, etc;), stores delivery (1,000,000 packages monthly to over 1,200 customers on Site, approximately 3,600 office relocations annually, approximately 50 to 60 courier stops per day, and taxi service for approximately 4,000 passengers per month). Also included are site-wide services for the management of recyclable materials, property management in accordance with DOE regulations, maintaining appropriate levels of general supplies, critical spare parts, capital spare parts and project related materials to ensure the timely availability of items to support the Site mission, and provides processes, programs, and administrative controls for the identification, re-utilization, and disposal of personal property assets no longer required in

support of the Hanford missions. This category changed -3.8%, or (\$734K) and no significant changes to current levels are anticipated in the future.

Quality Assurance

This category represents costs associated with providing a centralized program to ensure that requirements are established to facilitate compliance to 10 CFR 830.120 and DOE Order 414.1 throughout Fluor Hanford. Includes development and maintenance of the documentation system that flows QA requirements from the QA office to the projects. Also includes acquisition verification service that maintains and updates the evaluated suppliers qualifications, ensures procured items meet established requirements and conducts inspections on procured items. Also includes independent assessments of Hanford projects to management, as required by regulation and contract, to identify strengths and correct weaknesses affecting performance. Category also includes project specific quality assurance activities. This category changed -9.9%, or (\$920K). No significant changes are anticipated in the future.

Laboratory/Technical Support

This category includes field acquisition of high-level tank waste core, grab and vapor samples in support of tank waste capacity. Also included are operation of the laboratories for waste and environmental sample analysis, field and sampling services, and expertise in chemistry and data quality. The Engineering Laboratory includes mechanical, electrical, chemical, and instrumentation prototype development and engineering analysis capabilities for all major programs at Hanford and to other programs in the DOE complex. It includes monitoring equipment and supplies necessary for the Hanford Fire Department, industrial hygienists, and other qualified personnel to adequately assess chemical, physical, and biological hazards (excluding ionizing radiation). Crane and Rigging Services are included, such as management of mobile crane fleet, technical expertise for critical rigging operations on site, heavy hauling services site-wide, primary structural ironwork fabrications, construct, erect, and maintain scaffold framework site-wide, planned maintenance and test of cranes. Fabrication activities include the management to direct the program, gather and disseminate information, assist with the development of strategic plans, mentor staff, prepare and monitor budgets, advise and assist management staff meeting and training for workforce personnel along with shop clean up and support from others. This category changed 3.3%, or \$1,013K and no significant change to current levels anticipated in the future.

Management/Award/Incentive Fee

The amount reported includes contractor fee and corporate G&A. This category has changed by -57%, or (\$36,362K). This variance can be attributed to improvements to the fee accrual process that better matches fee recognition to the periods in which the fee is planned to be earned, consistent with GAAP.

Taxes

In prior years, the functional category "Taxes" represented only the B&O tax payments made. Washington state Sales and Use Taxes were spread throughout all cost categories. Effective with FY01 reporting, the Sales and Use Taxes have now been pulled into the Taxes category. This category decreased -6.8%, or (\$833K).

LDRD

There is no LDRD reported on the Hanford report.

IV. COST SAVINGS INITIATIVES

The Richland Operations Office (RL) and the Office of River Protection (ORP) continue to pursue accelerated cleanup efforts from all its contractors, shortening the cleanup period from 2070 to 2035, and possibly as soon as 2025. RL and ORP have outlined significant changes in the way business is to be completed -- driving the focus from annual cost reductions exercises to multi-year contractual performance incentives for work acceleration. The results from this strategy are significant -- annual, piecemealed cost savings are replaced with accelerated site closure and large, strategic cost reductions.

Contractually mandated performance incentives are included in all major prime Hanford contracts. Aggressive funding and schedule objectives have been required to meet accelerated mission objectives. Some contractor baselines represent a significant acceleration of activities with fewer resources than the currently approved baseline. Hanford contractors have worked individually to achieve savings, as well has coordinating and consolidating efforts when all parties can achieve savings.

RL and ORP have implemented improvements to the overall acquisition strategy and the approaches used to manage contracts, by improving the use of objective performance incentives, decreasing subjectivity, minimizing barriers to get work done, and eliminating non-value-added requirements. The following improvements, which are taken directly from the Hanford Performance Management Plan, are keys to this new strategy:

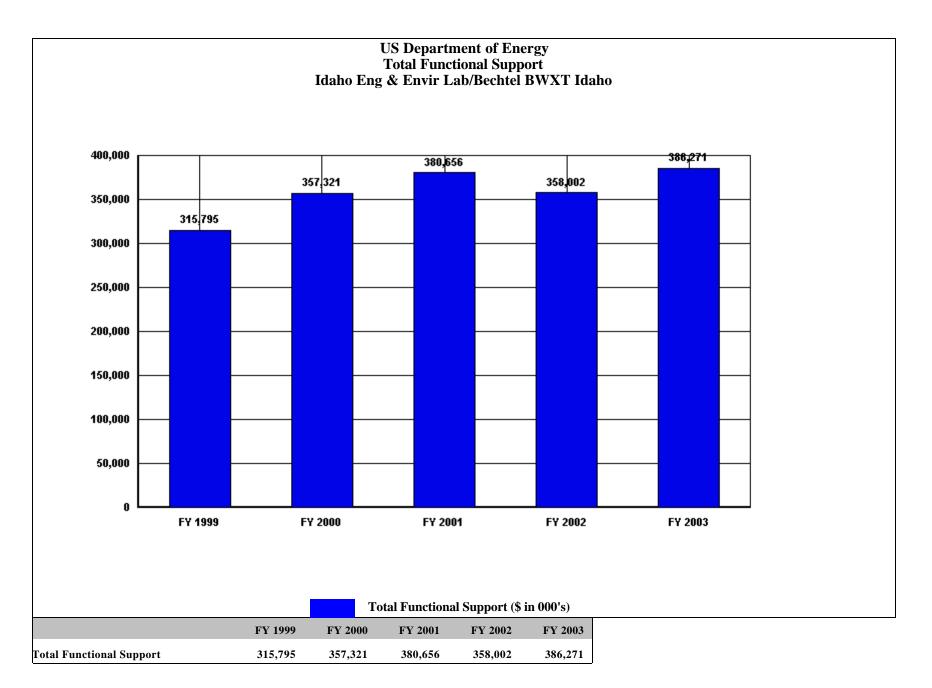
- Improve the quality of our contract solicitation process.
- Achieve contract clarity in the areas of workscope, applicable regulatory requirements, and to the extent possible, quantitatively define end points. We will incorporate risk-based approaches when we cannot provide quantitatively defined end points.
- Clearly identify the nature and extent of uncertainty and risks and align those with the acquisition strategy and contract structure. We will require contractors to identify and manage risk, evaluate their risk management control processes as part of the selection
- process, and monitor their implementation of those processes during the performance period.

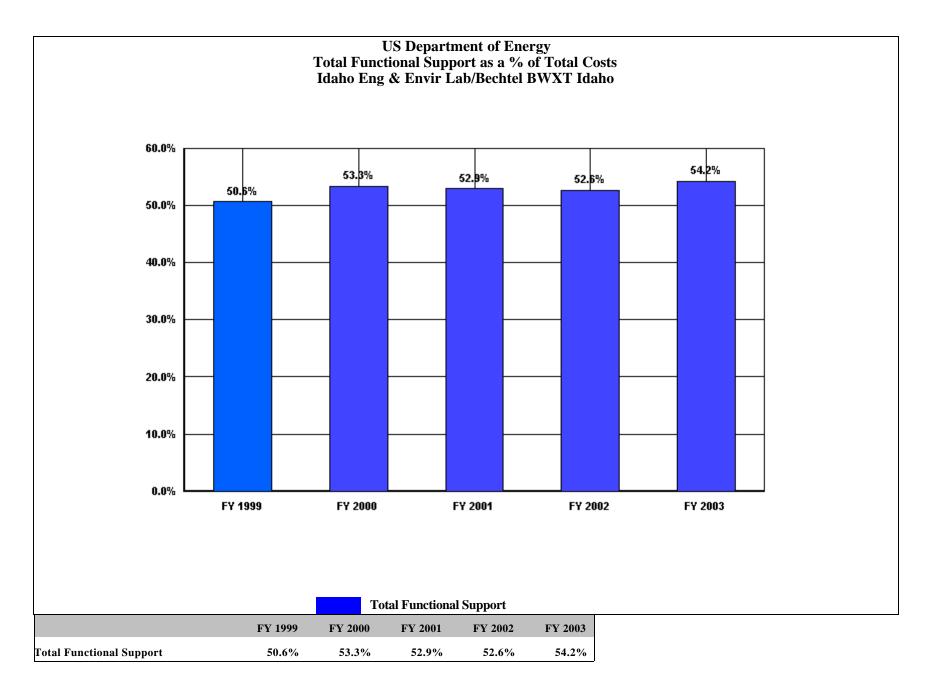
- Increase our emphasis on real risk reduction by focusing contractor fees on key end points and essential interim milestones and by minimizing the use of subjective performance measures.
- Translate DOE orders and requirements into clear statements more easily understood by the private sector.
- Further implement clear and disciplined processes for DOE contract administration and work oversight, and incorporate any additional requirements into the contract as appropriate.
- Improve our contractor oversight, including work-monitoring practices, and ensure technical capability of government monitors to carry out contractor oversight responsibilities.
- Effectively integrate our contract management processes with corresponding processes for project management, safety oversight management, and financial management.
- Increase use of information from contractor integrated assessment to detect, measure, and analyze performance and provide constructive feedback.

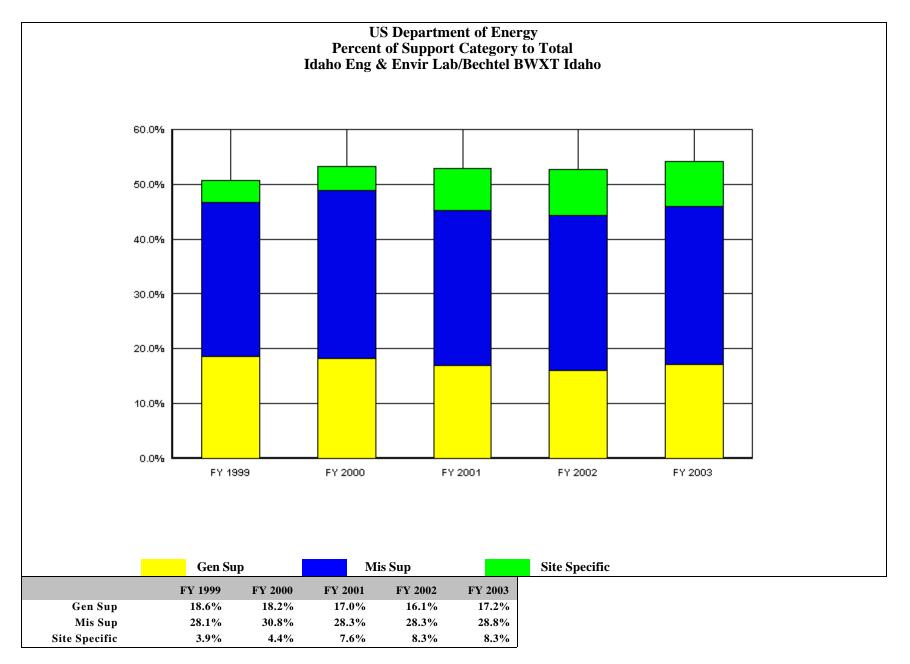
Hanford contractors have worked individually to achieve savings, as well has coordinating and consolidating efforts when all can achieve savings. The following are some examples of recent savings initiatives which altogether should save \$9.4M:

- Consolidating common 618-4 and 618-5 Burial Ground remediation activities and utilizing a revised soil sorting method resulted in savings.
- Resource sharing between projects at the 100 Area remediation sites resulted in savings.
- Performed 100 B/C pipeline remediation with fewer resources due to lower than expected contamination-to-clean soil ratio, and fewer pipelines at C Reactor than the drawings indicated allowed savings in labor, subcontract, and sampling.
- Development of both the uranium chips-in-oil and uranium oxide treatment plans were simplified resulting in savings.
- Savings in staff support to the remediation projects by reducing subcontracts and administrative requirements in sample and data management, technical applications, radiological control, and assessments.

EXECUTIVE DIRECTION 19,565 9,166 10,924 12,715 13,272 -6,22 HUMAN RESOURCES 6,393 10,936 10,127 9,510 9,576 3,18 CFO 5,143 5,046 9,438 5,918 6,281 1,13 PROCUREMENT 4,415 7,533 5,975 5,867 6,382 1,99 LEGAL 4,280 7,681 9,479 9,341 9,979 5,66 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,52 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,66 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,22 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2003<	3 49.8% 8 22.1% 7 44.6% 9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 -9.7% 6 9.8%
GENERAL SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change EXECUTIVE DIRECTION 19,565 9,166 10,924 12,715 13,272 -6,25 HUMAN RESOURCES 6,393 10,936 10,127 9,510 9,576 3,18 CFO 5,143 5,046 9,438 5,918 6,281 1,13 PROCUREMENT 4,415 7,533 5,975 5,867 6,382 1,99 LEGAL 4,280 7,681 9,479 9,341 9,979 5,66 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,53 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,62 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,33 OTHER 10,598 162 -764 2,0	2003 3 -32.2% 3 49.8% 8 22.1% 7 44.6% 9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 3 -9.7% 9.8%
EXECUTIVE DIRECTION 19,565 9,166 10,924 12,715 13,272 -6,22 HUMAN RESOURCES 6,393 10,936 10,127 9,510 9,576 3,18 CFO 5,143 5,046 9,438 5,918 6,281 1,13 PROCUREMENT 4,415 7,533 5,975 5,867 6,382 1,99 LEGAL 4,280 7,681 9,479 9,341 9,979 5,66 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,52 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,62 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,22 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 MISSION SUPPORT 115,838 121,893 122,327 109,316<	2003 3 -32.2% 3 49.8% 8 22.1% 7 44.6% 9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 3 -9.7% 9.8%
EXECUTIVE DIRECTION 19,565 9,166 10,924 12,715 13,272 -6,29 HUMAN RESOURCES 6,393 10,936 10,127 9,510 9,576 3,18 CFO 5,143 5,046 9,438 5,918 6,281 1,12 PROCUREMENT 4,415 7,533 5,975 5,867 6,382 1,90 LEGAL 4,280 7,681 9,479 9,341 9,979 5,69 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,52 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,66 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,22 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,47 MISSION SUPPORT FY 2003 FY	3 -32.2% 3 49.8% 8 22.1% 7 44.6% 9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 3 3 -9.7% 6 9.8%
CFO 5,143 5,046 9,438 5,918 6,281 1,13 PROCUREMENT 4,415 7,533 5,975 5,867 6,382 1,99 LEGAL 4,280 7,681 9,479 9,341 9,979 5,66 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,53 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,66 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,33 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 64 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2003 Chang ENVIRONMENTAL 10,336 10,383 10,107 8,740 9	8 22.1% 7 44.6% 9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 -9.7% 6 9.8%
PROCUREMENT 4,415 7,533 5,975 5,867 6,382 1,99 LEGAL 4,280 7,681 9,479 9,341 9,979 5,69 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,53 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,60 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 64 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,33 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,49 MAINTENANCE	7 44.6% 9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 -9.7% 6 9.8%
LEGAL 4,280 7,681 9,479 9,341 9,979 5,66 CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,53 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,62 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,44 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change ENVIRONMENTAL 10,336 10,383 10,107 8,740 9,333 -1,00 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,33 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,49 MAINTENANCE	9 133.2% 0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% 2003 -9.7% 6 9.8%
CENTRAL ADMIN SERVICES 12,829 17,846 17,145 15,147 20,359 7,53 PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,62 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,44 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change FW ENVIRONMENTAL 10,336 10,383 10,107 8,740 9,333 -1,00 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,33 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,49 MAINTENANCE 49,015 61,416 63,443 53,315 49,239 22 39,93	0 58.7% 8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% e 1999 to 2003 3 3 -9.7% 6 9.8%
PROGRAM/PROJECT CONTROL 6,177 13,791 13,650 12,033 13,805 7,62 INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,4 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change SAFETY AND HEALTH 10,336 10,383 10,107 8,740 9,333 -1,00 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,33 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,49 MAINTENANCE 49,015 61,416 63,443 53,315 49,239 22 UTILITIES SAFEGUARDS AND SECURITY 20,280 22,364 21,693 21,514 25,442 5,16	8 123.5% 9 -50.4% 5 15.5% 9 -90.2% 19 5.5% e 1999 to 2003 3 3 -9.7% 6 9.8%
INFORMATION OUTREACH 18,342 17,800 11,922 9,591 9,103 -9,23 INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,4 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change SAFETY AND HEALTH 10,336 10,383 10,107 8,740 9,333 -1,00 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,38 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,49 MAINTENANCE 49,015 61,416 63,443 53,315 49,239 22 UTILITIES 12,000 8,911 8,413 10,964 15,932 3,99 SAFEGUARDS AND SECURITY 20,280 22,364 21,693 21,514 25,442 5,16	9 -50.4% 5 15.5% 9 -90.2% 19 5.5% e 1999 to 2003 3 3 -9.7% 6 9.8%
INFORMATION SERVICES 28,096 31,932 34,431 27,168 32,461 4,36 OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,4 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change ENVIRONMENTAL 10,336 10,383 10,107 8,740 9,333 -1,00 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,36 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,46 MAINTENANCE 49,015 61,416 63,443 53,315 49,239 22 24 UTILITIES 12,000 8,911 8,413 10,964 15,932 3,96 SAFEGUARDS AND SECURITY 20,280 22,364 21,693 21,514 25,442 5,16	5 15.5% 9 -90.2% 19 5.5% e 1999 to 2003 -9.7% 6 9.8%
OTHER 10,598 162 -764 2,026 1,039 -9,55 TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,4 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Change ENVIRONMENTAL 10,336 10,383 10,107 8,740 9,333 -1,000 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,38 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,49 MAINTENANCE 49,015 61,416 63,443 53,315 49,239 22 UTILITIES 12,000 8,911 8,413 10,964 15,932 3,933 SAFEGUARDS AND SECURITY 20,280 22,364 21,693 21,514 25,442 5,16	9 -90.2% 19 5.5% e 1999 to 2003 3 -9.7% 6 9.8%
TOTAL GENERAL SUPPORT 115,838 121,893 122,327 109,316 122,257 6,4 MISSION SUPPORT FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Changest ENVIRONMENTAL 10,336 10,383 10,107 8,740 9,333 -1,000 SAFETY AND HEALTH 44,803 50,497 46,354 47,705 49,189 4,383 FACILITIES MANAGEMENT 13,617 19,217 18,927 18,516 31,115 17,495 MAINTENANCE 49,015 61,416 63,443 53,315 49,239 22,216 UTILITIES 3AFEGUARDS AND SECURITY 20,280 22,364 21,693 21,514 25,442 5,165	19 5.5% e 1999 to 2003 3 -9.7% 6 9.8%
MISSION SUPPORTFY 1999FY 2000FY 2001FY 2002FY 2003ChangeENVIRONMENTAL10,33610,38310,1078,7409,333-1,00SAFETY AND HEALTH44,80350,49746,35447,70549,1894,38FACILITIES MANAGEMENT13,61719,21718,92718,51631,11517,49MAINTENANCE49,01561,41663,44353,31549,23922UTILITIES12,0008,9118,41310,96415,9323,99SAFEGUARDS AND SECURITY20,28022,36421,69321,51425,4425,16	e 1999 to 2003 3 -9.7% 6 9.8%
ENVIRONMENTAL10,33610,38310,1078,7409,333-1,00SAFETY AND HEALTH44,80350,49746,35447,70549,1894,33FACILITIES MANAGEMENT13,61719,21718,92718,51631,11517,49MAINTENANCE49,01561,41663,44353,31549,23922UTILITIES12,0008,9118,41310,96415,9323,99SAFEGUARDS AND SECURITY20,28022,36421,69321,51425,4425,16	2003 3 -9.7% 6 9.8%
SAFETY AND HEALTH44,80350,49746,35447,70549,1894,38FACILITIES MANAGEMENT13,61719,21718,92718,51631,11517,49MAINTENANCE49,01561,41663,44353,31549,23922UTILITIES12,0008,9118,41310,96415,9323,99SAFEGUARDS AND SECURITY20,28022,36421,69321,51425,4425,16	6 9.8%
FACILITIES MANAGEMENT13,61719,21718,92718,51631,11517,49MAINTENANCE49,01561,41663,44353,31549,23922UTILITIES12,0008,9118,41310,96415,9323,96SAFEGUARDS AND SECURITY20,28022,36421,69321,51425,4425,16	
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SAFEGUARDS AND SECURITY 20,280 22,364 21,693 21,514 25,442 5,16	
LUGISTICS SUPPORT 11,896 10,836 11,517 10,104 11,917	
	1 0.2%
QUALITY ASSURANCE 6,979 15,739 15,178 12,252 10,750 3,77 LADODATODY/TECHNICAL SUPPORT 6,450 6,844 7,812 0,264 2,162 4,265	
LABORATORY/TECHNICAL SUPPORT 6,459 6,844 7,812 9,264 2,162 -4,29 TOTAL MISSION SUPPORT 175,385 206,207 203,444 192,374 205,079 29,66	
	e 1999 to
	2003
MANAGEMENT/INCENTIVE FEE 12,578 22,342 30,891 33,778 37,109 24,53	1 195.0%
TAXES 1,260 2,640 3,375 3,237 3,264 2,00	
LDRD / PDRD / SDRD 10,734 4,239 20,619 19,297 18,562 7,82	
TOTAL SITE SPECIFIC 24,572 29,221 54,885 56,312 58,935 34,3	
TOTAL FUNCTIONAL SUPPORT 315,795 357,321 380,656 358,002 386,271 70,47	
	e 1999 to 2003
Mission Direct Operation 260,589 281,047 308,202 296,072 311,153 50,56	
Capital Construction 47,107 31,823 30,673 26,100 15,280 -31,823	7 -67.6%
TOTAL MISSION DIRECT 307,696 312,870 338,875 322,172 326,433 18,73	6.1%
Total Costs 623,491 670,191 719,531 680,174 712,704 89,21	3 14.3%
Total Costs w/o Construction 576,384 638,368 688,858 654,074 697,424 121,04	
General Support % Total Costs 18.6% 18.2% 17.0% 16.1% 17.2%	
Mission Support % Total Costs 28.1% 30.8% 28.3% 28.8%	
Site Specific % Total Costs 3.9% 4.4% 7.6% 8.3%	
Total Support % Total Costs 50.6% 53.3% 52.9% 52.6% 54.2%	
Total Support % Total Costs w/o Construction 54.8% 56.0% 55.3% 54.7% 55.4%	







SITE CHARACTERISTICS

The mission of the Idaho National Engineering and Environmental Laboratory (INEEL) is to: 1) Deliver science-based, engineered solutions to the challenges of DOE's mission areas, other federal agencies, and industrial clients. 2) Accelerate environmental cleanup responsibly, using innovative science and engineering capabilities. 3) Provide leadership and support to optimize the value of EM investments and strategic partnerships throughout the DOE complex. 4) Enhance scientific and technical talent, facilities, and equipment to best serve national and regional interests.

The INEEL functional cost profile is a result of the many factors and characteristics associated with our operational missions. A comprehensive knowledge of site-specific characteristics (mission, diversity and complexity of work, duration of effort, regulatory drivers, geography, etc.) is required to fully understand and draw meaningful conclusions from this data. Some of the factors affecting the INEEL's functional cost profile include:

- INEEL is a multi-program FFRDC laboratory with a diverse customer base.
- The INEEL occupies 889 square miles with the associated logistics/infrastructure.
- There are 10 major "site" operating complexes and 5 facilities in the City of Idaho Falls, which is 40 to 60 miles from the site. Approximately 2,300 employees work in town locations while 2,900 employees work in site locations.
- INEEL provides support services of \$23M to other "on-site" government entities.
- Examples of operational missions include:
 - Environmental Clean up of legacy environmental problems. Life cycle (estimated at 30 to 50) waste cleanup activities include the following items:
 - Transuranic WasteHigh-Level WasteLow-Level WasteMixed Low-Level Waste
 - Environmental Media ContaminationSpent Nuclear Fuel
 - Research and Development The INEEL is involved in scientific research and development. Examples include bioprocessing, chemical separations, materials science, sensors, etc.
 - Nuclear Operations Operation of the Advanced Test Reactor which provides material and fuel test results for the U.S. Navy and produces various isotopes.
 - Manufacturing Production of tank armor for the U.S. Army.
- INEEL environmental operations are guided by the Idaho Settlement Agreement between the Department, the Navy, and the State of Idaho.
- The INEEL is one of the largest employers in the state of Idaho.

HIGHLIGHTS OF TRENDS

Total All				FY 2000 \$670.2M	
Total Functional Support	\$386.3M	\$358.0M	\$380.7M	\$357.3M	\$315.8M
Functional Support Percentage	54.2%	52.6%	52.9%	53.3%	50.6%

- FY 2000 Total Functional Support increased \$41.5M due mainly to legal subcontracts to provide support litigation and the Qui Tam litigation, increased FTEs, fee, and a change to a 24 hour/7day a week work schedule for certain areas.
- FY 2001 Total Functional Support increased \$23.4M due mainly to LDRD, fee, Strategic Investment Funding, a Business Systems Improvement Project, and litigation.
- FY 2002 Total Functional Support decreased \$22.7M due mainly to work force restructuring and mandatory cost reductions, decreased spending in the final implementation of a part of the Business Systems Improvement Project, reduced LDRD spending, and the elimination of the desktop refresh initiative.
- FY 2003 Total Functional Support increased \$28.3M due mainly to labor escalation, fringe benefit costs, and increased work scope.

ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

Compared to FY 2002, INEEL functional support costs have increased approximately \$28.3M. The specific significant changes in the individual functional support categories are as follows:

Central Administrative Support Increased by \$5.2M due to hiring additional employees and increased subcontract usage associated with Text Processing, Graphic Arts, Writing/Editing, Document Management Control System, and Records Management.

Program/Project Planning & Controls Increased by \$1.8M as the result of increased FTEs, labor escalation and fringe benefit costs.

Information Services Increased by \$5.3M due to increases in Computer Field Services, Cellular Phone Operations, and Application Framework operations. New work scope associated with the CRAY Computing Environment also contributed towards this increase.

Other Decreased by \$1.0M due to work force restructuring efforts that occurred in FY 2002.

Management/Award Fee/Incentive Fee Increased by \$3.2M as the result of contractor performance.

Safety and Health Increased by \$1.5M due to labor escalation, fringe benefit costs, and increased subcontract usage.

Facility Management/Engineering Increased by \$12.6M due to increased work scope, reorganizations, and reclassification of costs from other functional support categories and mission direct.

Maintenance Decreased by \$4.1M due to decreased work scope and reclassification of costs to other functional support activities.

Utilities Increased by \$5.0M due to labor escalation, electricity rate increases, and reclassification of costs from other functional support categories.

Safeguards and Security Increased by \$4.0M due to additional FTEs and non-labor costs to support increased safeguards and security requirements.

Logistics Support Increased by \$1.8M due to additional labor costs and reclassification of costs from other functional support categories and mission direct.

Quality Assurance/Compliance Decreased by \$1.5M due to reclassification of costs to other functional support activities.

Laboratory/Technical Support Decreased by \$7.1M due to reclassification of costs to other functional support categories.

MISCELLANEOUS NOTES

The Other category for \$1,039K is made up of \$94K for General Liability Insurance, (\$202K) related to contract transition efforts, and \$1,146K for Work Force Restructuring.

COST SAVINGS INITIATIVES

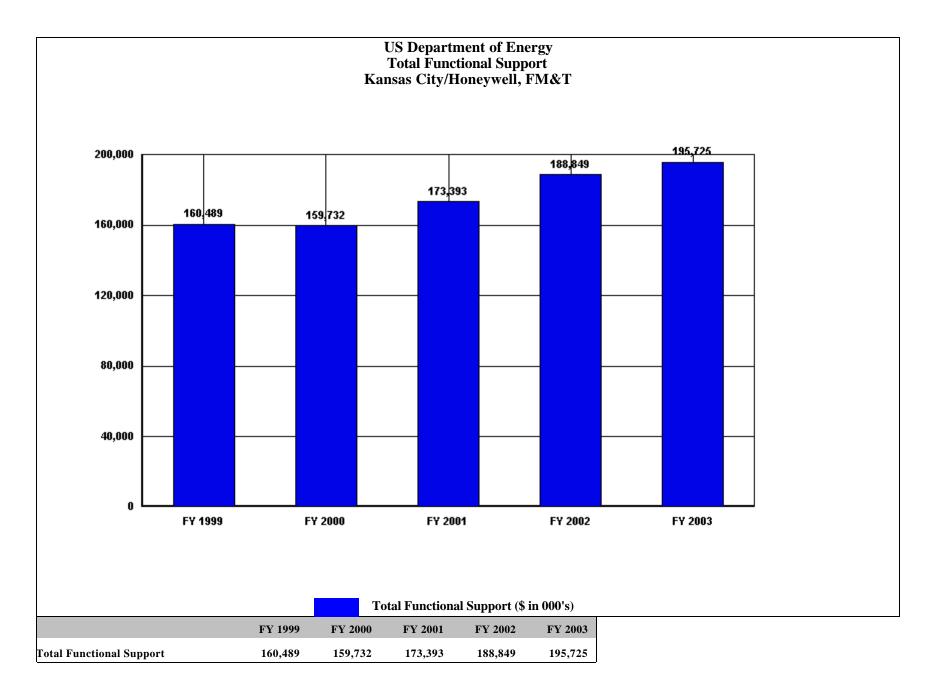
The INEEL employs an integrated approach to cost management. Four processes are utilized to achieve this integration:

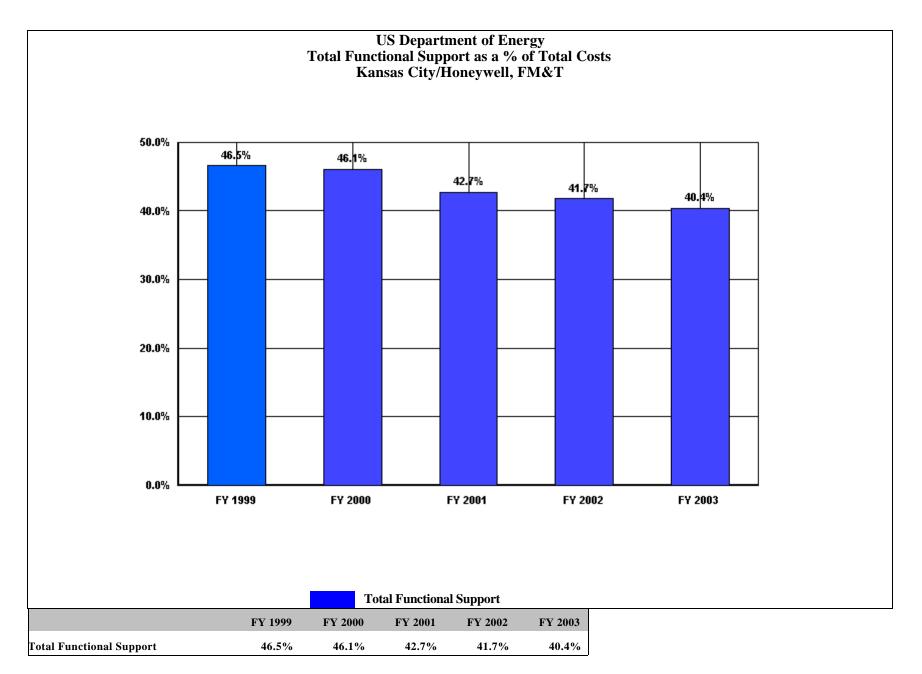
1) Develop and implement innovative and effective contract structures and incentives.

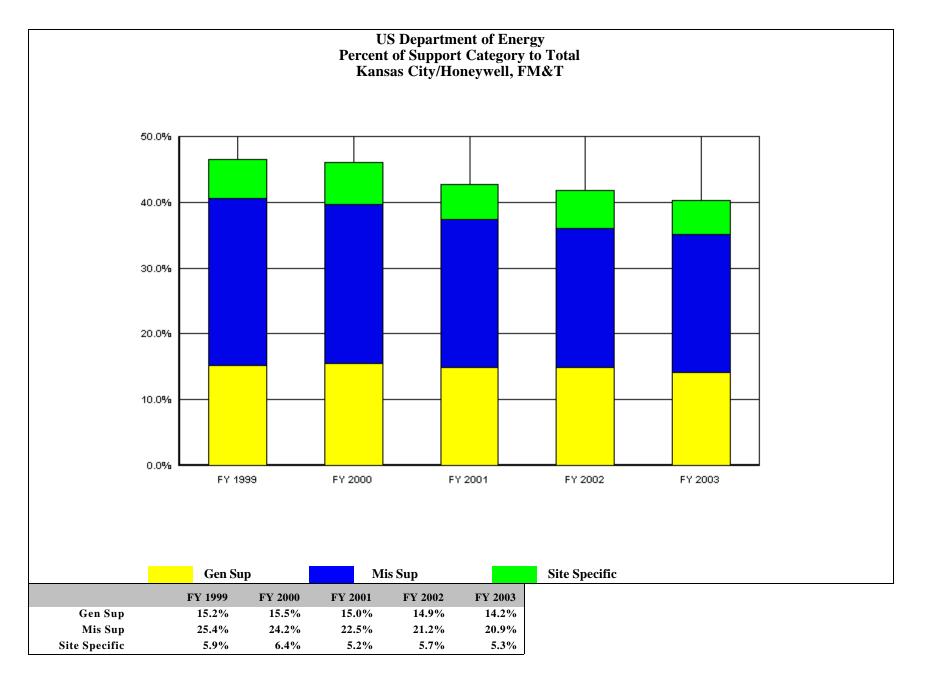
- 2) Utilize internal expertise to review and control cost through cost studies, analysis, and research. For example: Six Sigma, which is a proven systematic method of applying step-by-step improvements to our current work processes.
- 3) Employ outside experts to independently review and validate cost estimates.
- 4) Utilize performance measures and benchmarks to provide overall indicators of cost efficiency.

In addition, in FY 2003, BBWI underwent an extensive effort to split into two distinct operating units: the Laboratory (INEEL) and the Idaho Completion Project (ICP). The company reorganized into the two separate units and a restructuring task force of senior management and line management from the ICP and the INEEL underwent an extensive effort to determine the support service activities that were required to meet the mission of the ICP and INEEL. Costs were reduced resulting in a \$23.0M annual savings that will be realized in FY 2004 and beyond.

Trends in	Total Function	al Suppor	t Cost Cat	egories			
	Kansas City/H FY	oneywell, 2003	FM&T				
	(\$ in	000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	2,988	3,723	4,598	4,216	5,741	2,753	92.1%
HUMAN RESOURCES	4,066	4,320	4,947	4,467	3,896	-170	-4.2%
CFO	3,097	3,518	5,266	4,286	5,209	2,112	68.2%
PROCUREMENT	4,102	5,026	6,108	6,299	6,453	2,351	57.3%
LEGAL	538	620	1,238	2,053	2,096	1,558	289.6%
CENTRAL ADMIN SERVICES	1,486	1,007	209	430	220	-1,266	-85.2%
PROGRAM/PROJECT CONTROL	4,832	4,513	6,410	7,172	8,207	3,375	69.8%
INFORMATION OUTREACH	3,136	2,628	3,163	3,888	2,812	-324	-10.3%
INFORMATION SERVICES	26,402	28,250	29,926	33,391	34,207	7,805	29.6%
OTHER	1,642	-12	-1,128	1,200	0	-1,642	-100.0%
TOTAL GENERAL SUPPORT	52,289	53,593	60,737 FY 2001	67,402	68,841 FY 2003	16,552 Change 1	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
ENVIRONMENTAL	5,967	5,776	5,131	5,355	5,296	-671	-11.2%
SAFETY AND HEALTH	3,768	3,304	4,344	5,007	4,926	1,158	30.7%
FACILITIES MANAGEMENT	6,762	5,483	6,727	8,143	10,071	3,309	48.9%
MAINTENANCE	32,251	34,685	36,135	35,189	36,923	4,672	14.5%
UTILITIES	13,869	11,203	12,898	13,458	12,824	-1,045	-7.5%
SAFEGUARDS AND SECURITY	6,923	7,279	8,721	10,071	11,247	4,324	62.5%
LOGISTICS SUPPORT	6,443	5,631	6,270	6,399	6,795	352	5.5%
QUALITY ASSURANCE	7,700	7,357	7,450	8,203	9,165	1,465	19.0%
LABORATORY/TECHNICAL SUPPORT	4,018	3,225	3,690	4,016	3,928	-90	-2.2%
TOTAL MISSION SUPPORT	87,701	83,943	91,366	95,841	101,175	13,474	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	19,475	20,973	19,837	22,556	22,445	2,970	15.3%
TAXES	1,024	1,223	1,453	1,706	1,602	578	56.4%
LDRD / PDRD / SDRD	0	0	0	1,344	1,662	1,662	100.0%
TOTAL SITE SPECIFIC	20,499	22,196	21,290	25,606	25,709	5,210	25.4%
TOTAL FUNCTIONAL SUPPORT	160,489	159,732	173,393	188,849	195,725	35,236	22.0%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	164,927	163,982	187,292	208,277	222,820	57,893	35.1%
Capital Construction	19,371	23,071	45,427	55,396	66,438	47,067	243.0%
TOTAL MISSION DIRECT	184,298	187,053	232,719	263,673	289,258	104,960	57.0%
Total Costs	344,787	346,785	406,112	452,522	484,983	140,196	40.7%
Total Costs w/o Construction	325,416	323,714	360,685	397,126	418,545	93,129	28.6%
General Support % Total Costs Mission Support % Total Costs	15.2% 25.4%	15.5% 24.2%	15.0% 22.5%	14.9% 21.2%	14.2% 20.9%		
Site Specific % Total Costs	5.9%	6.4%	5.2%	5.7%	5.3%		
Total Support % Total Costs	46.5%	46.1%	42.7%	41.7%	40.4%		
Total Support % Total Costs w/o Construction	49.3%	49.3%	48.1%	47.6%	46.8%		







SITE PROFILE KANSAS CITY PLANT – HONEYWELL, FM&T

Background

The Kansas City Plant (KCP) is operated by Honeywell, Federal Manufacturing & Technologies (FM&T). Our broad array of products and capabilities are closely linked with current and future efforts to ensure the safety and reliability of the stockpile. The plant produces over 85% of the components that constitute a nuclear weapon-more than 1,000 active ship entities for over 40 product families. Approximately 80,000 ship entity pieces are shipped annually. Engineers are responsible for the full spectrum of products and technologies that perform weapon functions from access authorization to delivery of energy to the nuclear explosives package. These products include items such as radars, programmers, reservoirs, joint test assemblies, trajectory sensing signal generators, firesets, and mechanical cases. Other major initiatives the plant supports are: fabrication of telemetry systems to evaluate weapon systems, fabrication of Safeguards Transporters and program activities for the Office of Secure Transportation, warehousing and shipment of hardware for the Air Force's ongoing maintenance programs, and centralized procurement of Directed Stockpile Work production material.

The KCP includes property, assets and people located in Missouri, New Mexico and Arkansas. Current employment is approximately 3,100 people. The Kansas City facility resides on 141 acres including grounds and parking lots and currently utilizes approximately 2.9 million square feet of building space (primarily within one manufacturing building). The plant provides utility services to the South Kansas City Federal Complex which includes the plant and General Services Administration (GSA) space leased to other federal agencies. The plant bills GSA for their utilities. In October 1994, the FM&T division assumed responsibility for Kirtland Operations previously operated by EG&G. Kirtland Operations is situated on four separate sites in Albuquerque, New Mexico: 20.2 fenced acres owned by the U.S. Air Force and occupied under permit to the DOE, the Craddock Facility, the Air Park Facility, and the Coyote Canyon Facility. The Kirtland Operation also provides facility support and training for Fort Chaffee, Arkansas, which supports the Office of Secure Transportation, and engineering and technical support for Los Alamos, New Mexico. There are approximately 30,000 items of equipment at the combined facilities.

Functional Support Cost Trends

The plant cost profile is influenced by program requirements and funding trends associated with Defense Programs' workload and complementary work. Total operating costs (total costs less capital/construction) were relatively flat between FY1999 and FY2000, and then increased in FY2001, FY2002 and FY2003. During the five year period, direct mission costs increased by 35%, while total functional support costs only increased by 22%. General Support functions have remained at 16-17% of operating costs, while Mission Support functions have decreased from 25% to 21% during this time frame. A plant pension contribution requirement was driven in FY2003 by the drop in equity markets over the last three years and low treasury rates (note: the last required contribution was prior to the five-year functional cost period). This \$10.5M contribution impacted all categories through labor pricing.

SITE PROFILE KANSAS CITY PLANT – HONEYWELL, FM&T

General Support

FY2003 General Support costs represent a \$16.6 million increase from the FY1999 level. Significant element trends within the category reflect increases in Executive Direction (\$2.8M), Procurement (\$2.4M), Legal (\$1.5M), Program/Project Planning & Control (\$3.4M), and Information Services (\$7.8M) partially offset by Other (-\$1.6M). The remaining \$0.3 is comprised of the remaining four elements.

The increase in Executive Direction when compared to FY1999 reflects the addition of ten associates in the Six Sigma and Business Excellence organization and the addition of three senior management staff. The change in Procurement reflects increased labor costs due to 17 additional associates and increased contact support services. The change in Legal is associated with increased contracted services. Program/Project Planning & Control reflects an increase in labor costs for 26 associates and the additional travel and expenses related to supporting additional campaigns and increased direct mission work. Information Services is related to software procurements including DigitalWorks projects such as Advanced Security Model, software/hardware contracts (ASAP-Microsoft Enterprise license, PeopleSoft ERP systems, Oracle licenses, Xerox contract etc.), communication services, contract support services and an additional 45 FTEs in the organization. The Other category is described in the table below.

Activities in the General Support - Other category are summarized in the following table:

General Support – Other	
<u>FY2003</u>	(\$ in 000s) 0
<u>FY2002</u> Legal Settlement(s)	1,200
<u>FY2001</u> Bid & Proposal and Contract Transition Labor Costs Charged to Honeywell	(1,128)
<u>FY2000</u> Separation Costs (FY2000 RIF) Bid & Proposal Labor Costs Charged to	1,231
Honeywell	<u>(1,243)</u> (12)
<u>FY1999</u> Separation Costs (FY1999 RIF)	1,642
1999 Reduction in Force approximately 60 a	associates

1999 Reduction in Force approximately 60 associates 2000 Reduction in Force approximately 40 associates

SITE PROFILE KANSAS CITY PLANT – HONEYWELL, FM&T

Mission Support

The \$13.5 million increase in Mission Support costs from FY1999 to FY2003 is primarily attributed to increases in Safety & Health (\$1.2M), Facilities Management (\$3.3M), Maintenance (\$4.7M), and Safeguards & Security (\$4.3M).

Safety & Health reflects an increase in contract medical services. Multiple re-organizations through the fiscal years in the Facilities Management and Maintenance functions have impacted trends; therefore, these functional cost categories have been consolidated to address those trends. The variances in expenses are primarily attributed to increased contracted facilities engineering efforts including pre-Title I designs and contract labor services supporting activities such as roof refurbishment, asbestos abatement, and infrastructure refurbishment. The facility size and quantity of equipment have remained relatively constant throughout this period. As a result, required Facility Management / Maintenance costs continue to be a driver of the mission support cost category. The Safeguards & Security cost increase reflects heightened security measures put into place since September 11, 2001. Security costs reflect increased overtime and the hiring of additional Security Police Officers since the second half of FY2002.

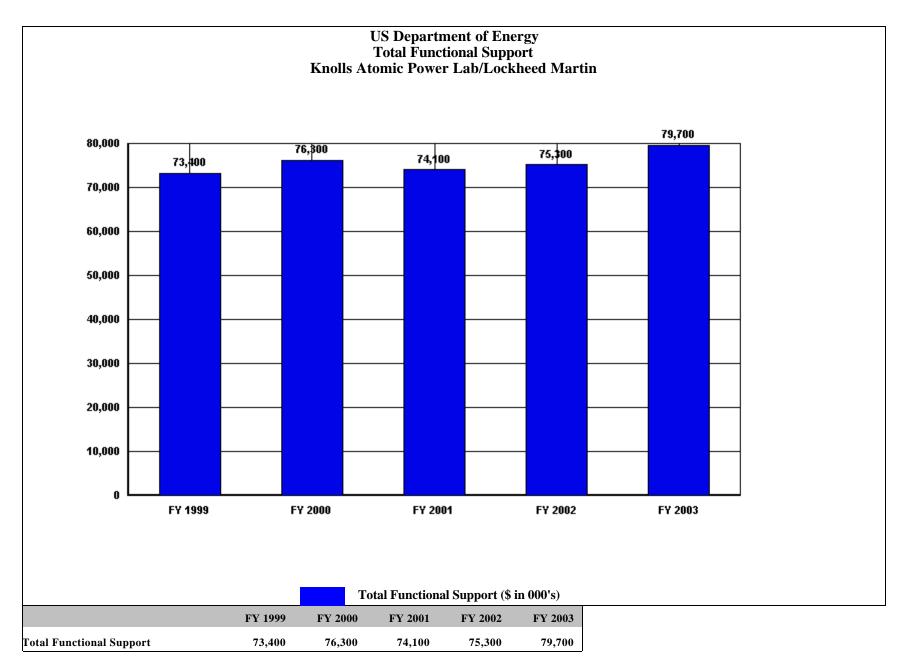
Site Specific

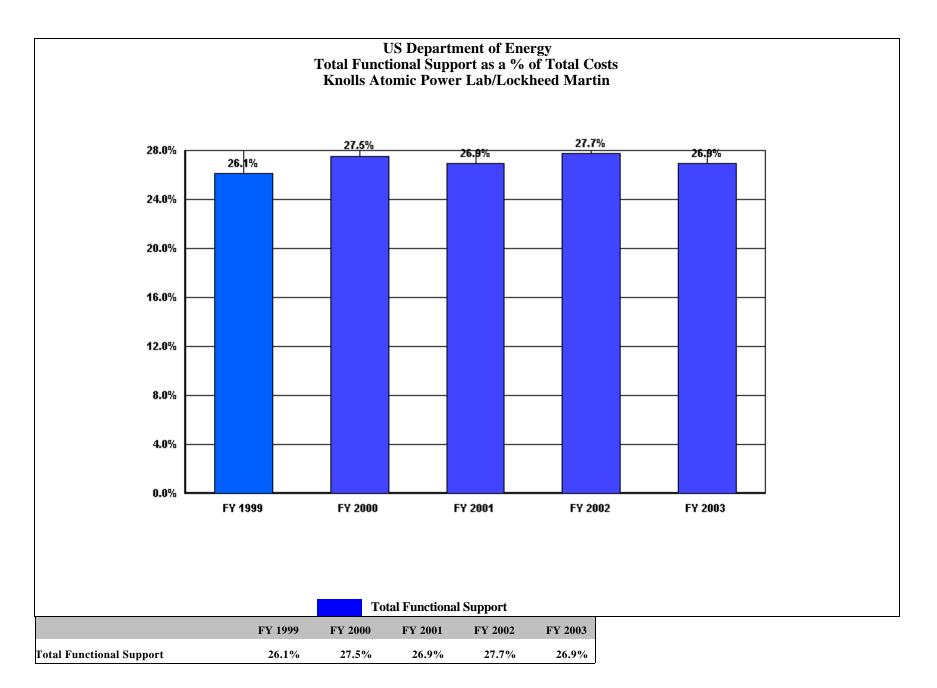
The change in site specific costs between FY1999 and FY2003 is attributed to an increase in management/award incentive fees, an increase in New Mexico Gross Receipts tax, and the support of Program Directed Research and Development (PDRD) activities which were initiated in FY2001.

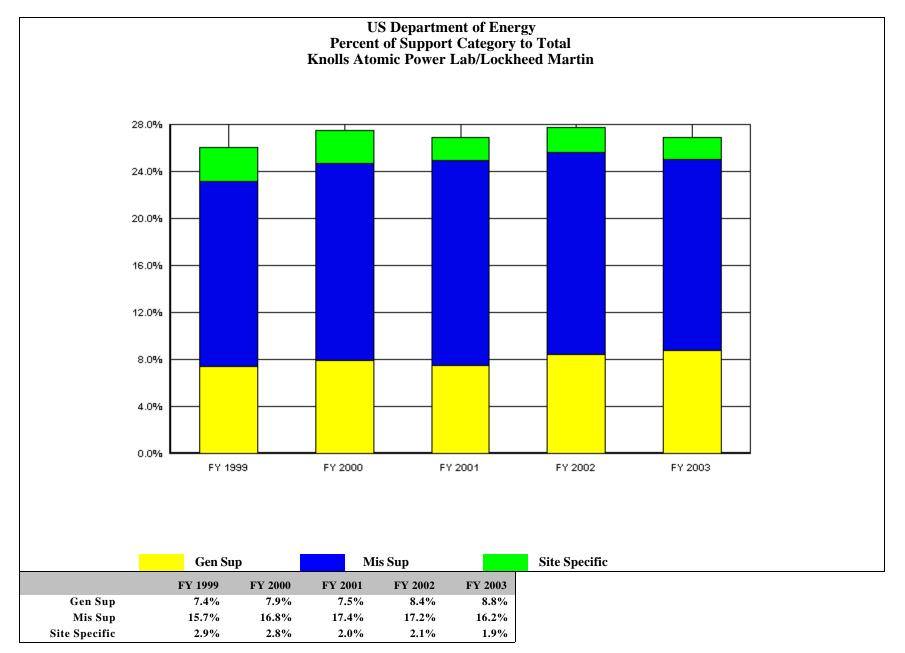
Global Cost Drivers/Anomalies

Since 1990, the plant census has been reduced by 53%. Workload and funding reductions have included early and regular retirements and have created a disproportionate amount of retirees to current associates. One source projects the average large company to have an employee to retiree ratio of 2.2:1. The employee to retiree ratio for the Kansas City Plant is approximately 1:1. Pensioner's Insurance is a significant fixed expense for the plant and is allocated to all cost categories.

Trends in Tota	al Function	al Suppor	t Cost Cat	egories			
Knolls At	omic Power		kheed Ma	rtin			
		2003					
	(\$ i r	1 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	1,500	1,800	3,100	2,800	3,000	1,500	100.0%
HUMAN RESOURCES	2,100	2,700	2,800	3,400	3,900	1,800	85.7%
CFO	3,800	3,700	2,900	2,500	3,100	-700	-18.4%
PROCUREMENT	1,800	1,700	2,000	1,700	2,000	200	11.1%
LEGAL	500	1,400	400	200	500	0	0.0%
CENTRAL ADMIN SERVICES	1,200	1,100	1,200	1,300	1,400	200	16.7%
PROGRAM/PROJECT CONTROL	200	300	300	400	400	200	100.0%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	9,700	9,200	8,000	10,600	11,800	2,100	21.6%
OTHER	0	0	0	0	0	0	0.0%
TOTAL GENERAL SUPPORT	20,800	21,900	20,700	22,900	26,100	5,300	25.5%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	
ENVIRONMENTAL	3,000	3,400	5,000	4,600	5,300	FY2 2,300	76.7%
SAFETY AND HEALTH	11,300	11,300	11,300	11,000	11,200	-100	-0.9%
FACILITIES MANAGEMENT	4,900	5,000	5,300	2,600	4,300	-600	-12.2%
MAINTENANCE	12,700	12,800	11,500	12,900	10,600	-2,100	-16.5%
UTILITIES	2,100	2,700	3,200	2,600	3,000	900	42.9%
SAFEGUARDS AND SECURITY	5,000	5,500	6,000	7,200	8,400	3,400	68.0%
LOGISTICS SUPPORT	2,300	2,700	2,500	2,800	2,200	-100	-4.3%
QUALITY ASSURANCE	3,000	3,100	3,200	3,000	3,100	100	3.3%
LABORATORY/TECHNICAL SUPPORT	0	0	0,200	0 s,000	0	0	0.0%
TOTAL MISSION SUPPORT	44,300	46,500	48,000	46,700	48,100	3,800	8.6%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	
MANAGEMENT/INCENTIVE FEE	7,500	7,300	5,100	5,000	5,000	FY2 -2,500	-33.3%
TAXES	800	600	3,100	3,000 700	500	-2,300	-33.5% -37.5%
LDRD / PDRD / SDRD	0	000	300 0	700	500 0	-300	-37.3%
TOTAL SITE SPECIFIC	8,300	7,900	5,400	5,700	5,500	-2,800	-33.7%
TOTAL FUNCTIONAL SUPPORT	73,400	76,300	74,100	75,300	79,700	6,300	8.6%
					-	, i	
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(0.0
Mission Direct Operation	187,200	174,600	178,700	180,400	189,500	2,300	1.2%
Capital Construction	20,900	26,300	22,900	15,900	27,300	6,400	30.6%
TOTAL MISSION DIRECT	208,100	200,900	201,600	196,300	216,800	8,700	4.2%
Total Costs	281,500	277,200	275,700	271,600	296,500	15,000	5.3%
Total Costs w/o Construction	260,600	250,900	252,800	255,700	269,200	8,600	3.3%
Total Costs #/o Construction	200,000	230,900	232,000	233,700	209,200	0,000	5.570
General Support % Total Costs	7.4%	7.9%	7.5%	8.4%	8.8%		
Mission Support % Total Costs	15.7%	16.8%	17.4%	17.2%	16.2%		
Site Specific % Total Costs	2.9%	2.8%	2.0%	2.1%	1.9%		
Total Support % Total Costs	26.1%	27.5%	26.9%	27.7%	26.9%		
Total Support % Total Costs w/o Construction	28.2%	30.4%	29.3%	29.4%	29.6%		
. Stal Support /S Fordi Obolo W/S Oblioti dollori				1			







SITE PROFILE KNOLLS LABORATORY – LOCKHEED MARTIN

The Knolls Atomic Power Laboratory (KAPL) is operated for the Department of Energy by KAPL, Inc., a Lockheed Martin Company. It is KAPL's sole function to support the United States Naval Nuclear Propulsion Program through development of advanced reactor plant designs, while providing design agency support of the operating fleet and training nuclear propulsion plant operating personnel.

KAPL currently employs more than 2,600 people at two major sites, in Niskayuna, NY and in West Milton, NY. The Knolls Site in Niskayuna and the Kesselring Site in West Milton are situated on approximately 180 and 3,905 acres of land, respectively. KAPL field personnel also operate out of shipyards and vendor plants in Maine/New Hampshire, Connecticut, Virginia, Hawaii, Georgia, California, Washington State, Tennessee and at the Naval Reactors Facility Site in Idaho.

KAPL was originally operated by the General Electric (GE) Company. GE received its initial research contract to establish KAPL from the Manhattan Engineering District in May of 1946. KAPL's mission was converted to a nuclear propulsion project in 1950. KAPL's initial efforts were spent developing a safe reactor small enough to operate inside a submarine. The SeaWolf, which was launched in 1955, represented the first KAPL designed reactor plant. Subsequently, KAPL designed reactors for the TRITON (SSN586), NARWHAL (SSN671), the research submarine NR-1, and the LOS ANGELES and Virginia Class attack and Trident Class ballistic missile submarines.

KAPL currently maintains, supports and enhances the mission capability of LOS ANGELES class submarines and OHIO class ballistic missile submarines. KAPL also supports Electric Boat and Northrop Grumman Newport News in the test and construction of the Virginia Class submarines and provides design and engineering support for the future CVN 21 class aircraft carriers.

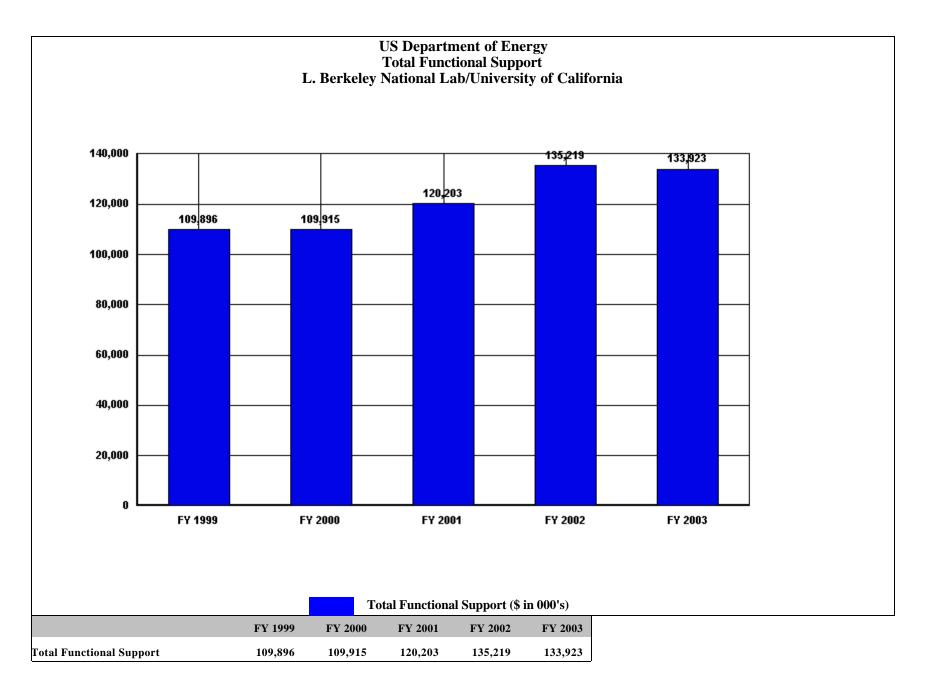
KAPL's efforts focus on designing the world's most technologically advanced nuclear reactor plants for the U.S. Navy submarines. Fundamental research is conducted to develop improved materials, chemistry control systems and components for naval nuclear propulsion technology.

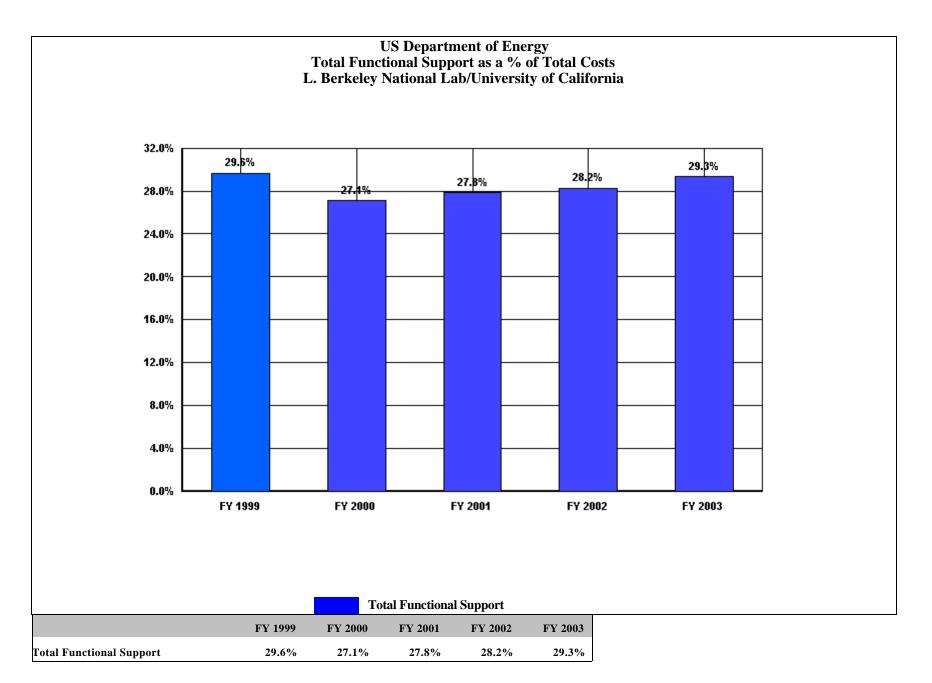
KAPL uses its theoretical knowledge, sophisticated testing capabilities and computational power to design new reactor and propulsion systems and components that will be used on existing and future Navy surface ships and submarines. Some additional areas KAPL focuses on are direct energy conversion, electric drive propulsion and advanced composite materials.

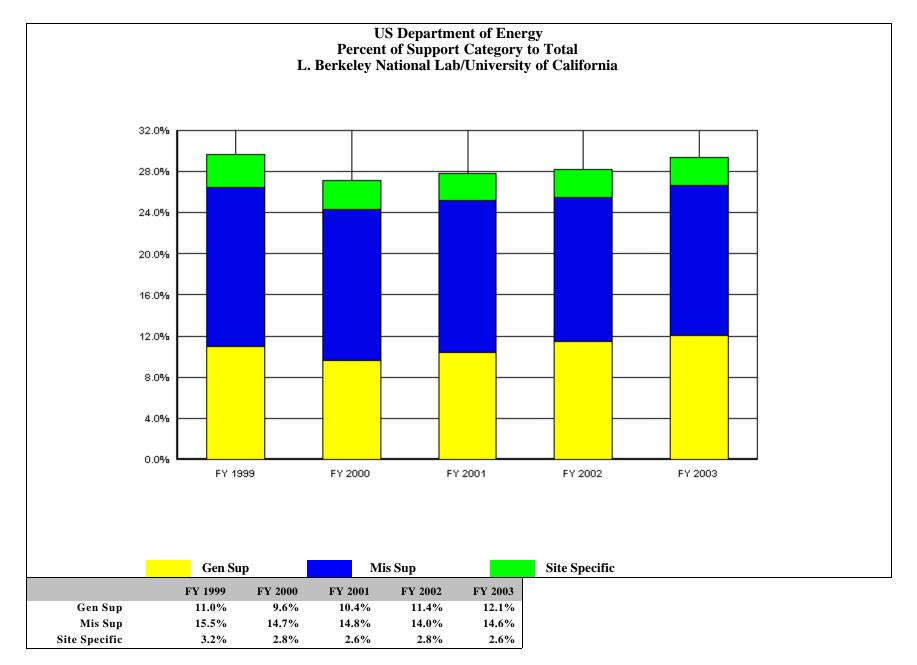
SITE PROFILE KNOLLS LABORATORY – LOCKHEED MARTIN

In addition, KAPL operates two prototype plants located at the Kesselring Site in West Milton, NY. The MARF and S8G prototypes commenced operation in 1976 and 1978, respectively, and are used to test reactors, reactor plant systems, and reactor steam and electric plant components, and for naval nuclear propulsion training. Two other prototypes located at the site, the S3G and D1G prototypes, are currently undergoing inactivation. S3G and D1G, which started operation in 1958 and 1962, respectively, were operated for training and testing until their missions were completed in the 1990's. At that time, the plants were shutdown and inactivation was started as part of Naval Reactors' continuing commitment to ensure proper dismantlement and environmental remediation of formerly used facilities.

Trends in Tota	l Function	al Suppor	t Cost Cat	egories			
L. Berkeley N	FY	2003	ity of Cali	fornia			
	(\$ i n	000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
EXECUTIVE DIRECTION	3,435	3,701	4,199	8,192	8,613	FY2 5,178	150.7%
HUMAN RESOURCES	3,771	4,034	3,610	3,676	4,466	695	18.4%
CFO	3,928	4,309	4,743	4,890	5,151	1,223	31.1%
PROCUREMENT	2,504	4,033	3,506	4,284	2,995	491	19.6%
LEGAL	2,400	1,338	1,646	1,503	1,428	-972	-40.5%
CENTRAL ADMIN SERVICES	3,179	4,456	6,069	5,847	5,494	2,315	72.8%
PROGRAM/PROJECT CONTROL	0	0	0	0	0	0	0.0%
INFORMATION OUTREACH	2,788	3,204	3,004	3,454	3,511	723	25.9%
INFORMATION SERVICES	18,703	17,196	19,270	20,916	21,449	2,746	14.7%
OTHER	52	-3,196	-1,175	2,041	2,023		3,790.4%
TOTAL GENERAL SUPPORT	40,760	39,075	44,872	54,803	55,130	14,370	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
ENVIRONMENTAL	1,943	2,829	5,127	2,159	2,159	FY2 216	11.1%
SAFETY AND HEALTH	7,900	8,175	7,068	9,254	9,851	1,951	24.7%
FACILITIES MANAGEMENT	11,217	12,068	14,556	16,125	16,767	5,550	49.5%
MAINTENANCE	18,640	16,905	15,527	16,322	16,761	-1,879	-10.1%
UTILITIES	4,584	4,313	5,918	7,947	6,724	2,140	46.7%
SAFEGUARDS AND SECURITY	1,437	1,590	2,590	3,259	3,165	1,728	120.3%
LOGISTICS SUPPORT	3,623	3,695	4,228	4,006	4,288	665	18.4%
QUALITY ASSURANCE	36	41	25	56	81	45	125.0%
LABORATORY/TECHNICAL SUPPORT	8,017	9,947	9,008	8,097	6,926	-1,091	-13.6%
TOTAL MISSION SUPPORT	57,397	59,563	64,047	67,225	66,722	9,325	16.2%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
	2.064	2.070	2.050	2 107	2.071	FY2(
MANAGEMENT/INCENTIVE FEE	2,964 289	3,070 234	2,950	3,107 271	3,071 342	107 53	3.6% 18.3%
TAXES LDRD / PDRD / SDRD	8,486	234 7,973	349 7,985	9,813	542 8,658	55 172	2.0%
TOTAL SITE SPECIFIC	11,739	11,277	11,284	9,813 13,191	12,071	332	2.0%
TOTAL FUNCTIONAL SUPPORT	109,896	109,915	120,203	135,219	133.923	24.027	21.9%
		,	,	,		,-	
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	222,825	243,286	265,254	278,204	270,081	47,256	21.2%
Capital Construction	38,000	52,261	46,568	65,282	52,427	14,427	38.0%
TOTAL MISSION DIRECT	260,825	295,547	311,822	343,486	322,508	61,683	23.6%
Total Costs	370,721	405,462	432,025	478,705	456,431	85,710	23.1%
Total Costs w/o Construction	332,721	353,201	385,457	413,423	404,004	71,283	21.4%
			,	,	,		
General Support % Total Costs	11.0%	9.6%	10.4%	11.4%	12.1%		
Mission Support % Total Costs	15.5%	14.7%	14.8%	14.0%	14.6%		
Site Specific % Total Costs	3.2%	2.8%	2.6%	2.8%	2.6%		
Total Support % Total Costs	29.6%	27.1%	27.8%	28.2%	29.3%		
Total Support % Total Costs w/o Construction	33.0%	31.1%	31.2%	32.7%	33.1%		
Total Support 70 Total Costs W/O Construction	55.070	21.175	21.270	52.170	22.170		







I. Background:

Lawrence Berkeley National Laboratory (LBNL) is a multi-program lab engaged in basic research in a wide variety of scientific disciplines. Major scientific achievements include nine winners of the Nobel Prize and other world-class, competitive prizes. The Lab's core competencies are in Computational Science and Engineering; Particle and Photon Beams; Bio Science and Bio Technology; the Characterization, Synthesis, and Theory of Materials; Advanced Technologies for Energy Supply and Energy Efficiency; Chemical Dynamics, Catalysis, and Surface Science; Advanced Detector Systems; and Environmental Assessment and Remediation. The Berkeley Lab provides several unique national experimental user facilities for qualified investigators: the Advanced Light Source (ALS); the National Energy Research Scientific Computing Center (NERSC); Energy Sciences Network (ESnet); 88-Inch Cyclotron and the National Center for Electron Microscopy.

LBNL is managed by the University of California and is located in Berkeley, California. LBNL occupies 206 buildings and trailers on 200 acres. Additional facilities are located in Berkeley due to space limitation on site, in Oakland for the NERSC facility, and in Walnut Creek for the Joint Genome Institute. In FY 2003, the workforce was approximately 3,800 people, consisting of 63% Career employees, 13% Graduate Student Research Assistants & Student Assistants, 6% Faculty, 8% Postdoctoral Fellows & Researchers, and 10% Other. LBNL's major DOE customer is Office of Science (SC), which provided 62% of total direct funding, followed by work for other Agencies (Federal and Non-Federal). Other DOE programs served are Energy Efficiency (EE), Office of Management Budget and Evaluation (ME), Assistant Secretary for Environmental Management (EM), Fossil Energy (FE), and Administrator for National Nuclear Security Administration (NA). LBNL conducts its unclassified research mission as a Tier III laboratory (no classified research or information on-site). Berkeley Lab's cybersecurity program addresses the needs of all computer and networking systems and is fully appropriate to systems that contain no classified information. The Laboratory's cybersecurity software is a powerful system for detecting network intruders and has served as a model for other laboratories.

II. Trend: (In \$000's)

	FY99	FY00	FY01	FY02	FY03
General Support	\$40,760	\$39,075	\$44,872	\$54,803	\$55,130
Mission Support	57,397	59,563	64,047	67,225	66,722
Site Specific	11,739	11,277	11,284	13,191	12,071
Total Support Costs	109,896	109,915	120,203	135,219	133,923
Total Mission Direct	222,825	243,286	265,254	278,204	270,081
Capital/Constr	38,000	52,261	46,568	65,282	52,427
Total Site Costs	\$370,721	\$405,462	\$432,025	\$478,705	\$456,431
Total FSC as % of Total Site Costs	29.6%	27.1%	27.8%	28.2%	29.3%
Ratio of Mission Direct to FSC	2.03	2.21	2.21	2.06	2.02

LBNL's trend in Functional Support Costs (FSC) as a percent of Total Site Costs has been fluctuating between 27.1% and 29.6% within the average of 28.4% between FY 1999 and FY 2003. From FY99 to FY00 the percent decreased from 29.6% to 27.1%, and increased slightly to 27.8% in FY01, 28.2% in FY02 and 29.3% in FY03.

Major changes from FY99 to FY03:

In FY02, the new Gelco Travel system was developed to improve travel processing and effectiveness. In the same year, Procurement/Receiving/Payables (PRP) system was also developed to decreased transaction costs in Procurement and Accounts Payable. The data for FY99 through FY03 are in accordance with the directives for the Functional Support Cost Report, which for cost classification/definition purposes essentially remained unchanged since FY99.

III. Analysis of Change in Support Costs from Prior Year (FY 2002 to FY 2003)

A. GENERAL SUPPORT:

<u>Category 1</u> - Executive Direction. Major costs include the Lab Director's office, Division Directors' salaries, and strategic planning support. An increase of \$421K primarily due to general increase in Director's salary and strategic planning effort. Other costs associated with Director's office expenses decreased.

<u>Category 2</u> - Human Resources. Major costs include HR operations, recruitment, and administration of compensation/benefit programs. Increased by \$790K due to the development of new training program and addition of HR related costs that used to be division expense.

<u>Category 3</u> – Chief Financial Officer: Major costs include the CFO, Internal Audit, Payroll, Financial Services, General Accounting, Accounts Payable, and Cost Accounting. Overall cost increased by \$261K due to CFO organization change and general increase in Financial System software maintenance, and further enhancement of Account Payable System. Costs for other financial service activities decreased.

<u>Category 4</u> – Procurement: Major costs include commercial and R&D subcontracts administration, development of the new Distributed Procurement Unit at the end of FY03 to track and facilitate Procurement Card purchase. The overall cost decreased by \$1.3M with the completion of the Purchasing, Receivable and Payable (PRP) system in FY03. Initial development costs were included in FY02.

<u>Category 5</u> – Legal: Major costs include the counsel/patents office and external patent attorney fees. Cost decreased by \$75K due to a decrease in patents and legal fees.

<u>Category 6</u> – Central Administrative Services: Major costs include library services, the administrative services department, general travel administration expenses, and travel agency fees. Decreased \$353K due to non-recurrence of travel system implementation costs; the decrease in publishing purchase costs and the decrease in library services costs.

<u>Category 8</u> – Information/Outreach Activities: Major costs include the Industrial Collaboration Office (i.e., Technology Transfer Department) and the Office of Planning & Communication (Public Affairs). Cost increased by \$57K due to increase in routine activity costs.

<u>Category 9</u> – Information Services: Major costs include Information System Services (UNIX, LAN, WEB, databases, etc.), computer infrastructure support, and network support. Cost for prior year projects decreased since completion. However, additional costs were incurred for new efforts in developing new projects (i.e. BLIS, Business Re-engineering), new enhancement costs for MAXIMO projects plus costs for the lease of radio equipment purchase resulted in a net increase of \$533K.

<u>Category 10</u> – Other: Major costs include legal settlements and UC shared indirect costs. Net decrease of \$18K due to decrease in legal settlements and Post Doctor supports.

B. MISSION SUPPORT:

<u>Category 11</u> – Environmental: Major costs include Environmental Services group, NEPA/CEQA, Environmental Health & Safety division office and Waste Management activities. No significant change in FY03.

<u>Category 12</u> – Safety and Health: Major costs include the Radiation Protection Group, Property Protection & Life Safety, operations, Health Services Group, Industrial Hygiene & Safety Engineer, the fire department, and emergency management. Increased \$597K primarily due to cost increases in Radiation Protection programs.

<u>Category 13</u> – Facilities Management: Major costs include offsite leases, facilities planning projects, and institutional projects. Cost increased by \$642K due to increase in institutional projects and recharge costs.

<u>Category 14</u> – Maintenance: Major costs include general maintenance expenses, gas/electricity/water projects, and facilities non-capitalized projects. Increased \$439K due to general maintenance expense increases and new costs in share of maintenance project.

<u>Category 15</u> – Utilities: Major costs include electricity, natural gas, and water. Decreased by \$1.2M due to general decrease in utility.

<u>Category 16</u> – Safeguards and Security: Major costs include general security and computer/cyber security. Decreased by \$94K due to general decrease in cyber & computer security expenses.

<u>Category 17</u> – Logistics Support: Major costs include material handling transportation, shipping/receiving/warehouse, stores/inventory management, and offsite/onsite shuttle bus services. Increase of \$282K resulted from new costs in material handling equipment and increase in shuttle bus services onsite and offsite.

<u>Category 18</u> – Quality Assurance: Major costs include QA auditing, inspection services and regulatory activities. Increase in quality assurance efforts has resulted in cost increases of \$25K.

<u>Category 19</u> – Lab/Technical Support: Major costs include engineering infrastructure projects. Cost decreased \$1.2M as less engineering infrastructure projects were undertaken.

C. SITE SPECIFIC:

<u>Category 20</u> – Management Award and Fees: Cost is University of California management fee. Cost decreased by \$36K due to decrease in UC management fees.

<u>Category 21</u> – Taxes: Costs are sales taxes. Cost increased by \$71K due to tax rate increase by 0.25% and \$10K relating to adjustment of FY02 sale tax.

<u>Category 22</u> – LDRD: Costs are LDRD operating and equipment projects. Decreased \$1.2M due to decrease in LDRD funding allocation.

D. MISSION DIRECT:

Overall cost decreased by 2.9% or \$8.1M. Major decreases include \$10.M in the SC and \$3.3M in Other. The decreases were offset by \$2.2M increase in Work for Others, \$1.1M in NA, \$1M in EM, and \$.7M in EE.

E. CAPITAL/CONSTRUCTION:

Decreased by 19.7% or \$12.9M primarily due to decrease in Genomics equipment purchases.

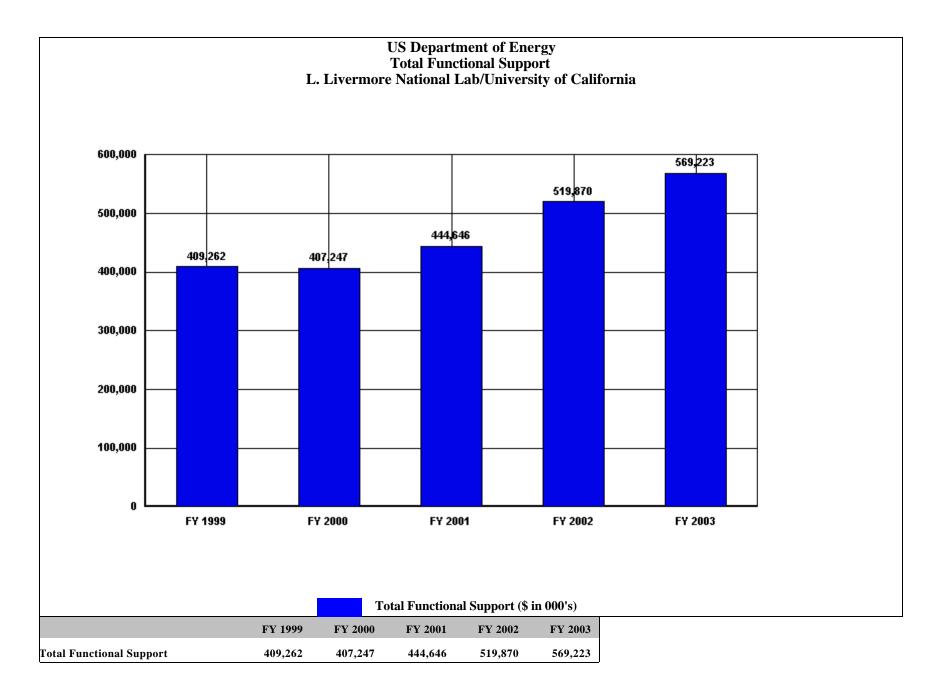
IV. Other: (Amount in 000's)

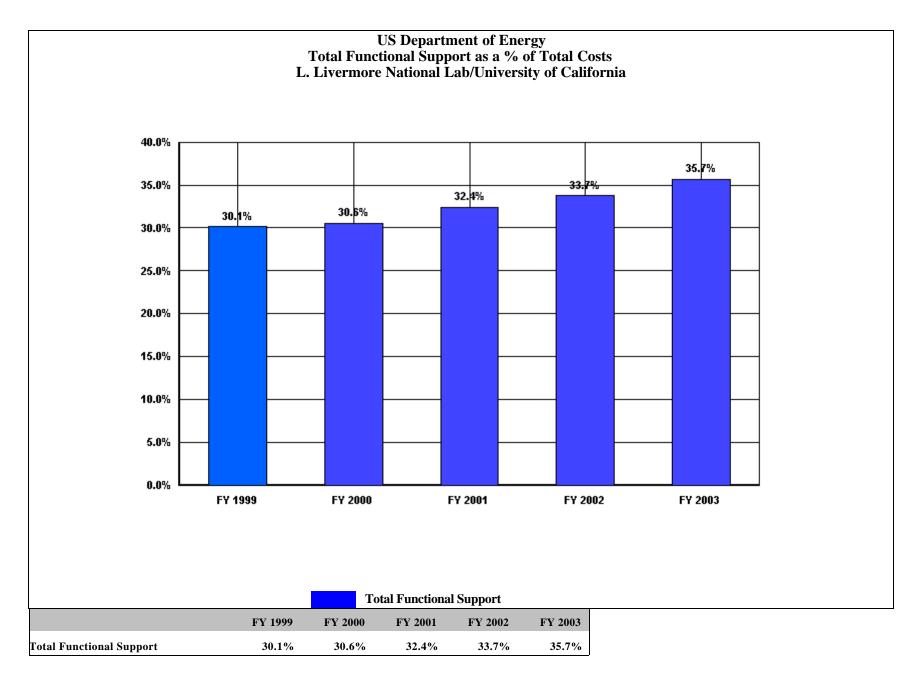
Item	Description	<u>FY 2002</u>	<u>FY 2003</u>
General Ledger	One time accounts reconciliation	38	0
Misc. Items	Banking & UBOC analysis fees	0	51
Misc. Adjustments	WFO Factor, etc.	8	(14)
General Expenses	Miscellaneous	(6)	384
Legal	Legal settlements	1,608	880
Post Doc Support	Career development training	393	0
Reconciliation Items	Reconciliation Items	0	722
	Total	\$ 2,041	\$ 2,023

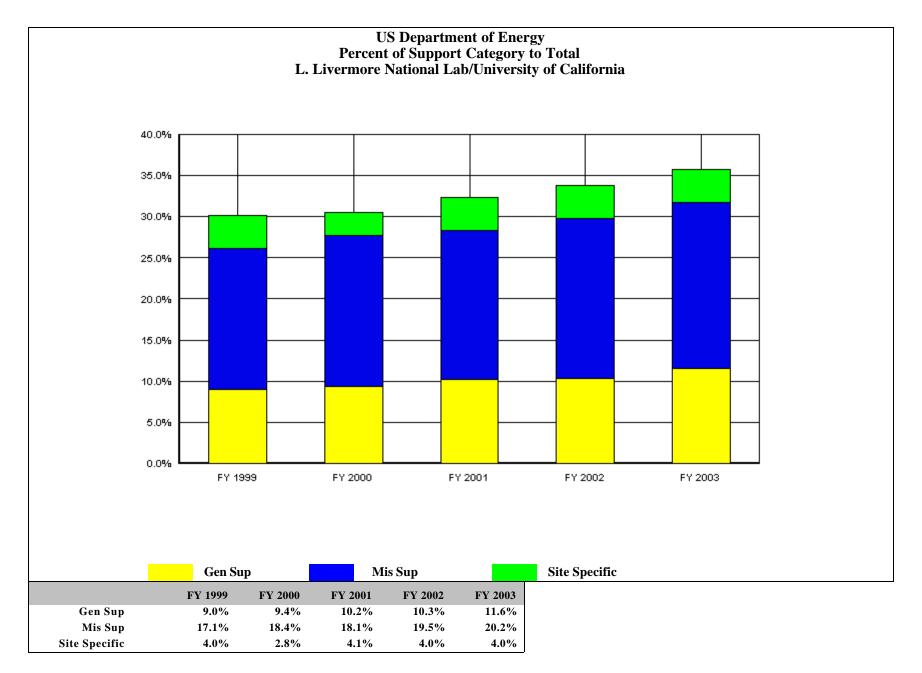
V. Cost Savings Initiatives:

Cost savings in labor costs realized through consolidations and reductions in staff: \$486K. Cost savings in procurement of services and supplies by stringent review of level and scope of support to be provided: \$155K. Utilization of in-house training resources vs. use of external training services: \$28K.

Trends in Tota	l Function	al Suppor	t Cost Cat	egories			
L. Livermore		ab/Univer 2003	sity of Ca	lifornia			
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	14,559	14,198	15,557	19,977	20,022	5,463	37.5%
HUMAN RESOURCES	16,310	16,493	17,093	18,904	19,501	3,191	19.6%
CFO	9,197	9,388	7,030	7,231	6,920	-2,277	-24.8%
PROCUREMENT	13,626	13,137	13,015	13,994	15,451	1,825	13.4%
LEGAL	2,882	3,456	3,280	3,060	3,194	312	10.8%
CENTRAL ADMIN SERVICES	16,418	17,586	18,834	21,590	22,665	6,247	38.0%
PROGRAM/PROJECT CONTROL	2,550	2,287	2,064	2,325	3,118	568	22.3%
INFORMATION OUTREACH	12,958	13,681	14,433	18,400	19,697	6,739	52.0%
INFORMATION SERVICES	33,497	28,382	38,090	47,311	60,830	27,333	81.6%
OTHER	276	6,417	10,364	5,523	13,240		4,697.1%
TOTAL GENERAL SUPPORT	122,273 FY 1999	125,025	139,760 FY 2001	158,315 FY 2002	184,638 FY 2003	62,365 Charac	51.0%
MISSION SUPPORT	F 1 1999	FY 2000	FY 2001	FY 2002	FY 2005	Change 1 FY2(
ENVIRONMENTAL	16,765	15,631	17,598	22,048	25,109	8,344	49.8%
SAFETY AND HEALTH	28,630	31,721	31,284	36,327	39,208	10,578	36.9%
FACILITIES MANAGEMENT	33,076	34,801	39,382	42,156	48,481	15,405	46.6%
MAINTENANCE	76,279	75,793	71,642	91,063	102,215	25,936	34.0%
UTILITIES	14,386	12,050	15,173	22,383	16,351	1,965	13.7%
SAFEGUARDS AND SECURITY	32,782	45,912	44,648	56,063	62,543	29,761	90.8%
LOGISTICS SUPPORT	10,009	9,895	10,831	10,510	8,875	-1,134	-11.3%
QUALITY ASSURANCE	5,415	6,097	5,866	5,363	5,446	31	0.6%
LABORATORY/TECHNICAL SUPPORT	15,613	13,078	12,585	13,870	13,366	-2,247	-14.4%
TOTAL MISSION SUPPORT	232,955	244,978	249,009	299,783	321,594	88,639	38.0%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	11,631	11,578	13,929	14,632	14,925	3,294	28.3%
TAXES	338	743	212	310	199	-139	-41.1%
LDRD / PDRD / SDRD	42,065	24.923	41,736	46,830	47,867	5,802	13.8%
TOTAL SITE SPECIFIC	54,034	37,244	55,877	61,772	62,991	8,957	16.6%
TOTAL FUNCTIONAL SUPPORT	409,262	407,247	444,646	519,870	569,223	159,961	39.1%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	999 to
					112000	FY2	
Mission Direct Operation	724,709	707,424	714,873	778,090	802,522	77,813	10.7%
Capital Construction	225,064	217,878	213,526	242,488	222,413	-2,651	-1.2%
TOTAL MISSION DIRECT	949,773	925,302	928,399	1,020,578	1,024,935	75,162	7.9%
Total Costs	1,359,035	1,332,549	1,373,045	1,540,448	1,594,158	235,123	17.3%
Total Costs w/o Construction	1,133,971	1,114,671	1,159,519	1,297,960	1,371,745	237,774	21.0%
General Support % Total Costs	9.0%	9.4%	10.2%	10.3%	11.6%		
Mission Support % Total Costs	17.1%	18.4%	18.1%	19.5%	20.2%		
Site Specific % Total Costs	4.0%	2.8%	4.1%	4.0%	4.0%		
Total Support % Total Costs Total Support % Total Costs w/o Construction	30.1%	30.6%	32.4%	33.7%	35.7%		
	36.1%	36.5%	38.3%	40.1%	41.5%		







Background

Established in 1952, Lawrence Livermore National Laboratory (LLNL) is a governmentowned, contractor-operated Research and Development facility managed and operated by the University of California for the National Nuclear Security Administration (NNSA) within the United States Department of Energy (DOE). LLNL is responsible for ensuring that the nation's nuclear weapons remain safe, secure, and reliable. In addition, the Laboratory also has a primary role in NNSA's mission in the prevention of the spread and use of nuclear weapons, as well as other weapons of mass destruction. Technologies and assessment tools developed at Livermore are contributing to homeland security and the war against terrorism. With its special capabilities, the Laboratory is also able to meet enduring national needs in conventional defense, energy, environment, biosciences, and basic science. LLNL has a diverse customer base with major efforts for DOE and NNSA program offices (Defense Programs, Defense Nuclear Nonproliferation, Science, and Environmental Restoration and Waste Management), as well as considerable work for other Federal and non-Federal agencies.

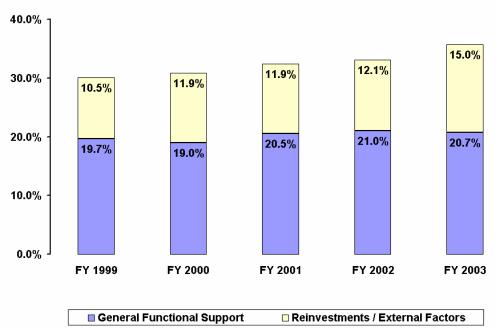
LLNL is a world class leader in technical research and development. The Laboratory is currently home to the Option White 12-teraflops supercomputer, the most powerful computer in the world at the time of installation, and will soon be home to the 100-teraflop Option Purple computer. The National Ignition Facility (NIF), now under construction, achieved "first light" in FY 2003. With 4 of its 92 laser beams already in operation, NIF is the world's most energetic laser and a cornerstone of the Stockpile Stewardship Program. LLNL's contributions to nonproliferation and homeland security include the development of sensors to detect proliferation activities as well as fast, portable sensors for biological agent detection. Recent LLNL breakthroughs in science and technology include the development of a laser-guide star system for the Keck Observatory and its use for discoveries in planetary science, the demonstration of high-data-rate laser communications, the development of thin-film fuel cells, and the development of an important new tool to detect genetic variation and cancers. Laboratory researchers have earned 97 "R&D 100 Awards" since 1978 (including six in 2003), which is indicative of LLNL's many other technical accomplishments. In addition, LLNL scientist Seymour Sack received the Enrico Fermi Award in 2003.

LLNL has about 8,800 University of California employees, which includes all workforce categories except contractors. LLNL's highly educated workforce includes about 1,700 doctorates, 1,200 masters, and 1,900 bachelor degrees. The primary LLNL site is located on one square mile, 40 miles southeast of San Francisco.

Trends

LLNL's support costs as a percentage of total Laboratory costs have increased from 30.1% in Fiscal Year (FY) 1999 to 35.7% in FY 2003, with the growth being mainly attributable to four categories: Information Services, Other, Maintenance, and Safeguards

& Security. The chart shown below provides detail of this trend by isolating these four categories where costs have increased rapidly as Reinvestments/External Factors. The remaining categories have only increased slightly since FY 1999 and decreased since FY 2002.



Support Costs As a Percentage of Total Costs

Although the four categories have driven support costs higher, the increases have generally been the result of either internal reinvestments or externally driven factors as detailed below:

Internal investments have been made in various information and support systems to increase both efficiencies and productivity at LLNL. The Laboratory has also established a Chief Information Officer (CIO) Office to unify the oversight and strategic management of all institutional Information Technology (IT) activities. In addition, LLNL has initiated a Maintenance Reinvestment program which was designed to assess maintenance deficiencies and serve as a tool to reduce the ongoing deferred maintenance backlog throughout LLNL. The Laboratory's investments in facility maintenance represent a sound strategy of reinvesting for the future and are considered "Best of Class" by DOE. In fact, some of the efficiencies resulting from this strategy have resulted in cost savings and are detailed at the end of this report.

• Increases due to externally driven factors include a steady rise in Safeguards & Security activities since September 11, 2001, as well as increases in the Other category for pending legal costs. Maintenance costs are also rising due to funding for Facilities and Infrastructure Revitalization Projects (FIRP).

Support costs also increased between FY 2002 and FY 2003 from 33.7% to 35.7% of total Laboratory costs. The three primary support categories in which increases were realized are Information Services, Maintenance, and Other. The Information Services category increased mainly due to the buy down of an Institutional Computing Lease-to-Own (LTO) while a majority of the increase in the Maintenance category was driven by an increase in Facilities and Infrastructure Revitalization Projects (FIRP). An increased accrual for pending legal costs drove the increase in the Other category.

	FY99	FY00	FY01	FY02	FY03
General Support	122,273	125,025	139,760	158,315	184,638
Mission Support	232,955	244,978	249,009	299,783	321,594
Site Specific Support	54,034	37,244	55,877	61,772	62,991
Total Support Costs	409,262	407,247	444,646	519,870	569,223
Mission Direct Operating	724,709	707,424	714,873	778,090	802,522
Mission Direct Capital	225,064	217,878	213,526	242,488	222,413
Total Mission Specific	949,773	925,302	928,399	1,020,578	1,024,935
Total Site Costs	1,359,035	1,332,549	1,373,045	1,540,448	1,594,158
Total Support Costs as % of	30.1%	30.6%	32.4%	33.7%	35.7%
Total Site Costs					

LLNL Support Cost by Functional Activity Summary FY 1999 - FY 2003 (\$ in thousands not adjusted for inflation)

Note: There may be minor variances due to rounding.

The following paragraphs highlight the DOE functional support categories where a significant change occurred in raw costs from FY 2002 to FY 2003. Each paragraph annotates the total raw costs for the functional area, the net change from the prior year, and a brief explanation of the change. A concise description of the costs included in each category has also been included.

Please note that the Mission Direct Costs reflect "raw costs" (i.e., costs without distributed charges) and will not tie back to the funding assigned by the Assistant Secretary.

General Support

Procurement (\$15,451K) increased by \$1,457K, due to a rise in procurement personnel directly supporting programmatic activities and also additional costs related to the new

Electronic Ordering System (EOS) purchased for the Materials Processing Charge service center. This category also includes expenditures for other procurement-related costs and contract-management activities.

Central Administrative Services (\$22,665K) increased by \$1,075K, largely due to higher demand for publication services. Additionally, the Innovative Business and Information Services (IBIS) Department incurred increased book and journal costs for the institutional library. Costs associated with travel-related support, printing and publication services, and the cafeterias are also included in this category.

Program/Project Planning & Control (\$3,118K) rose by \$793K, primarily due to a structural adjustment in FY 2003 in which the Work-for-Others team migrated from the Accounting Department into the Budget Office (note: these costs were previously categorized in the Chief Financial Officer functional category). This category consists of costs associated with the Budget Office, which primarily includes institutional budget and financial-management activities.

Information/Outreach Activities (\$19,697K) increased by \$1,297K, mainly due to an increase in the number of Post Docs in the Defense & Nuclear Technology (DNT) Directorate and the Deputy Director of Science & Technology (DDS&T) Organization. A rise in institutional tours also contributed to the increase in this category. Costs in this category also consist of Industrial Partnerships, University of California (UC) relations, and various fellowships.

Information Services (\$60,830K) increased by \$13,519K, largely due to early payment on an Institutional Computing LTO which will result in a cost savings due to reduced interest in future fiscal years. Costs also grew due to the continued implementation of a new institutional configuration management system which provides the Laboratory with the ability to share and access component engineering data, standards, policies, and procedures electronically in response to various DOE requirements (10CRF830.120, 10CRF830.122, and UC Contract 48, Appendix O). Additionally, LLNL formally established the CIO Office in FY 2003 to unify oversight of all institutional IT activities. Other costs captured in this category include those related to telecommunication services, computer network and applications support, as well as various software site licenses.

Other (\$13,240K) increased by \$7,717K. This rise was driven by a major accrual made at the end of FY 2003 to cover pending legal costs. A description of the costs in this category is included in the breakdown of the *Other* category provided below.

Mission Support

Environmental (\$25,109K) rose by \$3,061K, due to work to improve the LLNL ChemTrack system as well as increased effort related to inventory reduction and the removal of

SITE PROFILE

LAWRENCE LIVERMORE NATIONAL LAB – UNIVERSITY OF CALIFORNIA

contaminated glove boxes and exhaust systems from Building 251. The work in Building 251 is being completed to reduce the building's status from a Category 2 Nonreactor Nuclear Facility to a Radiological Facility. In this category, costs primarily stem from Environmental Protection and Pollution Prevention, and Medical Waste Processing.

Safety and Health (\$39,208K) increased by \$2,881K, due to emergency preparedness activities resulting from additional compliance requirements as well as meeting additional requirements stemming from the Safety and Emergency Management Inspection. Activities in this category also consist of Hazards Control, Health Services, and the Document Manager.

Facilities Management (\$48,481K) grew by \$6,325K, primarily due to an increase in facility revitalization projects, newly constructed facilities, and computer support costs within various Organizational Facility Charge (OFC) support burdens. Costs associated with the Institutional Facility Manager (IFM) and a variety of facilities remodeling projects are also included in this category.

Maintenance (\$102,215K) increased by \$11,152K, due mainly to the increase in maintenance-related Facilities and Infrastructure Revitalization Projects (FIRP) in FY 2003. The increase was also attributable to a rise in preventative maintenance and reinvestment projects to further reduce the maintenance backlog per the Ten Year Comprehensive Site Plan (TYCSP). This category consists primarily of Plant Engineering jobs and the LFC recharge, but also includes other maintenance-related support projects.

Utilities (\$16,351K) decreased by \$6,032K. Electricity costs dropped substantially in FY 2003, primarily due to one-time reimbursements received as a result of Independent System Operator (ISO) overcharges during the 2002 California energy crisis. Expenses in this category include electricity costs and mechanical utilities costs for water, gas, and sewage (Note: the costs reported for Utilities also currently include electricity costs transferred to the Sandia Livermore site).

Safeguards and Security (\$62,543K) increased \$6,480K, primarily because of increased security labor required due to the heightened security levels (SECON 2) during part of FY 2003. This category mainly consists of Safeguards and Security Program activities and cyber security relating to Sensitive Compartmented Information.

Logistics Support (\$8,875K) decreased \$1,635K, due to a DOE mandate reducing the number of vehicles contracted with Government Services Agency (GSA). Additional costs associated with transportation and material distribution are also included in this category.

Site Specific

Taxes (\$199K) decreased \$111K, as a result of reduced sales tax. FY 2002 included additional taxes paid for an operating lease that were not incurred in FY 2003.

SITE PROFILE

LAWRENCE LIVERMORE NATIONAL LAB – UNIVERSITY OF CALIFORNIA

Laboratory Directed Research and Development (LDRD) (\$47,867K) rose \$1,037K, as a result of the LDRD distribution base increasing in FY 2003.

Other

As requested, a breakdown of the support cost category "Other" is shown below:

10. Other (\$ in thousands)	FY99	FY00	FY01	FY02	FY03
Misc Bus Exp/Credits – Accounting Adjustments	16	-5	-11	-3	387
Misc Bus Exp/Credits – DCSP Procurement Variance	-66	0	0	0	0
Misc Bus Exp/Credits – Self Insurance/Reserve ¹	894	5,987	7,320	5,431	13,074
Misc Bus Exp/Credits – Bad Debt Allowance	-420	0	-200	-3	32
Misc Bus Exp/Credits (w/o special items)	-148	-180	-208	-177	-253
Lasers Employees Between Assignments (EBAs)	0	615	0	0	0
PAT Employees Between Assignments (EBAs) ²	0	0	1,416	275	0
September 11, 2001 Institution Impacts	0	0	2,046	0	0
Total	276	6,417	10,363	5,523	13,240
Note: There may be minor variances due to rounding					

¹ Self Insurance/Reserve Costs cover the estimated payments for litigation costs/settlements and general claims other than for workers' compensation and unemployment.

² Physics & Advanced Technologies (PAT) Employees Between Assignments (EBAs) are a result of the reorganization of Physics Directorate and Lasers Directorate into the National Ignition Facility (NIF) Directorate and the PAT Directorate. Although a majority of the costs were incurred in FY 2001, a portion remained in FY 2002.

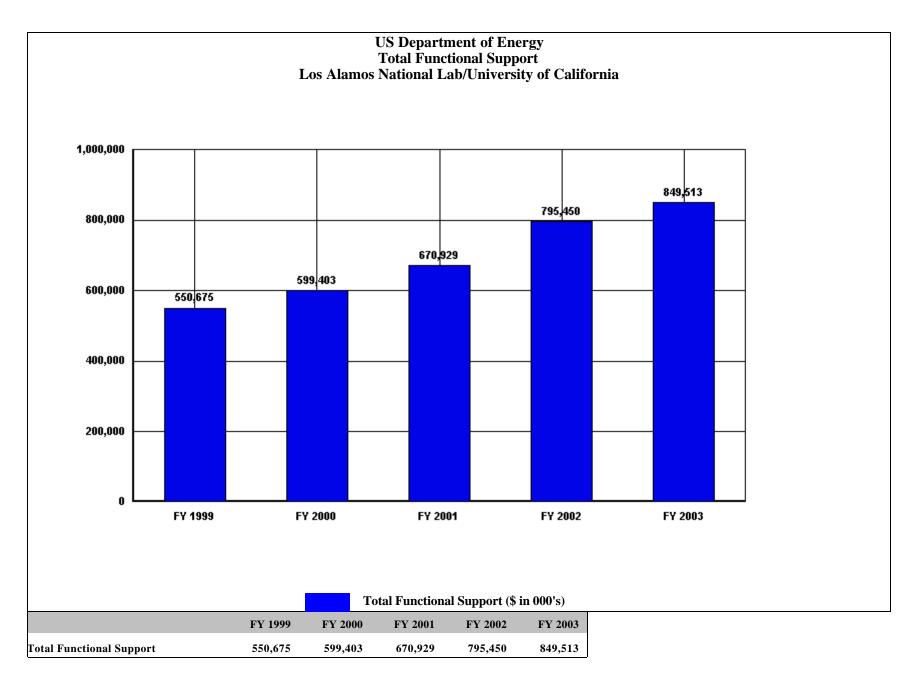
Cost Saving Initiatives

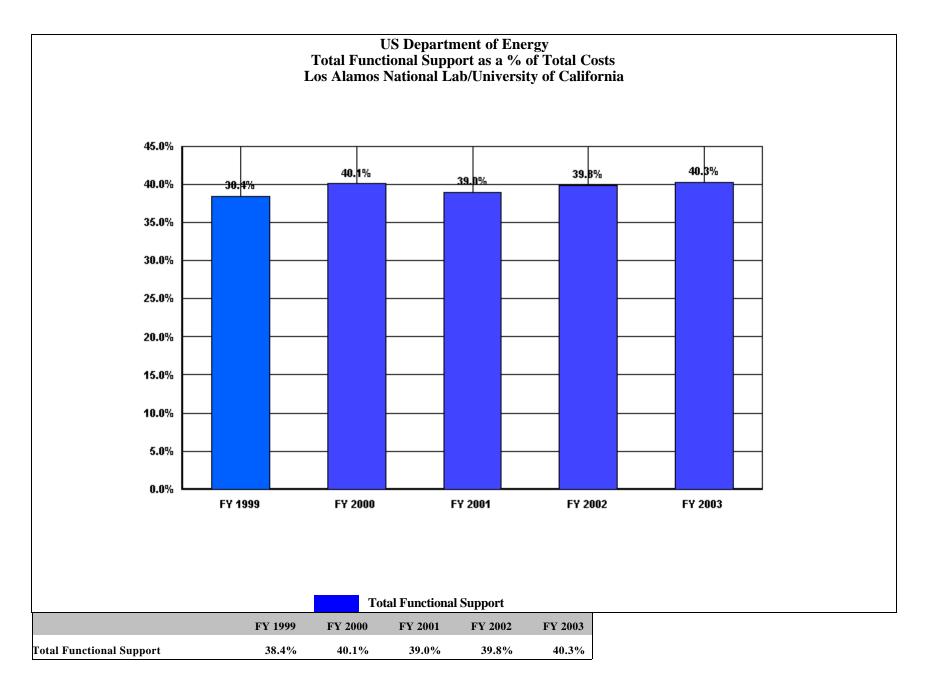
LLNL continues to pursue institutional cost savings and efficiencies. Examples of cost savings include the following:

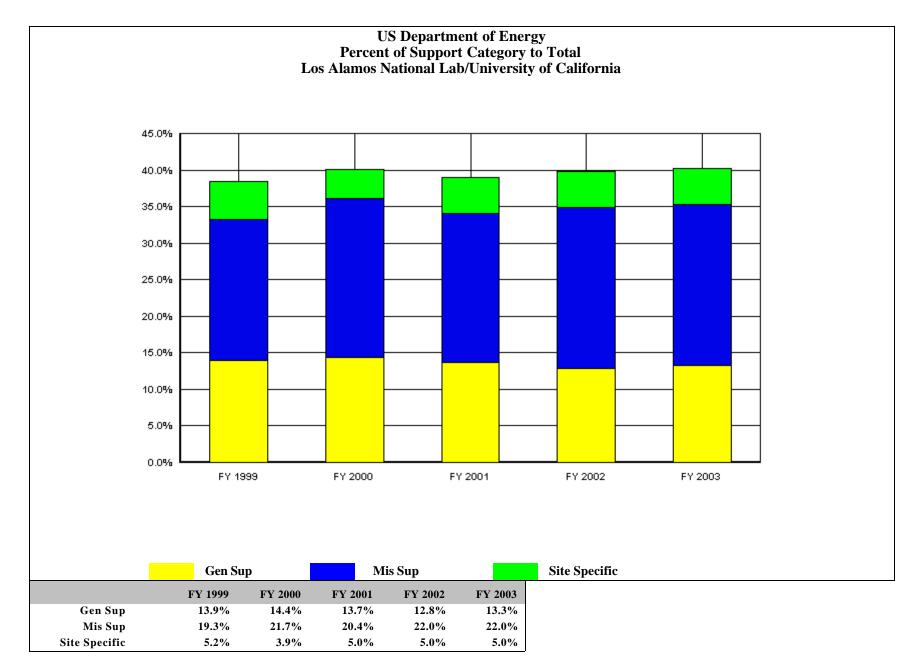
- An estimated net cost savings of \$21.7 million in FY 2003 comes from site-wide licensing of software and volume purchase agreements. For example, a site license for Microsoft Enterprise was negotiated in FY 2001 which covers licenses for the Windows operating system, Office software, and Client Access, and contributes to this savings. It is anticipated that the estimated net cost savings in FY 2003 will be fairly similar in future years. (Note: The savings reported for FY 2003 are estimates based on FY 2002 cost savings figures, since the actual savings for FY 2003 were not available yet.)
- Each year, Plant Engineering schedules a "maintenance window" for approximately 75 key facilities at LLNL. By carrying out preventive maintenance and small-scope repair work during this window, disruption to facility occupants (e.g., shutdown of R&D efforts) and Plant Engineering's mobilization costs are minimized. The estimated annual cost avoidance savings are about \$2.4 million.

- By re-engineering the processes used to support construction projects, an annual cost avoidance of about \$7.0 million has been achieved. Project delivery procedures are tailored to the scope of the project rather than using full design/estimating/project management/inspection procedures on every job. Simplified contract procedures also contribute to reduced project delivery costs.
- Service agreements have been established between the system managers of facilities and the shops that help to avoid costs of about \$1.6 million per year. Repairs costing \$800 or more are reviewed by the system manager, who considers the work with respect to other system and program priorities, essential backlog, budget, and future plans. These reviews ensure that any repairs made are consistent with replacement plans and the expected life of the component.
- The Laboratory re-engineered its document review and release process. It is now an online review process with greater accountability and control for the author and the author's directorate. The streamlined process reduces the average review time from three weeks to three days and the cost per document from \$144 to \$72. Based on annual reviews of approximately 4000 documents, an estimated cost savings of roughly \$300K per year is realized.

Trends in Tota	l Function	al Suppor	t Cost Cat	egories			
Los Alamos N		ab/Univers 2003	ity of Cali	fornia			
		1000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	7,250	12,715	14,443	22,708	24,063	16,813	231.9%
HUMAN RESOURCES	16,179	19,971	20,831	21,793	23,248	7,069	43.7%
CFO	7,991	9,058	8,401	9,708	11,268	3,277	41.0%
PROCUREMENT	10,465	11,315	12,501	12,935	17,438	6,973	66.6%
LEGAL	7,618	8,826	10,040	8,776	9,784	2,166	28.4%
CENTRAL ADMIN SERVICES	30,637	27,581	26,572	28,110	27,601 15,043	-3,036	-9.9% -14.8%
PROGRAM/PROJECT CONTROL INFORMATION OUTREACH	17,654 24,421	22,049 21,480	22,810 22,890	18,872 20,607	15,043 20,620	-2,611 -3,801	-14.8% -15.6%
INFORMATION OUTREACH	72,927	76,532	82,755	108,088	124,248	-3,801 51,321	-13.0%
OTHER	4,052	6,181	13,719	4,887	6,381	2,329	57.5%
TOTAL GENERAL SUPPORT	199,194	215,708	234,962	256,484	279,694	80,500	40.4%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
						FY20	03
ENVIRONMENTAL	20,802	23,993	20,638	24,461	17,663	-3,139	-15.1%
SAFETY AND HEALTH	58,298	61,068	62,574	71,974	87,621	29,323	50.3%
FACILITIES MANAGEMENT	7,046	58,821	71,082	103,706	100,559	93,513	,327.2%
MAINTENANCE	70,074	52,665	56,486	62,111	63,717	-6,357	-9.1%
	43,479	50,003	58,613	68,293	60,013	16,534 40,816	38.0% 67.3%
SAFEGUARDS AND SECURITY LOGISTICS SUPPORT	60,634 6,563	60,294 6,478	63,247 6,934	88,642 8,823	101,450 10,872	40,816 4,309	67.3% 65.7%
QUALITY ASSURANCE	8,765	9,652	8,602	8,823 9,530	10,872	4,309 9,176	104.7%
LABORATORY/TECHNICAL SUPPORT	1,076	2,070	2,104	9,530 2,507	3,845	2,769	257.3%
TOTAL MISSION SUPPORT	276,737	325,044	350,280	440,047	463,681	186,944	67.6%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
						FY20	
MANAGEMENT/INCENTIVE FEE	14,600	18,122	19,356	19,455	19,031	4,431	30.3%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD TOTAL SITE SPECIFIC	60,144 74,744	40,529 58,651	66,331 85,687	79,464 98,919	87,107 106,138	26,963 31,394	44.8% 42.0%
TOTAL FUNCTIONAL SUPPORT	550,675	599,403	670,929	795,450	849,513	298,838	54.3%
	, í	,	,	,	,	,	
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
							44.6%
Mission Direct Operation	720,835	757,854	810,845	968,017	1,042,175	321,340	
Mission Direct Operation Capital Construction	720,835 161,904	757,854 138,706	810,845 239,245	968,017 232,949	1,042,175 217,249	321,340 55,345	34.2%
							34.2% 42.7%
Capital Construction	161,904 882,739	138,706 896,560	239,245 1,050,090	232,949 1,200,966	217,249 1,259,424	55,345	
Capital Construction TOTAL MISSION DIRECT	161,904	138,706	239,245	232,949	217,249	55,345 376,685	42.7%
Capital Construction TOTAL MISSION DIRECT Total Costs	161,904 882,739 1,433,414	138,706 896,560 1,495,963	239,245 1,050,090 1,721,019	232,949 1,200,966 1,996,416	217,249 1,259,424 2,108,937	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs	161,904 882,739 1,433,414	138,706 896,560 1,495,963	239,245 1,050,090 1,721,019	232,949 1,200,966 1,996,416	217,249 1,259,424 2,108,937	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs	161,904 882,739 1,433,414	138,706 896,560 1,495,963	239,245 1,050,090 1,721,019	232,949 1,200,966 1,996,416	217,249 1,259,424 2,108,937	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs	161,904 882,739 1,433,414	138,706 896,560 1,495,963	239,245 1,050,090 1,721,019	232,949 1,200,966 1,996,416	217,249 1,259,424 2,108,937	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	161,904 882,739 1,433,414 1,271,510	138,706 896,560 1,495,963 1,357,257	239,245 1,050,090 1,721,019 1,481,774	232,949 1,200,966 1,996,416 1,763,467	217,249 1,259,424 2,108,937 1,891,688	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs	161,904 882,739 1,433,414 1,271,510 13.9%	138,706 896,560 1,495,963 1,357,257 14.4%	239,245 1,050,090 1,721,019 1,481,774 13.7%	232,949 1,200,966 1,996,416 1,763,467 12.8%	217,249 1,259,424 2,108,937 1,891,688 13.3%	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	161,904 882,739 1,433,414 1,271,510 13.9% 19.3%	138,706 896,560 1,495,963 1,357,257 14.4% 21.7%	239,245 1,050,090 1,721,019 1,481,774 13.7% 20.4%	232,949 1,200,966 1,996,416 1,763,467 12.8% 22.0%	217,249 1,259,424 2,108,937 1,891,688 13.3% 22.0%	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	161,904 882,739 1,433,414 1,271,510 13.9% 19.3% 5.2%	138,706 896,560 1,495,963 1,357,257 14.4% 21.7% 3.9%	239,245 1,050,090 1,721,019 1,481,774 13.7% 20.4% 5.0%	232,949 1,200,966 1,996,416 1,763,467 12.8% 22.0% 5.0%	217,249 1,259,424 2,108,937 1,891,688 13.3% 22.0% 5.0%	55,345 376,685 675,523	42.7% 47.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	161,904 882,739 1,433,414 1,271,510 13.9% 19.3%	138,706 896,560 1,495,963 1,357,257 14.4% 21.7%	239,245 1,050,090 1,721,019 1,481,774 13.7% 20.4%	232,949 1,200,966 1,996,416 1,763,467 12.8% 22.0%	217,249 1,259,424 2,108,937 1,891,688 13.3% 22.0%	55,345 376,685 675,523	42.7% 47.1%







SITE PROFILE LOS ALAMOS NATIONAL LAB – UNIVERSITY OF CALIFORNIA

I. SITE CHARACTERISTICS

In 1942, a team of scientists, engineers, and technicians gathered in Los Alamos, New Mexico, to begin the Manhattan Project, the secret mission to develop the world's first nuclear weapon that would help end World War II. What began as a crash effort grew into a world-class laboratory whose unparalleled research and development has addressed national interests and concerns for over 60 years.

Today, Los Alamos National Laboratory (LANL) continues to be recognized as a major scientific research institution. LANL is operated by the University of California (UC) (and has been since its inception in 1943) for the National Nuclear Security Administration (NNSA) of the U.S. Department of Energy.

LANL's central mission has always been nuclear weapons research and development including stewardship of the existing nuclear weapons stockpile, managing nuclear materials, stemming the proliferation of weapons of mass destruction, and cleaning up the legacy of 60 years of nuclear weapons production. In recent years, however, the Laboratory has had to address new aspects of that mission, often in response to unpredictable external events. LANL is poised to lead the nation in it's response to terrorism and homeland defense. Recent LANL contributions to homeland security include biodetectors that will assist in the detection of various biological or chemical threats.

LANL is one of the world's largest multidisciplinary institutions. It works in partnership with industry and education to conduct research in non-nuclear defense programs and a broad array of non-defense programs, including research in energy, biomedical science, computational science, environmental science, and materials science. LANL is home to the ASCI Q supercomputer, one of the world's most powerful computers. The computer is allowing scientists to visualize and predict real phenomena, from the inner workings of nuclear weapons to the course of wildfires, global weather patterns and epidemics. LANL played a leading role in the development of the human genome map and recently launched a genomic sequence database that is expected to become an important tool in Hepatitis C research. In 2003, scientists at LANL captured eight of R&D Magazine's 2003 R&D 100 Awards—more than any other Department of Energy laboratory—bringing the LANL total to 89 awards since 1978.

Location & Physical size of the site: LANL is located in northern New Mexico, approximately 35 miles northwest of Santa Fe, on 38 square miles (approximately 27,800 acres) of mesas and canyons. Twenty of these square miles are considered secure areas with limited access. The site consists of 47 separate technical areas, a large central administrative area and many outlying research sites scattered across the mesas and canyons. Nuclear facilities are located at 13 of the 47 technical areas. LANL maintains a total of 2,224 individual facilities

SITE PROFILE LOS ALAMOS NATIONAL LAB – UNIVERSITY OF CALIFORNIA

Number of employees: LANL is the largest employer in Northern New Mexico employing 9,089 fulltime UC employees, consisting of 3,418 technical staff members, 1,889 technicians, 2,124 administrative staff, 600 management, 359 postdocs, and 697 students.

Number of contractors on site: LANL employs 3,385 contractor personnel in the capacity of a security force (624), a site support workforce (1506), and technical and non-technical contractor employees employed throughout the Laboratory (1,255).

Requirements for housing and cafeterias: The Laboratory supports one main cafeteria and two satellite cafeterias for the 38 square miles of Laboratory facilities. The Laboratory provides economical housing to students on short-term assignments at the Laboratory.

Transportation (buses) requirements: The Laboratory maintains a taxi service for traveling from work-site to work-site and several shuttle buses to carry employees to and from outlying parking areas.

Amount of work subcontracted: Out of the Laboratory's total expenditures of \$2,109M, the Laboratory spent \$1,036M on subcontracted activities. This subcontracted work falls into the following categories.

- Materials\$189M
- Services\$425M
- Equipment \$73M
- Capital/Construction ...\$189M
- Site Support Services . . .\$119M
- Travel/Misc. \$41M

Customer diversity: The following three types of customers sponsor Laboratory activities:

- National Nuclear Security Administration (NNSA) 73%
- Non-DOE Work for Others (WFO) 12%

Levels of non-DOE work: The Non-DOE Work for Others portion of the Laboratory's sponsorship is composed of the following categories:

- Department of Health and Human Services. 9%
- Non-Federal Universities and Institutions 11%
- National Aeronautics and Space Admin 5%

Gross Receipt Tax: LANL pays an estimated \$31 million of gross receipts tax against expenditures on New Mexico services of approximately \$499 million.

II. HIGHLIGHTS OF TRENDS - Historical

As detailed in the table below, the Laboratory's Total Functional Support Costs have increased by \$299,033K over the period FY99 - FY03, and the percentage of Total Functional Support Costs to Total Site Costs for the period FY99 - FY03 has increased from 38.4% to 40.3%.

	FY99	FY00	FY01	FY02	FY03
General Support	199,194	215,708	234,962	256,484	279,694
Mission Support	276,737	325,044	350,280	440,047	463,681
Site Specific	74,744	58,651	85,687	98,919	106,138
Total Functional	550,675	599,403	670,929	795,450	849,513
Support Costs					
Mission Direct	720,835	757,854	810,845	968,017	1,042,175
Capital/Construction	161,904	138,706	239,245	232,949	217,249
Total Site Costs	1,433,414	1,495,963	1,721,019	1,996,416	2,108,937
Total Functional					
Support Costs as % of	38.4%	40.1%	39.0%	39.8%	40.3%
Total Site Costs					

Laboratory Functional Cost Summary: FY99 - FY03 Costs in \$K

Listed below are the major cost drivers to the overall increase in Total Functional Support Costs of \$299,033M between FY99 and FY03.

- **Executive Direction:** Increase of \$17M due to
 - The addition of several senior level Deputy and Associate Laboratory Directors and
 - The establishment of an institutional reinvestment account to cover issues related to LANL operations and scientific capability.
- Human Resources: Increase of \$7M attributable to
 - Increased spending for educational programs and basic Human Resource service delivery.
- **Procurement:** Increase of \$7M due to
 - Increased staffing level to address the growth in procurement activity in recent years and to address compliance initiatives.
- **Information Services:** Increase of \$51M due to
 - An increased demand for computing services,
 - An increase in costs for software and computing licenses, and

- The investment by LANL in a new Enterprise software project to replace many of the current administrative computing systems.
- **Facilities Management:** Increase of \$94M due primarily to
 - A more appropriate capturing of costs and the re-categorization of those costs from Mission Direct to Mission Support.
- Safety and Health: Increase of \$29M due to
 - Increased costs driven by programmatic and facility requirements.
 - Utilities: Increase of \$17M due primarily to

- Higher utility commodity costs and
- The improvement of LANL's utility infrastructure.
- Safeguards and Security: Increase of \$41M due to
 - Increased funding and requirements for Safeguards and Security activities.
- Quality Assurance: Increase of \$9M due to
 - Increased activities in response to nuclear safety requirements addressed by the Price Anderson Amendment Act and
 - The re-categorization of costs from Environmental to Quality Assurance.
- Laboratory-Directed Research & Development: Increased by \$27M due to
 The growth of LANL programs (the size of the LDRD program is sized as a percentage of LANL operating and capital programs.)

Costs in the areas of Safety and Health, Maintenance, Utilities, and Safeguards and Security may appear to be out of line with "similar" sites. As described above, LANL is a very large research and development facility encompassing 38 square miles. In addition LANL has special nuclear material facilities and plutonium facilities, which contribute to total functional support costs. Nuclear facilities are located at 13 of the 47 technical area sites.

III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

The following paragraphs highlight the DOE functional support categories in which significant changes have occurred in the costs from FY02 to FY03. Each paragraph details the total costs for the functional area, the net change from the prior fiscal year, a brief explanation of the change, and the impact on the future.

General Support

Executive Direction increased by \$1,355K FY03: \$24,063K FY02: \$22,708K Change: \$1,355K/+6%

The increase is due to LANL's wall-to-wall inventory of personal property and consulting services provided as a part of LANL's business process improvement initiatives.

Chief Financial Officer increased by \$1,560K.

FY03: \$11,268K FY02: \$9,708K Change: \$1,560K/+16%

The increase is due to an increase in the Accounting Group staff.

Procurement increased by \$4,503K.

FY03: \$17,438K FY02: \$12,935K Change: \$4,503K/+34.8%

This increase is due to an increase in procurement staff. In the last several years, the procurement staffing level has not kept up with the rapid growth experienced in other areas of LANL (operating costs have increased 78% since FY96). Additionally, compliance issues within procurement required additional resources.

Program/Project Planning & Control decreased by \$3,829K.

FY03: \$15,043K FY02: \$18,872K Change: \$3,829K/-20.3%

This decrease is primarily due to a more appropriate capturing of costs from General Support to Mission Direct.

Information Services increased by \$16,160K.

FY03: \$124,248K FY02: \$108,088K Change: \$16,160K/+15%

This increase is due to the continued support for the Enterprise Planning (EP) system—a computer-based system that will integrate, unify, modernize, and streamline the way the Laboratory handles administrative functions, including financial records, time-and-effort reporting, project management, property management, and facility maintenance. A significant investment was made to the EP system in FY02 and again in FY03. LANL invested \$3M in an Institutional Computing effort and \$2M in Linux prototype equipment for the test bed for a new operating system at LANL.

Other General Support increased by \$1,494K.

FY03:	\$6,381K
FY02:	\$4,887K
Change:	\$1,494K/30.6%

The increase is due to a one-time legal settlement in FY03.

Mission Support

Environmental decreased by \$6,798K.

FY03: \$17,663K FY02: \$24,461K Change: \$6,798/-27.8%

In FY03, a new Performance Surety Division was formed and costs were more appropriately re-categorized from Environmental to the QA/Compliance.

Safety and Health increased by \$15,647K.

FY03: \$87,621K FY02: \$71,974K Change: \$15,647/+21.7%

The primary driver for the cost increase in this area is roughly \$10M. In FY03, there were investments in emergency vehicles and equipment for the Fire Department. Also, in FY03 LANL established the Operations Support group for long-term development of standard operational processes to prevent unwanted occurrences, unsafe conditions and negative regulatory impacts.

Facilities Management/Engineering decreased by \$3,147K.

FY03: \$100,559K FY02: \$103,706K Change: \$3,147K/-3%

In FY03 a major reorganization of the facilities management function occurred. Facility management was initially centralized within a single division and all associated costs were categorized under facilities management/engineering rather than under Mission Direct. As a result of the FY03 reorganization, facility operations were more appropriately categorized as Mission Direct rather than as Facilities Management.

Maintenance increased by \$1,606K.

FY03: \$63,717K FY02: \$62,111K Change: \$1,606K/+2.6%

This increase is due to the implementation of a new contract for Site Support Service and the closing of the old contract.

Utilities decreased by \$8,280K.

FY03: \$60,013K FY02: \$68,293K Change: \$8,280K/-12.1%

This decrease is due to a decrease in utility work performed as part of the Cerro Grande Rehabilitation project, the project responsible for restoring various utilities damaged by the Cerro Grande fire.

Safeguards and Security increased by \$12,808K.

FY03: \$101,450K FY02: \$88,642K Change: \$12,808K/+14.4%

This increase is the result of an increase in funding and programmatic requirements for the Laboratory's Safeguards and Security program.

QA/Compliance increased by \$8,411K.

FY03: \$17,941K FY02: \$9,530K Change: \$8,411K/+88.2%

This increase is due to an increase of \$3M in the funding allocated to the compliance team responsible for responding to nuclear safety requirements addressed by the Price Anderson Amendment Act. When the new Performance Surety Division was formed, the costs of facility compliance were more appropriately re-categorized from the Environmental category to QA/Compliance.

Site Specific

Laboratory Directed Research and Development (LDRD) increased by \$7,643K.

FY03: \$87,107K FY02: \$79,464K Change: \$7,643/+9.6%

This increase is the result of growth in the Laboratory's LDRD program. The size of the LDRD programs is based on the Laboratory's operating and capital expenditures. During FY03, the LDRD program expanded at the same pace as the Laboratory.

Mission Direct

Defense Programs increased by \$38,249K.

FY03: \$577,670K FY02: \$539,421K Change: \$38,250K/+7.1%

This increase is due to an increase in funding for Stockpile R&D, Advanced Simulation and Modeling, PIT Certification, and Facilities & Infrastructure.

Nonproliferation and National Security increased by \$13,929K.

FY03: \$100,272K FY02: \$86,343K Change: \$13,929/+16.1%

This increase is primarily due to an increase in funding for Nonproliferation & Verification R&D, Arms Control & Nonproliferation, International Material Protection & Emergency, and US Surplus Fissile Materials Disposition.

Work for Other Federal Agencies increased by \$17,467K.

FY03: \$198,992K FY02: \$181,525K Change: \$17,467K/+9.6%

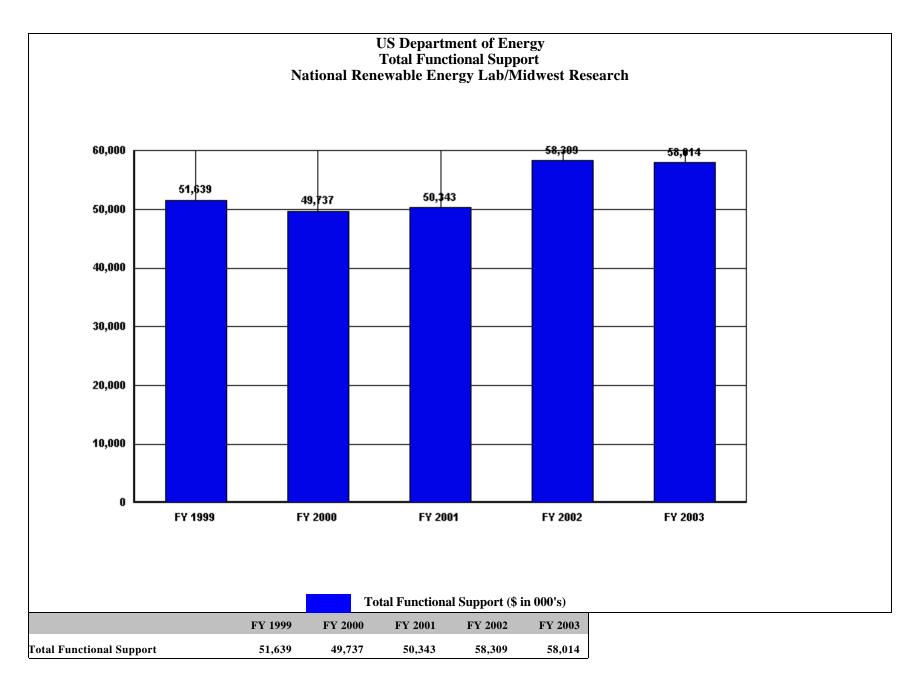
This increase is primarily due to an increase in funding for Department of Defense, NASA, Department of Health & Human Resources, and Department of Homeland Security.

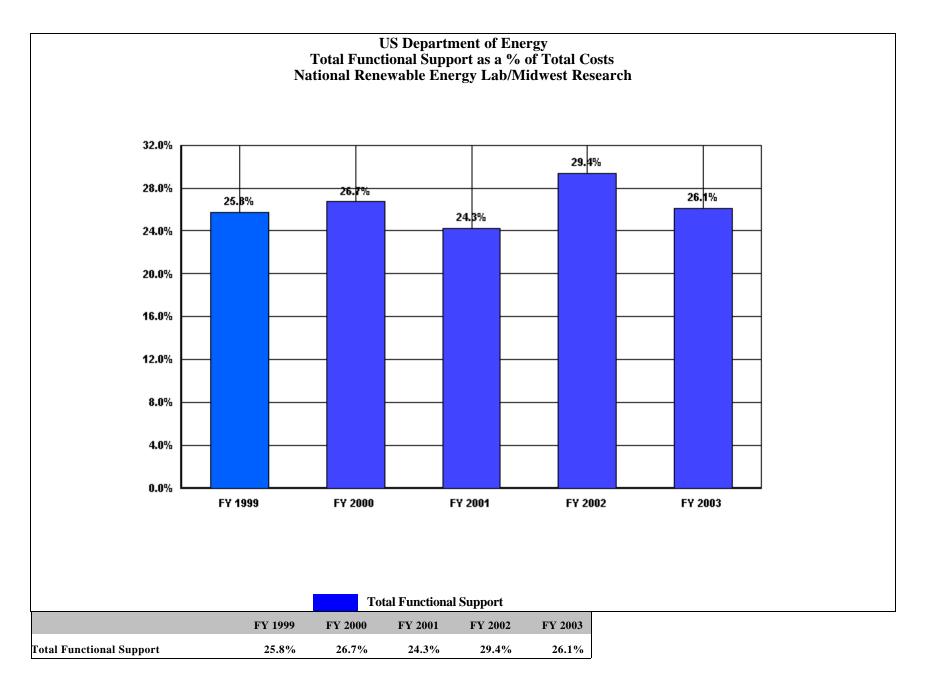
IV. OTHER

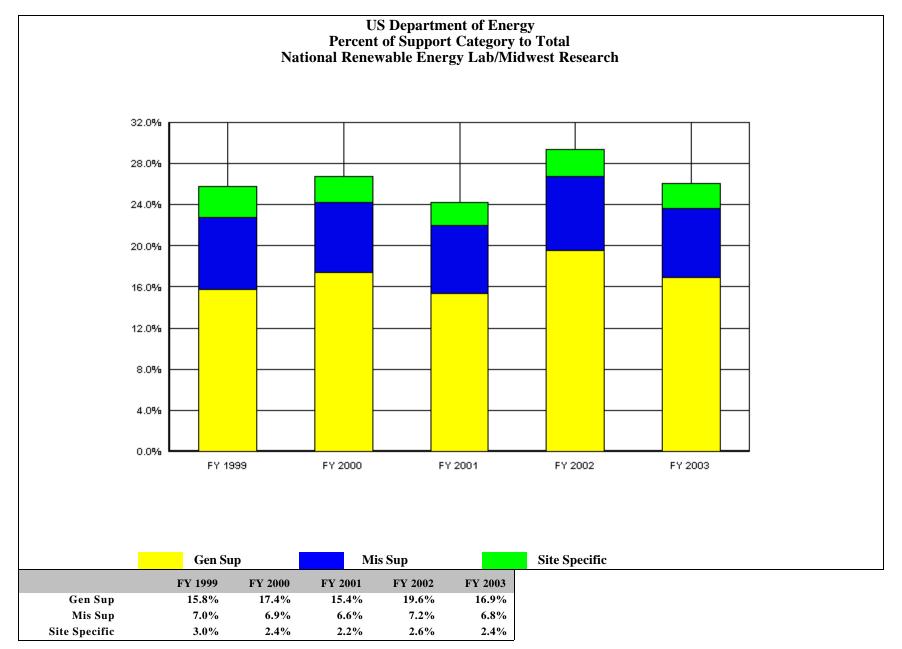
The Other category includes the following costs in \$K:

	FY99	FY00	FY01	FY02	FY03
Economic Development	278	0	0	0	0
Risk Management	1,117	1,247	827	254	0
Inst. Program Development	2,462	4,934	3,492	4,633	4,381
Lawsuit Settlement	0	0	9,400	0	2,000
Flood Damage	0	0	0		0
Total Costs	3,857	6,181	13,719	4,887	6,381

	Trends in Total Functional Support Cost Categories						
National Rene		rgy Lab/N 2003	lidwest R	esearch			
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(1999 to
EXECUTIVE DIRECTION	1,420	2,362	3,051	3,667	3,896	2,476	174.4%
HUMAN RESOURCES	1,135	1,521	1,418	1,651	1,546	411	36.2%
CFO	1,379	1,732	1,659	1,962	2,171	792	57.4%
PROCUREMENT	1,936	2,169	2,166	2,381	2,499	563	29.1%
LEGAL	1,627	1,023	1,323	1,916	1,442	-185	-11.4%
CENTRAL ADMIN SERVICES	1,218	1,737	2,184	2,553	2,486	1,268	104.1%
PROGRAM/PROJECT CONTROL	799	791	1,840	1,061	1,198	399	49.9%
INFORMATION OUTREACH	9,926	10,307	9,589	12,834	11,644	1,718	17.3%
INFORMATION SERVICES	11,141	7,940	6,794	8,652	8,751	-2,390	-21.5%
OTHER TOTAL GENERAL SUPPORT	1,068 31,649	2,810 32,392	1,919 31,943	2,126 38,803	1,941 37,574	873 5,925	81.7% 18.7%
MISSION SUPPORT	FY 1999	52,392 FY 2000	FY 2001	FY 2002	57,574 FY 2003	Change 1	
MISSION SUPPORT	F1 1999	F1 2000	F1 2001	F1 2002	F1 2003	FY20	
ENVIRONMENTAL	0	0	0	0	0	0	0.0%
SAFETY AND HEALTH	746	920	931	1,029	1,190	444	59.5%
FACILITIES MANAGEMENT	7,991	7,106	6,692	6,783	6,797	-1,194	-14.9%
MAINTENANCE	2,524	1,818	2,816	2,980	2,824	300	11.9%
UTILITIES	915	1,000	1,130	967	1,155	240	26.2%
SAFEGUARDS AND SECURITY	584	780	906	1,197	1,349	765	131.0%
LOGISTICS SUPPORT	823	387	408	406	789	-34	-4.1%
QUALITY ASSURANCE	466	535	579	719	641	175	37.6%
LABORATORY/TECHNICAL SUPPORT	0	238	272	261	286	286	100.0%
TOTAL MISSION SUPPORT	14,049	12,784	13,734	14,342	15,031	982	7.0%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
	4 400	4,561	4,666	5,164	5,409	986	22.3%
MANAGEMENT/INCENTIVE FEE	4,423		4,000				
MANAGEMENT/INCENTIVE FEE TAXES	4,423	0	4,000 0	0	0	0	0.0%
TAXES			,	0 0	0 0		0.0% -100.0%
	0	0	0	-	-	0	
TAXES LDRD / PDRD / SDRD	0 1,518	0 0	0	0	0	0 -1,518	-100.0%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT	0 1,518 5,941	0 0 4,561	0 0 4,666	0 5,164	0 5,409	0 -1,518 -532	-100.0% -9.0% 12.3%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT	0 1,518 5,941 51,639 FY 1999	0 0 4,561 49,737 FY 2000	0 0 4,666 50,343 FY 2001	0 5,164 58,309 FY 2002	0 5,409 58,014 FY 2003	0 -1,518 -532 6,375 Change 1 FY20	-100.0% -9.0% 12.3% 1999 to 003
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation	0 1,518 5,941 51,639 FY 1999 137,130	0 0 4,561 49,737 FY 2000 131,973	0 0 4,666 50,343 FY 2001 151,803	0 5,164 58,309 FY 2002 132,398	0 5,409 58,014 FY 2003 157,589	0 -1,518 -532 6,375 Change 1 FY20 20,459	-100.0% -9.0% 12.3% 1999 to 03 14.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT	0 1,518 5,941 51,639 FY 1999	0 0 4,561 49,737 FY 2000	0 0 4,666 50,343 FY 2001	0 5,164 58,309 FY 2002	0 5,409 58,014 FY 2003	0 -1,518 -532 6,375 Change 1 FY20	-100.0% -9.0% 12.3% 1999 to 003
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation	0 1,518 5,941 51,639 FY 1999 137,130	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496	0 0 4,666 50,343 FY 2001 151,803	0 5,164 58,309 FY 2002 132,398 7,599 139,997	0 5,409 58,014 FY 2003 157,589	0 -1,518 -532 6,375 Change 1 FY20 20,459	-100.0% -9.0% 12.3% 1999 to 03 14.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction	0 1,518 5,941 51,639 FY 1999 137,130 11,677	0 0 4,561 49,737 FY 2000 131,973 4,523	0 0 4,666 50,343 FY 2001 151,803 5,361	0 5,164 58,309 FY 2002 132,398 7,599	0 5,409 58,014 FY 2003 157,589 6,628	0 -1,518 -532 6,375 Change I FY20 20,459 -5,049	-100.0% -9.0% 12.3% 999 to 03 14.9% -43.2%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164	0 5,164 58,309 FY 2002 132,398 7,599 139,997	0 5,409 58,014 FY 2003 157,589 6,628 164,217	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410	-100.0% -9.0% 12.3% 12.3% 14.9% -43.2% 10.4%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 0999 to 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 0999 to 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 0999 to 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 0999 to 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446 188,769	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233 181,710	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507 202,146	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306 190,707	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231 215,603	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446 188,769	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233 181,710	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507 202,146	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306 190,707	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231 215,603	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446 188,769 15.8% 7.0%	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233 181,710 17.4% 6.9%	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507 202,146 207,507 202,146	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306 190,707 198,306 190,707	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231 215,603 16.9% 6.8%	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446 188,769 200,446 188,769	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233 181,710 186,233 181,710	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507 202,146 207,507 202,146	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306 190,707 198,306 190,707 19.6% 7.2% 2.6%	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231 215,603 16.9% 6.8% 2.4%	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 0999 to 03 14.9% -43.2% 10.4% 10.9%
TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	0 1,518 5,941 51,639 FY 1999 137,130 11,677 148,807 200,446 188,769 15.8% 7.0%	0 0 4,561 49,737 FY 2000 131,973 4,523 136,496 186,233 181,710 17.4% 6.9%	0 0 4,666 50,343 FY 2001 151,803 5,361 157,164 207,507 202,146 207,507 202,146	0 5,164 58,309 FY 2002 132,398 7,599 139,997 198,306 190,707 198,306 190,707	0 5,409 58,014 FY 2003 157,589 6,628 164,217 222,231 215,603 16.9% 6.8%	0 -1,518 -532 6,375 Change 1 FY20 20,459 -5,049 15,410 21,785	-100.0% -9.0% 12.3% 0999 to 03 14.9% -43.2% 10.4% 10.9%







SITE PROFILE NATIONAL RENEWABLE ENERGY LAB – MIDWEST RESEARCH INST.

<u>I</u> <u>Site Characteristics</u>

The National Renewable Energy Laboratory is the only "single program" laboratory in the Federal complex of laboratories dedicated to supporting renewable energy and energy efficiency technologies. NREL operates in six separate locations; five are near Golden, Colorado, 8 miles west of Denver, and one in Washington, D.C. The Golden area locations consist of the Department of Energy (DOE)-owned South Table Mountain (STM) and National Wind technology Center (NWTC) sites incorporating 327 acres of land at the STM site and 305 acres at the NWTC site, 20 miles north of the STM site. Of the 327 acres of land at the STM site, only about 136 acres can be developed; the balance is restricted via easements.

NREL activities occupy about 640,000 square feet (sf) of space. Of this, 380,000 sf is in DOE-owned buildings, and the balance is leased. Most of the research is conducted in DOE-owned buildings, while most of the administrative and support activities are conducted in leased buildings. The cost of leased space is a significant contributor to NREL's reported cost of facilities.

NREL has approximately 950 payrolled employees and about 1135 persons on site at all its locations. The majority of NREL's funding comes from the Office of Energy Efficiency and Renewable Energy, with lesser amounts provided by Energy Research and other DOE and non-DOE sources. NREL's programs include:

- Solar Energy
- Wind Energy
- Biomass
- Hydrogen, Fuel Cells, & Infrastructure
- Building Technologies
- Federal Energy Management Program
- Geothermal Energy
- FreedomCAR & Vehicle Technologies
- Distributed Energy & Electricity Reliability
- Weatherization and Intergovernmental Activities

II Cost Trends

The raw data suggest that support costs as a percentage of total costs have been rising since FY 1999. However, a closer look at the data shows that the increase in this percentage in FY 2002 was caused by a shift in total Laboratory costs from subcontracting to in-house research, and support costs declined in FY 2003. It should also be noted that, for the purposes of this report, some directly funded Information Outreach costs are included in the support cost category.

SITE PROFILE

NATIONAL RENEWABLE ENERGY LAB – MIDWEST RESEARCH INST.

In FY 2003 the Laboratory experienced a sharp increase in the cost of its defined benefit retirement plan. The cost of the plan was \$3.2 million in FY 2002, rising to \$5.5 million in FY 2003. Despite this increase, the Laboratory was able to maintain the ration of direct to indirect costs by reducing other indirect costs.

III Analysis of Change in Support Costs from Prior Year

- 1. CFO Increase is due to the redesign of a finance service center to provide costprice analysis, and a temporary staffing increase to handle a backlog of WFO closeouts and the additional workload associated with the Electronic Processing Initiative.
- 2. Executive Direction Some costs (about \$780K) were reclassified from Quality Assurance
- 3. Other As in past years, this category was use to reflect the costs of NREL's DDRD activity.
- 4. Legal Legal costs reflect lower costs for patent activity
- 5. Safety and Health Increase due to staff increase of 1.4 FTEs
- 6. Information Outreach -- Decrease due largely to decrease in direct funded IO activity from \$2 million to \$1 million.
- 7. Utilities The increase in utility costs resulted from higher rates for gas and electricity, as well as the addition of the new ReFuel facility at the Laboratory.
- 8. Quality Assurance The decrease in QA costs was largely the result of a reclassification of some QA costs to the Executive Direction category.
- 9. Logistics Support The cost increase shown was largely the result of including the cost of GSA vehicles (approximately \$210K) in this category as recommended by the Peer Review team.
- 10. Program/Project Control Cost increase resulted from a shift of Laboratory costs from subcontracted research to in-house research.
- 11. Other Other costs returned to normal levels. FY 2002 costs reflected some costs associated with the Laboratory's 25th Anniversary activities.
- 12. Laboratory/Tech Support The increase reflects increased use of Machine Shop services.

IV Cost Savings Initiatives

The ratio of research (direct) to support (indirect) FTEs has increased more than 15% since FY95. This indicates that more NREL staff is working directly on the science and technology needs of the Laboratory's clients, relative to those providing the support products and services required to conduct NREL's mission work.

Two of every three dollars invested at NREL are spent directly on producing research, development, field verification and testing, technical analysis, and technical assistance outcomes and results. Transitions resulting from contract recompetition and new

SITE PROFILE NATIONAL RENEWABLE ENERGY LAB – MIDWEST RESEARCH INST.

operating requirements have been effectively managed to improve this outcome consistently during the past several years. There has been a 24% improvement in the research support ratio since FY95.

NREL achieved a labor multiplier of 2.40 in FY03. Proactive management and timely response to changing requirements and priorities enabled the Lab to meet its goal of 2.40. This was accomplished even though the Laboratory experienced a sharp increase in the cost of its defined benefit pension plan, which added over \$2 million to the cost of fringe benefits in FY 2003.

Specific Initiatives

Reducing utilities costs: In FY 2001 NREL initiated a lab-wide program to make laboratory operations more sustainable, meaning less impact on the environment without decreasing financial or personnel effectiveness. This initiative continued in FY 2003 and includes several different elements; the three elements that provide cost savings are reducing energy use in buildings, reducing the impact of transportation, and reducing water use. Utilities costs decreased from \$1,130K in FY 2001 to \$967K in FY 2002. Some of the specific activities undertaken or planned include:

- replacing water fixtures with low- or waterless units (toilets, urinals, showerheads, etc);
- replacing boilers, chillers, and other major building equipment with newer, more efficient units, and in some cases, replacing electric with natural-gas-powered units;
- enforcing the purchase of Energy Star rated office equipment;
- replacing some older lighting with newer, more energy-efficient lighting;
- installing energy saving devices on vending machines;
- installing electricity and water meters throughout the complex, in all individual buildings, to better manage and control energy and water use.

	FY 2002	FY 2003	FY 2004
Savings	\$163K	\$171K	\$180K

Electronic processing initiative: NREL launched an initiative in FY 2003 to improve the effectiveness and efficiency of our business processes by providing timelier and higher quality data for management decisions. This will include providing online entry of transactions; implementing electronic data checking, routing and approvals; eliminating hard copy forms; reducing the time and other resources to process transactions; and eliminating redundant process steps. Electronic processing will significantly reduce the time employees spend recording, validating, routing and approving transactions that currently comprise 40,000 documents annually. Expected benefits include:

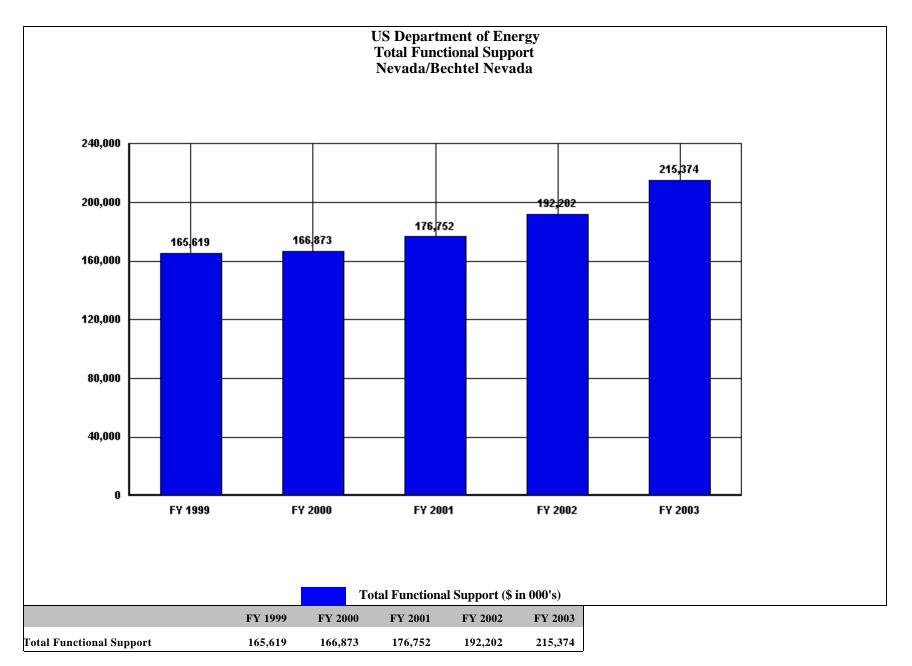
- Spending more staff time on data analysis and less time on data collection and input
- Ability to shorten time for approving transactions via online signatures

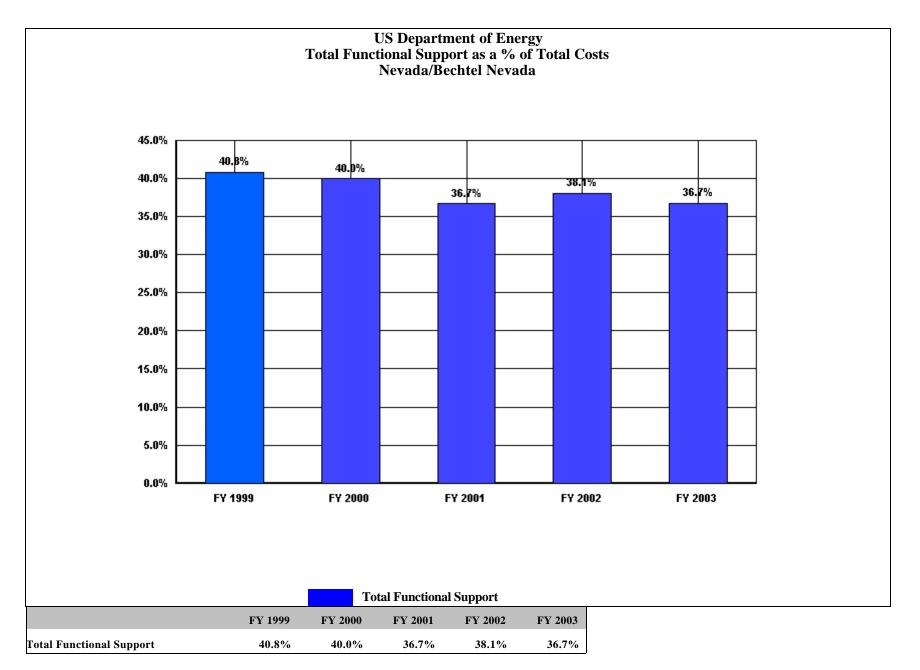
SITE PROFILE NATIONAL RENEWABLE ENERGY LAB – MIDWEST RESEARCH INST.

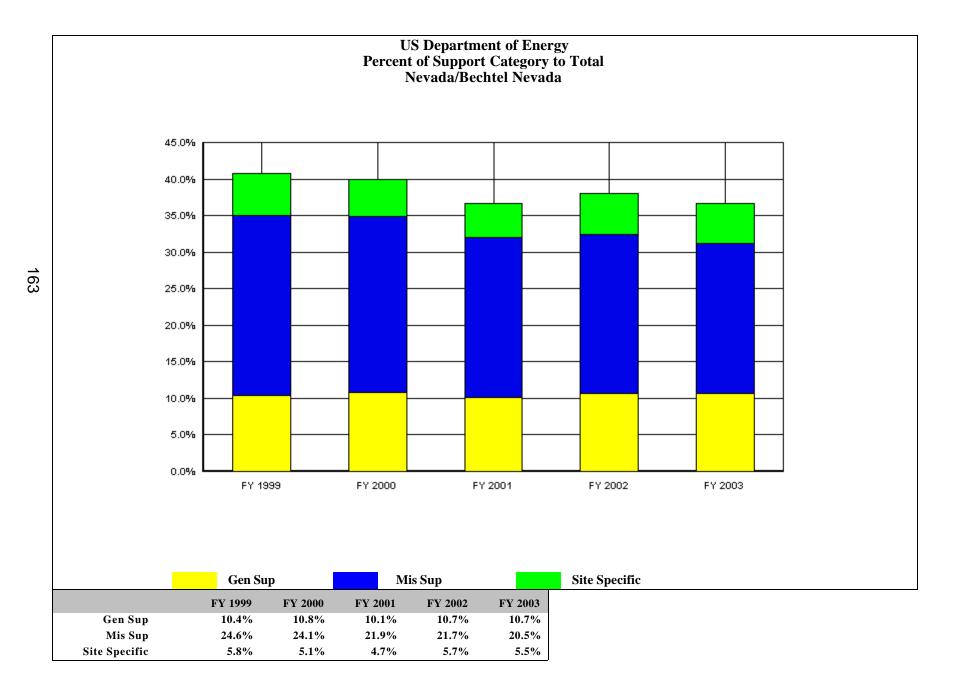
- Providing more up-to-date information (as often as daily updates) to improve project management
- Automatic quality checks as staff enter transactions for improved quality of reports
- Preventing the development and maintenance of custom information systems
- Reducing volume of paper, reducing environmental impact and cost of purchase and disposal
- Providing centralized information for more timely NREL performance metrics

Since this initiative is in progress, the cost saving data is not yet available.

Trends in Total Functional Support Cost Categories							
	Nevada/Be	chtel Neva 2003	ada				
		2005 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	6,357	7,066	10,409	6,607	6,359	2	0.0%
HUMAN RESOURCES	3,285	3,229	3,302	3,656	3,919	634	19.3%
CFO	3,659	3,439	3,561	3,991	4,047	388	10.6%
PROCUREMENT	1,974	2,014	1,863	2,306	3,094	1,120	56.7%
LEGAL	919	996	865	1,012	1,352	433	47.1%
CENTRAL ADMIN SERVICES	7,249	7,470	8,114	9,566	11,391	4,142	57.1%
PROGRAM/PROJECT CONTROL	1,130	1,200	1,151	1,719	2,329	1,199	106.1%
INFORMATION OUTREACH	1,610	1,676	1,240	1,920	2,353	743	46.1%
INFORMATION SERVICES	15,452	16,107	17,378	21,177	25,135	9,683	62.7%
OTHER	750	1,776	1,021	2,024	2,887	2,137	284.9%
TOTAL GENERAL SUPPORT	42,385	44,973	48,904	53,978	62,866	20,481	48.3%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
ENVIRONMENTAL	4,218	3,079	930	950	1,062	-3,156	-74.8%
SAFETY AND HEALTH	13,229	13,992	14,956	16,936	20,822	7,593	57.4%
FACILITIES MANAGEMENT	6,077	5,131	6,815	7,716	9,932	3,855	63.4%
MAINTENANCE	24,645	23,033	23,013	22,672	23,710	-935	-3.8%
UTILITIES	6,814	7,397	10,499	11,877	11,821	5,007	73.5%
SAFEGUARDS AND SECURITY	23,630	24,611	24,995	27,523	28,162	4,532	19.2%
LOGISTICS SUPPORT	10,542	11,920	10,408	11,174	12,153	1,611	15.3%
QUALITY ASSURANCE	2,710	3,763	5,576	3,548	3,737	1,027	37.9%
LABORATORY/TECHNICAL SUPPORT	7,932	7,791	8,227	7,133	8,729	797	10.0%
TOTAL MISSION SUPPORT	99,797	100,717	105,419	109,529	120,128	20,331	20.4%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
MANAGEMENT/INCENTIVE FEE	16,350	17,794	17,530	19,613	23,213	6,863	42.0%
TAXES	7,087	3,389	4,899	5,822	5,452	-1,635	-23.1%
LDRD / PDRD / SDRD	0	0	0	3,260	3,715	3,715	100.0%
TOTAL SITE SPECIFIC	23,437	21,183	22,429	28,695	32,380	8,943	38.2%
TOTAL FUNCTIONAL SUPPORT	165,619	166,873	176,752	192,202	215,374	49,755	30.0%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
Mission Direct Operation	228,143	240,389	273,437	293,512	347,960	FY2 119,817	52.5%
Capital Construction	12,502	10,332	31,866	19,276	23,569	11,067	88.5%
TOTAL MISSION DIRECT	240,645	250,721	305,303	312,788	371,529	130,884	54.4%
	106.264	417 504	492.055		596.002	100 (20	44.50/
Total Costs	406,264	417,594	482,055	504,990	586,903	180,639	44.5%
Total Costs w/o Construction	393,762	407,262	450,189	485,714	563,334	169,572	43.1%
				10 70	10.70		
General Support % Total Costs	10.4%	10.8%	10.1%	10.7%	10.7%		
General Support % Total Costs Mission Support % Total Costs							
Mission Support % Total Costs	10.4% 24.6% 5.8%	10.8% 24.1% 5.1%	10.1% 21.9% 4.7%	10.7% 21.7% 5.7%	10.7% 20.5% 5.5%		
	24.6%	24.1%	21.9%	21.7%	20.5%		







SITE PROFILE NEVADA OPERATIONS – BECHTEL

I. <u>Site Characteristics</u>:

The Nevada Test Site, located 65 miles north of Las Vegas, is a massive outdoor laboratory and national experimental center. Larger than the state of Rhode Island, it is 1,375-square-miles, making it one of the largest secured areas in the United States. The remote site is surrounded by thousands of additional acres of land withdrawn from the public domain for use as a protected wildlife range and for a military gunnery range, creating an unpopulated land area comprising some 5,470 square miles. But, the test site is more than the 1,375-square-mile remote-testing site in southern Nevada. Satellite facilities and laboratories are also located in California, Maryland, Nevada, and New Mexico. Total test site and related employment is about 6,500. The arid desert climate allows for year-round operation.

Located within the boundaries of the Nevada Test Site, the base camp of Mercury has many of the amenities found in a typical small town. Housing, medical services, fire protection, law enforcement and security, and a cafeteria are all on site. There are 467 support buildings and laboratories with a replacement cost of \$891 million. There is housing for 341; offices, laboratories, warehouses, and training facilities; a hospital, post office, fire station, and sheriff's substation; and a large motor pool complete with repair facilities.

There are 400 miles of paved roads and 300 miles of unpaved roads, two airstrips, and 10 heliports, as well as several active water wells and an electric power transmission system. Programs are in place to ensure environmental protection and the safety and health of the work force.

Established as the Atomic Energy Commission's on-continent proving ground, the Nevada Test Site has seen more than four decades of nuclear weapons testing. Since the nuclear weapons testing moratorium in 1992, test site use has diversified into many other programs. Today, the test site is a national asset for supporting experimentation, testing, training, and demonstration for defense systems and advanced high hazard operations. Our current missions are:

- 1. National Security Support the Stockpile Stewardship Program through subcritical and other weapons physics experiments, nuclear test readiness, emergency management, training and demonstration for defense systems, advanced high hazard operations, and other national security experimental programs.
- 2. Environmental Management Support environmental restorations, groundwater characterization, and low-level radioactive waste management.

SITE PROFILE NEVADA OPERATIONS – BECHTEL

- 3. Stewardship of the Nevada Test Site Manage the land and facilities at the test site as a unique and valuable national resource.
- 4. Technology Diversification and Economic Diversification Support traditional and nontraditional departmental programs and commercial activities that are compatible with the Stockpile Stewardship Program.

II. <u>Highlights of Trends</u>:

A summary of the change in the various functional cost categories from FY 1999 to FY 2003 is as follows:

						Change
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY99-03
General Support	\$ 42,385	\$ 44,973	\$ 48,904	\$ 53,978	\$ 62,866	48%
Mission Support	99,797	100,717	105,419	109,529	120,128	20%
Site Specific	23,437	21,183	22,429	28,695	32,380	38%
Total Support	\$ 165,619	\$ 166,873	\$ 176,752	\$ 192,202	\$ 215,374	30%
Mission Direct	228,143	240,389	273,437	293,512	347,960	53%
Capital/Constr.	12,502	10,332	31,866	19,276	23,569	89%
Total Site	\$ 406,264	\$ 417,594	\$ 482,055	\$ 504,990	\$ 586,903	44%
Sppt Cost Ratio	40.8%	40.0%	36.7%	38.1%	36.7%	-10%

Total Support costs increased by 12% from FY 2002 to FY 2003. However, overall site costs increased by 16% due to larger increases in the Mission Direct and Capital/Construction areas. This resulted in our support cost ratio decreasing from 38.1% in FY 2002 to 36.7% in FY 2003. The reasons for significant increases/decreases for each line item are detailed in Note III below.

III. Analysis of Change in Support Costs from Prior Year:

Significant changes in various specific line items from FY 2002 to 2003 are as follows:

- <u>Executive Direction</u>. The decrease is related to completion of a business systems development project. In FY 2000, Bechtel Nevada started the process of creating a Data Warehouse and updating its project and financial systems. Most of the work scope was completed in FY 2001.
- <u>Information Services</u>. The increase resulted primarily from equipment purchases, increased headcount and support for moving facilities.

SITE PROFILE NEVADA OPERATIONS – BECHTEL

- <u>Other</u>. A detailed breakdown of the elements included in this line item is provided in Note V below.
- <u>Safety and Health</u>. The increase is due to Beryllium testing that was conducted in various buildings in the North Las Vegas Complex.
- <u>Facilities Management.</u> The increase is due to the move from various buildings in the North Las Vegas Complex as a result of Beryllium findings. Lease costs are \$5.9M.
- <u>LDRD</u>. The PDRD program was implemented in FY 2002 and continues to grow.
- <u>Mission Direct</u>. Workscope increased in several areas.

IV. <u>Cost Savings Initiatives</u>:

Based on FY 2002 success in realizing an increase in funds available for direct mission work, NNSA/NV again included an FY 2003 award fee measure that required BN to maintain or reduce the percentage of indirect to total costs without negatively impacting service levels. As a result of this measure, BN reduced the percentage of indirect to total costs from 45.2% to 42.4% in FY 2003. This resulted in an additional \$12.5M of funds available for direct mission work.

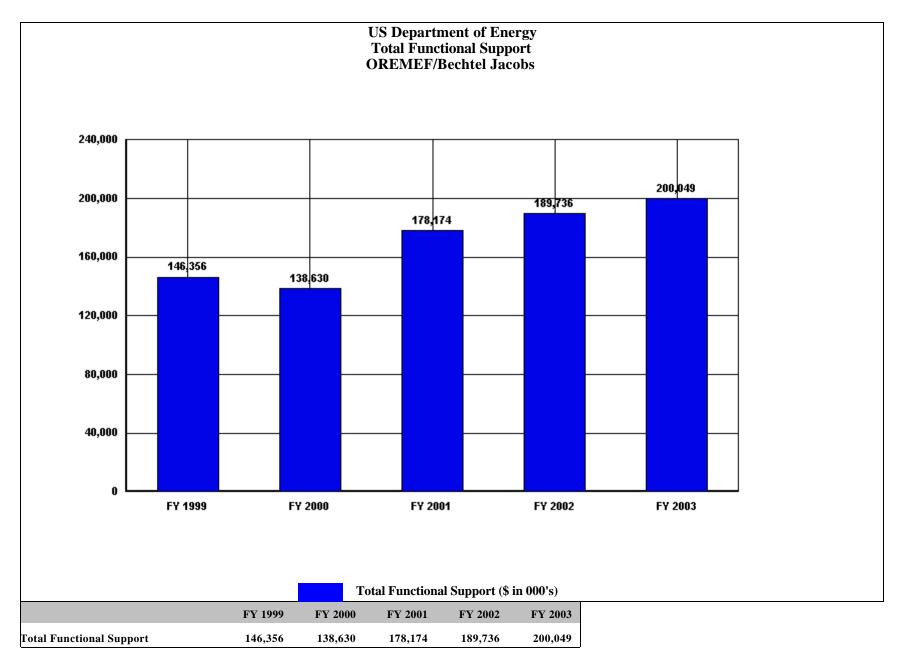
V. Other:

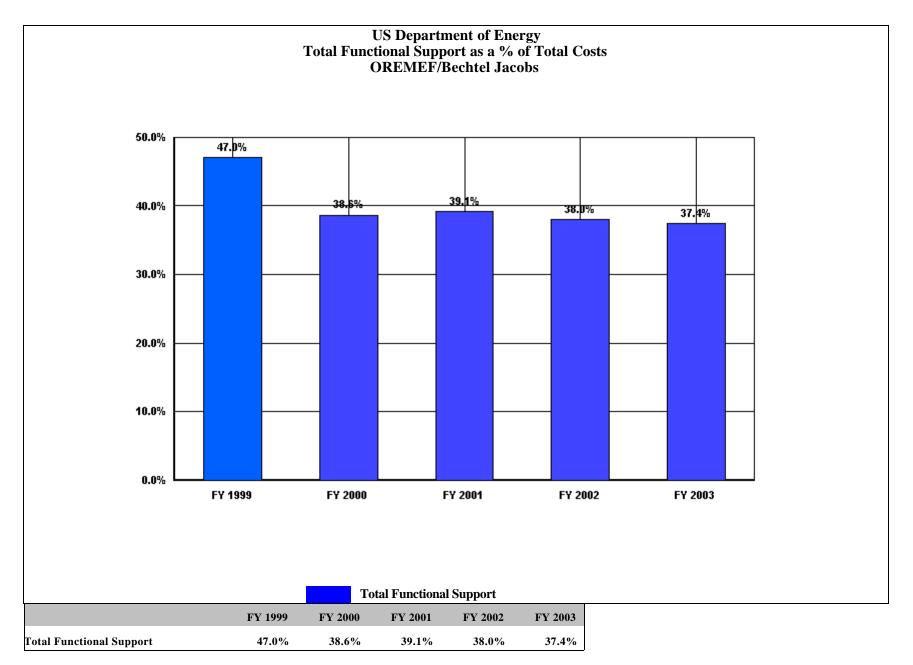
Details of costs included in the other category are as follows:

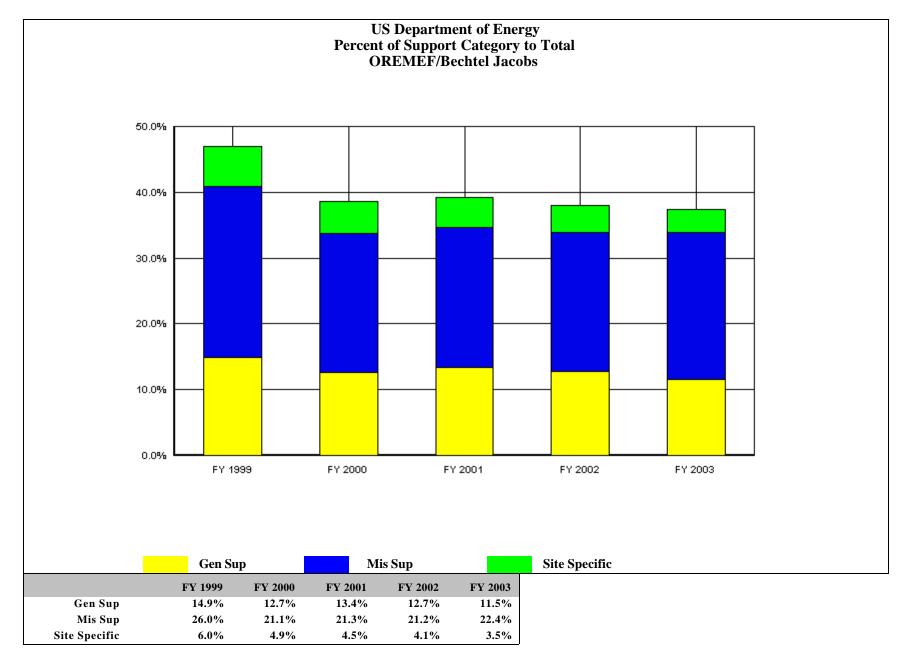
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
	(in 000's)				
3161 Displaced Worker	405	338	112	12	0
General Insurance	339	315	422	415	203
Housing	335	363	216	371	822
Legal Settlements	191	98	8	77	109
Worker's Comp. Health	(221)				
Elk Hills Retirement	579	755	627	699	755
Excess Property Sale	(653)	(102)	(508)	(524)	268
Retro Worker's Comp*				478	346
Other Adjustments	(225)	9	144	496	384
Total	\$ 750	\$ 1,776	\$ 1,021	\$ 2,024	\$ 2,887

* - This represents prior contractor worker's compensation claims for Johnston Atoll. Claims were \$345K in FY 2001 and included in the Legal line item. This cost is considered more appropriate in the Other line item.

Trends in Total Functional Support Cost Categories							
	OREMEF/B	Sechtel Jac		0			
		2003 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	3,628	4,021	2,502	3,626	3,366	-262	-7.2%
HUMAN RESOURCES	3,962	5,434	7,318	9,916	11,020	7,058	178.1%
CFO	6,475	5,564	4,917	4,472	4,366	-2,109	-32.6%
PROCUREMENT	4,307	4,814	5,184	5,558	6,398	2,091	48.5%
LEGAL	600	862	1,325	1,136	1,288	688	114.7%
CENTRAL ADMIN SERVICES	11,063	6,276	6,466	6,883	7,527	-3,536	-32.0%
PROGRAM/PROJECT CONTROL	9,795	8,415	11,809	11,526	9,259	-536	-5.5%
INFORMATION OUTREACH	1,896	1,819	2,195	1,982	1,575	-321	-16.9%
INFORMATION SERVICES	4,353	8,018	18,858	18,223	16,589	12,236	281.1%
OTHER	441	275	294	75	48	-393	-89.1%
TOTAL GENERAL SUPPORT	46,520	45,498	60,868	63,397	61,436	14,916	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
ENVIRONMENTAL	11,975	8,631	6,753	6,761	7,572	-4,403	-36.8%
SAFETY AND HEALTH	19,692	25,458	42,065	43,913	51,722	32,030	162.7%
FACILITIES MANAGEMENT	2,049	1,277	1,159	1,783	2,533	484	23.6%
MAINTENANCE	18,233	10,782	12,333	12,294	16,004	-2,229	-12.2%
UTILITIES	13,797	13,981	15,107	17,642	15,815	2,018	14.6%
SAFEGUARDS AND SECURITY	7,290	7,734	11,175	15,440	19,105	11,815	162.1%
LOGISTICS SUPPORT	2,416	2,432	3,019	3,193	1,453	-963	-39.9%
QUALITY ASSURANCE	4,588	3,932	4,723	4,513	4,911	323	7.0%
LABORATORY/TECHNICAL SUPPORT	1,046	1,480	401	419	750	-296	-28.3%
TOTAL MISSION SUPPORT	81,086	75,707	96,735	105,958	119,865	38,779	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	18,985	17,346	19,933	19,324	17,914	-1,071	-5.6%
TAXES	-235	79	638	1,057	834	1,069	454.9%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	18,750	17,425	20,571	20,381	18,748	-2	0.0%
TOTAL FUNCTIONAL SUPPORT	146,356	138,630	178,174	189,736	200,049	53,693	36.7%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	162,189	213,588	255,586	274,900	324,069	161,880	99.8%
Capital Construction	3,034	6,610	21,369	35,273	11,242	8,208	270.5%
TOTAL MISSION DIRECT	165,223	220,198	276,955	310,173	335,311	170,088	102.9%
Total Costs	311,579	358,828	455,129	499,909	535,360	223,781	71.8%
Total Costs w/o Construction	308,545	352,218	433,760	464,636	524,118	215,573	69.9%
General Support % Total Costs	14.9%	12.7%	13.4%	12.7%	11.5%		
Mission Support % Total Costs	26.0%	21.1%	21.3%	21.2%	22.4%		
Site Specific % Total Costs	6.0%	4.9%	4.5%	4.1%	3.5%		
Total Support % Total Costs	47.0%	38.6%	39.1%	38.0%	37.4%		
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I. <u>Background</u>

Functional support costs for the Oak Ridge Environmental Management Enrichment Facility (OREMEF) site represent a compilation of the support costs at the Paducah, Kentucky site; the Portsmouth, Ohio site; and the East Tennessee Technology Park (ETTP) located in Oak Ridge, Tennessee. The mission is three-fold: environmental cleanup and waste management, management of depleted uranium hexafluoride, and reindustrialization of the ETTP. Physical characteristics of each site are as follows:

ETTP: Approximately 360 buildings covering 14 million square feet of space. Most buildings are over 30 years old and non-operational. Approximately 721 Bechtel Jacobs Company employees reside at the site with an additional 2,563 subcontractor, British Nuclear Fuels (BNFL), and Community Reuse Organization of East Tennessee (CROET) tenants also physically located on the site.

Portsmouth: DOE is responsible for the maintenance and upkeep on approximately 72 buildings on the Portsmouth site. Bechtel Jacobs Company has 136 employees at the site and 298 additional subcontractors.

Paducah: Approximately 135 buildings on 3,556 acres of land with 748 acres inside the security fence. Bechtel Jacobs Company has 157 employees at the site as well and 299 additional subcontractors.

On April 1, 1998, Bechtel Jacobs Company LLC, a Managing and Integrating (M&I) contractor, replaced Lockheed Martin Energy Systems as the managing contractor for the ETTP, Paducah, and Portsmouth sites. As of the end of FY 2000, approximately 85% of the total Bechtel Jacobs workscope had been subcontracted. The subcontractors may support the missions functionally, which would be reflected in the appropriate functional category, or fixed price subcontracts may be utilitized for specific scopes of work and would be reflected in the mission direct category. Approximately 6% of the Bechtel Jacobs subcontracted workscope continues to be performed by BWXT Y-12 (formerly Lockheed Martin Energy Research Corporation). Other than utilities, these costs are not reflected in the BJC functional report, but are reflected in the BWXT Y-12 and UT-Battelle reports. The United States Enrichment Corporation performs approximately 16% of the workscope at Paducah and Portsmouth.

II. <u>Trends</u>

After a two-year decrease, functional support cost increased in FY 2001, FY 2002, and FY 2003 primarily due to increased ES&H support required by the projects, information technology, support for network separation, worker's compensation, and safeguards and security. The trend of Total Support Costs as a percentage of Total Site Costs fluctuated

within 1% over the last three years indicating that mission direct cost and support cost are changing proportionately.

Major year-to-year anomalies include the following:

Executive Direction: Includes Bechtel Jacobs Company Executive Management and the Six Sigma Initiatives. Historical Information: FY 2001 reduction is due to organization changes that combined organizational elements and reduced the number of managers. The increase in FY 2002 is due to the addition of three Six Sigma Black Belts.

Human Resources: Includes Human Resources Department Management, compensation administration, employment and staffing, benefits services, training services and HR systems support, diversity program, employee recognition and awards, labor relations, and current Worker's Compensation cost. Historical information: The increase in FY 2000 was due primarily to changing the costing methodology for Worker's Compensation, which moved the cost from fringe to site overheads (~\$1.1M). The FY 2001 increase is due to the addition of six FTE's over the course of the year to support training and organizational development as well as increases in the amount of training taken by employees. Worker's Compensation costs account for the increase in FY 2002 (~\$2.1M). Training cost increases are reflected in the FY 2003 amount (~\$1.4M).

Chief Financial Officer: Includes payroll, general accounting, accounts payable, accounts receivable, treasury, travel, funds control, cost accounting, business systems, rates administration, internal audit, and outside audit coordination. Historical information: Employment levels in the CFO organization decreased by 16% during FY 1999, with further cost efficiencies in FY 2000 through FY 2003.

Procurement: Includes procurement administration, purchasing activities and most particularly, subcontract procurement and administration, as well as procedure compliance and prime contract management. Historical information: Due to the subcontracting effort, procurement costs increased in FY 2000 and FY 2001. With over 170 subcontracts to manage, incremental funding required additional procurement efforts in FY 2001, a trend that continued into FY 2002 and FY 2003.

Legal: Includes cost associated with legal counsel support and litigation support. Historical information: In FY 2000, EH investigations at Paducah and Portsmouth resulted in additional support in this area to respond to FOIA requests. The increase in FY 2001 is due to the addition of four FTE's during the year to support environmental law, employment law, and management of legacy worker's compensation claims.

Central Administrative Services: Includes administrative services, records management, and copy machine services. Historical information: The reduction from FY 1999 to FY 2000 reflects the changing work environment under the BJC contract, which resulted in

reductions to administrative staff. The FY 2001 and FY 2002 increase is due to additional personnel hired to support increased records management requirements.

Program/Project Planning & Control: Includes overall project management and project controls, systems programs, baseline control and reporting, program performance, technical integration, and programmatic assessments. Historical information: Increase in FY 2001 is due to a reorganization that shifted FTE's from executive direction to this functional category. The decrease in FY 2003 reflects the reclassification of the Closure Projects Evaluation Board to Executive Management and cost efficiencies.

Information/Outreach Activities: Includes all public affairs activities and the Site Specific Activity Boards for Oak Ridge and Paducah. Cost decreased in FY 2003 because the Site Specific Activity Board became a programmatic responsibility.

Information Services: Includes Information Technology administration and management; PC maintenance; Server and Desktop support; Application management, maintenance, enhancements, and improvements; software licenses; network support; radios, pagers, cell phones, and telephones. Historical information: Increases from FY 2000 through FY 2002 are due to continued network independence efforts and system upgrades. Reduction in FY 2003 due to decreased desktop services and decreased application enhancements, as well as reduced telephone costs.

Environmental: Includes environmental compliance and monitoring, water quality, Clean Air Act, EPCRA, NPDES, Clean Water Act, and cleanup standards. Historical information: The \$3.3M decrease from FY 1999 to FY 2000 was due to subcontracting part of the environmental scope which reduced the number of direct hire environmental staff and the subcontracts became mission direct cost. Changes from FY 2000 to FY 2001 were a result of system applications for environmental work being reclassified to Information Services. Increases in FY 2003 are due to increased emphasis and required subcontractor oversight in the area of environmental compliance.

Safety and Health: Includes safety and health costs, radiation protection, industrial hygiene, medical, fire protection, emergency management, Radcon support, dosimetry and analysis, facility safety, occupational safety, ISMS revalidation, EH investigations, nuclear safety, criticality safety, and shift superintendent operations. Historical information: Costs increased during FY 2000 due to EH investigation support. FY 2001 through FY 2003 increases are due to continued heightened emphasis on safety and additional Health Physics support required by the projects, as well as the ISMS revalidation in FY 2003.

Facilities Management: Includes engineering and construction management, facility transition management, and technical functions management. Historical information: Cost in this category decreased \$0.8M in FY 2000 due to the ability to better identify the

type of engineering. Since the category definition requires facility engineering, only facility engineering was included as well as some engineering management and the facilities management organizations. Changes in FY 2002 were due to increased building rental/lease and increased construction management, and FY 2003 increases were a result of engineering management.

Maintenance: Includes all maintenance activities and real property management, roads & grounds, and cost to support the infrastructure of the sites. Historical information: Since FY 1999, costs have decreased as subcontractors take over facilities, including the maintenance costs in their contracts. The recent increase in FY 2003 is due to increased Infrastructure cost at ETTP (+\$2M, which includes Material Management reclassification) and Portsmouth (+\$2M).

Utilities: Includes utility costs for infrastructure of the site, as procured by contract, or purchased from BWXT Y-12. Historical information: The responsibility for power and utility distribution ceased to be an ETTP responsibility on April 1, 1998. The employees associated with providing power and utilities were transferred to Y-12 (power) or OMI (utilities). In accordance with functional cost instructions, the utility cost purchased from BWXT Y-12 is included in this category, and should be deducted from the BWXT Y-12 utility category cost. FY 2002 increases are due to higher utility costs.

Safeguards/Security: Includes all cost of personnel for protective forces, program management, protective systems, information security, NMC&A, and costs currently direct funded by program FS30 for Safeguards/Security operations. Historical information: Costs have increased by \$4.3M in FY 2002 and by \$3.6M in the past year due to heightened security requirements imposed after 9/11.

Logistics Support: Includes materials management, property sales, transportation services, fleet management, and shipping/receiving activities. Historical information: The increase in FY 2001 and FY 2002 is due to reduced proceeds from property sales. In FY 2003, materials management was integrated into Infrastructure cost at ETTP and was re-classified as Maintenance (~\$1.5M).

Quality Assurance: Includes functional quality assurance costs, QA program and field operations, PAAA reporting process, performance evaluations, procedures/directives management, and program assessments. Historical information: Increase in FY 2001 through FY 2003 is due to emphasis placed on procedures and assessments.

Laboratory/Technical Support: Includes sampling, analysis, and monitoring, as well as laboratory activities. Historical information: The cost reduction from FY 1999 in this category reflects the effect of subcontracting major scopes of work so that the analytical support cost is included in the cost of the subcontract.

Management/Award/Incentive Fee: Fluctuations in fee over the five year period are due to a change in the fee structure to a performance-based fee structure. The performance measures were largely tied to specific scopes of work that vary from year to year. The fluctuations are a factor of performance and fee available to be earned.

Taxes: Includes franchise and excise taxes. Historical information: Balance in FY 2001 reflects a \$2.3M credit received for pollution tax credits. Listed at the end of the file are the sales and use tax paid for the past four years. Bechtel Jacobs does not operate with any direct pay permits and does not separately identify this cost in the accounting system. FY 2003 balances include a \$130K assessment as a result of Tennessee sales and use tax audit.

Environmental Management: Changes in EM costs in FY 2002 reflects the decision to move the uranium programs to EM, resulting in –0- costs for Nuclear Energy (NE).

The Bechtel Jacobs Company contract with DOE contains requirements that may cause the site's costs to appear out of line with other costs. While Bechtel Jacobs Company is committed to subcontracting a significant portion of the scope of work, the employees inherited from the previous contractor were transitioned to these subcontractors with substantially equivalent benefits as they had received prior to transition. This necessitates significant efforts of the part of the Human Resources, Procurement, Executive Management, Legal, and Chief Financial Officer functions. The Human Resource function spent a great deal of time negotiating new benefits packages with new carriers because the existing carrier could not handle the requirements, which also resulted in buying out the contract with the old carrier. In addition, the Procurement Function has been required to add special clauses to each subcontract to ensure that these personnel requirements are met. The Chief Financial Officer function has been involved in setting up a separate payroll system in order to pay the subcontractors so that accurate labor data can be maintained for benefits purposes. Therefore, due to the abovementioned circumstances, the FY 1999 functional costs may not compare favorably with those of other sites. Note that the FY 2000 functional costs have improved as the Managing and Integrating (M&I) Contractor process matured. As mentioned earlier, FY 2001 through FY 2003 support cost as a percentage of total cost stayed fairly constant.

III. <u>Major Cost Saving Initiatives</u>

Six Sigma Initiative

In FY 2001, Bechtel Jacobs Company (BJC) began implementing a Six Sigma initiative. Six Sigma is a problem-solving methodology that uses a systematic approach to allow an organization to improve quality quickly and effectively. It utilizes a rigorous set of statistical tools and methodologies designed to improve work quality, profitability, customer and employee satisfaction and leadership of business enterprises. BJC has combined the Six Sigma methodologies with behavioral-oriented Performance Based

Leadership tools to improve the way we do business; tackle the issues that can hinder performance and drive us toward our goal of meeting business objectives and DOE expectations.

BJC calculates and tracks the cost savings derived from the Six Sigma Process Improvement Projects (PIPs) on a calendar year basis. The following is a brief description of the results and cost savings associated with PIPs that generated cost savings in 2003. Cost savings are unburdened and are net of any implementation (investment) cost.

Improving the Baselining Process

This goal of this PIP was to reduce the gap between the Budgeted Cost of Work Scheduled (BCWS) and the Actual Cost of Work Performed (ACWP) by focusing on the baseline/budget development process that defines the annual BCWS (i.e., development of scope, schedule, and estimate). Data analysis indicated that over fifty percent of the gap between BCWS and ACWP is generated in the first three to four months of the fiscal year.

Analysis indicated that, for many projects, high levels of regulatory involvement are a significant contributor to the creation of gaps between the baseline and actual expenditures through schedule delays for many projects. The team evaluated a number of issues, such as: availability of funding; short business months in October; Paid Time Off/Holidays in November and December; delays in subcontract startups, scope uncertainty; potential front end loading; staffing and mobilization efforts, and development of infrastructure as possible reasons for gaps between baseline and actual expenditures. An improvement plan was implemented to address many of these issues.

	(\$Thousands)		
2003 Cost Savings	\$	47	

Legal Document Management and Production Process Improvement

The number of information requests associated with freedom of Information Act (FOIA), Workers Compensation, Worker Advocacy Office (WAO), and related litigation has significantly increased. Before this PIP was initiated, the average time to respond to a request was 40 calendar days. As a result of the PIP, the average time to respond is 15 calendar days, a reduction of 25 days, with less staff time required to process each request.

	(\$Thousands)		
2003 Cost Savings	\$	291	

Improve the Process for Subcontract Initiation to Payment

Prior to initiation of this PIP, the process for managing subcontract funding and vendor payments involved re-work, duplicate data entry, and incidences of data not matching between the Bechtel Procurement System (BPS) and the Accounts Payable (AP) systems.

Implementation of an electronic interface between these systems resulted in a reduction of job hours in AP and eliminated re-work. Key actions included establishing a team to function as a project (with a defined scope, schedule, and budget). The team prepared the life cycle baseline guidance, established consistent business rules that were issued as a desk instruction, assigned responsibility for project/function BPS/AP to a designated person, instituted electronic controls, and performed training on the revised process. The improvements identified by the Team allowed BJC to proceed with implementing an electronic interface. Potential areas for data disconnects were identified, and by utilizing the planned controls and mistake proofing techniques, defects have been kept to an absolute minimum.

	(\$Thousands)		
2003 Cost Savings	\$	137	

Improve the Analytical and Data Management Process at Paducah

From October 2000 through February 2002, approximately 30% of the sample packages developed at Paducah requested expedited turnaround time from the analytical laboratories. These packages represented over 50% of the samples collected (9,000 expedited vs. 15,000 collected). Since premiums are paid for expedited laboratory turnaround times, the expedited samples represented approximately 16,000 sampleequivalents in terms of cost. This difference represents an increase in cost of approximately 40% over standard turnaround times. The objective of this PIP was to improve the process so that the requested number of expedited turnaround times from the laboratory would be reduced by 30% and schedule would not be negatively impacted. Improvement actions resulted in a more fully integrated system with some non-value added process steps being completely eliminated. Savings resulted from four major changes. First, expedited laboratory turnarounds for which cost premiums are charged were eliminated in most cases. Second, classification reviews were eliminated on any data not being released to the public. Third, the final review and approval cycle was eliminated. Fourth, an electronic status board was implemented to ensure regulatory data is delivered on time to minimize the risk of fines and penalties.

	(\$T	housands)
2003 Cost Savings	\$	825

Reduce Banking Costs Associated with Benefit Accounting Bank Accounts

During Calendar Year 2001, there were 29 Benefit Accounting Bank Accounts that were maintained. Each of these accounts accrues monthly maintenance fees from the bank. The amount of the bank fee is dependent on the services provided for each account. Improvements identified by this PIP allowed BJC to consolidate and reduce the number of Bank Accounts from 29 to 12, with a corresponding reduction in banking fees.

	(\$Thousands)	
2003 Cost Savings	\$	224

Improve Workforce Transition (WFT) Subcontractor Benefits Billing and Payments Billing Process

Bechtel Jacobs Company (BJC) manages Multi-Employer Pension Plans (MEPPs) and Multi-Employer Health and Welfare Act (MEWA) benefits for both BJC and transitioned subcontractor employees. The plan administrator requires consolidated monthly contribution reports and payments. This requires invoices to and collection from the subcontractors to facilitate consolidated data and payments. The entire process is manual, and has a risk for error. An invoice to the subcontractors is created which they use to deposit the employee/employer contributions in the bank. This process is entirely manual and includes multiple data reviews intended to reduce risk of errors. Late transmittal of invoices to subcontractors may prohibit timely deposit of funds, thereby requiring use of BJC funds. The goal of this PIP was to reduce the multiple validations and to automate the invoice development process to reduce the effort required, risk of error, and facilitate timely deposits.

	(\$Thousands)	
2003 Cost Savings	\$	137

Reduce Software Maintenance and Operations Costs

This PIP was undertaken to help meet a challenge to reduce the Software Maintenance budgets for FY 2002 and FY 2003. The team analyzed projected expenditures for maintaining existing and new software applications and evaluated the impact of reducing or eliminating support for various applications. A software change control board was also instituted to maintain control over expenditures for newly proposed applications. The budget reduction achieved for 2003 was \$820,000.

	(\$Thousands)	
2003 Cost Savings	\$	820

Improve Health Physics Survey Process for Surveillance and Maintenance

The purpose of this PIP was to evaluate the scope and cost of conducting health physics surveys during surveillance and maintenance of ORNL buildings awaiting decontamination and decommissioning. Data analysis indicated that measurements were being made in several facilities where no results had been found over limits for six months. Reduction in non value-added surveys reduced cost and eliminated the potential exposure of technicians conducting such surveys. Other improvements included webbased reporting of survey results and ongoing, regularly scheduled reviews of survey results.

	(\$Thousands)	
2003 Cost Savings	\$	152

<u>Reduce Costs for Managing the Waste Information Management System</u> This PIP was undertaken to help meet a challenge to reduce the FY 2003 budget for the

Waste Information Management system. The goal was to eliminate unneeded functionality of the waste tracking database, while retaining those elements necessary to maintain compliance with applicable requirements and regulations. The team identified features that were not requirements-based and could be eliminated for a 2003 cost savings of \$1,029,000.

	(\$T	housands)
2003 Cost Savings	\$	1,029

Optimizing Staffing Levels for the Molten Salt Reactor Experiment Project

The MSRE project involves the removal of uranium from facility tanks and equipment, treating the material and transferring it to appropriate containers for disposal. The fuel is in salt form, but must be melted for removal and transfer. Once the removal begins, the operation must continued 24/7 for approximately 24 months. The purpose of this PIP was to optimize staffing of the MSRE project. It evaluated the number of staff required, various shift options, and the time and cost required to train employees. Cost savings were identified in the areas of training time required and number of workers needed to conduct the work.

	(\$Thousands)	
2003 Cost Savings	\$	799

Improving Craft Support for the Melton Valley Closure Project

The purpose of this PIP was to evaluate options and associated costs for obtaining craft support for Melton Valley projects. The team evaluated the current availability of, and future needs for, craft support. They also analyzed the costs of hiring craft support directly, compared to purchasing support services from other prime contractors on the Oak Ridge Reservation. Based on the results of this PIP, the project was able to reduce its estimated cost for craft support by \$251,000.

	(\$Thousands)	
2003 Cost Savings	\$	251

Improve the Process for Benefit Transmittals

This PIP evaluated the Human Resources and Finance organizations' processes for collecting and capturing data associated with benefits administration and accounting. The team identified improvements to decrease cycle time reduce manual rework, reduce database discrepancies, and improve systems used to generate benefits invoices for subcontractors.

	(\$Thousands)	
2003 Cost Savings	\$	65

Improve the Inspection Process for Surveillance and Maintenance

The purpose of this PIP was to evaluate the scope and cost of conducting inspections during surveillance and maintenance of ORNL buildings awaiting decontamination and decommissioning. Data analysis indicated that the majority of systems being inspected were very stable and were consistently within specification limits for the period reviewed. The team developed a statistical protocol to evaluate the inspection performance data, modified inspection check sheets, and changed inspection roles and responsibilities. Inspection data will be monitored and analyzed on an ongoing basis. The PIP allowed adjustments to inspection frequencies and therefore reduced inspection costs.

	(\$Thousands)	
2003 Cost Savings	\$	259

Reduction of Groundwater Sampling on the Oak Ridge Reservation

This PIP evaluated the possibility of reducing costs of groundwater monitoring to free up funding for accelerated cleanup. Data analysis indicated that both the frequency of sampling and the number of analyses could be reduced for some groundwater monitoring wells. The primary improvement was instituting the use of hypothesis testing to provide a statistical analysis of sample results for future sampling activities. These improvements reduced the amount of sampling and therefore reduced sampling costs.

	(\$Thousands)		
2003 Cost Savings	\$	82	

Optimizing Melton Valley Hydrologic Isolation Project Borrow Area Operations

This project involves the operation of borrow areas to provide contour fill for the capping of approximately 100 acres in Melton Valley. The purpose of this PIP was to evaluate and improve the proposed borrow area operation to meet aggressive cost and schedule targets. Analysis indicated that two variables – the capacity of dump trucks and the speed of trucks from borrow area to capping site – were the most important factors in meeting cost and schedule targets. The execution plan addressed these requirements by specifying a minimum dump truck capacity in subcontract documents and upgrading the haul road to safely accommodate a 25 mph speed limit. Contingency plans were also developed to recover/accelerate the work schedule.

	(\$Thousands)	
2003 Cost Savings	\$	359

Improve the Incremental Funding Process

When this PIP was started in FY 2003, incremental funding to subcontractors had already resulted in the processing of approximately 1,900 revisions to subcontracts and work releases, each revision costing an average of \$417 with a median cycle time of 7 days. While incremental funding is part of the U.S. government budgeting process and will

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continue to occur, the purpose of this PIP was to streamline BJC's internal processes for allocating incremental funding authorizations. The PIP identified improvements in the allocation and internal approval process, reduced the cycle time for revisions by 50%, and allowed a reduction in staff dedicated to these activities.

	(\$Thousands)
2003 Cost Savings	\$ 77

Improving the Process for Shipping UF6 Cylinders

BJC's work scope includes the safe storage and offsite shipment of over 6,000 cylinders containing depleted uranium hexafluoride by the end of FY 2006. The purpose of this PIP was to optimize the process for offsite shipment to meet or beat contractual cost and schedule targets. Simulation modeling identified several opportunities to accelerate the shipment process, including the use of an alternative cylinder loading process, reconfiguration of staging areas, improved access to the loading site, providing a covered area for inspections and continued operations during inclement weather, and additional equipment and operators. These improvements are anticipated to allow the project team to ship 10 cylinders per day, compared to a historical average of 4.7 per day, reducing estimated life cycle costs by \$5.6 million.

	(\$Thousands)
2003 Cost Savings	\$ 329

Reducing the Number of Radiological Surveys at the Environmental Management Waste Management Facility (EMWMF)

Between May 2002 and September 2003 there were over 24,000 radiological surveys for over 5,000 placarded waste shipments to the EMWMF. This number is expected to increase significantly in the next 5 years. The purpose of this PIP was to evaluate survey results to determine if the number of radiological surveys could be reduced, while complying with all applicable requirements and regulations. Process mapping showed that 6 surveys are conducted from the time that waste is loaded onto a truck at the generating site, to the time that it delivers the waste to the EMWMF and returns to the generating site. Analysis of survey results showed that 2 of the surveys - conducted when the truck leaves the generator site and again when it enters the EMWMF - are duplicative and have always been far below regulatory limits. The control plan requires BJC to submit a technical justification as a basis for eliminating the incoming survey at EMWMF. Life cycle savings are estimated to be \$4.3 million.

	(\$Thousands)
2003 Cost Savings	\$ 30

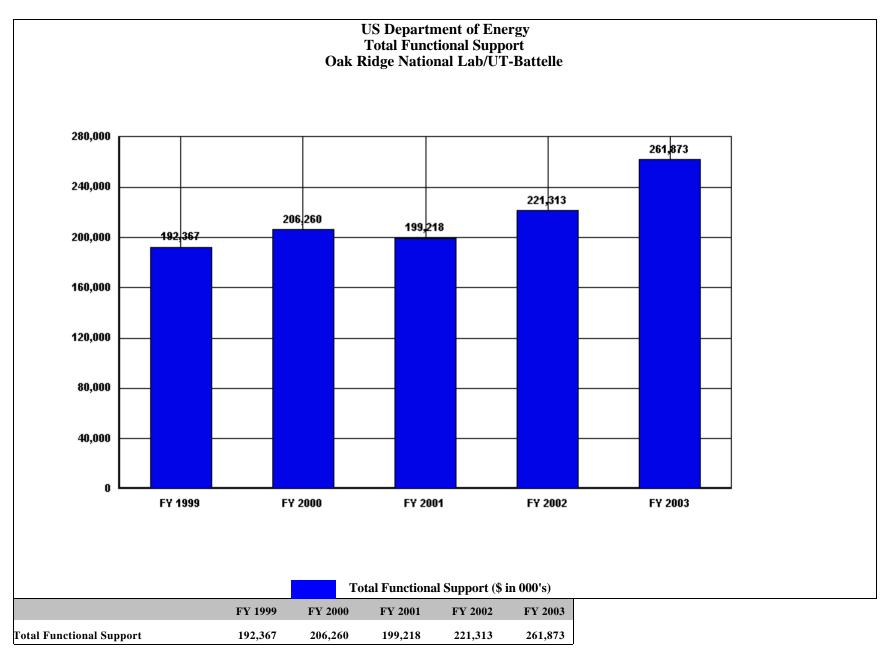
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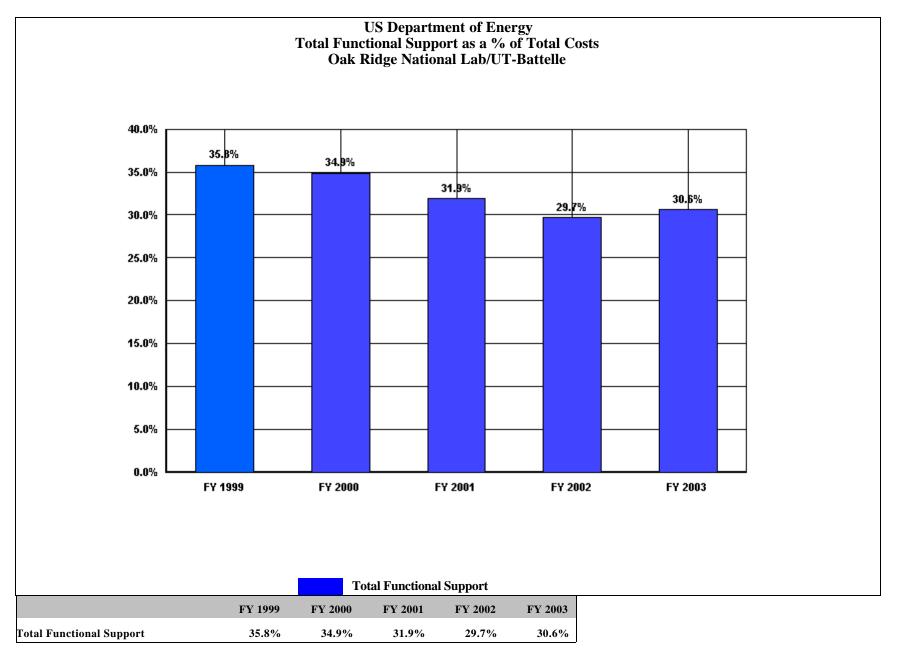
IV. Other

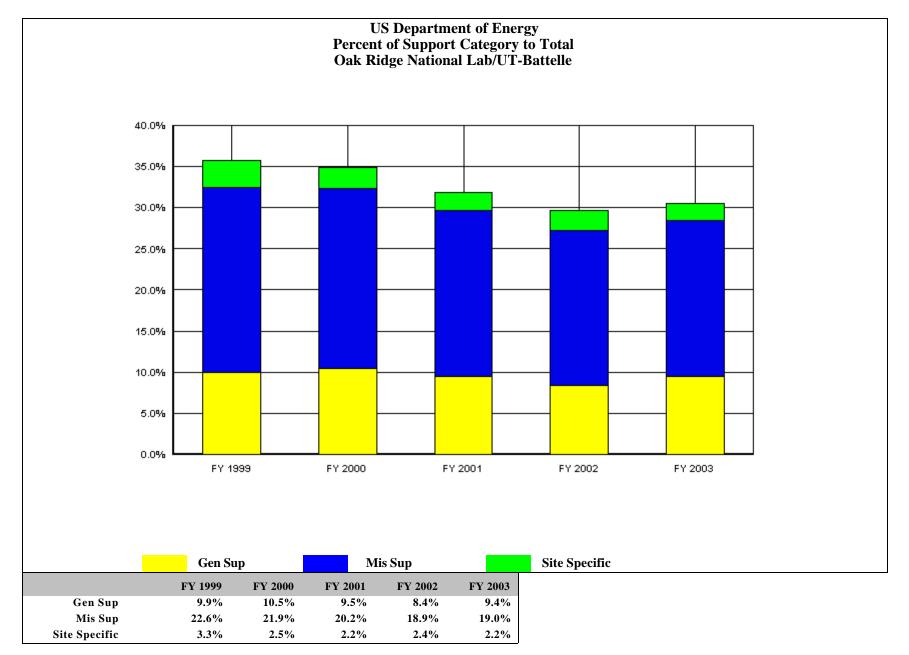
The Other functional category includes the following for FY 2003:

Inclement Weather/Meetings Reservation Management/DOE Directed Support	30 7
Site Office Support Total	\$ 11 48

Trends in	Total Function	al Suppor	t Cost Cat	egories			
0	ak Ridge Nation		Г-Battelle				
		2003 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	1999 to
						FY2(03
	4,086	5,512	5,681	5,537	12,581	8,495	207.99 26.49
HUMAN RESOURCES CFO	5,244 5,443	4,496 5,268	4,511 5,087	5,260 5,057	6,627 11,232	1,383 5,789	106.49
PROCUREMENT	2,471	3,208	3,087	2,752	4,853	2,382	96.49
LEGAL	2,306	1,330	1,669	1,875	2,172	-134	-5.89
CENTRAL ADMIN SERVICES	4,912	5,092	5,616	4,432	5,230	318	6.59
PROGRAM/PROJECT CONTROL	1,948	2,348	1,084	1,057	2,192	244	12.59
INFORMATION OUTREACH	3,834	5,425	7,643	7,247	8,604	4,770	124.4
INFORMATION SERVICES	15,943	19,041	20,059	24,116	22,713	6,770	42.5
OTHER	7,131	10,436	4,914	5,162	4,703	-2,428	-34.0
TOTAL GENERAL SUPPORT	53,318	62,105	59,342	62,495	80,907	27,589	51.7
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
ENVIRONMENTAL	6,646	5,808	5,440	5,400	10,862	FY2 4,216	0 03 63.4
SAFETY AND HEALTH	21,612	24,747	22,684	21,358	27.414	5,802	26.8
FACILITIES MANAGEMENT	4,330	6,461	14,039	17,436	27,711	23,381	540.0
MAINTENANCE	57,394	60,955	50,201	58,928	47,556	-9,838	-17.1
UTILITIES	7,884	9,987	13,423	12,338	19,269	11,385	144.4
SAFEGUARDS AND SECURITY	7,342	6,812	9,108	13,947	15,266	7,924	107.9
LOGISTICS SUPPORT	5,720	6,852	4,109	5,597	6,067	347	6.1
QUALITY ASSURANCE	4,605	4,338	4,401	3,587	5,029	424	9.2
LABORATORY/TECHNICAL SUPPORT	5,861	3,403	2,485	2,100	3,371	-2,490	-42.5
TOTAL MISSION SUPPORT	121,394	129,363	125,890	140,691	162,545	41,151	33.9
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	9,573	7,745	6,450	6,959	7,056	-2,517	-26.3
TAXES	-695	-558	287	301	308	1,003	144.3
LDRD / PDRD / SDRD	8,777	7,605	7,249	10,867	11,057	2,280	26.0
TOTAL SITE SPECIFIC	17,655	14,792	13,986	18,127	18,421	766	4.3
TOTAL FUNCTIONAL SUPPORT	192,367	206,260	199,218	221,313	261,873	69,506	36.1
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	327,859	338,462	349,697	382,622	420,207	92,348	28.2
Capital Construction	16,981	47,095	75,479	141,642	174,228	157,247	926.0
TOTAL MISSION DIRECT	344,840	385,557	425,176	524,264	594,435	249,595	72.4
Fotal Costs	537,207	591,817	624,394	745,577	856,308	319,101	59.4
Fotal Costs w/o Construction	520,226	544,722	548,915	603,935	682,080	161,854	31.1
General Support % Total Costs	9.9%	10.5%	9.5%	8.4%	9.4%		
Aission Support % Total Costs	22.6%	21.9%	20.2%	18.9%	19.0%		
Site Specific % Total Costs	3.3%	21.9%	20.2%	2.4%	2.2%		
Total Support % Total Costs	35.8%	34.9%	31.9%	2.4%	30.6%		
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Background

ORNL is a multiprogram science and technology laboratory managed for the U.S. Department of Energy (DOE) by UT-Battelle, LLC. ORNL was established in 1943 as part of the Manhattan Project to pioneer a method for producing and separating plutonium for use in the development of the atomic bomb. The Graphite Reactor served as a pilot-scale plutonium production facility for much larger reactors built in Hanford, Washington. After World War II, material irradiation research was conducted at the Graphite Reactor. During the 1950s and 1960s, ORNL conducted research in several fields related to nuclear energy and built and operated several nuclear research reactors, in addition to performing important life sciences research. With the energy crises of the early 1970s and 1980s, ORNL's activities expanded to include multiprogram research and development in support of national DOE missions.

Major programs at ORNL include materials science and engineering, analytical and separations chemistry and chemical sciences, environmental sciences, fusion science and technology, instrumentation science and technology, nuclear physics and astrophysics with radioactive ion beams, neutron science, life sciences, high-performance computing, social sciences, energy-efficient technologies for buildings, biomass energy, fossil energy, nuclear technology and safety, environmental management science, environmental technology development, life-cycle analysis and health and environmental risk assessment.

ORNL has a staff of over 3,800 contractor employees. The ORNL main site encompasses approximately 1,100 acres in the Bethel and Melton valleys, approximately 10 miles southwest of the center of the city of Oak Ridge, Tennessee, with additional facilities located on the adjacent Copper Ridge. ORNL also occupies space at the Oak Ridge Y-12 Plant and leases some space off-site. The ORNL main site currently has 353 buildings, 67 trailers, with approximately 3.28 million square feet of building space.

Trends

Functional Support Costs have increased over the period from FY 1999 to FY 2003 from \$192.4M in FY 1999 to \$261.9M in FY 2003. This is due mainly to increases in the Office of Science funding and Capital/Construction. Over this same time period the percentage of Functional Support costs to total costs has decreased slightly from 36% to 31%.

FY 2003 Functional Support to total costs is artificially low due to the increased construction line item amounts that are related to the Spallation Neutron Source (SNS), Center for Nanophase Material Science (CNMS), and Genomics Facility. The line item construction related costs will continue for several years before we see them return to a normal level.

For the FY2003 Functional Cost analysis, wage costs were distributed based on the Level 4 organization where the employee worked, thus more accurately reflecting the type of work being performed. As a result, several support categories show considerable variations from previous years; i.e., Executive Direction (\$7M increase), CFO (\$6M increase), and Maintenance (\$11M decrease).

<u>Procurement</u> - Increase of \$2M due to reorganization, staff increases, and associated costs.

<u>Program/Project Control</u> - Increase of \$1M due to moving the costs of SNS Management Information and Project Controls from Capital/Construction into the Program/Project Control category.

<u>Environmental & Safety & Health</u> – Increases of \$5M and \$6M, respectively, due to legacy costs, scope increases, and wage pool impacts.

<u>Facilities Management</u> - Increase of \$10M is due to costs associated with revitalization, third party leases, and Non-Reactor Nuclear Facility Division.

Taxes: The estimation of sales and use taxes for fiscal years 1999 - 2003 is as follows (in 000's):

 FY 99:
 \$7,563
 FY 00:
 \$7,130
 FY 01:
 \$7,457
 FY 02:
 \$8,368

 FY 03
 \$10,428

Cost Savings Initiatives: FY2003 Operations Improvement Program (OIP) Projects

1. Chemical Management Center OIP Project

The <u>Chemical Management Center OIP Project</u> provided a focal point for reducing the hazardous material footprint at the Laboratory. ORNL employees utilize and maintain a variety of commercial chemical products as part of normal day-to-day operations. When a staff member determines that a commercial chemical product is excess to operation but is still a valuable chemical with potential for reuse by others, historically, there were no options other than to keep the item or disposed of it as waste. The establishment of the Chemical Management Center provides a centralized collection of usable commercial chemical products and facilitates the redistribution of the chemicals to other ORNL or off-site (non-ORNL) users.

An acceptance criteria was established to ensure that the CMC will only receive chemicals that have the potential of being used. At this centralized location, trained CMC personnel have evaluated the chemicals and actively work to find alternate uses and users for the chemicals. One of the goals of the CMC is to expand the universe of potential users, primarily internal to ORNL, but also including other DOE or federal sites, manufacturers, or universities.

The CMC provides research and maintenance staff a cost-effective resource bank of usable chemicals. Additionally, this effort promotes safe and efficient research and maintenance operations by reducing local control area inventories. The reduction of chemical clutter in laboratories will reduce the likelihood of spills, make it easier to locate wanted chemicals and reduce the amount of time required to maintain up-to-date chemical inventories.

The FY 2003 funding for the CMC was \$216K. Throughout the year, the CMC staff facilitated the transfer of 2,558 unwanted items from original control areas to new custodians and 520 items to safe storage in the CMC. By transferring items to safe storage in the CMC and avoiding unnecessary chemical purchases, we had a positive impact in reducing the chemical footprint in many laboratories and provide a valuable service to ORNL research staff. Additionally, this effort improved overall chemical safety at ORNL by removing unwanted chemicals from individuals' inventories, improving the accuracy of the Hazardous Materials Inventory System and by providing a chemical removal and delivery service to ORNL.

2. Liquid and Gaseous Waste Reengineering OIP Project

The <u>Liquid and Gaseous Waste Reengineering OIP Project</u> is a two-year project, with a total investment of \$1M, which is designed to

- eliminate the need for ORNL facilities to use the outdated and expensive existing central liquid and gaseous waste treatment facilities currently operated by DOE Environmental Management (EM);
- assist generators in re-engineering the liquid and gaseous waste systems; and
- complete the Facility Process Evaluations initiated under the Facility Environmental Vulnerability Assessment Recommendations Implementation OIP.

The FY 03 funding was \$575K; and resulted in the following outcomes

- The Liquid and Gaseous Waste Treatment System Strategic Plan was submitted as required by August 29, 2003 to satisfy the Performance Evaluation Plan action to 'Develop a risk prioritized strategic plan for the liquid and gaseous waste treatment systems and associated infrastructure required to support current and future ORNL missions; prepare ADS requests for operating/capital project funding to implement these systems; and complete preliminary proposal for FY04 GPP." The plan identifies a series of expense planning and capital projects totaling \$79.9M to build the new liquid and gaseous waste treatment systems required for the next 50 years to support the SC mission. Annual operating cost savings of over \$14M per year will be realized with the new facilities compared to the annual cost to operate the existing aged and inefficient central collection and treatment systems. After payback of this facility development investment in 5.7 years, the \$575K OIP investment would be paid back in about 2 weeks. These developments would also allow SC facilities to be disconnected from the existing EM operated treatment facilities by 2010, the planned beginning of EM Bethel Valley remediation.
- Support of \$10k was provided to Metals & Ceramics Division for the installation of a chiller at 4508 that significantly reduced the amount of once-through cooling water discharged to the waste system. The chiller will reduce the amount of cooling water discharged to the process waste system by 20 million gallons per year (MGY). This will reduce the amount of ORNL process waste requiring treatment by 11%. The annual cost of operating the process waste treatment plant is \$11.4M. The installation of the chiller will pay back the \$575K OIP investment in approximately 6 months, assuming costs for operation of the ORNL liquid and gaseous waste treatment systems are "cost-shared" between EM and SC in the future based on the amount of waste generation.
- Four hundred and seventy six (476) facilities were evaluated for environmental vulnerabilities. Of the facilities evaluated, eight-eight (88) were identified as having environmental vulnerabilities. Fifty-six (56) of these vulnerabilities were

• corrected, or noted in the Condition Assessment System (CAS) for future action during facility maintenance or at end of facility life. Thirty-two (32) conditions were established in ATS for actions on the remaining vulnerabilities.

3. Disposal of Special Nuclear Materials (SNM) OIP Project

The <u>Disposal of SNM OIP Project</u> is designed to eliminate the storage of SNM in the 3027 vault, allowing closure of a Category II nuclear facility. This project is to be funded for 3 years, totaling \$633K to date, with \$385K being funded in FY03. When completed, this project will save approximately \$2.5M in operating costs (based on 20 yr operation). Disposition paths have been identified for all materials remaining in the facility. These paths are being worked aggressively by project personnel. Where the disposition options are at risk, alternate paths are being developed and worked. Since the Cell F safety analysis required over a full year to resolve comments, the projected operational date for Cell F is currently early January 2004. Transfer of remaining programmatic materials to Cell F from Building 3027 can then occur.

During FY03 significant accomplishments were made in support of the disposition of materials from Building 3027 as summarized below.

- Material acceptance was received from LLNL for 79 grams of remote-handled Pu material, (DNFSB material).
- A processing plan was developed and approved by the DOE site office and Bechtel Jacobs for disposing of 53 grams of remote-handled Pu material as liquid low-level waste, (DNFSB material).
- The opening and inspection of nine items of Pu-238 at Building 3027 was completed to collect container data and analyze the material batches. This data was used for completing the safety analysis revision for the shipping cask and was provided to LANL for their acceptance criteria evaluations, (DNFSB material).
- The repackaging of two large plutonium-beryllium sources reading approximately 2.5 R/h each was completed. These sources were overpacked into special form capsules by project personnel with very low personnel exposures.
- The first shipment of enriched uranium to the Y-12 plant was completed.
- A potential user for the 3027 facility has been identified and the facility has been made available for the new user to develop a project plan and a bid specification package for the necessary modifications.

In summary, disposition paths have been identified for all materials remaining in the facility. These paths are being worked aggressively by project personnel. Where the disposition options are at risk, alternate paths are being developed and worked. Since the Cell F safety analysis required over a full year to resolve comments, the projected

operational date for Cell F is currently early January 2004. Transfer of remaining programmatic materials to Cell F from Building 3027 can then occur.

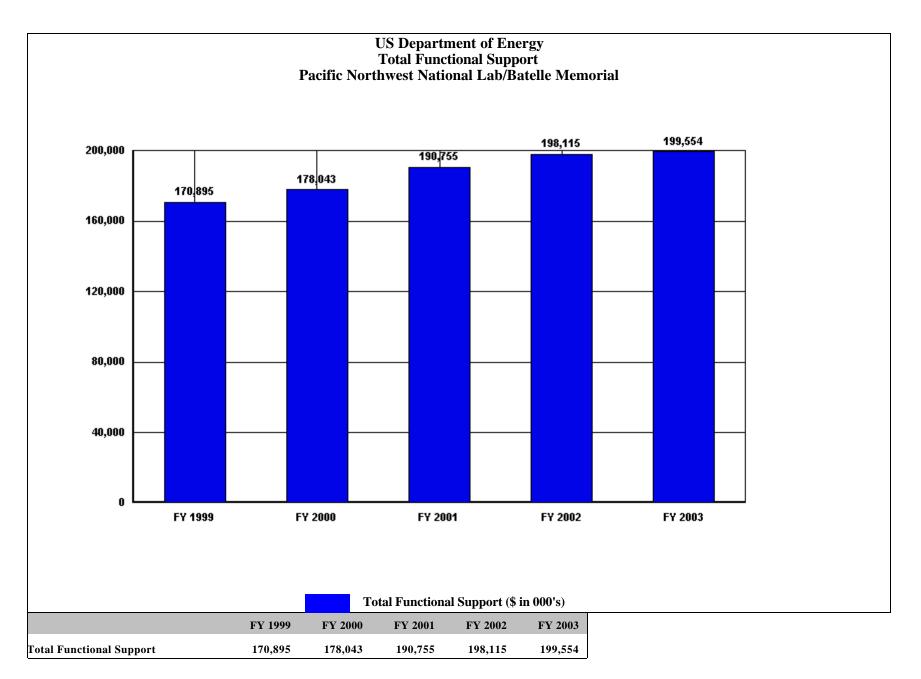
4. Consolidation of Fabrication Activities OIP Project

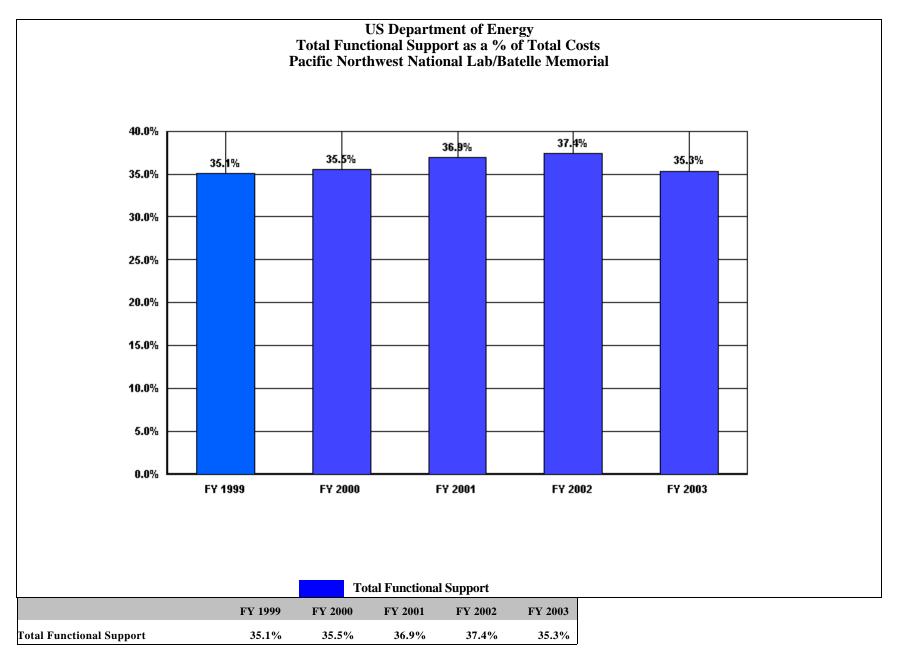
The <u>Consolidation of Fabrication Activities OIP Project</u> was funded at \$537K and consolidated the major fabrication shops into one facility. Consolidation of these facilities will increase efficiency by providing a single focal point for fabrication activities. This action will assist the laboratory in meeting their commitment to space reduction by utilizing the aforementioned vacated space to accommodate tenants from four other facilities. Because of the consolidation of fabrication activities and the movement of other personnel into that space, the space charge cost was reduced \$40K per month. In addition, the Fabrication Department's burden labor force was reduced by 1 FTE. A reduction in program maintenance cost has also been realized by eliminating excess machines which were not needed due to logistical changes. This project will provide for a full return on investment in less than one year.

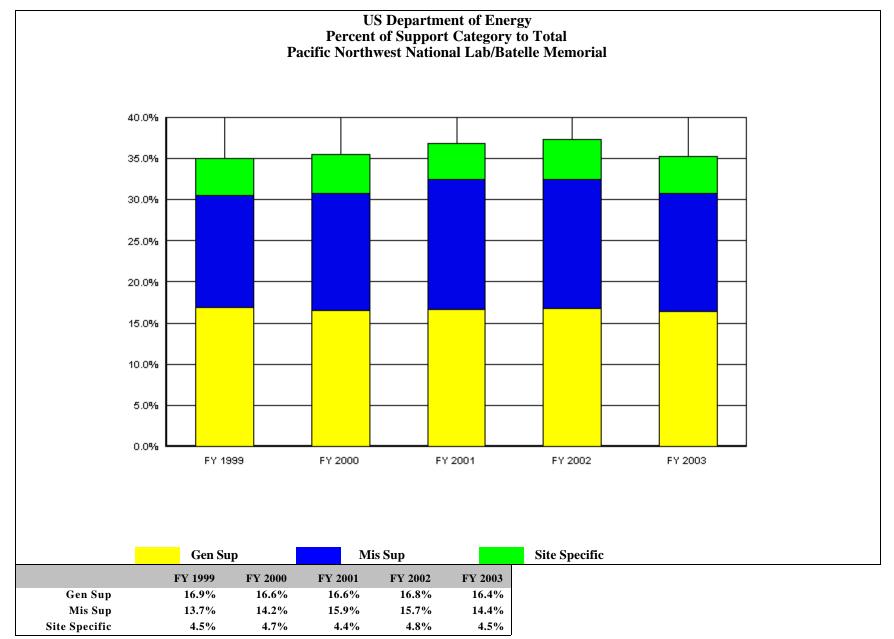
5. Basic Order Agreement for Analytical Services OIP Project

The <u>Basic Order Agreement for Analytical Services OIP Project</u> developed and implemented a basic order agreement (BOA) for analytical work to be performed by qualified commercial laboratories, and FY03 costs were \$40K. This BOA provides a comprehensive mechanism for project managers to utilize laboratories that offer the most efficient cost structures while ensuring generation of quality data thus reducing ORNL's liability. The new process allowed for a cost savings of \$105K, creating a return on investment of 2.6 in one year.

Trends in Total Functional Support Cost Categories								
Pacific North	west Natio	nal Lab/B	atelle Me	norial				
	FY	2003						
	(\$ in	000's)						
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20		
EXECUTIVE DIRECTION	4,186	3,818	2,803	3,905	3,887	-299	-7.1%	
HUMAN RESOURCES	4,635	4,622	4,815	4,740	4,935	300	6.5%	
CFO	8,740	9,280	10,417	11,814	11,452	2,712	31.0%	
PROCUREMENT	8,983	6,992	6,056	5,639	5,713	-3,270	-36.4%	
LEGAL	1,571	1,805	1,843	1,393	941	-630	-40.1%	
CENTRAL ADMIN SERVICES	3,714	3,666	3,553	3,919	4,808	1,094	29.5%	
PROGRAM/PROJECT CONTROL	4,063	3,457	3,012	3,798	2,976	-1,087	-26.8%	
INFORMATION OUTREACH	8,461	7,380	9,597	11,132	12,762	4,301	50.8%	
INFORMATION SERVICES	18,614	21,339	23,215	21,524	22,765	4,151	22.3%	
OTHER	19,379	20,589	20,491	21,162	22,657	3,278	16.9%	
TOTAL GENERAL SUPPORT	82,346	82,948	85,802	89,026	92,896	10,550	12.8%	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20		
ENVIRONMENTAL	759	1,858	2,970	3,245	4,161	3,402	448.2%	
SAFETY AND HEALTH	17,180	16,725	20,718	18,710	16,497	-683	-4.0%	
FACILITIES MANAGEMENT	15,707	15,063	18,116	19,882	20,273	4,566	29.1%	
MAINTENANCE	8,886	8,300	7,313	9,020	9,801	915	10.3%	
UTILITIES	9,039	8,600	9,027	9,939	8,527	-512	-5.7%	
SAFEGUARDS AND SECURITY	3,848	7,800	9,583	8,938	10,061	6,213	161.5%	
LOGISTICS SUPPORT	1,577	1,075	1,287	1,558	1,538	-39	-2.5%	
QUALITY ASSURANCE	3,938	6,153	6,638	3,969	4,319	381	9.7%	
LABORATORY/TECHNICAL SUPPORT	5,703	5,747	6,389	8,161	5,936	233	4.1%	
TOTAL MISSION SUPPORT	66,637	71,321	82,041	83,422	81,113	14,476	21.7%	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1		
	0.088	10 517	11.756	11 196	10 648	FY20		
MANAGEMENT/INCENTIVE FEE	9,088 2,955	10,517	11,756	11,186	10,648	1,560 -2,027	17.2% -68.6%	
TAXES LDRD / PDRD / SDRD	2,955	3,448 9,809	669 10,487	2,192 12,289	928 13,969	-2,027 4,100	-08.0% 41.5%	
TOTAL SITE SPECIFIC	21,912	23,774	22,912	25,667	25,545	3,633	16.6%	
TOTAL FUNCTIONAL SUPPORT	170,895	178,043	190,755	198,115	199,554	28,659	16.8%	
			-		, i			
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	0.0	
Mission Direct Operation	304,638	315,815	313,608	322,232	352,558	47,920	15.7%	
Capital Construction	11,913	7,218	12,715	10,066	12,843	930	7.8%	
TOTAL MISSION DIRECT	316,551	323,033	326,323	332,298	365,401	48,850	15.4%	
Total Costs	487,446	501,076	517,078	530,413	564,955	77,509	15.9%	
Total Costs w/o Construction	475,533	493,858	504,363	520,347	552,112	76,579	16.1%	
	170,000	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	001,000	020,017	002,112	, 0,0 / 2	1011/0	
General Support % Total Costs	16.9%	16.6%	16.6%	16.8%	16.4%			
Mission Support % Total Costs	13.7%	14.2%	15.9%	15.7%	14.4%			
Site Specific % Total Costs	4.5%	4.7%	4.4%	4.8%	4.5%			
Total Support % Total Costs	35.1%	35.5%	36.9%	37.4%	35.3%			
Total Support % Total Costs w/o Construction	35.9%	36.1%	37.8%	38.1%	36.1%			
rotar Support 70 rotar Costs w/o Construction	22.970	20.170	27.070	20.170	20.170			







I. <u>SITE CHARACTERISTICS</u>

History:

Battelle Memorial Institute operates the Pacific Northwest National Laboratory for DOE. In 1965, Battelle Memorial Institute assumed management and operation of the federal government's Hanford Laboratories in southeastern Washington State. At the same time, the research facility was separated from Hanford site operations and renamed the Pacific Northwest Laboratory. Battelle has invested more than \$101M in private research facilities and equipment adjacent to the government laboratory.

Mission:

Pacific Northwest National Laboratory is a multi-program national laboratory that creates new knowledge and delivers solutions to science and technology challenges across the U.S. Department of Energy's science, national security, environmental quality, and energy resources missions. PNNL performs basic and applied research to deliver energy, environmental, and national security for the nation. The Laboratory is an outgrowth of the R&D component of the Manhattan Project Hanford Works that focused on materials science, nuclear technology, and health studies. Strengths in chemical and molecular science, process science and engineering, computational and information science, environmental and climate science, energy systems science and engineering, materials science and engineering, and nuclear science and engineering underpin our research programs. PNNL operates the Environmental Molecular Sciences Laboratory, a national scientific user facility with advanced resources for fundamental research on the physical, chemical and biological processes. Biological science research focuses on the bio-molecular basis of health effects from environmental pollutants. PNNL solves legacy environmental problems with cost-effective cleanup solutions and technologies that prevent pollution and minimize waste. Scientists identify technology to characterize and mitigate the consequences of pollution, climate change, and other environmental impacts as the basis for sound policy decisions. PNNL develops clean energy and industrial processes, lightweight materials and advanced power systems for transportation, and efficient building technologies for DOE's energy mission. PNNL provides impactful and innovative solutions to prevent the proliferation of weapons of mass destruction, combat terrorism, promote nuclear safety, and protect critical infrastructure and information for DOE's national security mission. The Laboratory strives for excellence in management and safe operations, thereby enabling efficient and cost-effective research while protecting our workers, the public, and the environment. PNNL staff is broadly engaged in local economic development, education, and other community programs.

Consistent with the mission, a significant portion of the Laboratory's work is in environmental science, environmental technology, or for the Department of Homeland Security. Further, PNNL's projects in support of DOE's national security and energy missions often draw heavily upon capabilities developed in support of the environmental mission.

Some of the factors affecting the PNNL's functional cost profile include:

- 1. PNNL is a multi-program laboratory with a diverse customer base: DP, EE, EH, EM, ER, FE, NE, NN, PO, RW, DHS and Work for Others.
- 2. One of the provisions of Battelle's contract with DOE is a unique agreement called a Use Permit. This agreement combines Battelle and government-owned facilities in a consolidated laboratory where Battelle can conduct work for DOE as well as other government agencies and private businesses on a cost-reimbursable basis. The physical resources of the consolidated laboratory are valued an approximately \$650 million.
- 3. PNNL actively occupies 98 buildings and another 3 buildings in standby mode.
- 4. FY2003 year-end headcount was 3662.

II. <u>HIGHLIGHTS OF TRENDS</u>

The trend in PNNL's total Functional Support Costs is:

Year	Total Functional Support Costs	Total Functional Support Costs as a % of Total Costs
1999	\$170,895	35.1%
2000	\$178,042	35.5%
2001	\$190,755	36.9%
2002	\$198,115	37.4%
2003	\$199,554	35.3%

III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEARS

Updated Functional Support cost guidance requested a summary of what types of cost are included in each cost category, as well as an explanation of significant changes.

Executive Direction:

This category includes the Laboratory Director's Office and Strategic Planning. Executive Direction remained relatively constant from FY02 with a slight reduction in cost of \$18K or 0.5%.

Human Resources

Includes cost associated with Human Resource activities associated with recruiting, wage and salary administration, EEO and diversity activities. Also, included in this category is benefits administration and educational programs. Human Resource cost is slightly up \$195K or 4.1% from FY02.

Chief Financial Officer

Includes cost associated with the CFO office and the Audit & Oversight Directorate less corporate G&A. CFO cost includes activities associated with central accounting activities, funds control, cost accounting, financial systems management and budget control. CFO cost was down \$362K or 3.1% from FY02.

Procurement

Includes Procurement cost from contracting activities, legal/contracts, acquisition Services, and Cost Price. Procurement cost remained fairly constant in FY03 with only a slight increase of \$74K or 1.3% from FY02.

Legal

Legal cost is down for the second year in a row. The decrease from FY02 to FY03 is \$452K or 32.4% and is mainly due to a decrease in the number of litigations.

Central Administrative Services

Includes cost related with Service & Equipment Centers, including the Duplicating Service Center, Hanford Technical Library, Technical Library Walk-In Services, and the Office Support Service Center. Central Administrative Support cost is up \$889K or 22.7% due to an increase in cost associated with the Hanford Technical Library service center and the Office of Support Services group.

Program/Project Planning & Control

Includes cost from Project Management Support Group and Quality/Performance Management Group. Program/Project Planning & Control cost is down \$822K or 21.7%. The decrease in cost is a savings related to the management cost within the Performance Management Group. In FY03 the manager of this group was on an offsite assignment supporting the start-up of the Department of Homeland Security.

Information/Outreach Activities

Includes cost from Economic Development and Office of External Relations, which is associated with technology transfer activities, technical information management activities, employee outreach programs and the university science & education management system. Information/Outreach Activities cost increases over the last three years are due to increased activities associated within the Economic Development group supporting technology commercialization. In addition in FY03 we have re-categorized the university science & education management system from the laboratory technical support category. The increase from FY02 to FY03 was \$1,630K or 14.6%.

Information Services

Includes cost from Information Sciences organization, including Jupiter Super Computer, Communication Workshops, EMSL Computer Service Center, Information Technology, and Starlight Service Center. Information services cost is up \$1,241K or 5.8% from FY02.

Other

This category includes cost not assigned to other Functional Support cost categories, such as the cost for a planning and technical liaison (\$4,422K), program development and management (\$17,467K), and bid and proposal costs (\$767K). These costs are consistent with FY02, increasing less than 1%.

Environmental

Includes cost associated with the development, implementation and maintenance of effluent controls, environmental monitoring, and surveillance, permitting, auditing and evaluation to assure environmental compliance, and pollution prevention. The cost in environmental is up \$916K or 28.0% from FY02. The FY03 increase within "Environmental" is related to the shift of DOE Effluent Monitoring activities from client funded to the DOE Building & Utility pool.

Safety & Health

Includes costs associated with the safety and health programs such as emergency preparedness, fire protection, industrial hygiene, industrial safety, occupational medical services, nuclear safety, radiation protection, transportation safety, and management and oversight. Cost in this category is down \$2,213K or 11.8% from FY02. This can be mainly attributed to direct labor support declining in the Environmental Restoration & Waste Management.

Facilities Management

Includes costs associated with facilities and their ability to function effectively. Facilities management includes engineering, rental of buildings and land and other activities related to facilities management and plant engineering such as remodeling, utilization, facility modification and facility upgrades. Cost in this category remained fairly flat from FY02 with a slight increase of \$391K or 2.0%.

Maintenance

Includes costs associated with Facilities Operations. Costs are associated with the requirements to sustain property, plant and equipment related to preventive, predictive and corrective maintenance. Maintenance cost increased \$781K or 8.7% from FY02, which mainly can be attributed to the renovation to the Radiochemical Processing Lab.

Utilities

Includes cost associated with Buildings & Utilities related to operating plants and equipment, contract level services for fuel, water and support need to provide electric, power, heat, and other elements. Utilities cost has decreased \$1,412K or 14.2% mainly due to a Building & Utilities cost reduction going into FY03 and cost savings related to the buy-downs related to the Energy Savings Performance Contract.

Safeguards & Security

Includes cost associated with the development and implementation of the safeguards and security program such as program direction, protective forces, physical security protection systems, transportation, information security, material control and accountability, research and development, personal security, and cyber security. Cost in Safeguards and Security is up \$1,123K or 12.6% mainly due to the emphasis on security operations activities.

Logistics Support

Costs associated with shipping, receiving, transportation, warehousing, motor pools, office equipment pools, property management and other logistics activities. Logistics cost remained constant in FY03 with a slight decrease of \$20K or 1.3% from FY02.

Quality Assurance

Includes cost within Quality & Integrated Safety. Costs are associated with quality engineering, quality assurance and operational readiness activities. Quality Assurance cost is up \$350K or 8.8%. The increase is visible within the research directorates where direct labor support is up from FY02 as well as cost in the Quality Organizational Jointly Shared pool.

Laboratory/Technical Support

Laboratory/Technical Support cost is associated with field investigations and other scientific studies as well as technical support activities such as electronic services. Cost in this category is down \$2,225K or 27.3% primarily related to the shift of the university science & education management system to the information outreach category to better align cost as defined in the functional cost instructions as well as a decrease in the Building & Utilities laboratory technical support activities driven by increased emphasis in the environmental and maintenance Building & Utilities.

Management/Award Incentive Fee

Includes cost for Management/Award Incentive Fee category and Corporate G&A. Management/Award/Incentive Fee cost is down \$538K or 4.8% related to reduced interest rates applied to the Cost of Facilities Capital and decreases within Corporate G&A.

Taxes

Includes cost for Tax category. Tax cost is down \$1,264K or 57.7% due to a \$1,328K tax accrual made in FY02 related to a pending tax appeal. No significant tax accruals were required in FY03.

LDRD/GRE

Includes cost for LDRD category and GRE Category. Cost is up \$1,680 or 13.7% due to LDRD and GRE cost which represents an increased emphasis on the Laboratory's research and development activities in response to laboratory growth in this area.

IV. FY 2003 PNNL COST SAVINGS INITIATIVES

Specific cost reduction or cost avoidance successes realized in FY03 included:

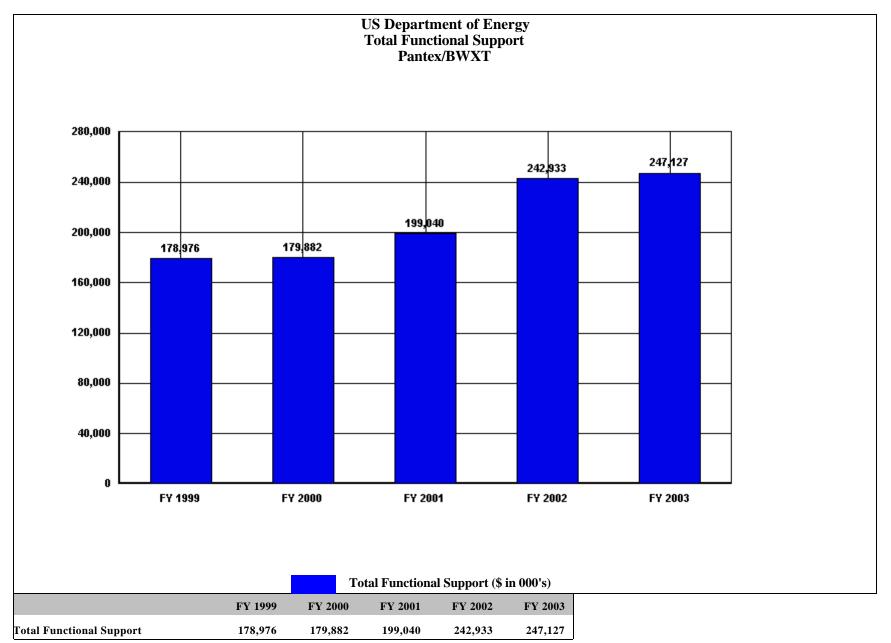
Alternative facility financing continues to be one of several methods PNNL has employed to reduce facility costs. These efforts have resulted in identification and use of best commercial practices, outcome-oriented performance measures, and elimination of low-value-added activities. Just over the past nine years, the number of buildings occupied has dropped from approximately 200 to approximately 100 and the gross square footage has remained about the same. While the quality of space has improved (phasing out WWII era facilities and replacing them with new facilities), the actual annual operating cost has decreased (i.e., from \$55M in FY95 to \$51M in FY03). The annual facility operating cost reduction is much more significant if adjusted for inflation.

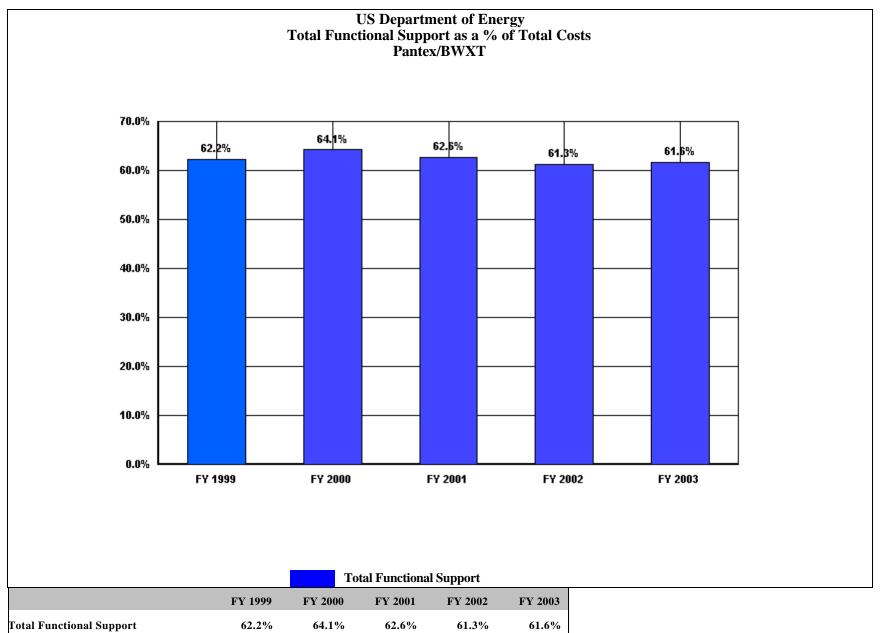
Energy Savings Performance Contracts (ESPCs) and Energy Conservation Projects (ECPs) have been a source of significant savings at PNNL. PNNL has invested \$11.5M in four ESPCs/ECPs since FY96, and over \$9M has already been repaid from facility operations savings.

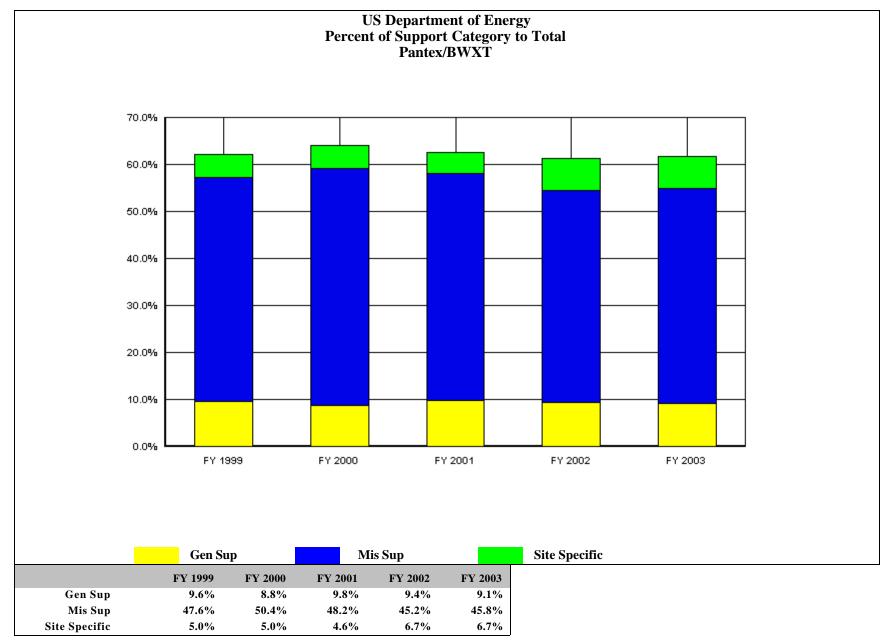
The decentralization of the Contracts, Acquisition, and Sales functions and associated span of control revisions resulted in a \$700K savings to the lab for FY02 vs. FY01. PNNL applied the business operations concept to the business offices and the contracts field teams essentially combining along the lines of the business office structure.

In response to the identification of increased resources needed in the near future for capability and facility revitalization efforts, PNNL management requested the development of a Cost Productivity Review (CPR) team. The team's objective is a 15% real increase in resources over the next three years available to be reinvested and maintain competitive rates.

Trends in	Total Function	al Suppor	t Cost Cat	egories			
		x/BWXT 2003					
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	1,841	1,232	1,015	1,186	1,163	-678	-36.8%
HUMAN RESOURCES	5,019	4,863	4,525	5,847	6,034	1,015	20.2%
CFO	3,783	2,835	2,763	3,342	4,061	278	7.3%
PROCUREMENT	2,702	2,296	2,745	3,432	3,014	312	11.5%
LEGAL	1,145	1,342	1,014	1,033	1,120	-25	-2.2%
CENTRAL ADMIN SERVICES	2,838	2,767	2,848	3,452	3,136	298	10.5%
PROGRAM/PROJECT CONTROL	994	988	1,521	3,986	4,003	3,009	302.7%
INFORMATION OUTREACH	825	421	444	468	542	-283	-34.3%
INFORMATION SERVICES	8,230	7,621	8,819	13,080	12,609	4,379	53.2%
OTHER TOTAL GENERAL SUPPORT	254	194	5,593	1,340	878	624 8,929	245.7% 32.3%
	27,631 FY 1999	24,559	31,287 FY 2001	37,166	36,560		
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
ENVIRONMENTAL	9,429	9,299	9,576	9,976	9,799	370	3.9%
SAFETY AND HEALTH	26,479	29,638	30,681	41,234	40,776	14,297	54.0%
FACILITIES MANAGEMENT	11,848	10,259	12,206	16,313	17,227	5,379	45.4%
MAINTENANCE	37,510	37,649	37,621	39,355	38,894	1,384	3.7%
UTILITIES	6,401	7,173	9,516	7,724	8,538	2,137	33.4%
SAFEGUARDS AND SECURITY	39,406	42,143	43,940	54,738	58,922	19,516	49.5%
LOGISTICS SUPPORT	4,547	3,953	7,188	6,591	5,934	1,387	30.5%
QUALITY ASSURANCE	1,232	1,202	2,520	3,194	3,462	2,230	181.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL MISSION SUPPORT	136,852	141,316	153,248	179,125	183,552	46,700	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	14,220	13,438	13,898	21,674	21,250	7,030	49.4%
TAXES	273	569	607	961	621	348	127.5%
LDRD / PDRD / SDRD	0	0	0	4,007	5,144	5,144	100.0%
TOTAL SITE SPECIFIC	14,493	14,007	14,505	26,642	27,015	12,522	86.4%
TOTAL FUNCTIONAL SUPPORT	178,976	179,882	199,040	242,933	247,127	68,151	38.1%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
Mission Direct Operation	92,787	92,602	104,797	130,298	136,975	FY2 44,188	47.6%
Capital Construction	15,794	7,950	14,021	23,355	17,008	1,214	7.7%
TOTAL MISSION DIRECT	108,581	100,552	118,818	153,653	153,983	45,402	41.8%
	· · · · · · · · · · · · · · · · · · ·			·			
Total Costs	287,557	280,434	317,858	396,586	401,110	113,553	39.5%
Total Costs w/o Construction	271,763	272,484	303,837	373,231	384,102	112,339	41.3%
General Support % Total Costs	9.6%	8.8%	9.8%	9.4%	9.1%		
Vission Support % Total Costs	47.6%	50.4%	48.2%	45.2%	45.8%		
Site Specific % Total Costs	5.0%	5.0%	4.6%	6.7%	6.7%		
		64.1%		61.3%	61.6%		
Total Support % Total Costs	62.2%	04.1%	62.6%	() 1. 7%	01.0%		







I. Site Characteristics:

Pantex Plant is operated for the Department of Energy/National Nuclear Security Administration by BWXT Pantex. The site is located on 16,000 acres in Carson County northeast of Amarillo, Texas. It houses 670 buildings containing approximately 3 million square feet and employs over 3,200 people. Constructed by the U.S. Army in 1942 as a conventional bomb plant, Pantex was decommissioned after World War II and sold to Texas Tech University as excess government property. In 1951, the Atomic Energy Commission reclaimed 10,000 acres of the site for nuclear weapons work. The remaining 6,000 acres were reclaimed by 1989 and are leased from Texas Tech.

Pantex assumed responsibility for weapons maintenance and modification in the mid-1960s when plants that had been performing those tasks closed. With the closure of the AEC Burlington Plant in Iowa in 1975, Pantex became the nation's only assembly and disassembly point for nuclear weapons.

The Pantex Plant is charged with maintaining the safety, security and reliability of the nation's nuclear weapons stockpile and has five primary missions.

- 1. Evaluate, retrofit, and repair weapons in support of both life extension programs and certification of weapon safety and reliability;
- 2. Dismantle weapons that are surplus to the strategic stockpile;
- 3. Sanitize components from dismantled weapons;
- 4. Develop, test, and fabricate high explosive components; and
- 5. Provide interim storage and surveillance of plutonium pits.

Pantex is participating with other Defense plants and laboratories in the Enhanced Surveillance Program to better predict component and material lifetimes, a critical element of the Stockpile Life Extension Program. Pantex also participates in the Advanced Design and Production Technologies (ADAPT) Campaign to provide the manufacturing complex with advanced capabilities for designing, developing and certifying components and systems, and for producing, assembling, and delivering components and systems products.

All work at Pantex is carried out under these overarching priorities: the security of weapons and information, the safety and health of workers and the public, and the protection of the environment.

II. Highlights of Trends:

	<u>FY1999</u>	<u>FY2000</u>	<u>FY2001</u>	FY2002	<u>FY2003</u>
General Suppor Mission Suppo Site Specific Total Support	,	\$24,559 141,316 <u>14,007</u> \$179,882	\$31,287 153,248 <u>14,505</u> \$199,040	\$37,166 179,125 <u>26,642</u> \$242,933	\$36,560 183,552 <u>27,015</u> \$247,127
Total Costs	\$287,557	\$280,434	\$317,858	\$396,586	\$401,110
Total Functiona Support Costs as a % Of Total Site Costs		64.1%	62.6%	61.3%	61.6%

Major Anomalies:

General Support FY1999 - FY2000

As a result of VSIP costs coming to an end and the absence of any large liabilities, FY1999 and FY2000 General Support costs experienced a decline.

General Support FY2001

General Support costs increased again in FY2001 due to unique occurrences that could not be avoided. A mid-year change in contractor required Senior Management from both BWXT Pantex and Mason & Hanger to work together for several months in an effort to transition the Pantex operating contract as efficiently and effectively as possible. As a result of the events of September 11th, Pantex was closed for 8 days with only essential personnel reporting to work, therefore the direct labor personnel reported their time as indirect cost for that time period.

General Support FY2002

During FY2002, Pantex initiated a more focused management approach. Many departments were restructured to provide for a more centralized management. In some instances, this moved what were previously classified as both mission support and mission direct costs to general support costs. These costs included the creation of the Planning, Scheduling & Integration (PSI) division, the centralization of the purchases of desk top computers as well as organizational structure changes in the IT department.

Mission Support FY1999 - FY2000

The increases from FY1999 through FY2000 reflect a change in planning/tracking strategy. Effort previously reported as Mission Direct, such as Security and Safety, can be isolated more easily and separated from the overall plant cost. The increase found in this area is offset by a decrease in Mission Direct. It should be noted that this is not intended to imply a

decrease in Mission Direct work. In most cases, the effort reported for Mission Support categories is tied directly to a particular weapon program.

Mission Support FY2001

The ability to pull cost out and apply it to Functional Cost category increases each year as work is defined at lower and lower levels within our Work Authorization Control System. In addition to this trend; however, there were other occurrences in FY2001 that drove cost higher for this category than in years past. The increase in utilities cost experienced around the country inflated our Utility cost by more than \$2 million. The September 11th attack drove Security costs up slightly through a heightened security stance (for the 19 days remaining in the year). The increases evident in other areas within Mission Support are a direct reflection of the increase in Mission work that Pantex was able to achieve for FY2001.

Mission Support FY2002

During FY2002, additional scope was added for three primary projects. 1) \$13 million for Safety & Health costs related to implementing the Authorization Basis Program. This is required in order for Pantex to be in compliance with Regulation 10CFR830 by April 2003. 2) \$9 million for heightened security costs for Security Police Officer labor. 3) \$5.8 million for facility improvements funded by Facilities and Infrastructure Recapitalization Program (FIRP) dollars.

Mission Support FY2003

A slight increase in Mission Support was realized in FY2003. This was primarily due to a combination of heightened security and a high number of uncleared security guards at the plant. Extensive amounts of overtime were required by Security to compensate for this increased scope with a shortfall in available labor.

Site Specific FY 2002

The fee earned by BWXT Pantex increased in FY2002 over FY2001 due to an increased fee base related to increased scope and an increase in performance against objectives.

Major Cost Drivers:

When comparing Pantex with other sites, it is important to note that we are a unique facility with a work scope unlike any other. For example, the costs for the Safeguards and Security program at Pantex are directly related to the quantity, configuration and multiple locations of nuclear material, including Category 1A, on site. All security planning, analysis and program execution is driven by a strategy that is more resource intensive than at other sites.

Due to a change in contractor in February of FY2001, the organizational structure at the plant was changed. Departments were created, deleted and combined to fit Management's vision of how the work should be done. The result is a slightly different roll-up of cost in many of the individual categories within each section.

III. Analysis of Change in Support Costs from Prior Year

The following functional support cost categories had changes greater than \$1million from FY2002 to FY2003. Below is a brief explanation of each change:

Safeguards & Security – Increased by \$4.2 million as a result of increased work scope for heightened security initiatives in FY2003. In addition, a large amount of overtime was worked by the guard force to compensate for a high number of uncleared guard personnel. **LDRD** – Increased by \$1.1 million primarily as the result of DP funding increasing in FY2003 over FY2002 levels. By design, the expenditures in the PDRD (LDRD) area fluctuate with the level of our DP funding. As DP funding increases, the amount of work funded as a part of PDRD also increases.

IV. Explanation of the "Other" Category

General Support-OtherF	<u>Y1999</u>	FY2000	FY2001	FY2002	<u>FY2003</u>
VSIP	84	63	8		
Transition Cost			2,347	1,068	12
Plant Close due to 9/11			3,083		
Beryllium Compensation	n			90	126
Sandia/Tri-Lab	18	15	12	10	11
Labor Pool					677
PXSO Misc Expenses	<u>152</u>	<u>116</u>	<u>143</u>	<u>172</u>	52
Total Other	254	194	5,593	1,340	878

VSIP – Voluntary Separation Incentive Package was offered in FY1997 in an effort to downsize. This resulted in a reduction in force of approximately 350 people and consisted of an educational assistance program that ran through FY2001.

Transition Cost – Mason & Hanger Corp. lost the contract at the Pantex Plant in FY2000. The transition period was lengthy and during the process, senior management from both companies were actively preparing for the change.

September 11th Attack – The plant was closed to non-essential personnel for 8 days, resulting in a sizeable loss in work time. The pay received by employees during that time was captured as Plant Close versus authorized work initiatives and cannot be assigned to a specific functional cost category. The increased effort by Security as a result of the attack is reported as Safeguards & Security under Mission Support.

Sandia/Tri-Lab – Personnel from other sites are housed on-site in an oversight/support capacity. The costs associated with them are for miscellaneous supplies provided by Pantex.

Labor Pool – Personnel unable to work in their assigned environment due to clearance restrictions or at management's discretion were assigned to a labor pool. Their efforts consisted of primarily administrative functions such as filing, answering phones or cleaning for various areas throughout the plant and cannot be tracked back to each of the areas supported.

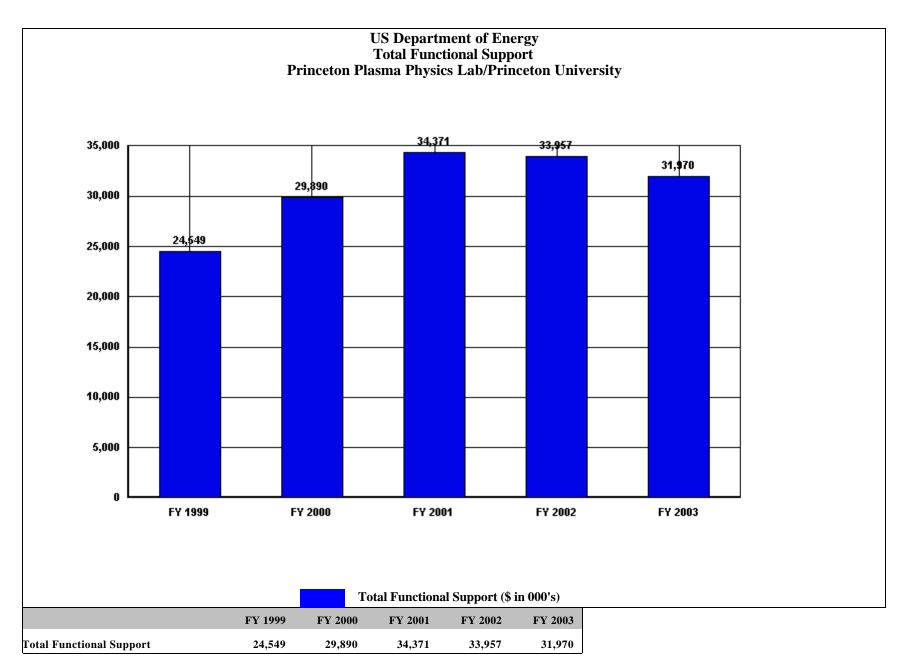
PXSO Miscellaneous Expenses – cost incurred by USDOE, Pantex Site Operations through the contractor's financial system for miscellaneous items such as supplies.

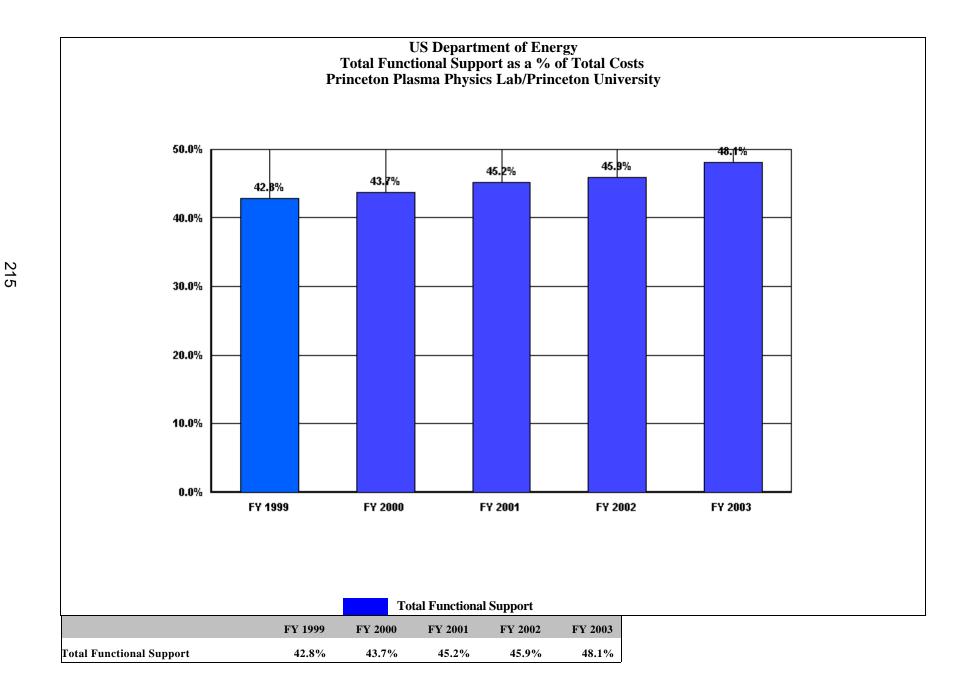
V. Cost Savings Initiatives

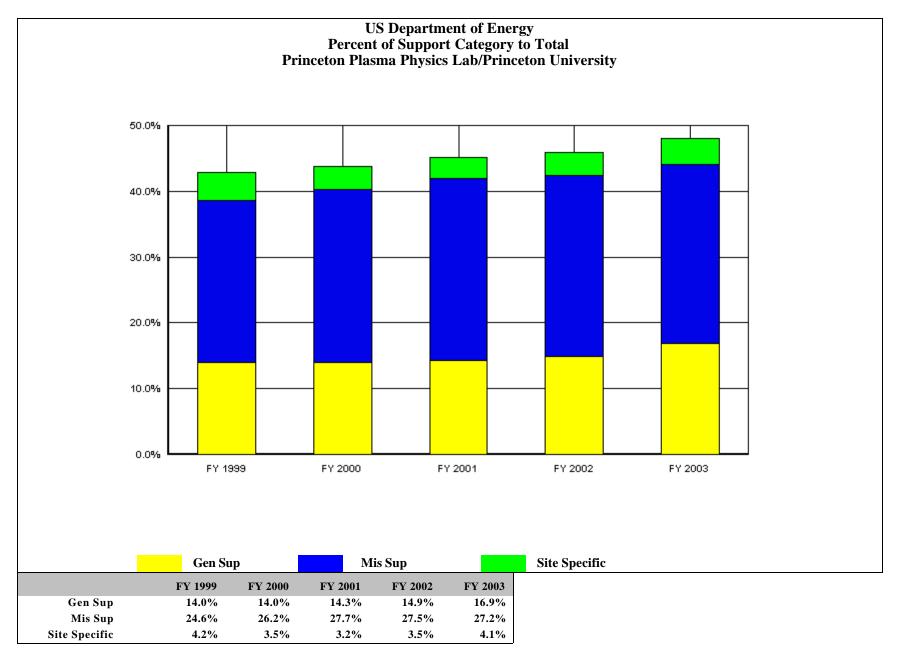
Reduced State Unemployment Taxes

BWXT Pantex began operations in Texas in February 2001. As a new employer, the State assigned an unemployment experience rate of 2.7% of taxable wages. BWXT challenged this and was able to transfer the successor employer's experience rating and assume the prior experience factor (1%). As a result, the state refunded \$1.2M in taxes paid from the start of the contract to the date of the settlement.

Trends in To Princeton P	lasma Physic	••		Ŭ			
		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change (FY20	
EXECUTIVE DIRECTION	840	814	757	786	817	-23	-2.7%
HUMAN RESOURCES	821	989	1,037	958	1,036	215	26.2%
CFO	1,007	1,176	1,225	1,294	1,333	326	32.4%
PROCUREMENT	483	551	601	655	555	72	14.9%
LEGAL	2	0	35	-78	0	-2	-100.0%
CENTRAL ADMIN SERVICES	176	193	232	173	214	38	21.6%
PROGRAM/PROJECT CONTROL	630	663	692	677	739	109	17.3%
INFORMATION OUTREACH	2,681	2,843	2,908	3,142	3,125	444	16.6%
INFORMATION SERVICES	2,543	2,695	3,155	3,322	2,981	438	17.2%
OTHER TOTAL GENERAL SUPPORT	-1,156 8,027	-383 9,541	224 10,866	87 11,016	405 11,205	1,561 3,178	135.0% 39.6%
MISSION SUPPORT	8,027 FY 1999	9,541 FY 2000	FY 2001	FY 2002	FY 2003	Change	
MISSION SUFFORT		FI 2000	FI 2001	F1 2002	FI 2003	FY2	
ENVIRONMENTAL	128	433	1,214	1,107	0	-128	-100.0%
SAFETY AND HEALTH	1,510	2,275	2,711	2,580	1,555	45	3.0%
FACILITIES MANAGEMENT	2,611	2,522	2,580	3,280	3,334	723	27.7%
MAINTENANCE	4,851	6,117	7,100	6,215	7,144	2,293	47.3%
UTILITIES	2,185	3,335	3,899	3,273	2,348	163	7.5%
SAFEGUARDS AND SECURITY	859	957	1,055	1,409	1,346	487	56.7%
LOGISTICS SUPPORT	664	772	760	844	872	208	31.3%
QUALITY ASSURANCE	386	445	518	497	454	68	17.6%
LABORATORY/TECHNICAL SUPPORT TOTAL MISSION SUPPORT	918 14,112	1,083 17,939	1,258 21,095	1,126 20,331	1,012 18,065	94 3,953	10.2%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	20,331 FY 2002	FY 2003	Change	
		FI 2000	FI 2001	F1 2002	FI 2005	FY2	
MANAGEMENT/INCENTIVE FEE	2,410	2,410	2,410	2,610	2,700	290	12.0%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	2,410	2,410	2,410	2,610	2,700	290	12.0%
TOTAL FUNCTIONAL SUPPORT	24,549	29,890	34,371	33,957	31,970	7,421	30.2%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
Mission Direct Operation	26,018	31,447	35,997	34,727	29,088	3,070	11.8%
Capital Construction	6,767	7,008	5,729	5,220	5,398	-1,369	-20.2%
TOTAL MISSION DIRECT	32,785	38,455	41,726	39,947	34,486	1,701	5.2%
Total Costs	57,334	68,345	76,097	73,904	66,456	9,122	15.9%
Total Costs w/o Construction	50,567	61,337	70,368	68,684	61,058	10,491	20.7%
General Support % Total Costs	14.0%	14.0%	14.3%	14.9%	16.9%		
Mission Support % Total Costs	24.6%	26.2%	27.7%	27.5%	27.2%		
Site Specific % Total Costs	4.2%	3.5%	3.2%	3.5%	4.1%		
Total Support % Total Costs	42.8%	43.7%	45.2%	45.9%	48.1%		
Total Support % Total Costs w/o Construction	48.5%	48.7%	48.8%	49.4%	52.4%		







I. BACKGROUND

The Princeton Plasma Physics Laboratory (PPPL) is a Collaborative National Center for plasma and fusion science. Its primary mission is to develop the scientific understanding and key innovations which will lead to an attractive fusion energy source. This research program is carried out in close collaboration with other national and international institutions. Associated missions at PPPL include conducting world-class research along the broad frontier of plasma science and providing the highest quality of scientific education.

PPPL is managed by Princeton University. The Laboratory is sited on 88 acres of Princeton University's James Forrestal Campus, about four miles from the main campus. There are two sites at the Laboratory: C-Site that houses most of the Laboratory's workforce and the smaller experimental devices; and D-Site which is the site of the National Spherical Torus Experiment (NSTX) that began operations in FY 1999. D-Site was initially constructed for the Tokamak Fusion Test Reactor (TFTR) that ceased operations in FY 1997. TFTR was decommissioned between FY 2000 and FY 2002, on schedule and under budget.

PPPL's FY 2003 funding was approximately \$69 million, of which approximately \$62 million was provided from the Office of Fusion Energy Sciences, approximately \$5 million from other DOE programs, and approximately \$2 million from other federal agencies, non-federal sponsors and other DOE laboratories. The Laboratory costed approximately \$67 million during FY 2003. As of September 30, 2003, the number of regular employees at PPPL is approximately 405, not including approximately 30 subcontractors and limited duration employees, 42 graduate students, and visiting research staff.

II. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEARS

PPPL's Total Functional Support Costs increased significantly in FY 2000 and FY 2001. Total Functional Support Costs were relatively flat in FY 2002, as compared to FY 2001, and then decreased in FY 2003. The overall increases and decreases in Functional Support Costs are directly in response to changes in Total Mission Direct Costs. The increase in total Laboratory costs in FY 2000 and FY 2001 is primarily due to the decontamination and decommission (D&D) of TFTR which began in FY 2000 and for which approximately \$10 million in funding was provided by Fusion Energy Sciences in FY 2002 compared to FY 2001. Total Mission Direct Costs are down slightly in FY 2002 compared to FY 2001, due principally to the completion of the TFTR D&D project. TFTR D&D costs decreased approximately \$2.7 million from FY 2001 to FY 2002. Total Mission Direct Costs decreased significantly in FY 2003, again due primarily to the TFTR D&D project, for which costs decreased approximately \$7.3 million from FY 2002 to FY 2003.

In April 1997, experimental operations were terminated on the Tokamak Fusion Test Reactor. In FY 1997 \$2.6 million was accrued for restructuring costs relating to the reduction-in-force in June/July 1997 following the shutdown of TFTR. Actual restructuring costs were less than the costs accrued and appear as cost credits in the "Other" General Support category in subsequent years. In addition, this category includes credits for the reversal of termination costs accrued for subcontracts related to the TPX project that was cancelled in FY 1995. PPPL was able to negotiate lower termination costs than those forecasted and accrued in FY 1995. In FY 2003, the other category includes \$0.4 million for PPPL employees whose positions were eliminated and who were separated from the Laboratory. The following provides a breakdown of the "Other" General Support Category:

	<u>FY 99</u>	<u>FY 00</u>	FY 01	FY 02	FY 03
Severance/Termination	\$(1175)K	\$(300)K	\$(97)K	\$0	\$362K
Labor Rate Var – Overhead Staff	\$6K	\$(27)K	\$150K	\$25K	\$10K
Miscellaneous	<u>\$13K</u>	<u>\$(56)K</u>	<u>\$171K</u>	<u>\$62K</u>	<u>\$33K</u>
Total	\$(1156)K	\$(383)K	\$224K	\$87K	\$405K

Functional Support Costs increased by \$5.4 million from FY 1999 to FY 2000 and \$4.5 million from FY 2000 to FY 2001. (Excluding the impact of severance and contract termination costs/credits, Functional Support Costs increased by \$4.5 million and \$4.3 million from FY 1999 to FY 2000 and from FY 2000 to FY 2001, respectively.) The increase by Functional Support category is summarized below:

Total Functional Support Costs – FY 2000 Total Functional Support Costs – FY 1999 Increase	\$29.9M <u>\$24.5M</u> \$ 5.4M
ReconciliationEnvironmental/Safety & HealthMaintenance	\$ 1.1M 1.3M
 Utilities All Other Total 	1.3M 1.2M <u>1.8M</u> \$ 5.4M
Total Functional Support Costs – FY 2001 Total Functional Support Costs – FY 2000 Increase	\$34.4M <u>\$29.9M</u> \$ 4.5M
Reconciliation • Environmental/Safety & Health	\$ 4.5M
MaintenanceInformation ServicesAll Other	1.0M .5M 1.8M
Total	\$ 4.5M

The majority of these increases from FY 1999 to FY 2001 can be attributed to the following:

- The TFTR D&D activity increased the Laboratory's need for additional resources for support activities, primarily in the Environmental and Safety and Health categories. These additional resources account for the \$1.0 million increase in the Environmental/Safety and Health support costs from FY 1999 to FY 2000 and the \$1.1 million increase from FY 2000 to FY 2001.
- The NSTX project operated for a full year in FY 2000, as compared to half a year in FY 1999, contributing approximately \$0.9 million to the increase in costs for maintenance and utilities from FY 1999 to FY 2000. These costs increased an additional \$0.3 million from FY 2000 to FY 2001 due to operation of the neutral beam systems that began in FY2001 and significant coil repairs.
- Additional D-Site Caretaking activities (transformer repairs, breaker/cubicle modifications, and HVAC work) contributed approximately \$0.5 million to the increase in maintenance support costs from FY 2000 to FY 2001.
- FY 1999 utility costs include a credit adjustment from Public Service Enterprise Group of \$0.7 million.
- PPPL is upgrading its business computing systems, replacing its legacy systems with a state-of-the-art enterprise resource planning system. This project commenced in FY 2001. FY 2001 costs for Information Services include \$0.3 million for this effort.
- All Other: FY 1999 vs FY 2000
 - Includes \$.9 million of cost reversals related to severance and contract termination costs included in FY 1999 that did not reoccur in FY 2000.
 - Includes \$.4 million of inflation for all functional support categories except those specific categories mentioned above, for which the increase from FY 1999 to FY 2000 includes the cost of inflation.
- All Other: FY 2000 vs FY 2001
 - Includes \$.2 million of cost reversals related to severance and contract termination costs included in FY 2000 that did not reoccur in FY 2001.
 - Includes \$1.0 million of inflation for all functional support categories except those specific categories mentioned above, for which the increase from FY 2000 to FY 2001 includes the cost of inflation.

Total Functional Support Costs did not change significantly between FY 2001 and FY 2002. However, there were significant changes among the categories within the Mission Support and Site Specific categories. The changes for the Mission Support Category are summarized below:

Mission Support Costs – FY 2002 Mission Support Costs – FY 2001	\$ 20.3M \$ 21.1M
Decrease	$\frac{-210101}{(0.8)M}$
Reconciliation	
Facilities Management	\$ 0.7 M
Maintenance	(0.9)M
• Utilities	(0.6)M

• Safeguards/Security	0.4 M
• All Other	<u>(0.4)M</u>
	\$ (0.8)M

The majority of changes shown above can be attributed to the following:

- Facilities Management includes a \$0.7 million increase in the Princeton University land lease.
- The \$0.4 million increase in Safeguards and Security costs is attributed to the additional security requirements undertaken by PPPL in response to the events of September 11.
- Maintenance costs in FY 2002 for TFTR Caretaking and NSTX decreased by \$0.5 million and \$0.3 million, respectively. Both TFTR Caretaking and NSTX experienced non-recurring maintenance costs in FY 2001 as noted previously.
- Reduced machine operations time for NSTX accounted for a \$0.2 million decrease in Utility costs. An additional \$0.2 million decrease in Utility costs can be attributed to lower natural gas costs.
- In FY 2002, PPPL's benefits costs were lower than in FY 2001, offsetting the impact of inflation.

The changes for the Site Specific Category are summarized below:

Site Specific Costs – FY 2002	\$ 2.6M
Site Specific Costs – FY 2001	\$ 2.4M
Increase	\$ 0.2M

This increase was due to the \$0.2 million increase in the Princeton University Management Allowance in FY 2002.

Total Functional Support Costs decreased by approximately \$2 million from FY 2002 to FY 2003. The decrease by Functional Support Category is summarized below:

Total Functional Support Costs – FY 2003 Total Functional Support Costs – FY 2002 Decrease	\$ 32.0M <u>\$ 34.0M</u> \$ (2.0)M
Reconciliation	
• Procurement	\$ (0.1)M
Information Services	(0.3)M
• Environmental	(1.1)M
• Safety and Health	(1.0)M
Maintenance	0.9 M
• Utilities	(0.9)M

٠	Management/Award/Incentive Fee	0.1 M
٠	Other	<u>0.4 M</u>
		\$ (2.0)M

The majority of these changes can be attributed to the following:

- The \$0.1 million decrease in Procurement can be attributed to a reduction of one buyer who was hired for a limited duration to support the TFTR D&D project.
- In FY 2002, a one-time network upgrade for the new Engineering Wing was performed, costing \$0.2 million. Also, the business computing upgrade project costs were \$0.1M lower in FY 2003 than in FY 2002. These changes account for \$0.3 million less costs in Information Services in FY 2003 than in FY 2002.
- The completion of the TFTR D&D project resulted in a \$1.1 million decrease in Environmental costs in FY 2003.
- The \$1.0 million decrease in Safety and Health costs in FY 2003, is also due principally to the completion of the TFTR D&D project, which contributed approximately \$0.7 to the decrease. The reduced TFTR Caretaking activity also reduced the Safety and Health costs in FY 2003 by approximately \$0.1 million.
- The toroidal field coil center bundle on the National Spherus Torus Experiment (NSTX) project developed a fault and needed to be repaired/replaced in FY 2003. Those costs plus additional costs due to additional operating staff working on maintenance tasks while NSTX was not operating, resulted in approximately \$1.5 million of additional maintenance costs. PPPL reclassified Laboratory AC Power Distribution System costs from Utilities to Maintenance in FY 2003 which resulted in \$0.3 million additional maintenance costs as compared to FY 2002. Finally, the reduced activity for TFTR Caretaking resulted in \$1.1 million less maintenance costs in FY 2003 than in FY 2002, offsetting some of the increases previously addressed.
- Due to the faulty toroidal field coil center bundle, NSTX had a shorter run-time in FY 2003 than in FY 2002, resulting in \$0.4 million less utility costs. Also, the reclassification of AC Power Distribution System costs resulted in approximately \$0.3 million less utility costs than in FY 2002.
- The DOE Incentive Fee was increased by approximately \$0.1 million in FY 2003.

PPPL's Functional Support Costs as a percentage of Total Site Costs for FY 1999 – FY 2003 are as follows:

	Total		General Support		
	Functional	General	Excluding	Mission	Site
	Support Costs	Support Support	Termination Costs	<u>Support</u>	Specific
FY 1999	42.8%	14.0%	15.7%	24.6%	4.2%
FY 2000	43.7%	14.0%	14.3%	26.2%	3.5%
FY 2001	45.2%	14.3%	14.4%	27.7%	3.2%
FY 2002	45.9%	14.9%	14.9%	27.5%	3.5%
FY 2003	48.1%	16.9%	16.4%	27.2%	4.1%

Excluding termination and other non-recurring, restructuring-related costs, the percentage of General Support Costs to Total Costs remained relatively constant from FY 1999 to FY 2002. In FY 2003, this percentage increased due to the sharp decrease in Total Costs and the relatively flat General Support Costs. There are two categories of General Support Costs. First, there are institutional administration costs, such as executive management, financial management, and human resources administration that are relatively flat, except for inflation, within a relatively wide range of activity levels at PPPL.

	<u>FY 99</u>	<u>FY 00</u>	FY 01	<u>FY 02</u>	<u>Y 03</u>
Inst. Admin. General Supp. Costs	\$3.4M	\$3.6M	\$3.7M	\$3.7M	3.9M
Total Costs	\$57.3M	\$68.3M	\$76.1M	\$73.9M	\$66.5M
Percentage	5.9%	5.3%	4.9%	5.0%	5.9%

Therefore, as the overall Laboratory activity level increased, driven by TFTR D&D, these activities, as expected, declined as a percentage of total cost. After TFTR D&D was completed, these activities increased as a percentage of total cost.

The second category of General Support Costs is support activities. Support activities include procurement, information outreach, and information services. These activities provide direct support to the Laboratory's programs and, therefore, fluctuate in response to changes in PPPL's activity level due to the amount of services provided by these activities that are consumed by the Laboratory. However, even these largely variable cost elements include a fixed cost component, which tends to cause these costs to increase as a percentage of total costs in response to a significant drop in the Laboratory's activity level.

	<u>FY 99</u>	<u>FY 00</u>	FY 01	<u>FY 02</u>	FY 03
Other General Support Costs	\$4.6M	\$5.9M	\$7.2M	\$7.3M	\$7.3M
Total Costs	\$57.3M	\$68.3M	\$76.1M	\$73.9M	\$66.5M
Percentage	8.0%	8.6%	9.5%	9.9%	11.0%
Percentage excluding					
severance/termination cost	ts 9.9%	9.2%	9.1%	9.9%	10.6%

Mission Support Costs include both infrastructure costs and costs that are determined by PPPL's experimental program, such as electricity costs for operating experimental devices. Therefore, the percentage of Mission Support Costs to total costs may fluctuate from one fiscal year to the next primarily as a result of the nature of the research program being conducted in each fiscal year. Mission Support Costs increased by \$3.8 million from FY 1999 to FY 2000, and by \$3.2 million from FY 2000 to FY 2001. This upward trend was due primarily to the increases in costs for safety and health, maintenance and utilities as discussed above. Mission Support Costs decreased by \$0.8 million from FY 2001 to FY 2002, and then decreased by \$2.3 million from FY 2002 to FY 2003, for reasons noted previously. Nevertheless, Mission Support Costs were relatively flat as a percentage of total costs for the FY 2001 through FY 2003 time period.

The Mission Direct costs reflect the transfer of Waste Management activities from Environmental Management (EM) to the Office of Science (SC) in FY 2001. Pursuant to Headquarters, although Waste Management is no longer funded by the Office of Science, these costs are still included in the Mission Direct Science category. Also, Safeguards and Security became a direct funded program in FY 2001; however, these costs are reported in the S&S Mission Support category.

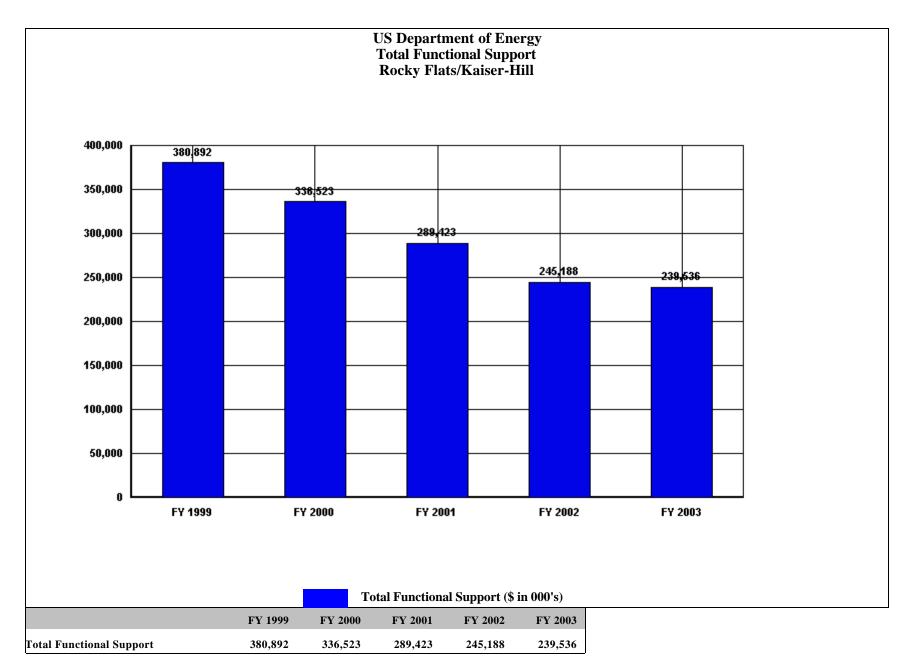
III. COST SAVINGS INITIATIVES

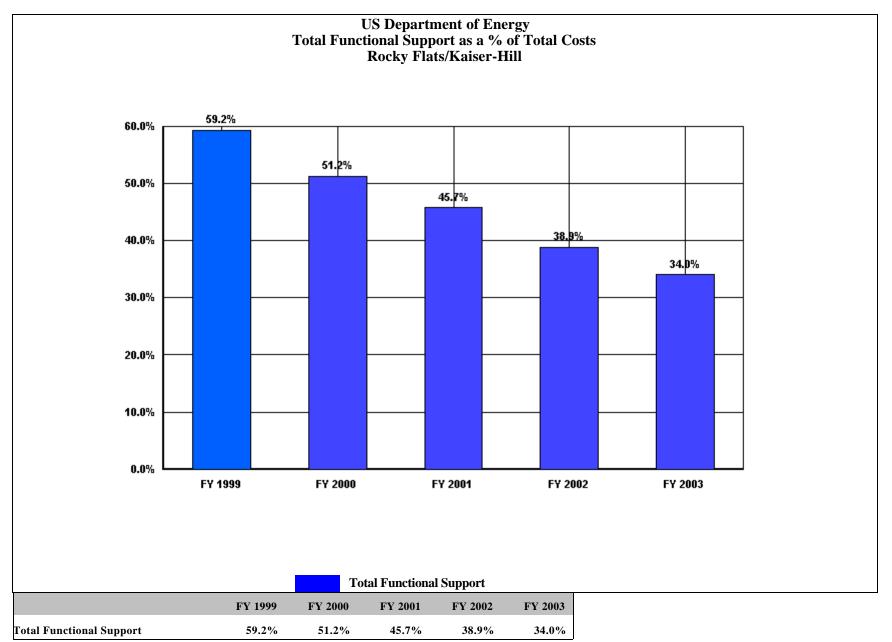
Specific initiatives implemented to reduce support costs in FY 2003 are as follows:

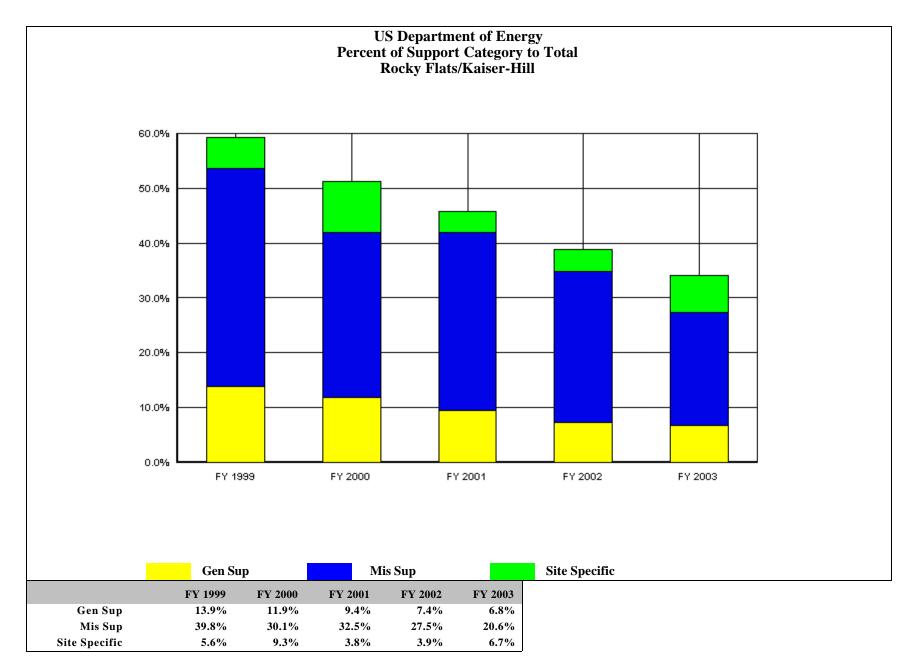
- The Princeton Plasma Physics Laboratory made use of the availability of zone fares by using United Airlines, which was the only carrier on which these rates were available. The use of this contract resulted in savings of approximately \$15,000.
- The introduction of Amtrak Acela service between New York and Boston also produced a cost savings since the cost of the train is about half of the cost of airline travel to Boston in many cases. The use of Amtrak Acela resulted in cost savings of approximately \$2,400.
- Increased use of GSA vehicles through coordination between the Travel Office and the Dispatch Office reduced the use of personal vehicles and rental cars for short duration trips within driving distance. The cost savings for this was approximately \$1,000.
- "Appletalk," which was supported through a Cisco router, was eliminated in FY 2003. This allowed for the elimination of the router which saved approximately \$10,000 in maintenance costs.
- PPPL extensively reviewed details of our backup and data retention schedules, balancing risk and cost and revised the retention schedule significantly. The result was a savings of approximately \$10,000 in tapes.
- Due to the new business computing system and other productivity improvements, PPPL was able to eliminate one clerical position from the Accounting Division, resulting in approximately \$35,000 of savings.

It is noteworthy that the above expense reductions are in addition to significant cost reductions that have been implemented in previous years by the Laboratory.

	Total Function Rocky Flat	••					
	•	2003					
	(\$ in	000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	5,105	8,554	3,910	915	520	-4,585	-89.8%
HUMAN RESOURCES	7,634	7,988	3,493	1,674	1,697	-5,937	-77.8%
CFO	15,512	6,033	9,935	4,474	4,130	-11,382	-73.49
PROCUREMENT	2,900	2,375	3,291	2,372	2,279	-621	-21.49
LEGAL	1,583	875	1,160	1,336	1,795	212	13.49
CENTRAL ADMIN SERVICES	4,864	3,970	3,397	5,277	5,010	146	3.0
PROGRAM/PROJECT CONTROL	18,448	6,569	6,562	4,329	4,092	-14,356	-77.8
INFORMATION OUTREACH	1,427	1,549	1,618	2,189	2,108	681	47.7
INFORMATION SERVICES	22,571	17,920	15,830	13,785	11,563	-11,008	-48.8
OTHER	9,193	22,149	10,317	10,146	14,598	5,405	58.8
TOTAL GENERAL SUPPORT	89,237	77,982	59,513	46,497	47,792	-41,445	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
ENVIRONMENTAL	18,743	13,181	14,902	13,740	12,786	-5,957	-31.8
SAFETY AND HEALTH	64,869	38,735	47,149	42,207	33,350	-31,519	-48.6
FACILITIES MANAGEMENT	62,747	32,496	32,462	15,420	9,979	-52,768	-84.1
MAINTENANCE	31,101	31,257	33,587	32,712	22,092	-9,009	-29.0
UTILITIES	11,429	10,902	9,840	10,289	8,846	-2,583	-22.6
SAFEGUARDS AND SECURITY	38,181	39,217	44,055	42,845	43,835	5,654	14.8
LOGISTICS SUPPORT	9,202	9,645	9,118	5,043	3,167	-6,035	-65.6
QUALITY ASSURANCE	6,564	2,942	1,455	2,035	1,998	-4,566	-69.6
LABORATORY/TECHNICAL SUPPORT	12,801	19,190	13,376	9,543	8,691	-4,110	-32.1
TOTAL MISSION SUPPORT	255,637	197,565	205,944	173,834	144,744	-110,893	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
MANAGEMENT/INCENTIVE FEE	35,087	60,934	23,966	24,857	47,000	11,913	34.0
TAXES	931	42	0	0	0	-931	-100.0
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0
FOTAL SITE SPECIFIC	36,018	60,976	23,966	24,857	47,000	10,982	30.5
TOTAL FUNCTIONAL SUPPORT	380,892	336,523	289,423	245,188	239,536	-141,356	-37.19
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	239,273	310,012	341,741	383,681	464,463	225,190	94.1
Capital Construction	22,708	10,279	2,173	2,214	0	-22,708	-100.0
TOTAL MISSION DIRECT	261,981	320,291	343,914	385,895	464,463	202,482	77.3
Fotal Costs	642,873	656,814	633,337	631,083	703,999	61,126	9.5
Fotal Costs w/o Construction	620,165	646,535	631,164	628,869	703,999	83,834	13.5
					,		
Seneral Support % Total Costs	13.9%	11.9%	9.4%	7.4%	6.8%		
Aission Support % Total Costs	39.8%	30.1%	9.4% 32.5%	27.5%	20.6%		
	37.070	50.170	52.570				
	5 60/	0 204	2 2 0/	2 0.0/	6 704		
Site Specific % Total Costs Total Support % Total Costs	5.6% 59.2%	9.3% 51.2%	3.8% 45.7%	3.9% 38.9%	6.7% 34.0%		





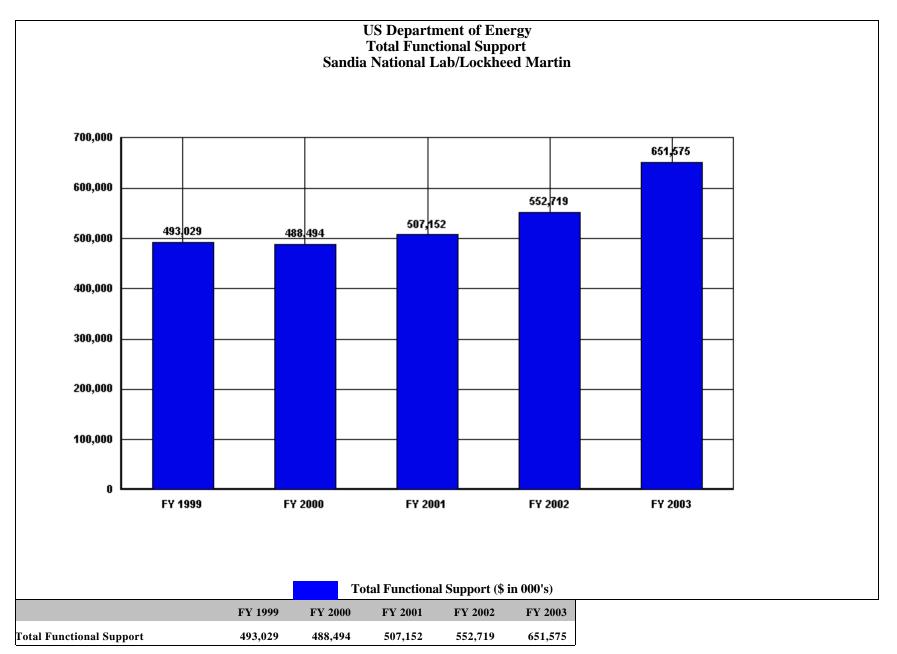


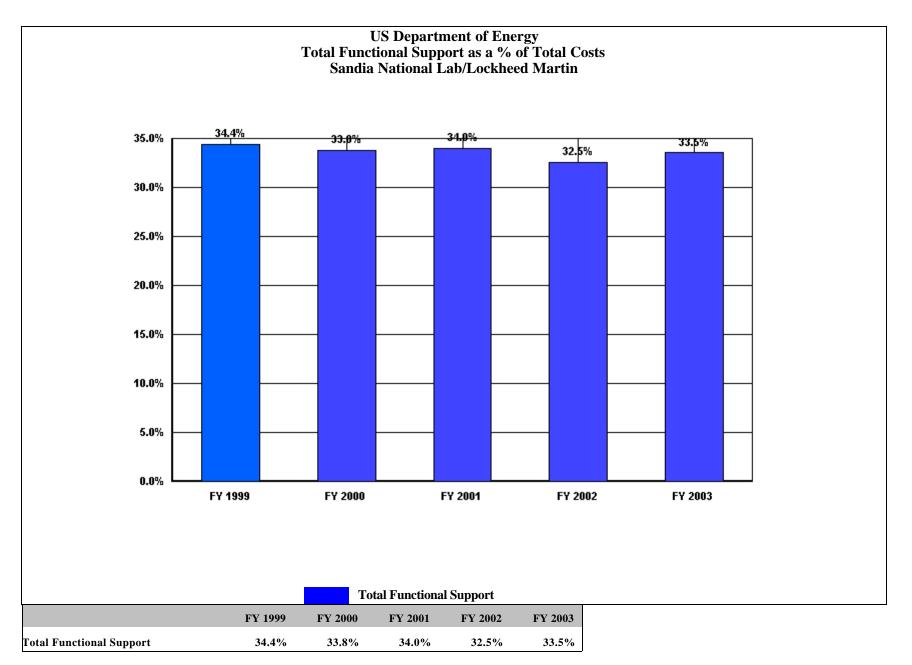
SITE PROFILE ROCKY FLATS –KAISER HILL

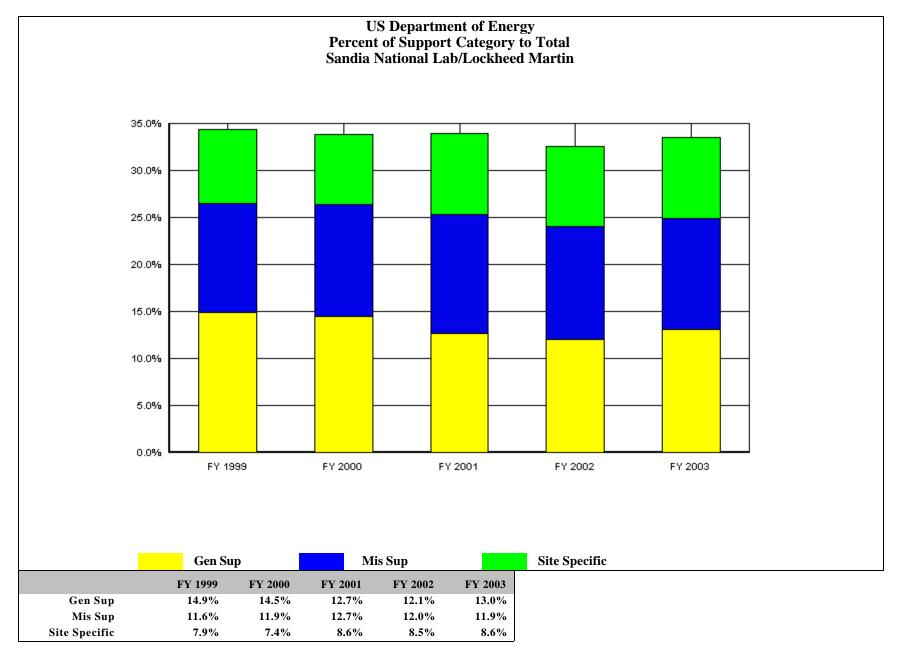
The Rocky Flats Environmental Technology Site is a former nuclear weapons production site. The 6300-acre site, 15 miles from downtown Denver, was originally constructed in the 1950's to manufacture nuclear weapons components. Plutonium manufacturing operations were suspended in 1989 due to safety and environmental concerns, and then terminated in early 1992.

The Rocky Flats continued to accelerate Site closure in FY 2003. As buildings are decontaminated and decommissioned they are converted to a "cold and dark" state which minimizes site utility and infrastructure support requirements. In FY 2003, the Site completed the final Special Nuclear Material shipment and closed the sole remaining Material Access Area. This will significantly reduce site Safeguards and Security costs in 2004 and beyond. As the Site continues to accelerate towards 2006 closure, General and Mission Support costs will continue to decline as demolition, environmental remediation, and closure verification become the sole site activities.

Trends in T	otal Function	al Suppor	t Cost Cat	egories			
Sand	dia National L FY	ab/Lockho 2003	eed Martin	1			
	(\$ i n	n 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	17,252	18,071	19,759	24,464	25,817	8,565	49.6%
HUMAN RESOURCES	17,958	21,044	24,356	27,061	28,780	10,822	60.3%
CFO	8,636	9,785	10,384	12,388	9,223	587	6.89
PROCUREMENT	12,900	12,099	11,650	10,096	14,223	1,323	10.39
LEGAL	5,460	5,557	5,385	5,640	5,501	41	0.8
CENTRAL ADMIN SERVICES	11,416	14,211	13,997	14,208	14,942	3,526	30.9
PROGRAM/PROJECT CONTROL	21,338	14,902	6,788	2,320	35,904	14,566	68.3
INFORMATION OUTREACH	13,107	12,590	13,359	13,209	14,762	1,655	12.6
INFORMATION SERVICES	88,507	94,440	81,025	94,905	103,679	15,172	17.1
OTHER	17,431	6,305	2,918	713	832	-16,599	-95.2
TOTAL GENERAL SUPPORT	214,005 FY 1999	209,004 FY 2000	189,621 FY 2001	205,004 FY 2002	253,663 FY 2003	39,658 Change 1	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY2	
ENVIRONMENTAL	3,011	1,928	1,014	1,362	1,022	-1,989	-66.1
SAFETY AND HEALTH	32,739	32,427	29,772	32,040	33,805	1,066	3.3
FACILITIES MANAGEMENT	21,043	46,143	60,077	71,259	88,261	67,218	319.4
MAINTENANCE	51,914	29,540	30,605	32,406	30,530	-21,384	-41.2
UTILITIES	20,036	18,422	21,793	21,157	20,875	839	4.2
SAFEGUARDS AND SECURITY	27,825	32,363	33,111	31,564	43,143	15,318	55.1
LOGISTICS SUPPORT	9,135	11,405	12,683	14,181	12,342	3,207	35.1
QUALITY ASSURANCE	-1	0	0	0	638		3,900.0
LABORATORY/TECHNICAL SUPPORT	0 165,702	0	0	0 203,969	0 230,616	0 64,914	0.0 39.2
TOTAL MISSION SUPPORT SITE SPECIFIC	FY 1999	172,228 FY 2000	189,055 FY 2001	203,969 FY 2002	230,010 FY 2003	Change 1	
						FY20	003
MANAGEMENT/INCENTIVE FEE	17,122	17,078	16,788	18,367	23,143	6,021	35.2
TAXES	44,998	47,442	51,168	53,958	57,128	12,130	27.0
LDRD / PDRD / SDRD	51,202	42,742	60,520	71,421	87,025	35,823	70.0
TOTAL SITE SPECIFIC	113,322	107,262	128,476	143,746	167,296	53,974	47.6
TOTAL FUNCTIONAL SUPPORT	493,029	488,494	507,152	552,719	651,575	158,546	32.2
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	
Mission Direct Operation	869,885	872,149	909,630	1,051,636	1,100,872	FY2 230,987	26.6
Capital Construction	71,652	84,943	75,723	94,291	192,109	120,457	168.1
FOTAL MISSION DIRECT	941,537	957,092	985,353	1,145,927	1,292,981	351,444	37.3
Fotal Costs	1,434,566	1,445,586	1,492,505	1,698,646	1,944,556	509,990	35.6
Fotal Costs w/o Construction	1,362,914	1,360,643	1,416,782	1,604,355	1,752,447	389,533	28.6
		14.5%	10.7%	12.1%	12.0%		
	14.9%	14.5%	12.7%	12.1%	13.0%		
Mission Support % Total Costs	11.6%	11.9%	12.7%	12.0%	11.9%		
General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	11.6% 7.9%	11.9% 7.4%	12.7% 8.6%	12.0% 8.5%	11.9% 8.6%		
Mission Support % Total Costs	11.6%	11.9%	12.7%	12.0%	11.9%		







I. <u>BACKGROUND</u>

About Sandia

Sandia is a National Security Laboratory operated for the U.S. Department of Energy by the Sandia Corporation, a Lockheed Martin Company. We design all non-nuclear components for the nation's nuclear weapons, perform a wide variety of energy research and development projects, and work on assignments that respond to national security threats -- both military and economic. We encourage and seek partnerships with appropriate U.S. industry and government groups to collaborate on emerging technologies that support our mission.

Mission Statement

Sandia National Laboratories provides scientific and engineering solutions to meet national needs in nuclear weapons and related defense systems, energy security, and environmental integrity, and to address emerging national challenges for both government and industry. As a Department of Energy National Laboratory, Sandia works in partnership with universities and industry to enhance the security, prosperity, and well being of the nation.

Attributes of SNL – FY03 approximations

4 major sites (Albuquerque, NM; Livermore, CA; Tonopah Test Range, NV; Kauai Test Range, HI) Acres of land – 344,732 Number of buildings – 794 Building square footage – 6,211,346 Number of buildings leased – 35 Leased building square footage – 214,000 Employees – 8,327 On-Site Contractors – 2,876

II. <u>HIGHLIGHTS OF TRENDS</u>

The table below illustrates the trend analysis for FY99-03:

	FY99	FY00	FY01	FY02	FY03
Total Functional Support Costs	\$493M	\$488M	\$507M	\$553M	\$652M
Total Functional Support Costs as % of Total Site Costs	34.37%	33.79%	33.98%	32.54%	33.51%

In FY00 Sandia National Laboratories fully implemented a Commercial-Off-The-Shelf (COTS) software package (Oracle). During the implementation process, all functional cost elements were re-visited according to the existing functional cost documentation. Under Oracle, projects were consolidated and re-aligned for business management purposes. In FY01 & FY02, we continued to make adjustments and implemented a significant COTS upgrade. In FY03 changes were implemented due to the Peer Review held in July 2003. As a result, certain elements may be presented differently.

III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

Chief Financial Officer

The \$3,165K decrease in Chief Financial Officer (CFO) is primarily due to restructuring of work packages and is now being reported in other functional cost categories (i.e. Procurement).

Procurement

The \$4,127K increase in Procurement is primarily due to restructuring of work packages that were being reported in other functional cost categories (i.e. CFO).

Program/Project Planning & Control

The \$33,584K increase in Program/Project Planning & Control is primarily due to reclassification of project management costs from Mission Direct to this functional cost category per the Peer Review held in July 2003.

Information/Outreach Activities

The \$1,553K increase in Information/Outreach Activities is primarily due to increased activities relating to Small Business Partnering.

Information Services

The \$8,774K increase in Information Services is primarily due to a one-time capital investment in a mid-range computing system (\$4.2M), increased activities relating to videoconferencing and web page maintenance (\$3.5M), and reclassification of costs per the Peer Review held in July 2003 (\$74K).

Environmental

The \$340K decrease in Environmental is primarily due to a one-time savings of hazardous waste costs.

Facilities Management

The \$17,002K increase in Facilities Management is primarily due to increased work load for space modifications and management of new construction projects.

Safeguards/Security

The \$11,579K increase in Safeguards/Security is primarily due to reclassifying Program and Complex Integration (B&R FS2005) from Mission Direct to this category.

Logistics Support

The \$1,840K decrease in Logistics Support is primarily due to reclassification of costs per the Peer Review held in July 2003.

Management/Award/Incentive Fee

The \$4,776K increase in Management/Award/Incentive Fee is primarily due to a renegotiation of the management fee.

<u>LDRD</u>

The \$15,603K increase in LDRD is due to an increase in total Sandia costs.

IV. OTHER

The table below itemizes the amount in the Other functional cost category:

Program/Project	Amount
Contract Variance	1,063,120.30
Administration	(231,103.04)
Total	832,017.26

V. COST SAVINGS INITIATIVES

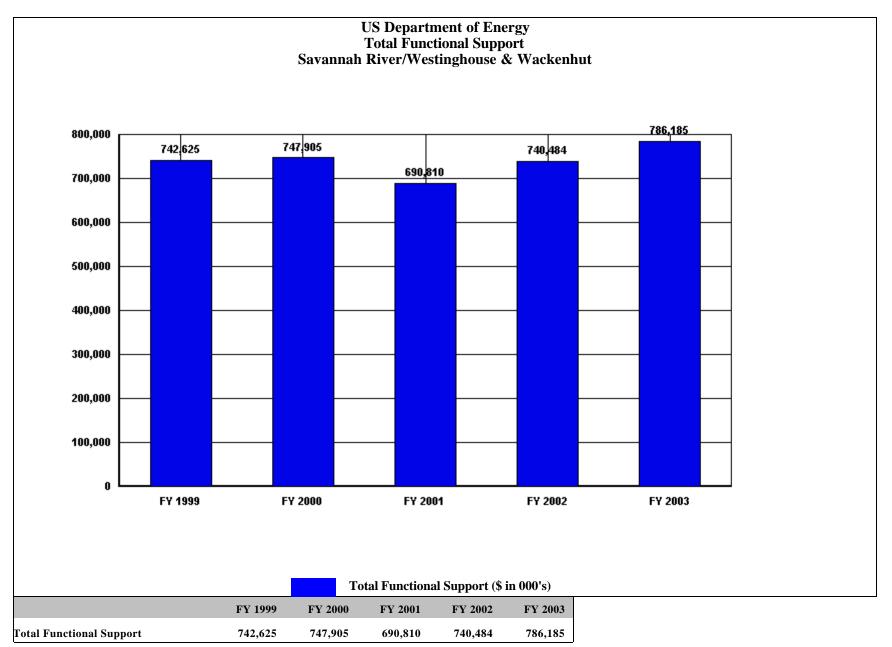
During FY2002, a new web-based Accounts Payable Invoice action approval process was implemented which reduced overtime costs. In FY2003, this process resulted in \$25K of savings.

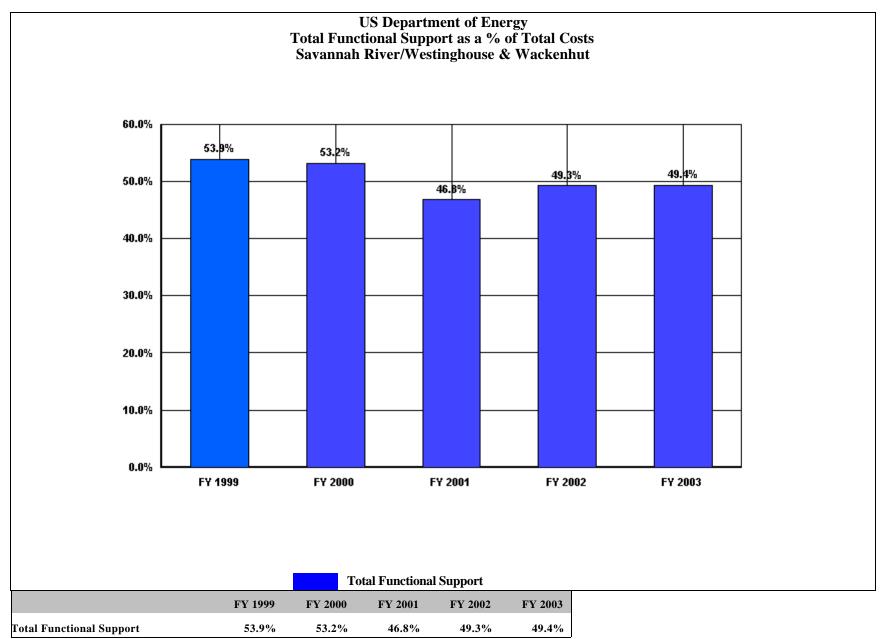
During FY2003, SNL enabled the use of SWABIZ online reservation system instead of LMeRes to reduce travel costs. SWABIZ does not charge a transaction fee. This process resulted in \$363K of savings this fiscal year.

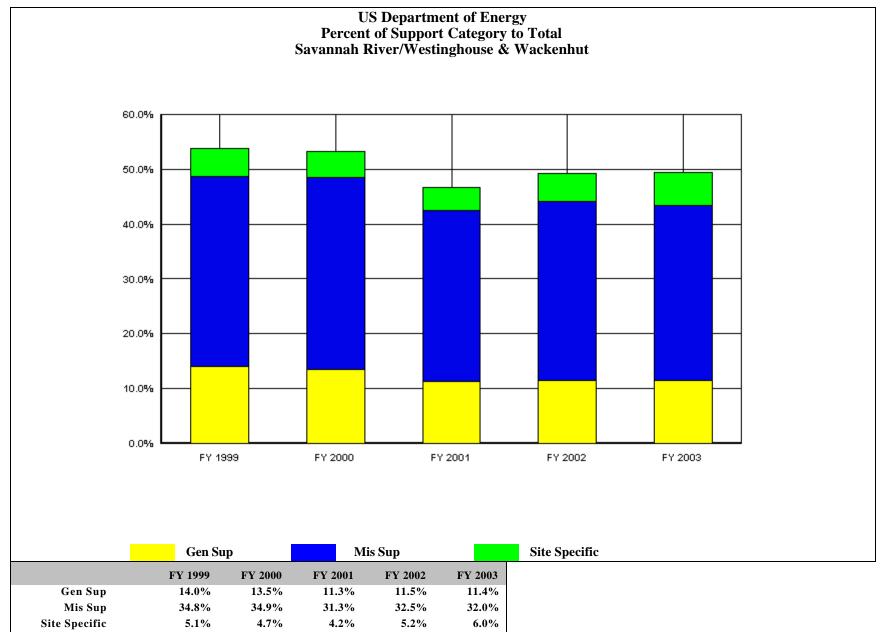
During FY2003, SNL negotiated new contracts for remanufactured toner cartridges to reduce supply costs. These new contracts resulted in savings of \$140K this fiscal year.

During FY2003, SNL implemented distributing the benefits packages via internal mail to reduce postage costs. This process resulted in \$18K of savings in postage this fiscal year.

	Total Function nah River/West FY	••		U			
7		000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	6,054	6,473	7,039	8,186	7,133	1,079	17.8%
HUMAN RESOURCES	13,298	13,942	13,096	13,051	13,462	164	1.2%
CFO	13,760	13,648	13,306	13,379	14,180	420	3.1%
PROCUREMENT	13,111	12,501	13,299	13,719	14,861	1,750	13.3%
LEGAL	11,662	8,470	5,742	4,205	6,089	-5,573	-47.8%
CENTRAL ADMIN SERVICES	18,942	18,058	17,793	18,334	20,417	1,475	7.8%
PROGRAM/PROJECT CONTROL	33,491	32,563	35,743	37,681	37,366	3,875	11.6%
INFORMATION OUTREACH	4,978	5,094	5,344	5,381	4,072	-906	-18.29
INFORMATION SERVICES	76,814	74,037	55,758	56,040	59,190	-17,624	-22.9%
OTHER	824	5,489	-8	3,014	4,732	3,908	474.39
TOTAL GENERAL SUPPORT	192,934	190,275	167,112	172,990	181,502	-11,432	
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
ENVIRONMENTAL	20,384	25,477	26,126	26,430	27,340	6,956	34.1%
SAFETY AND HEALTH	98,618	107,777	116,805	125,613	114,215	15,597	15.89
FACILITIES MANAGEMENT	37,581	37,276	33,894	35,288	45,227	7,646	20.39
MAINTENANCE	158,292	148,882	105,434	109,168	120,135	-38,157	-24.19
UTILITIES	42,552	41,799	42,828	43,359	45,700	3,148	7.49
SAFEGUARDS AND SECURITY	52,623	60,495	64,791	74,830	81,536	28,913	54.99
LOGISTICS SUPPORT	15,176	17,240	19,665	21,957	23,602	8,426	55.59
QUALITY ASSURANCE	30,643	28,544	27,658	25,788	21,719	-8,924	-29.19
LABORATORY/TECHNICAL SUPPORT	23,342	23,578	24,632	26,870	29,631	6,289	26.9%
TOTAL MISSION SUPPORT	479,211	491,068	461,833	489,303	509,105	29,894	
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
MANAGEMENT/INCENTIVE FEE	68,754	64,819	61,894	78,191	95,505	26,751	38.99
TAXES	1,726	1,743	-29	0	73	-1,653	-95.89
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.09
TOTAL SITE SPECIFIC	70,480	66,562	61,865	78,191	95,578	25,098	35.6
TOTAL FUNCTIONAL SUPPORT	742,625	747,905	690,810	740,484	786,185	43,560	5.9%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
Mission Direct Operation	491,292	506,026	589,551	579,539	645,334	FY2 (154,042	003 31.49
Mission Direct Operation Capital Construction	144,811	152,395	196,684	183,300	161,509	154,042	11.59
Capital Construction	144,011	152,575	170,004	105,500	101,507	10,070	11.57
TOTAL MISSION DIRECT	636,103	658,421	786,235	762,839	806,843	170,740	26.89
Total Costs	1,378,728	1,406,326	1,477,045	1,503,323	1,593,028	214,300	15.59
Total Costs w/o Construction	1,233,917	1,253,931	1,280,361	1,320,023	1,431,519	197,602	16.09
Conoral Support % Total Casts	14.0%	13.5%	11.3%	11.5%	11.4%		
General Support % Total Costs	34.8%	13.5% 34.9%	31.3%	32.5%	32.0%		
Mission Support % Total Costs							
Site Specific % Total Costs	5.1%	4.7%	4.2%	5.2%	6.0%		
Total Support % Total Costs	53.9%	53.2%	46.8%	49.3%	49.4% 54.0%		
Total Support % Total Costs w/o Construction	60.2%	59.6%	54.0%	56.1%	54.9%		







I. <u>SITE CHARACTERISTICS</u>

Savannah River Site (SRS) continues to focus on the following stewardship and mission areas:

- Nuclear Weapons Stockpile Stewardship
- Nuclear Materials Stewardship
- Environmental Stewardship

While the changing world has caused a downsizing of the site's original defense mission, the new vision of SRS is to be a modernized DOE site, recognized for performance and excellence in support of our national security and as a responsible steward of the environment. We will continue to provide tritium recycling and storage, while constructing and operating a new facility for the extraction of tritium to support the nuclear weapons stockpile. We will also construct and operate several new facilities to store and dispose of surplus plutonium as part of the nation's nuclear nonproliferation efforts.

Currently, the major focus of SRS is on Environmental Management (EM). A vision for accelerated cleanup has been developed and is part of the current Performance Management Plan (PMP) outlining specific actions that are being taken to accelerate the cleanup program. This includes application of innovative cleanup reform approaches to accelerate both cleanup and risk reduction, reduce the life cycle costs of the EM program and enhance Homeland Security. This vision was incorporated into a contract modification during FY03 with significantly increasing expectations for cleanup.

The complex covers 198,344 acres, or 310 square miles in three counties in South Carolina, bordering the Savannah River. The Savannah River Site is an operating site, currently maintaining operations in nineteen (19) Class 2 Nuclear Facilities. The site was constructed during the early 1950's to produce basic materials used in nuclear weapons, primarily tritium and plutonium-239. While many support facilities were constructed and operated during that time, many large facilities have been shut down with the exception of the tritium facilities. Also, there have been major site expenditures for nuclear non-proliferation activities. SRS's major customer base includes EM and NNSA, as well as work for other Federal agencies.

At FY03 year-end, 12,691 full time equivalent (FTEs) personnel were employed on site. This included 11,813 FTEs for WSRC (includes the four major contractors) and 878 WSI FTEs.

Current Line Item activity includes the following:

• Tritium Extraction Facility (TEF) – will provide for extraction capabilities for both the Commercial Light Water Reactor and Accelerated Production of Tritium concepts (LI 98-D-125).

- FB Line Plutonium Packaging and Stabilization project will provide thermal stabilization and packaging capability in 221-FB Line to meet DOE-STD-3013. The project includes replacement of existing furnaces with higher temperature furnaces, installation of an outer can welder and leak detector, and associated modification and/or upgrades to existing support equipment, systems and services. These modifications and upgrades will be minimum essential necessary to support thermal stabilization and packaging processing including, but not necessarily limited to, Safeguards & Securities, ventilation, cooling, fire detection, nuclear incident monitoring, and material storage (LI 02-D-420).
- Highly Enriched Uranium Blend Down provides for the blending down of highly enriched uranium to low-enriched uranium and recovering its economic value by using it as a fuel in power reactors. This is in support of a Memorandum of Understanding between DOE and the Tennessee Valley Authority (LI 01-D-407).
- Tritium Facility Modernization and Consolidation provides for the relocation of several process systems and functions from Building 232-H to other locations in the Tritium Facility. This serves to reduce the footprint while enhancing several of the processes (LI 98-D-123).
- Pit Disassembly and Conversion Facility provides support to LANL A/E on Government Furnished Design for infrastructure design, construction planning, and acquisition planning support for the project (LI 99-D-141).

II. <u>HIGHLIGHTS OF TRENDS</u>

The SRS Functional Support Cost Report combines costs for Westinghouse Savannah River Company (WSRC) and Wackenhut Services, Incorporated (WSI) into an integrated report. Total Functional Support Costs for WSRC for FY99 to FY03 increased by \$21.5M or 3.2%. This compares to a consumer price index increase over the same period of 12.9%. Since FY99, WSRC increased their pension contribution to \$68M. Market performance was positive in both FY99 and FY00 and no pension contribution was necessary to fully fund the pension. Pension contributions resumed in FY01 and have increased in FY02 and FY03. With WSI included, the support costs reflected an increase of \$43.6M or 5.9%.

During FY03 WSRC underwent a major reorganization to focus emphasis on accelerated cleanup and projectized site activities. WSRC worked closely with the customer to eliminate and/or reduce requirements to streamline and improve operations. This is evident by the positive trend for Mission Direct and Capital/Construction, both which increased by \$154.0M (30.4%) and \$16.7M (10.9%) respectively.

Since FY1999, WSRC has continuously applied refinements to our categorization process, and recasts have been implemented as appropriate. Overall, the FY03 Actuals are slightly better

than planned when fee is excluded (3.6% favorable), and nearly on target when fee is included (.84% favorable). In FY03, significant cost savings were achieved due to the maintenance reengineering effort that began in FY00 as well as restructuring the workforce applied more resources to mission activities. As a result of contract modification with emphasis on reducing the footprint and accelerated clean up, a higher fee was negotiated. The trend analysis follows: <u>General Support</u>

The overall change from FY99 to FY03 was an \$11.4M decrease or 5.9 % resulting from our continued emphasis on cost effectiveness and completion of certain significant activities. This net decrease is a combination of increases and decreases with significant changes highlighted.

- 1. Legal (-\$5.6M) FY99-FY03 trend shows a significant reduction of 47.8% in litigation expenses due to the near completion of a class action lawsuit.
- 2. Information Services (-\$17.6M) FY99-FY03 trend shows a significant reduction of 22.9% including higher cost associated with the Y2K effort in FY99. However, the Replacement Telephone System (RTS) lease term ended in FY00, thereby reflecting lower costs for FY01. The Core Application Replacement System (CARS) project kicked off its first phase to replace the Payroll/Human Resources mainframe application, which partially offset the overall reduction. Renegotiation of certain IT contracts and levels of service were initiated and projected to continue to produce cost savings.
- 3. Other (+\$3.9M) increased primarily due to work force restructuring costs. Workforce restructuring costs are an anomaly, which contributes to the trend. Specific information is included in the Table in section V.

Mission Support

Reflected an upward trend of \$29.9M or 6.2%. There were major decreases in several categories that partially offset the overall increase. The following information explains the significant changes for the trend period.

- 1. Environmental (+\$6.9M) increased 34.1% as a result of more focus on federal and state required environmental compliance and monitoring due to accelerated clean up.
- 2. Maintenance (-\$38.2M) reduced by 24.1% to maintenance activities primarily due to the continuation of innovative maintenance reengineering and additional reengineering efforts.
- 3. Safeguards & Security (+\$28.9M) reflected a 54.9% increase. The increase from FY99 to FY03 is primarily due to increased staffing associated with KAMS, Heightened Security, FB-Line, and PU Stabilization. In addition to the increased staffing, WSI-SRS entered into a new Collective Bargaining Unit Agreement with the Union in FY02.

- 4. Logistics (+\$8.4M) reflected an increase of 55.5%. Costs for this category include transportation costs for onsite relocation of over 980 displaced workers and support space involving over 3,000 moves from A, B, D and E Areas. Moves reflect implementation of accelerated clean-up initiatives resulting in a reconfigured, more efficient and less costly site. As F-Area and other site areas prepare for deactivation and demolition, equipment excess activities have increased significantly. Also, increased costs for escorts of on site vendor transportation and delivery resulted from increased security required since 9/11.
- 5. Laboratory/Technical Support (+\$6.3M) reflected a significant increase of 26.9% due to increases in analytical services, sampling analyses and technical support services for accelerated cleanup and mission activities.
- 6. Quality Assurance (-\$8.9M) reflects a reduction of 29.1%; in a continuing trend to streamline procedures and processes and reassign resources to focus on mission activities.

Site Specific

Management/Award/Incentive Fee (+\$26.7M) increased 38.9%. WSRC's contract has gone through two significant evolutions since FY99. The most recent, completed in FY03, resulted in increased fee opportunities as a result of contractor accepting significantly increased risk.

III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

General Support

The overall change from the prior year resulted in an \$8.5M or 4.9% increase. Most of the changes in the functional categories are small and due to normal escalation. The following information explains the significant changes from the prior year's costs:

- 1. Legal (+\$1.9M) increase of 44.8% due to settlements for a major class action lawsuit.
- 2. Information/Outreach Activities (-\$1.3M) decrease of 24.3% primarily due to workforce restructuring and reorganization activities to support mission essential activities. Also, site restrictions due to heightened security alerts reduced the number of tours and community outreach activities planned for FY03.
- 3. Information Services (+\$3.2M) increase of 5.62% primarily due to a maintenance contract requiring an operating system upgrade to the current version/release 6. The Verizon contract was restructured which accelerated work scope originally scheduled for FY04 & FY05 into FY03 for hardware and software.
- 4. Other (+ \$1.7M) increase of 57% primarily due to work force restructuring involuntary separation program occurring in FY03. Specific information is outlined in Table V.

Mission Support

Mission Support reflects a \$19.8M increase (4.1%) with a number of increases offset by decreases in many of the categories. The following information explains significant changes from the prior year's costs:

- 1. Safety & Health (-\$11.4M) decrease of 9.07% due to the site reorganization efforts of FY03 in accordance with accelerating the reduction of risk and cleanup in a cost effective manner. Also, a graded approach to the Integrated Safety Management System was adopted to assist with completing work scope more cost effectively without compromising safety. This resulted in a higher usage of Multi-Skilled Technicians (MST's) who are capable of performing Operations, Maintenance and entry level Radcon activities. This decreased the former full time Radcon support that was previously required.
- 2. Facilities Management (+9.9M) increase of 28.17% due to over 980 employees relocated from older facilities placed on the D&D list. This included facility reconfigurations to accommodate WSRC and DOE personnel relocated from A to B-Area. Also, facility and infrastructure upgrades were necessary to support the Lab personnel moves from D-Area to A-Area facilities. The FY02-FY03 increase was +28.2%. As previously stated, these moves will result in a reconfigured, more efficient and less costly site as WSRC directs resources for accelerated clean-up initiatives.
- 3. Maintenance (+\$11M) increase of 10.05% resulted in utilization of approximately \$3.3M of Construction Craft to support FY03 maintenance activities. Some work scope scheduled for FY02 was deferred until FY03. Also, the DOE-HQ requirements for capital projects were modified in FY03 pertaining to Closure activities. These Closure projects that were formerly capital, are now categorized as operating. Some of the effort that was once considered capital and captured in the Capital/Construction category has now been identified as Maintenance and resulted in approximately a \$4M increase.
- 4. Safeguards and Security (+\$6.7M) increase of 8.96% included the WSRC portion that included Fire Department equipment upgrades, turn out gear & self-contained breathing apparatus (SCBA's), salary and fringe increases, and a increase in the pension rate. The WSI portion was based on an increase in salaries and fringe benefits (insurance).
- 5. Quality Assurance (-\$4.1M) decrease of 15.78% was due to the site reorganization and work force restructuring in support of mission direct activities for accelerated clean up.
- 6. Laboratory and Tech Support (+\$2.8M) increase of 10.28% attributed to the site realignment in accordance with accelerating the reduction of risk and cleanup.

Site Specific

Management/Award Incentive Fee (+\$17.3M) Contract change implemented in FY03 resulted in an increased fee due to accomplishment of significantly higher amounts of work along with the assumption of increased risk.

IV. COST SAVINGS INITIATIVES

WSRC continues to pursue cost effectiveness initiatives in an effort to balance site needs with shrinking budgets. Some of these initiatives are in the operation areas and have potential to drive mission direct costs down, which may have a negative impact on the functional support cost ratio. However, continued success in reducing functional support costs is dependent upon delivering necessary support activities in the most cost-effective manner and effort continues in this arena. Cost saving initiatives for FY03 included:

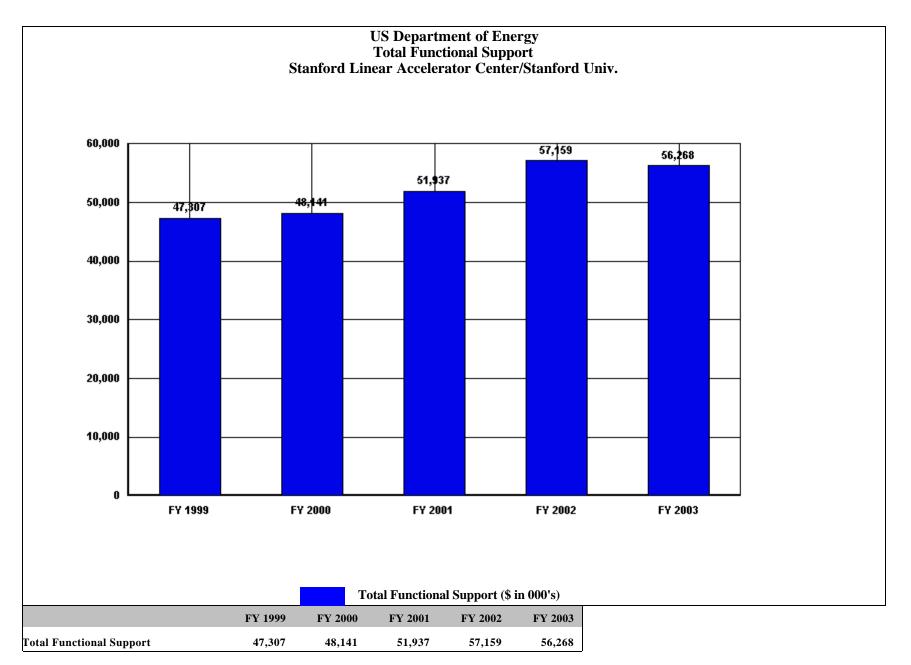
- The site implemented a tailored approach to defining practices of specifying requirements, design attributes, and operating strategies that result in safe and successful Department of Energy (DOE) mission accomplishment at minimum lifecycle cost. Mission Accomplishment is assured by focusing efforts on the specific mission(s) directed by Department of Energy - Savannah River and National Nuclear Security Administration (DOE-SR and NNSA). This included establishing design parameters based on reasonably expected versus conservative system/materials performance, balancing initial project costs, and long-term operating costs. For example, considering life-cycle cost, as appropriate, for each activity; using existing (vs. new) facilities, systems, equipment, and materials to the extent that such use is safe and cost-effective; and identifying and eliminating low-value and non-value-added activities.
- 2. In FY03, the site decentralized the site training organization eliminating 20% of the positions and subcontracted selected training courses.
- 3. Corporate Sizing. WSRC utilizes commercial and non-nuclear benchmarking as well as corporate sizing to define the level of support. WSRC uses LMI, The Hackett Survey, and senior management reviews to ensure that organizations are "right sized." The expectation is that this will drive significant reductions to support costs that will allow for increase in Accelerated Cleanup Activities.
- 4. Improved technologies and computing automations have improved the applications to streamline approvals of property passes, requisitions, travel expense reports, electronic routing of services invoices and processing of exempt overtime pay.
- 5. Implementation of the Six Sigma process with \$11M in cost savings and \$4M in productivity savings in FY03 alone. This includes reduction of the time/labor for the high

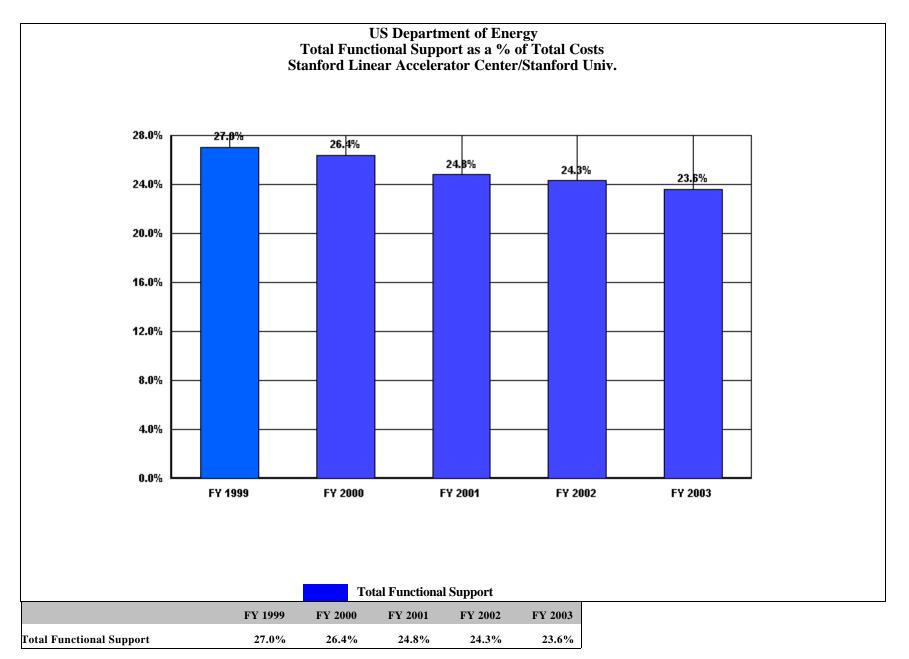
level waste (HLW) handling process, reduction in the number of analytical tasks for the HLW corrosion control program, reduction in the cost of document control services, shortening field sampling mobilization time, reduction in the radiological support for routine well sampling, improving the records archival process and training records database quality, and reduction in the number of liquid effluent monitoring samples to name a few.

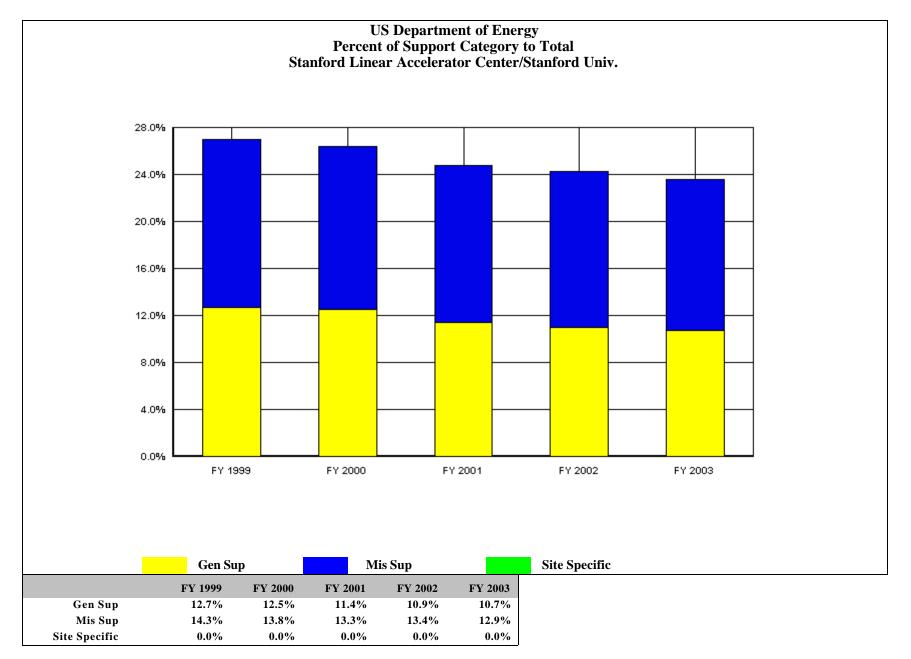
V. Other

Workforce	<u>FY96</u> 3,240	<u>FY97</u> 16,985	<u>FY98</u> 0	<u>FY99</u> 423	<u>FY00</u> 730	<u>FY01</u> 487	<u>FY02</u> 2,875	<u>FY03</u> 5,091
Restructuring Insurance Cost Saving	0 0	267 0	52 676	360 0	42 0	37 0	0 0	46 0
Program Payments to former employees								
Legal	0	273	0	0	57	-314	0	(403)
Settlements Overhead costs							23	65
Procurement Card Rebates								(99)
Inventory Write-off	<u>0</u>	<u>960</u>	<u>0</u>	<u>0</u>	<u>4,606</u>	<u>-212</u>	<u>120</u>	<u>0</u>
Total WSRC	3,240	18,485	728	783	5,435	-2	3,019	4,700
Workforce Restructuring	706	-109	-18	0	0	0	0	-
Legal	0	0	0	0	0	0	0	-
Insurance Total WSI	<u>41</u> 747	<u>26</u> -83	<u>76</u> 58	<u>41</u> 41	<u>54</u> 54	<u>-6</u> -6	<u>-5</u> -5	$\frac{32}{32}$
Total OTHER	3,987	18,402	786	824	5,489	-8	3,014	4,732

Trends in Tota	l Function	al Suppor	t Cost Cat	egories			
Stanford Line		ator Cente 2003	er/Stanforo	l Univ.			
	(\$ i n	1 000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	2,477	2,678	2,955	2,910	2,759	282	11.4%
HUMAN RESOURCES	1,824	1,809	1,982	2,330	2,168	344	18.9%
CFO	3,501	3,693	3,503	3,555	4,205	704	20.1%
PROCUREMENT	2,007	2,041	1,918	2,053	1,974	-33	-1.6%
LEGAL	88	90	94	98	99	11	12.5%
CENTRAL ADMIN SERVICES	655	817	736	927	619	-36	-5.5%
PROGRAM/PROJECT CONTROL	918	1,133	1,171	1,293	1,284	366	39.9%
INFORMATION OUTREACH	1,840	2,011	2,082	2,841	2,793	953	51.8%
INFORMATION SERVICES	6,577	5,861	6,702	6,773	6,414	-163	-2.5%
OTHER	2,400	2,746	2,825	2,955	3,275	875	36.5%
TOTAL GENERAL SUPPORT	22,287	22,879	23,968	25,735	25,590	3,303	14.8%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
ENVIRONMENTAL	2,298	2,333	2,718	2,163	2,235	-63	-2.7%
SAFETY AND HEALTH	4,809	5,088	5,205	5,802	5,330	521	10.8%
FACILITIES MANAGEMENT	1,296	1,531	2,134	2,312	1,980	684	52.8%
MAINTENANCE	6,615	6,099	5,976	6,374	6,346	-269	-4.1%
UTILITIES	6,977	6,925	8,189	10,619	10,533	3,556	51.0%
SAFEGUARDS AND SECURITY	1,222	1,437	1,690	1,859	1,922	700	57.3%
LOGISTICS SUPPORT	1,596	1,726	1,895	2,086	2,153	557	34.9%
QUALITY ASSURANCE	207	123	162	209	179	-28	-13.5%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL MISSION SUPPORT	25,020	25,262	27,969	31,424	30,678	5,658	22.6%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
MANAGEMENT/INCENTIVE FEE	0	0	0	0	0	0	0.0%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	0	0	0	0	0	0	0.0%
TOTAL FUNCTIONAL SUPPORT	47,307	48,141	51,937	57,159	56,268	8,961	18.9%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	999 to
						8-	
						FY20	05
Mission Direct Operation	103,693	107,705	116,322	131,775	127,068	23,375	22.5%
Mission Direct Operation Capital Construction	103,693 24,233	107,705 26,814	116,322 41,414	131,775 46,418	127,068 55,195		
					-	23,375	22.5%
Capital Construction	24,233	26,814	41,414	46,418	55,195	23,375 30,962	22.5% 127.8%
Capital Construction TOTAL MISSION DIRECT	24,233 127,926	26,814 134,519	41,414 157,736	46,418 178,193	55,195 182,263	23,375 30,962 54,337	22.5% 127.8% 42.5%
Capital Construction TOTAL MISSION DIRECT Total Costs	24,233 127,926 175,233	26,814 134,519 182,660	41,414 157,736 209,673	46,418 178,193 235,352	55,195 182,263 238,531	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs	24,233 127,926 175,233	26,814 134,519 182,660	41,414 157,736 209,673	46,418 178,193 235,352	55,195 182,263 238,531	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs	24,233 127,926 175,233	26,814 134,519 182,660	41,414 157,736 209,673	46,418 178,193 235,352	55,195 182,263 238,531	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs	24,233 127,926 175,233	26,814 134,519 182,660	41,414 157,736 209,673	46,418 178,193 235,352	55,195 182,263 238,531	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	24,233 127,926 175,233 151,000	26,814 134,519 182,660 155,846	41,414 157,736 209,673 168,259	46,418 178,193 235,352 188,934	55,195 182,263 238,531 183,336	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs	24,233 127,926 175,233 151,000 12.7%	26,814 134,519 182,660 155,846 12.5%	41,414 157,736 209,673 168,259 11.4%	46,418 178,193 235,352 188,934 10.9%	55,195 182,263 238,531 183,336 10.7%	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	24,233 127,926 175,233 151,000 12.7% 14.3%	26,814 134,519 182,660 155,846 12.5% 13.8%	41,414 157,736 209,673 168,259 111.4% 13.3%	46,418 178,193 235,352 188,934 10.9% 13.4%	55,195 182,263 238,531 183,336 10.7% 12.9%	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	24,233 127,926 175,233 151,000 12.7% 14.3% 0.0%	26,814 134,519 182,660 155,846 12.5% 13.8% 0.0%	41,414 157,736 209,673 168,259 11.4% 13.3% 0.0%	46,418 178,193 235,352 188,934 10.9% 13.4% 0.0%	55,195 182,263 238,531 183,336 10.7% 12.9% 0.0%	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%
Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	24,233 127,926 175,233 151,000 12.7% 14.3%	26,814 134,519 182,660 155,846 12.5% 13.8%	41,414 157,736 209,673 168,259 111.4% 13.3%	46,418 178,193 235,352 188,934 10.9% 13.4%	55,195 182,263 238,531 183,336 10.7% 12.9%	23,375 30,962 54,337 63,298	22.5% 127.8% 42.5% 36.1%







SITE PROFILE STANFORD LINEAR ACCELERATOR CENTER – STANFORD UNIVERSITY

I. Site Characteristics

The Stanford Linear Accelerator Center was founded in 1962 as a national user facility for high energy physics using electron beams in a two-mile linear accelerator. SLAC is a single program laboratory dedicated to research in high energy physics, accelerator physics, particle astrophysics, and in allied fields that can make use of its synchrotron radiation facilities. It is a major center of support for U.S. physics research and for training next generation scientists. 1300 users from around the world participate in the high energy physics program. 1700 scientists from universities, industry, and other research institutions are active in the synchrotron radiation program. SLAC is operated for the DOE by Stanford University under a Management and Operating Contract.

SLAC is located on the San Francisco Peninsula in Menlo Park, California, west of the main Stanford campus. The SLAC site occupies 426 acres leased by DOE from Stanford University. There are about 300 buildings and structures on site. In FY2003 staffing level of SLAC was about 1530.

SLAC's major facilities are world-class and include:

• The world's largest linear accelerator, delivering 50 billion volts (50 GeV) electron (including polarized electron) and positron beams

• The B Factory, a state-of-the-art asymmetric electron-positron collider and associated particle detector for the production and research of B mesons

- A 3 GeV electron storage ring (SPEAR) for production of ultraviolet and x-ray for use in synchrotron radiation research
- A large concrete shielded building for experiments with stationary targets
- Two major accelerator physics R&D facilities to test subsystems and features of future accelerators

Mission Activities

The DOE Office of Science provides almost all of SLAC's funding.

SLAC is the leader in design and construction of linear accelerators and storage rings that deliver intense, energetic, and extremely bright beams of electrons and photons for use in particle physics, material science, molecular biology, environmental science, medicine, and other scientific research fields.

The program mission can be summarized as follows:

- Perform and support world-class research in high-energy physics, particle astrophysics and disciplines using synchrotron radiation.
- Provide accelerators, detectors, instrumentation, and support for national and international research programs in particle physics and scientific disciplines that use synchrotron radiation.

• Advance the art of accelerators, and accelerator-related technologies and devices through the development of new sources of high-energy particles and synchrotron radiation, plus new

SITE PROFILE

STANFORD LINEAR ACCELERATOR CENTER - STANFORD UNIVERSITY

techniques for their scientific utilization.

• Transfer practical knowledge and innovative technology to the private sector.

• Contribute to the education of the next generation of scientists and engineers, and to the scientific awareness of the public.

							FY99 t	o FY03	FY02 to	o FY03
FSCR	<u>Support</u>	<u>1999</u>	2000	<u>2001</u>	<u>2002</u>	2003	\$ Chg	% Chg	\$ Chg	% Chg
Functional										
Support	General Support	22,286	22,879	23,968	25,734	25,589	3,303	14%	(144)	-1%
	Mission Support	25,020	25,264	27,968	31,426	30,677	5,657	22%	(749)	-2%
Functional S	upport	47,306	48,143	51,936	57,160	56,267	8,961	19%	(893)	-2%
Direct	Mission Direct	103,693	107,705	116,322	131,774	127,067	23,375	22%	(4,707)	-4%
	Capital/Construction	24,233	26,814	41,414	46,418	55,195	30,962	115%	8,776	16%
Direct		127,926	134,519	157,736	178,193	182,262	54,336	40%	4,069	2%
Total		175,232	182,662	209,672	235,353	238,528	63,297	35%	3,176	1%
Functional S	upport as a percentage of	27.0%	26.4%	24.8%	24.3%	23.6%				

II. Highlights of Trends

Functional Support Cost increased 18% between FY99 and FY03 and declined 2% between FY02 and FY03. The ratio between Functional Support Cost and Total Site Cost has been decreasing from FY99. As in the past, SLAC has aggressively managed to control its Functional Support Cost and has successfully kept its growth below that of the Total Direct Costs. The Mission Direct Operating Cost has had some growth (22%) over the five-year period. The Capital/Construction Direct Cost has been increasing since FY99 as a result of several projects: the Research Office Building construction, the SPEAR3 and GLAST capital equipment projects, and beginning in FY03 the design phase of the Linac Coherent Light Source (LCLS) line-item construction project.

About 40% of the Functional Support Cost comes from three functions – Utilities, Information Services, and Maintenance, at percentages of 19%, 11% and 11% respectively in FY03. Other than Utilities which have been on an upward spiral because of electrical power, the year-to-year fluctuations in Information Services and Maintenance are more related to one-time activities, such as requirements related to desk-top computing and local area networks (Information Services), and specific maintenance and infrastructure projects (Maintenance).

In FY03, due to the shortfall of the High Energy Physics (HEP) program funding to SLAC, in addition to major program cuts and a voluntary layoff program, all HEP-supported staff took four days of leave without pay as well as mandated vacation. Furthermore, the Materials and Services (M&S) budget was also reduced across all the HEP-funded activities of the Laboratory. As a result of all these one-time measures, SLAC was able to avoid involuntary layoffs and achieved a one-time reduction of the Functional Support Costs by 2% in FY03.

However, a continued decrease in functional support costs is not sustainable. Although there is a salary freeze for all SLAC staff in FY04 as a budget-saving measure, the restoration of the work days lost in FY2003 and the increases in the costs for staff benefits will result in a 5% increase in staffing cost in FY04. M&S budget in certain critical support areas will also need to be restored.

SITE PROFILE STANFORD LINEAR ACCELERATOR CENTER – STANFORD UNIVERSITY

Electrical power costs will increase above the rate increases in FY04 because increased loads due to SPEAR3 operations and improvements installed with the PEP-II B Factory.

III. Analysis of Significant Changes in Functional Support Costs from Prior Year

Category 3, <u>C.F.O.</u>: Includes costs associated with financial activities. Costs increase 18% or \$650K from FY02 to FY03 primarily due to leave accrual adjustments which went from a significant overaccrual in FY02 to an under-accrual in FY03.

Category 6, <u>Central Administration Services</u>: This category includes SLAC Library costs, the cost of copiers, and cafeteria operations. Decreases of \$308K in FY03 from FY02 are due to the shift in focus of one staff from the Library to Information/Outreach, and the fact that the copier replacement program was postponed in FY03 due to budget cuts.

Category 8, <u>Information/Outreach</u>: This category includes those costs associated with media communication, public information and relations, outreach programs, scientific information dissemination, technical information management, and technology transfer. The increase that began in FY02 was primarily due to the staffing and other costs associated with the Office of Communications established in 2002 to bring various related functions together with the goal of improving communications to the public and within the Laboratory.

Category 10, <u>Other</u>: The only costs captured in this category are the Stanford University Indirect Costs which are negotiated by DOE. Costs in FY98 were \$600K lower because of an adjustment resulting from over-accruals in prior years.

Dollars in Thousands	1999	2000	2001	2002	2003
Stanford University Indirect Costs	2,400	2,746	2,825	2,955	3,275

Category 12, <u>Safety & Health</u>: This category includes the costs for fire protection, occupational medical services, work smart program, emergency preparedness, industrial hygiene, radiation protection and dosimetry program. Costs decreased \$472K in FY03 from FY02 This was due to the implementation of a new dosimeter badge which reduced ongoing costs and the recategorization of costs (\$206K) associated with radiological environmental protection under Environment.

Category 13, <u>Facilities Management</u>: This category includes engineering and other costs associated with facilities and their ability to function effectively. Costs decreased \$333K between FY02 and FY03. In FY03, the effort of one staff was directed towards the Mission Direct capital equipment project SPEAR3 Upgrade.

SITE PROFILE STANFORD LINEAR ACCELERATOR CENTER – STANFORD UNIVERSITY

Category 15, <u>Utilities</u>: The dominant component, over 90%, of this category is electrical power. Natural gas, water, sewer and sanitary waste disposal costs are also included. More than 90% of the electrical power consumption is "process" power for the operation of the experimental facilities. Thus, changes in experimental program operations can have a large impact on electrical power costs. The increase between FY01 and FY02 was for electrical power, primarily a result of the California energy crisis in 2001. The electrical power costs in FY03 were almost the same as FY02, partly because of the extended downtime of the SPEAR synchrotron radiation facility for installation associated with the SPEAR3 upgrade.

III. Analysis of Significant Changes in Functional Support Costs from Prior Year (continued)

Category 24, <u>Capital/Construction</u>: Costs increased \$8.8M from FY02 to FY03. The increase is primarily related to the SPEAR3 and the GLAST capital equipment projects. SPEAR3 is a joint project between the DOE and NIH completed in November 2003, while GLAST, a joint project between the DOE and NASA, is scheduled to complete the instrument fabrication phase in 2005. In addition, in FY2003, the design phase of the Linac Coherent Light Source (LCLS) Project was initiated.

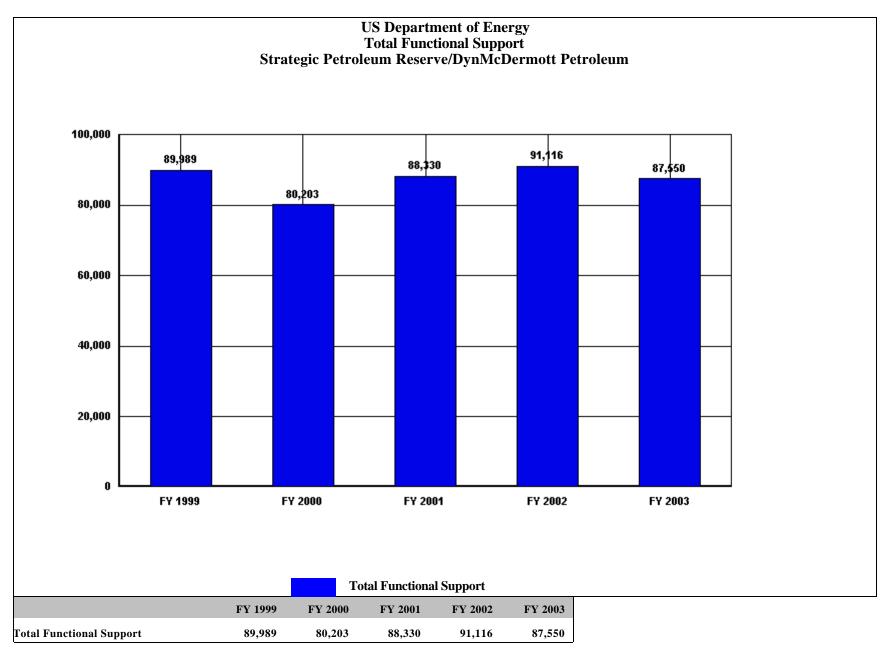
IV. Cost Savings Initiatives:

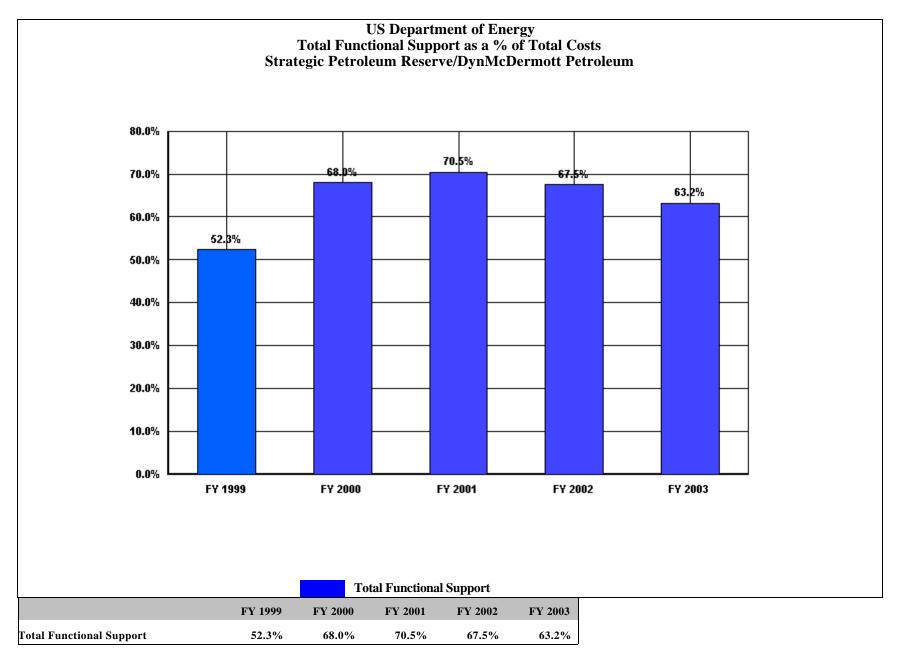
SLAC has been, and continues to be, very responsible in managing its business and administrative functions. In recent years we have taken numerous actions to streamline administrative functions, procedures, and practices, resulting in cost avoidance and small cost reductions. It is primarily through such actions that SLAC is able to incorporate various new requirements mandated by the DOE, while still successful in keeping administrative and support costs low.

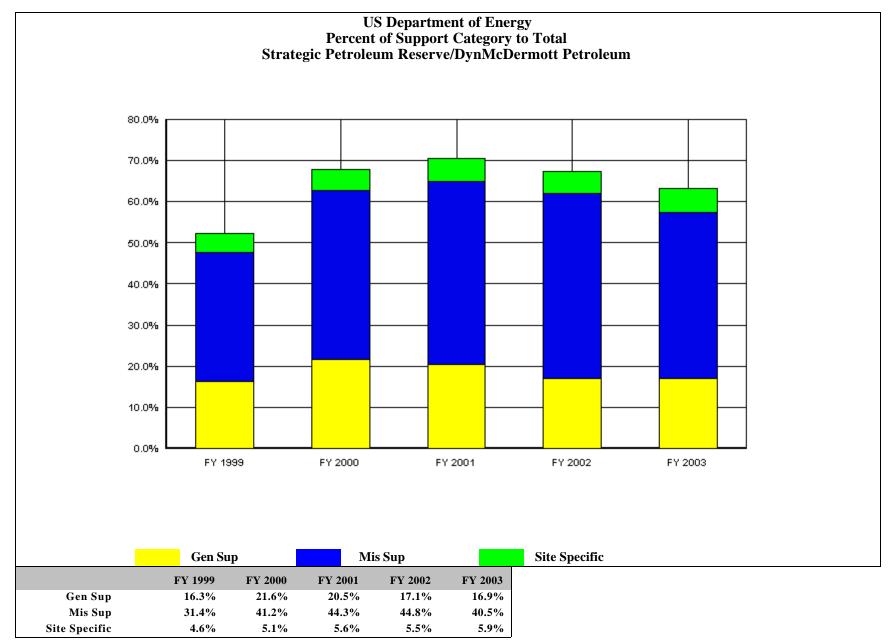
In FY97, SLAC invested in a new business information system which consists of a suite of integrated software packages for human resources management, payroll, accounting, purchasing, asset management, and inventory. The Laboratory expects future cost savings through continual process improvements and increased use of electronic transaction/ information processing.

The one-time cost savings measures taken in FY03 have been discussed in Section II.

Trends in Total Functional Support Cost Categories							
Strategic Petrole		ve/DynMc 2003	Dermott l	Petroleum			
	(\$ in	000's)					
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	1,164	560	294	260	434	-730	-62.7%
HUMAN RESOURCES	1,514	2,030	1,336	1,259	1,196	-318	-21.0%
CFO	1,848	1,823	1,969	1,797	1,922	74	4.0%
PROCUREMENT	2,007	1,780	1,918	1,957	1,945	-62	-3.1%
LEGAL	639	1,485	754	532	611	-28	-4.4%
CENTRAL ADMIN SERVVICES	1,676	1,474	993	698 4 020	760	-916	-54.7%
PROGRAM/PROJECT CONTROL	5,705 1,672	5,468 1,790	4,748 2,362	4,930 1,852	5,072 2,467	-633 795	-11.1% 47.5%
INFORMATION OUTREACH INFORMATION SERVICES	1,672	1,790 9,108	2,362	1,852 9,828	2,467 8,965	-2,765	47.5% -23.6%
OTHER	0	9,108 0	0	9,828	8,965 0	-2,765	-23.6% 0.0%
TOTAL GENERAL SUPPORT	27,955	25,518	25,731	23,113	23,372	-4,583	-16.4%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	1999 to
						FY2(
ENVIRONMENTAL	2,250	2,078	2,213	2,350	2,410	160	7.1%
SAFETY AND HEALTH	2,419	2,545	3,138	2,500	2,694	275	11.4%
FACILITIES MANAGEMENT	718	809 25 825	716	1,015	1,437	719	100.1%
MAINTENANCE	30,311	25,835	29,464	27,410 2,600	25,106	-5,205 73	-17.2% 3.5%
UTILITIES SAFEGUARDS AND SECURITY	2,086 10,788	2,036 10,742	2,903 11,824	2,000	2,159 18,288	7,500	5.5% 69.5%
LOGISTICS SUPPORT	3,610	2,856	3,679	2,955	2,294	-1,316	-36.5%
QUALITY ASSURANCE	1,884	1,744	1,659	1,721	1,610	-274	-14.5%
LABORATORY/TECHNICAL SUPPOR	0	1,744	0	0	0	0	0.0%
TOTAL MISSION SUPPORT		49 (45	-				3.6%
IOTAL MISSION SULLONI	54,066	48,645	55,596	60,539	55,998	1,932	5.070
SITE SPECIFIC	54,000 FY 1999	48,045 FY 2000	55,596 FY 2001	60,539 FY 2002	55,998 FY 2003	Change 1	1999 to
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(1999 to 03
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE	FY 1999 7,968	FY 2000 6,040	FY 2001 7,003	FY 2002 7,316	FY 2003 7,970	Change 1 FY20 2	999 to 03 0.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES	FY 1999 7,968 0	FY 2000 6,040 0	FY 2001 7,003 0	FY 2002 7,316 148	FY 2003 7,970 210	Change 1 FY20 2 210	999 to 03 0.0% 100.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE	FY 1999 7,968 0 0	FY 2000 6,040 0 0	FY 2001 7,003	FY 2002 7,316 148 0	FY 2003 7,970 210 0	Change 1 FY20 2	999 to 03 0.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD	FY 1999 7,968 0	FY 2000 6,040 0	FY 2001 7,003 0 0	FY 2002 7,316 148	FY 2003 7,970 210	Change 2 FY20 2 210 0	999 to 03 0.0% 100.0% 0.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC	FY 1999 7,968 0 0 7,968	FY 2000 6,040 0 0 6,040	FY 2001 7,003 0 0 7,003	FY 2002 7,316 148 0 7,464	FY 2003 7,970 210 0 8,180	Change 1 FY20 2 210 0 212	1999 to 003 0.0% 100.0% 0.0% 2.7% -2.7%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT	FY 1999 7,968 0 0 7,968 89,989 FY 1999	FY 2000 6,040 0 6,040 80,203 FY 2000	FY 2001 7,003 0 7,003 88,330 FY 2001	FY 2002 7,316 148 0 7,464 91,116 FY 2002	FY 2003 7,970 210 0 8,180 87,550 FY 2003	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20	0999 to 03 0.0% 100.0% 0.0% 2.7% -2.7% 1999 to 003
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation	FY 1999 7,968 0 0 7,968 89,989 FY 1999 82,037	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791	FY 2001 7,003 0 0 7,003 88,330 FY 2001 37,040	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164	1999 to 100.0% 100.0% 0.0% 2.7% -2.7% 1999 to 103 -38.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT	FY 1999 7,968 0 0 7,968 89,989 FY 1999	FY 2000 6,040 0 6,040 80,203 FY 2000	FY 2001 7,003 0 7,003 88,330 FY 2001	FY 2002 7,316 148 0 7,464 91,116 FY 2002	FY 2003 7,970 210 0 8,180 87,550 FY 2003	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20	0999 to 03 0.0% 100.0% 0.0% 2.7% -2.7% 1999 to 003
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation	FY 1999 7,968 0 0 7,968 89,989 FY 1999 82,037	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791	FY 2001 7,003 0 0 7,003 88,330 FY 2001 37,040	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164	1999 to 100.0% 100.0% 0.0% 2.7% -2.7% 1999 to 103 -38.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791 0	FY 2001 7,003 0 7,003 88,330 FY 2001 37,040 0	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791	FY 2001 7,003 0 0 7,003 88,330 FY 2001 37,040 0 37,040	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873	Change 1 FY2(2 210 0 212 -2,439 Change 1 FY2(-31,164 0 -31,164	1999 to 100 0.0% 100.0% 0.0% 2.7% -2.7% 1099 to 103 -38.0% 0.0%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026	FY 2000 6,040 0 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994	FY 2001 7,003 0 0 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026	FY 2000 6,040 0 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994	FY 2001 7,003 0 0 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026	FY 2000 6,040 0 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994	FY 2001 7,003 0 0 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026	FY 2000 6,040 0 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994	FY 2001 7,003 0 0 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026 172,026 172,026	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994 117,994 117,994	FY 2001 7,003 0 0 0 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370 125,370	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873 138,423 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs Total Costs w/o Construction	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026 172,026 172,026 16.3%	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994 117,994 21.6%	FY 2001 7,003 0 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370 125,370 20.5%	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079 135,079 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 0 50,873 138,423 138,423 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	FY 1999 7,968 0 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026 172,026 172,026 172,026 31.4%	FY 2000 6,040 0 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994 117,994 21.6% 41.2%	FY 2001 7,003 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370 125,370 20.5% 44.3%	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079 135,079 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 138,423 138,423 138,423 138,423 138,423 138,423 138,423 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs Site Specific % Total Costs	FY 1999 7,968 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026 172,026 172,026 131.4% 4.6%	FY 2000 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994 117,994 21.6% 41.2% 5.1%	FY 2001 7,003 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370 125,370 20.5% 44.3% 5.6%	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079 135,079 135,079	FY 2003 7,970 210 0 87,550 FY 2003 50,873 138,423 138,423 138,423 138,423 138,423 138,423 138,423 50,873	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%
SITE SPECIFIC MANAGEMENT/INCENTIVE FEE TAXES LDRD / PDRD / SDRD TOTAL SITE SPECIFIC TOTAL FUNCTIONAL SUPPORT MISSION DIRECT Mission Direct Operation Capital Construction TOTAL MISSION DIRECT Total Costs Total Costs w/o Construction General Support % Total Costs Mission Support % Total Costs	FY 1999 7,968 0 0 7,968 89,989 FY 1999 82,037 0 82,037 172,026 172,026 172,026 172,026 31.4%	FY 2000 6,040 0 6,040 0 6,040 80,203 FY 2000 37,791 0 37,791 117,994 117,994 21.6% 41.2%	FY 2001 7,003 0 7,003 88,330 FY 2001 37,040 0 37,040 125,370 125,370 20.5% 44.3%	FY 2002 7,316 148 0 7,464 91,116 FY 2002 43,963 0 43,963 135,079 135,079 135,079	FY 2003 7,970 210 0 8,180 87,550 FY 2003 50,873 138,423 138,423 138,423 138,423 138,423 138,423 138,423 138,423 138,423	Change 1 FY20 2 210 0 212 -2,439 Change 1 FY20 -31,164 0 -31,164 -33,603	0999 to 0.3 0.0% 100.0% 0.0% 2.7% -2.7% 999 to 0.3 -38.0% 0.0% -38.0% -19.5%







SITE PROFILE STRATEGIC PETROLEUM RESERVE – DYNMCDERMOTT PETROLEUM

The Strategic Petroleum Reserve (SPR) was established in 1975 in response to the 1973 Arab oil embargo. It is authorized by the Energy Policy and Conservation Act (EPCA) (Public Law 94-463), and by the comprehensive energy plans of all Administrations since 1975, in recognition of the long-term dependence of the United States on imported crude oil and petroleum products.

The United States (U.S.) is a member of the International Energy Agency (IEA), which requires member nations to maintain stocks of crude oil in the public and private sectors. The U.S. relies on a combination of oil in the SPR and private stocks to meet its oil storage obligations to the IEA.

Our mission is to maintain a state of readiness to respond to a Presidential order to drawdown the SPR emergency crude oil stockpile. The SPR maintains a goal of being drawdown ready within 15 days of notification. The SPR has stockpiled 624 million barrels of oil and is currently filling the SPR with Royalty-in-Kind oil, which is being diverted to increase the inventory. The current inventory amounts to approximately 60 days of net imports, based on the U. S. net import rate for crude oil in 1999.

The SPR's Operating and Maintenance contractor has one project management office and four operation and maintenance sites. The operation and maintenance sites are listed below.

Bryan Mound located in east Texas near the city of Freeport.232 million barrels of crude oil can be stored in the site's 20 caverns.77 people are employed at the site as of October 2003.The site contains 231 million barrels of oil in storage as September 30, 2003.The site consists of 36 buildings.

Big Hill is located in east Texas near the city of Beaumont. 170 million barrels of crude oil can be stored in the site's 14 caverns. 88 people are employed at the site as of October 2003. The site contains 123 million barrels of oil in storage as September 30, 2003. The site consists of 29 buildings.

Bayou Choctaw is located in central Louisiana near the city of Baton Rouge.76 million barrels of crude oil can be stored in the site's 6 caverns.54 people are employed at the site as of October 2003.The site contains 76 million barrels of oil in storage as September 30, 2003.The site consists of 26 buildings.

West Hackberry is in Southwest Louisiana near the city of Lake Charles. 222 million barrels of crude oil can be stored in the site's 22 caverns. 90 people are employed at the site as of October 2003 including a traveling workover crew. The site contains 194 million barrels of oil in storage as September 30, 2003. The site consists of 29 buildings.

SITE PROFILE STRATEGIC PETROLEUM RESERVE – DYNMCDERMOTT PETROLEUM

Deviation Explanations

FY 1999 vs. FY 2000

The Life Extension program was basically completed during FY 1999. FY 1999 was \$51.8M and FY 2000 was \$10.9M.

The DynMcDermott (DM) labor headcount was being reduced. FY 1999 was \$32.3M and FY 2000 was \$30.5M.

Employees were being trained in the operational capability of the Life Extension equipment. FY 1999 was \$.6M and FY 2000 was \$.8M.

Several Life Extension subcontractor claims were settled during FY 2000. FY 1999 was \$0M and FY 2000 was \$.9M.

FY 2000 vs. FY 2001

Major Maintenance was expanded for repairs and modification to existing facilities and equipment. FY 2000 was \$2.8M and FY 2001 was \$4.0M.

The DM headcount continues to be reduced. FY 2000 was \$30.5M and FY 2001 was \$30.3M. Computer software programs continue to be expanded and maintained. FY 2000 was \$9.1M and FY 2001 was \$11.4M.

The crude oil exchange program continued. FY 2000 was \$0M and FY 2001 was \$.2M. Enhanced security was implemented. FY 2000 was \$0M and FY 2001 was \$.5M.

FY 2001 vs. FY 2002

Major Maintenance to perform Enhanced Security tasks and heat exchanger bundle replacement. FY 2001 was \$0M and FY 2002 was \$6.8M.

Enhanced security implementation continued with the hiring of 50 guards and expenditure of significant overtime to replace the non-cleared guards at their posts. FY 2001 was \$.5M and FY 2002 was \$8.0M

FY 2002 vs. FY 2003

The Vapor Pressure program began in FY 2002 but significantly increased in FY 2003 in preparation for the units to go into production in FY 2004. FY 2002 was \$4M and FY 2003 was \$14M.

The West Hackberry site replaced the Raw Water (RW) and Crude Oil (CO) high pressure pumps in FY 2002. FY 2002 was \$2.9M and FY 2003 was \$0M.

SITE PROFILE STRATEGIC PETROLEUM RESERVE – DYNMCDERMOTT PETROLEUM

Cost Savings

Some of the major cost savings implemented by DM during the time period:

Reduction of DM headcount

Reduction of subcontracted manpower

Changed insurance program to implement a cafeteria program, which reduces medical expenses Modification to the Degasification Program

Significant reduction in the office space and rental cost

Combined DM with CSC's (parent-company) Worker's Compensation insurance policy

Increased on-line training and reduced instructor-lead training

Consolidated the Emergency Response Training (ERT) Academy and perform more of the training in-house

Improved the copier service contract and reduced cost

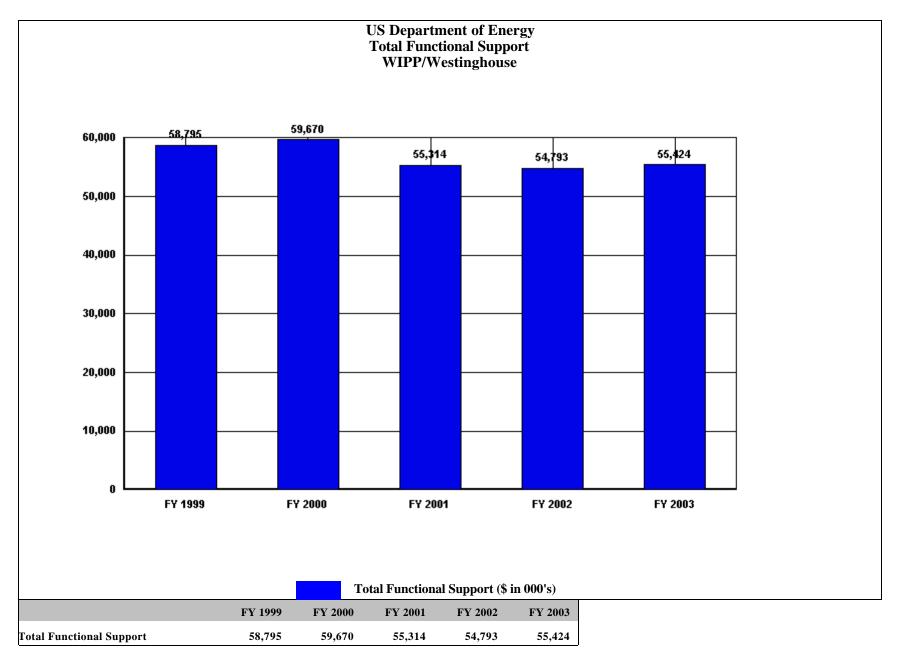
Changed the in-house drawdown model's maintenance from a "buy" to a "make"

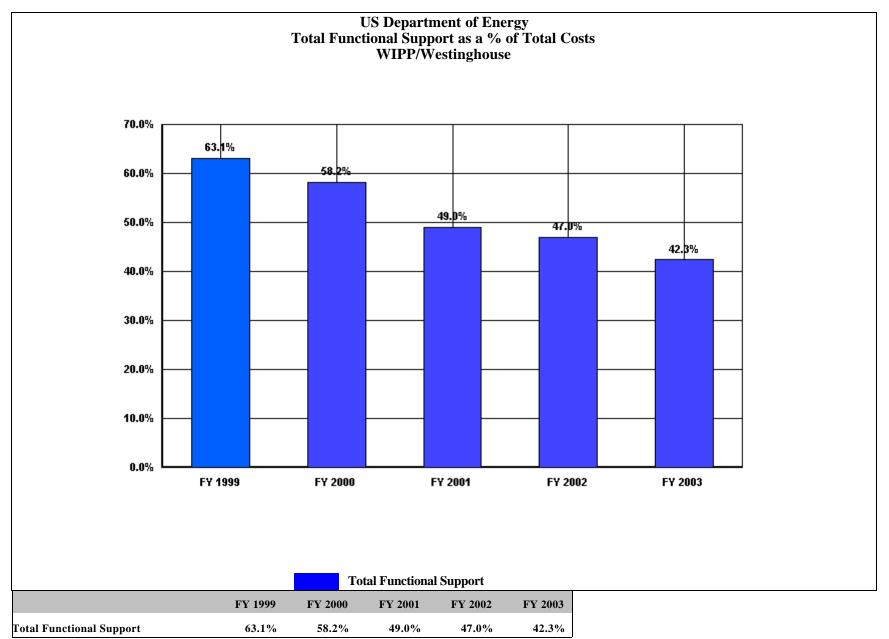
Changed the re-write SOEP application from a "buy" to a "make"

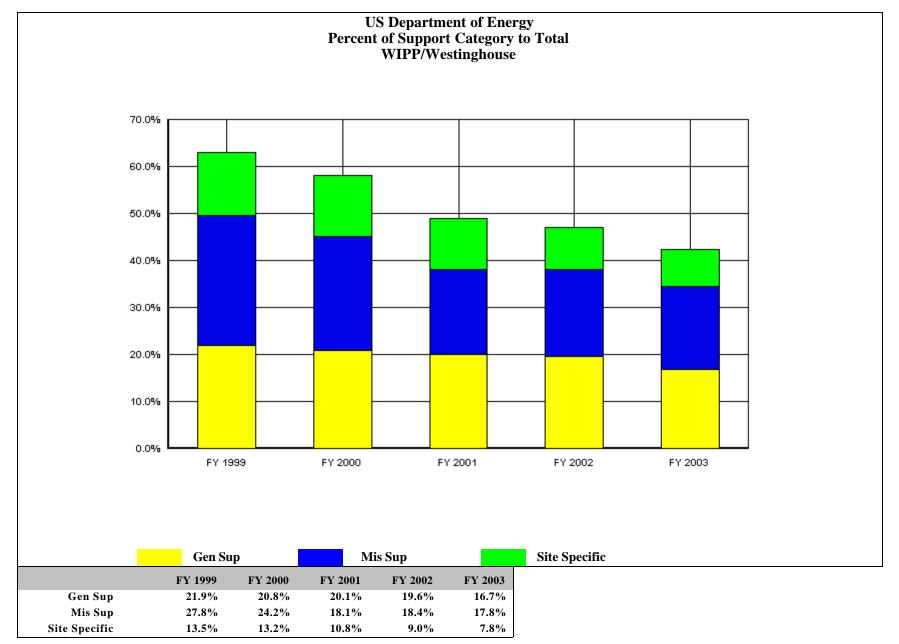
Procurement and Finance linked paper documents to electronic documents in SAP

Modified the Project Review schedule from monthly to quarterly

Trends in 7	Fotal Function	al Suppor	t Cost Cat	egories			
	WIPP/We FY	estinghous 2003	se				
(\$ in 000's)							
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
EXECUTIVE DIRECTION	823	694	939	1,340	531	-292	-35.5%
HUMAN RESOURCES	2,792	3,523	4,121	3,661	3,666	874	31.3%
CFO	2,090	1,992	2,648	1,747	1,886	-204	-9.8%
PROCUREMENT	1,341	1,210	1,421	1,289	1,376	35	2.6%
LEGAL	309	395	1,084	1,137	1,002	693	224.3%
CENTRAL ADMIN SERVICES	4,014	4,345	3,303	3,211	3,113	-901	-22.4%
PROGRAM/PROJECT CONTROL	1,820	1,930	2,118	1,829	1,828	8	0.4%
INFORMATION OUTREACH	2,836	2,806	2,911	2,593	2,036	-800	-28.2%
INFORMATION SERVICES	4,338	4,445	4,127	6,038	6,433	2,095	48.3%
OTHER	0	0	0	0	0	0	0.0%
TOTAL GENERAL SUPPORT	20,363	21,340	22,672	22,845	21,871	1,508	7.4%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
ENVIRONMENTAL	2,316	2,436	2,075	2,201	1,883	-433	-18.7%
SAFETY AND HEALTH	5,926	5,426	3,711	3,442	5,177	-749	-12.6%
FACILITIES MANAGEMENT	3,217	3,035	1,487	1,637	1,792	-1,425	-44.3%
MAINTENANCE	6,936	7,132	6,457	7,260	7,543	607	8.8%
UTILITIES	1,292	1,000	195	11	-21	-1,313	-101.6%
SAFEGUARDS AND SECURITY	1,932	2,036	2,571	2,892	3,150	1,218	63.0%
LOGISTICS SUPPORT	1,244	1,272	1,413	1,443	1,312	68	5.5%
QUALITY ASSURANCE	2,012	2,057	1,990	1,770	2,498	486	24.2%
LABORATORY/TECHNICAL SUPPORT	984	439	518	815	0	-984	-100.0%
TOTAL MISSION SUPPORT	25,859	24,833	20,417	21,471	23,334	-2,525	-9.8%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
MANAGEMENT/INCENTIVE FEE	8,085	7,862	6,679	5,256	6,215	-1,870	-23.1%
TAXES	4,488	5,635	5,546	5,221	4,004	-484	-10.8%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	12,573	13,497	12,225	10,477	10,219	-2,354	-18.7%
TOTAL FUNCTIONAL SUPPORT	58,795	59,670	55,314	54,793	55,424	-3,371	-5.7%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
Mission Direct Operation	29,852	36,113	50,603	59,475	74,599	44,747	149.9%
Capital Construction	4,533	6,806	7,018	2,366	918	-3,615	-79.7%
TOTAL MISSION DIRECT	34,385	42,919	57,621	61,841	75,517	41,132	119.6%
Total Costs	93,180	102,589	112,935	116,634	130,941	37,761	40.5%
Total Costs w/o Construction	88,647	95,783	105,917	114,268	130,023	41,376	46.7%
			·				
General Support % Total Costs	21.9%	20.8%	20.1%	19.6%	16.7%		
	27.8%	20.8%	18.1%	19.0%	17.8%		
Mission Support % Total Casts		2+.2/0	10.1/0	10.4/0	1/.0/0		
				0.0%	7 80%		
Site Specific % Total Costs	13.5%	13.2%	10.8%	9.0% 47.0%	7.8%		
Mission Support % Total Costs Site Specific % Total Costs Total Support % Total Costs Total Support % Total Costs w/o Construction				9.0% 47.0% 48.0%	7.8% 42.3% 42.6%		







SITE PROFILE WASTE ISOLATION PILOT PLAN – WESTINGHOUSE

Background:

The Waste Isolation Pilot Plan (WIPP) is designed to permanently dispose of transuranic (TRU) waste generated by defense-related activities. It is located in southeastern New Mexico, 26 miles east of Carlsbad. Project facilities include disposal rooms excavated 2,150 feet underground (about a half-mile) in an ancient, stable salt formation. TRU waste consists primarily of tools, gloves, clothing and other such items contaminated with trace amounts of radioactive elements, mostly plutonium. Westinghouse TRU Solutions' (WTS) mission is to dispose of TRU waste in an environmentally sound and safe manner while meeting the mandate to reduce cost. There are 27 DOE TRU waste sites, each having the similar goal of removal of TRU wastes from its facility. The total volume of TRU waste currently managed by the DOE (stored and projected) is estimated to be 171,439 m³ of which 167,412 m³ is CH TRU and 4,027 m³ is RH TRU waste. A portion of this waste will be treated or repackaged prior to disposal, and the reported volumes may change depending on the selected treatment of repackaging methodology. The volume to be disposed of at WIPP is 108,439 m³, of which 106,623 m³ is contact handled (CH) TRU, and 1,816 m³ is remote handled (RH) TRU waste. WIPPs' total capacity for both CH TRU waste and RH TRU waste is set at 175, 600 m³ by the Land Withdrawal Act, with the total volume of RH TRU waste not exceeding 7,080 m³. WTS opened and began receiving waste March 26, 1999. At the end of FY03, WIPP had emplaced 15,238 cubic meters of TRU Waste, which was a result of 2,057 shipments.

WTS developed and implemented a new stand-alone program, Central Characterization Project (CCP), that enables the deployment of equipment and personnel to identified generator sites to perform waste characterization activities of TRU waste. The CCP functions are independent of other WIPP Site activities and/or requirements; therefore, new program and project level documentation which complies with all RCRA permits for waste characterization and disposal are required.

The concept behind the development of the CCP is that once the program is certified, the program and project level documentation will be deployed and accepted at the next generator site that had been targeted for clean up. The Department of Energy will save significant amounts of money resulting from standardization of programs, equipment and procedures.

The CCP effort has extended beyond the boundaries of WTS by partnering with Los Alamos National Laboratories and Sandia National Laboratories to organize a team of experts in the fields of Non-Destructive Assay, Non-Destructive Examination, Head Space Gas Analysis, Acceptable Knowledge and Transportation. The teaming concept will more effectively utilize the resources of the Department of Energy in its effort to clean up and close generator sites across the complex.

SITE PROFILE WASTE ISOLATION PILOT PLAN – WESTINGHOUSE

CCP has developed and implemented an aggressive, fast-paced program to accelerate the cleanup of stored CH-TRU waste at those facilities across the country that only have small quantities of waste destined for WIPP, and that are designated as small quantity sites (SQS). Processes were designed, procedures developed, personnel hired and trained, mobile vendors selected, equipment deployed, and start-up activities initiated at three sites.

- Savannah River Site The certification audit was completed, approved to ship, reviewed by the Environmental Protection Agency (EPA), and the New Mexico Environmental Department (NMED), and shipment of CCP waste to WIPP began.
- Argonne National Laboratories East and the Nevada Test Site Readiness assessments were completed, waste characterization operations began, certification audits were completed and both sites are currently waiting for approval from the EPA and NMED to begin shipments to WIPP.

Standardization, a cornerstone of CCP, will help drive down the cost-per-drum for characterization.

WTS has developed the NTP Integrated Schedule – the complex-wide schedule is a management tool that shows interdependency of activities among the complex and tracks progress toward the major milestones identified in the National TRU Waste Management Plan.

The WIPP operating costs are within one fund type (with minor exceptions). Other sites having multiple missions with multiple appropriation funding sources may view what classifies as support costs differently.

Trends:

• WTS continues to reduce support costs each year.

	FY99	FY00	FY01	FY02	FY03
Total Functional Support	63.2%	58.16%	48.98%	46.98%	42.33%
Costs as a Percentage of					
Total Costs					

WTS support costs continue to decrease.

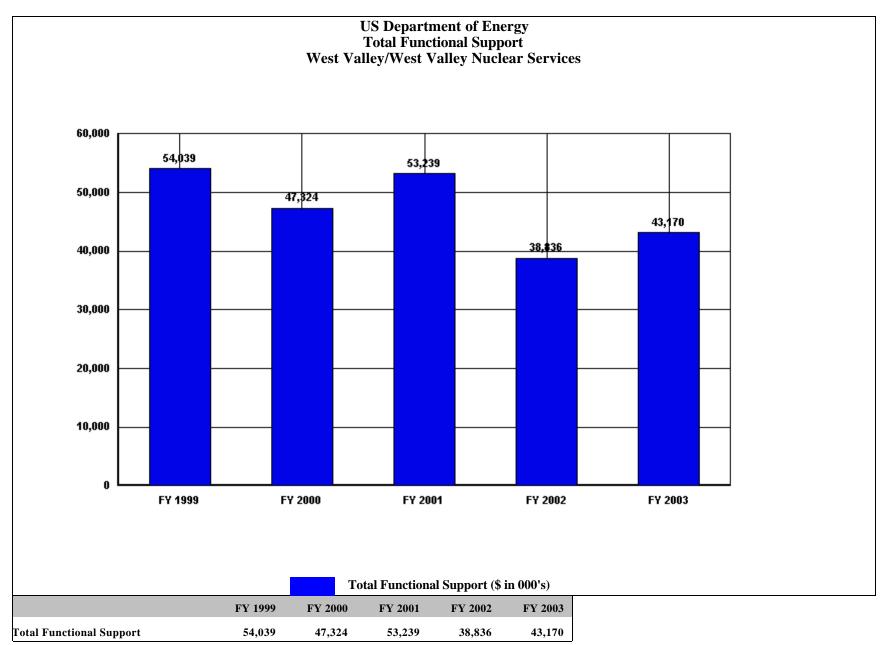
SITE PROFILE WASTE ISOLATION PILOT PLAN – WESTINGHOUSE

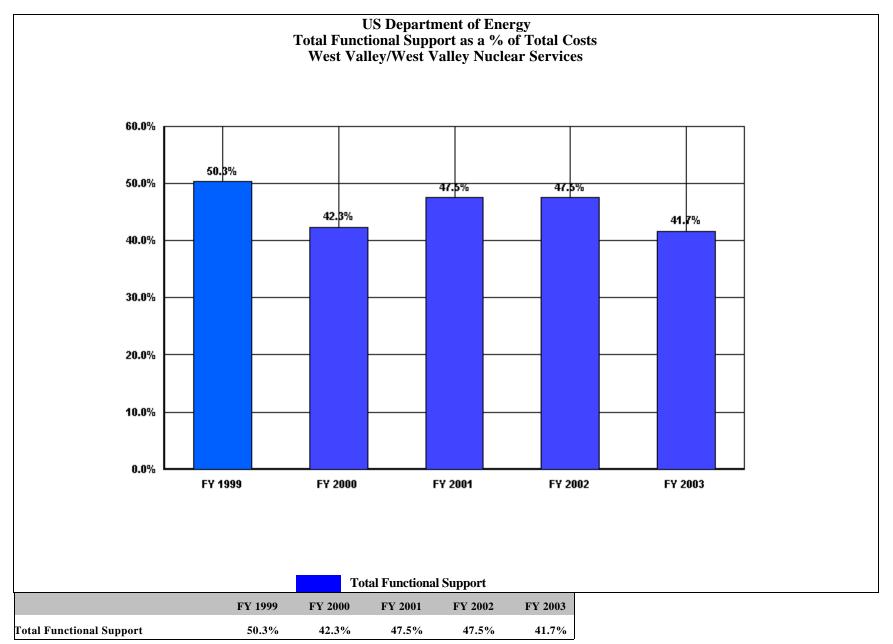
The WTS mission has moved from preparation for opening with emphasis on design, environmental compliance and permitting activities into an operating mode. This shift from information based (preparing to open) tasks to hands on (operating) tasks have resulted in a steady shift to mission direct efforts and away from support functions. The WIPP site mission is singular in nature (disposal of TRU waste). Its total infrastructure is charged to one mission; therefore, support functions lack the economies of scale that results from spreading these costs across missions. WTS is the M&O contractor and our submittal contains only a portion of the total WIPP budget. Because WIPP is a one of a kind 10,000-year facility in a remote location, it has unique human resource, record management, and outreach efforts. Legal activities have increased due to increased support for RCRA permitting. The opening of WIPP in March of 1999 and the continued increase in waste receipt throughput have resulted in a continued downward trend in support costs. In 2001, WTS was awarded the WIPP M&O contract. This resulted in significant cost savings in support cost areas. The FY03 Functional Support Cost percentage is 4.65% less than FY02, and shows a five year reduction of 20.87%.

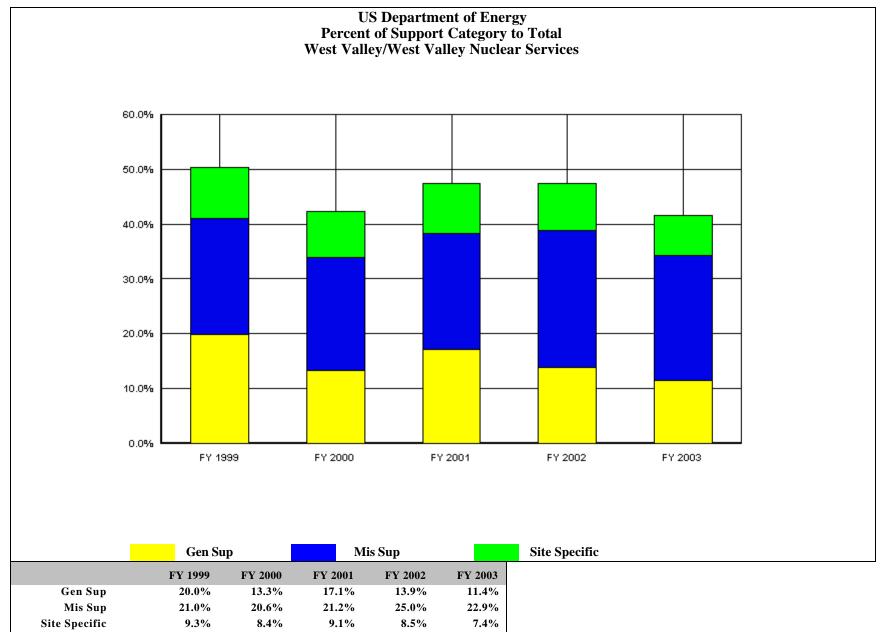
Cost Savings Initiatives:

WTS has committed to achieve in excess of \$80M in cost savings over their 5-year contract with the DOE. To date, \$78.69M of savings has been identified. Performance objectives to demonstrate effective project and operational management were established which resulted in significant improvements in plant efficiency, better coordination with waste generator sites, and completion of critical work scope within budget and schedule.

Trends in Total Functional Support Cost Categories								
West Vall	ey/West V	alley Nucl 2003	lear Servio	ces				
		2005 000's)						
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1		
EXECUTIVE DIRECTION	502	601	723	536	497	FY2 (-1.0%	
HUMAN RESOURCES	1,953	2,028	2,029	1,867	2,035	82	4.2%	
CFO	933	1,029	1,274	1,290	1,436	503	53.9%	
PROCUREMENT	1,297	1,373	1,276	1,167	1,009	-288	-22.2%	
LEGAL	176	346	328	192	299	123	69.9%	
CENTRAL ADMIN SERVICES	1,711	1,464	1,189	628	624	-1,087	-63.5%	
PROGRAM/PROJECT CONTROL	1,007	1,104	1,157	1,388	1,678	671	66.6%	
INFORMATION OUTREACH	470	879	1,143	1,221	1,563	1,093	232.6%	
INFORMATION SERVICES	6,260	6,036	4,683	3,063	2,668	-3,592	-57.4%	
OTHER	7,137	0	5,396	0	0	-7,137	-100.0%	
TOTAL GENERAL SUPPORT	21,446	14,860	19,198	11,352	11,809	-9,637		
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1		
ENVIRONMENTAL	1,711	1,931	1,851	1,679	1,328	FY2 (-383	-22.4%	
SAFETY AND HEALTH	7,283	7,559	7,181	6,490	7,552	-383	-22.4%	
FACILITIES MANAGEMENT	1,283	2,262	1,786	0,490 1,605	2,260	318	16.4%	
MAINTENANCE	3,782	2,202 3,890	4,025	4,011	4,773	991	26.2%	
UTILITIES	2,007	1,995	3,037	2,011	2,340	333	16.6%	
SAFEGUARDS AND SECURITY	1,100	1,995	1,484	1,293	1,666	566	51.5%	
LOGISTICS SUPPORT	760	817	1,484	942	952	192	25.3%	
QUALITY ASSURANCE	1,695	1,659	1,646	916	936	-759	-44.8%	
LABORATORY/TECHNICAL SUPPORT	2,297	1,824	1,040	1,546	1,870	-427	-18.6%	
TOTAL MISSION SUPPORT	22,577	23,075	23,796	20,493	23,677	1,100		
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1		
						FY2 (
MANAGEMENT/INCENTIVE FEE	9,143	9,389	10,026	6,780	7,571	-1,572	-17.2%	
TAXES	873	0	219	211	113	-760	-87.1%	
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%	
TOTAL SITE SPECIFIC	10,016	9,389	10,245	6,991	7,684	-2,332		
TOTAL FUNCTIONAL SUPPORT	54,039	47,324	53,239	38,836	43,170	-10,869	-20.1%	
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY2(
Mission Direct Operation	53,396	64,537	58,800	42,981	60,446	7,050	13.2%	
Capital Construction	0	0	0	0	0	0	0.0%	
TOTAL MISSION DIRECT	53,396	64,537	58,800	42,981	60,446	7,050	13.2%	
Total Costs	107,435	111,861	112,039	81,817	103,616	-3,819	-3.6%	
Total Costs w/o Construction	107,435	111,861	112,039	81,817	103,616	-3,819	-3.6%	
General Support % Total Costs	20.0%	13.3%	17.1%	13.9%	11.4%			
General Support % Total Costs Mission Support % Total Costs	20.0% 21.0%	13.3% 20.6%	17.1% 21.2%	13.9% 25.0%	11.4% 22.9%			
Mission Support % Total Costs								
Mission Support % Total Costs Site Specific % Total Costs	21.0%	20.6%	21.2%	25.0%	22.9%			
Mission Support % Total Costs	21.0% 9.3%	20.6% 8.4%	21.2% 9.1%	25.0% 8.5%	22.9% 7.4%			







I. Site Characteristics

The West Valley Demonstration Project (WVDP) Act chartered the Department of Energy (DOE) with, among other mandates, the task of solidifying the liquid high level waste (HLW) at the Western New York Nuclear Service Center (WNYNSC). The site is owned by New York State (NYS) and administered through its agency, New York State Energy Research and Development Authority (NYSERDA). The WNYNSC is a 3,300 acre site located approximately 30 miles south of Buffalo, New York. A commercial spent nuclear fuel reprocessing facility operated at the site from 1966 until 1972. This reprocessing facility occupied about 165 acres of the larger 3,300 acre tract. During its operational years, the facility was used to reprocess uranium and plutonium from spent nuclear fuel (SNF), 60% of which originated from defense facilities. Spent Fuel reprocessing operations resulted in approximately 600,000 gallons of liquid HLW stored in underground tanks, which required treatment, storage and ultimate disposal.

In 1980, the United States Congress passed the West Valley Demonstration Project Act (Public Law 96-368), which authorized DOE to conduct a technology demonstration project to solidify the liquid HLW. A subsequent decision was made by DOE to develop vitrification technology as the process to solidify the liquid HLW. In accordance with WVDP Act requirements, DOE also has responsibility for: 1) developing containers suitable for the permanent disposal of the solidified HLW at an appropriate Federal repository; 2) transporting the HLW containers to the Federal repository; 3) disposing of low level waste (LLW) and transuranic (TRU) waste resulting from HLW solidification; and 4) the decontamination and decommissioning of the tanks, hardware and facilities used for HLW solidification. Under a separate agreement, DOE also had responsibility for 125 spent nuclear fuel (SNF) assemblies stored at the site, which have been removed from a "wet" storage facility, placed into certified transportation casks, and transferred to the Idaho National Environmental and Engineering Laboratory (INEEL) site.

HLW solidification was performed in consultation with the U.S. Nuclear Regulatory Commission (NRC) per a Memorandum of Understanding between the DOE and NRC, and consistent with a Cooperative Agreement between DOE and NYSERDA. Per the WVDP Act, NYSERDA is responsible for ten percent of WVDP costs. NYSERDA holds title to the WNYNSC and the NRC license to operate the site, which has been put into abeyance during DOE conduct of the Project. DOE has exclusive use and possession of the WVDP premises (i.e., 230 acres), and is responsible for maintaining these premises, managing environmental risk, ensuring site worker and public safety, and accomplishing the scope of the WVDP Act as mandated by its implementing agreements.

Mission

The prime management and operating contractor for the WVDP is the West Valley Nuclear Services Company (WVNSCO), which manages the facility according to a performance based contract. During the time period encompassed by the Functional Cost Report (FY1998 to FY2003), the Project will have evolved from HLW waste processing engineering / construction / start-up, through HLW final treatment/vitrification processing, to the current decontamination

and waste management phase. There are significant challenges being managed in order to assure the Project has the required disciplines to support this evolutionary process.

II. Highlights of Trends

The actual current year dollars spent for functional costs decreased from \$48.5M in FY98 to \$43.2M in FY2003. The functional cost data are not adjusted for the impacts of inflation over the reporting period (FY1998-FY2003). When the functional cost trend totals are adjusted to FY2003 dollars, the overall cost trend decreases more significantly by approximately 23%, from \$55.8M "adjusted" FY2003 base year (\$48.5M FY1998 dollars escalated to FY2003 basis) to \$43.2M in FY2003. As the work scope has evolved during the functional cost reporting period from waste processing systems and facilities construction to HLW processing to post-processing decontamination and waste management scopes, the site has experienced significant fluctuations in non-labor Mission related expenditures. This is primarily due to completion of vitrification facility construction, facility/system modifications and completion of required infrastructure upgrades. Direct employment levels have decreased from 830 full time equivalents (FTEs) in FY1998 to the current level of 486 FTEs. Total Project expenditure decreased from \$114.4M in FY1998 to \$103.7M in FY2003, reflecting the overall trend and the evolution of the Project's mission.

FY2003 was a year of significant change for the West Valley Demonstration Project as the Project continued the evolution to a decontamination / waste management oriented mission An effect of the changing mission at WVDP was an increase in overall expenditures of \$21.9M, from the FY2002 level of \$81.8M to \$103.7M in FY2003. This increase is due primarily to subcontract costs for the construction of the Remote Handled Waste Facility, the shipment of the spent nuclear fuel to INEEL, and the decontamination of the spent fuel storage pool. These are significant waste management and decontamination efforts associated with the new mission that generated increased expenditures when compared to the FY2002 level.

In FY2003, a total of \$1.8M of New York State Sales and Use taxes was included as a part of the respective functional cost categories, an increase of \$.4M from the FY2002 amount.

The WV total functional cost increased from \$38.8M in FY2002 to \$43.2M in FY2003. The increase is primarily due to increased pension fund needs. While the overall FTE headcount decreased from the FY2002 level, the total labor and related benefits costs increased due to a work force restructuring initiative that was realized in FY2002 and an increase in assets required in FY2003 to maintain minimal pension fund account balances associated with plan year 2002.

III. Analysis of Change in Support Costs from Prior Years

WVNSCO management has focused on safety as the mission has evolved. From a functional cost reporting perspective, WVNSCO was able to improve the ratio in support vs. mission expenditures in comparison to FY2002 levels from 47.5% to 41.7%. WVNSCO also improved

when compared to Total DOE EM functional cost data. The DOE EM mission direct expenditure percentage is 48.1% as compared to 58.3% for WVDP Mission direct expenditures.

The table illustrates the FY2002 to FY2003 WVDP comparison and the WVDP to DOE EM comparison.

Functional Cost Category	WVDP F	Y2002	WVDP F	Y2003	DOE EM F	Y 2002	WV % vs DOE EM	
Conoral Support	¢ 11.250	12.00/	¢ 11 000	11.4%	¢ 741 500	11 50/	-0.1%	
General Support Mission Support	\$ 11,352 \$ 20,493		\$ 11,809 \$ 23,677		\$ 741,533 \$ 1,795,419	11.5% 27.9%		below "EM" Ave below "EM" Ave
Site Specific Support	\$ 6,991	8.5%	. ,	7.4%		5.2%		above "EM" Ave
Total Functional Support	\$ 38,836	47.5%	\$ 43,170	41.7%	\$ 2,869,644	44.5%	-2.9%	
Mission direct	\$ 42,981	52.5%	\$ 60,446	58.3%	\$ 3,096,575	48.1%	10.3%	better than "EM" Ave
Construction	\$ -	0.0%	\$ -	0.0%	\$ 477,920	7.4%	-7.4%	
Total	\$ 81,817	100.0%	\$103,616	100.0%	\$ 6,444,139	100%	0.0%	

At the individual Functional cost category level, the need to increase assets for the pension fund caused some of the categories to show an increase in total expenditures. For these categories, the reduction in FTE's and non labor expenditures did not decrease enough to compensate for the overall increased labor costs associated with increasing the assets in the pension fund. This is noted in the following categories: CFO, Program/Project Control, Information Outreach, Facilities Management, Maintenance and Laboratory/Technical support.

Categories which reported an increase due to non labor expenditures are as follows: Human Resources; incurred increased workforce relocation costs related to obtaining the required talents for the evolving mission,

Legal; increased costs for subcontract counsel related to Project issues,

Safety and Health; increased equipment costs for replacement of radiation monitoring and counting equipment,

Utilities; increase due to market fluctuations in electric and natural gas prices and increased usage as a result of colder than average winter weather,

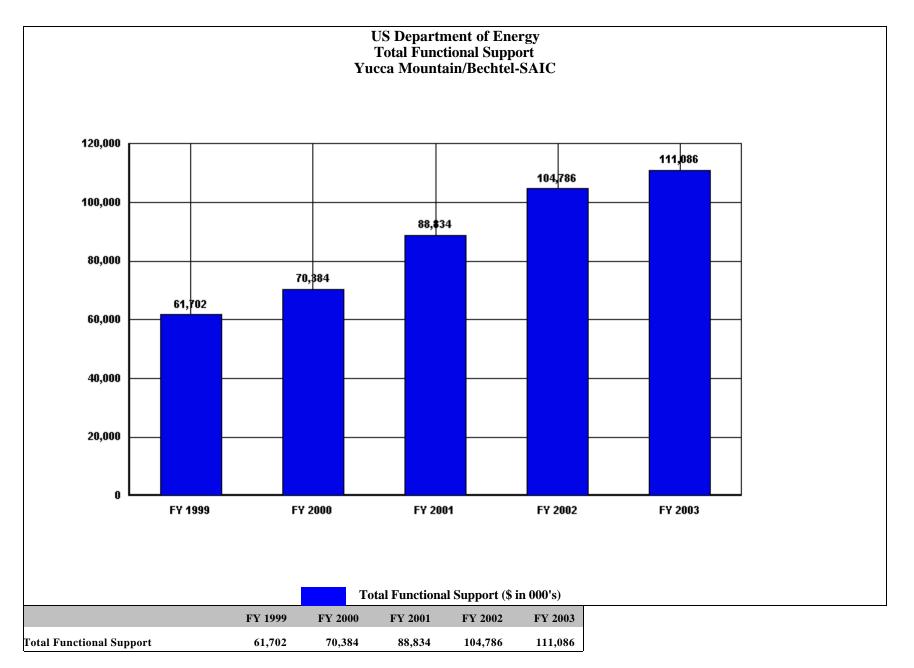
Safeguards and Security; subcontract costs related to SECON 2 level and the shipment of the spent nuclear fuel.

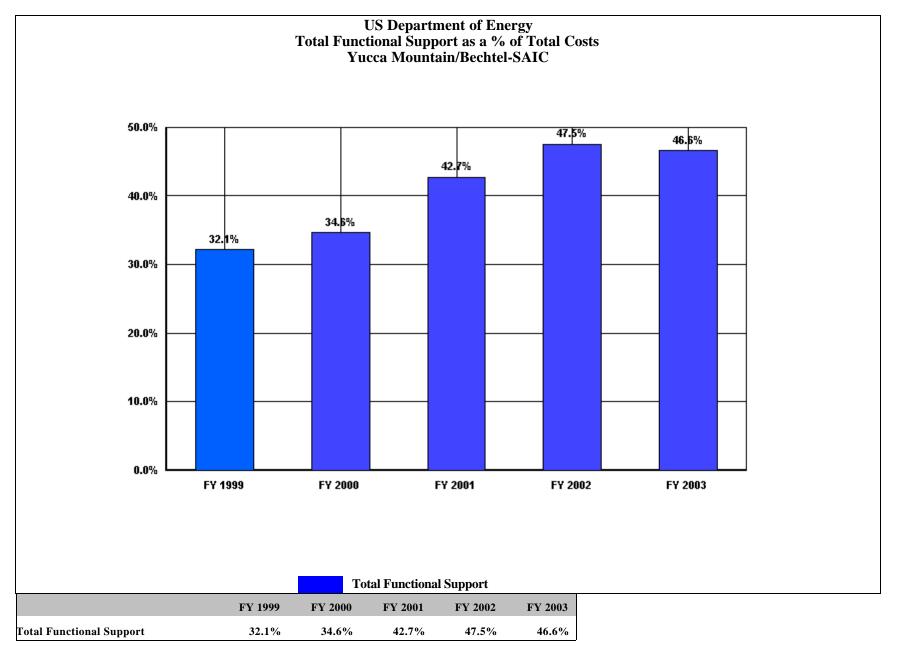
Categories reporting decreases in expenditures due to the reprioritization of resources and the evolving mission are: Executive Direction, Information Services, Procurement, Central Administrative Services and Environmental.

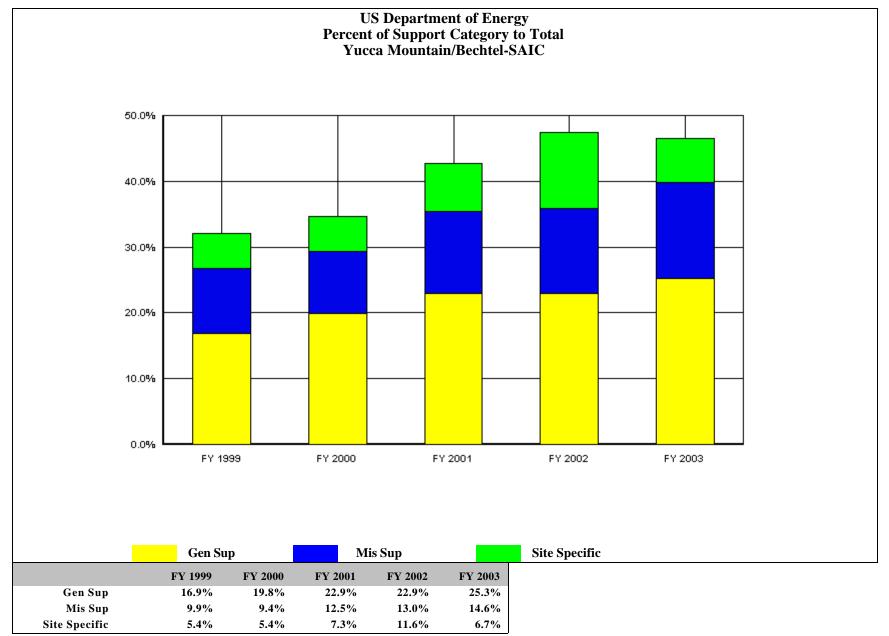
IV. Cost Savings Initiatives

The WVNSCO Project Control system recognized approximately \$15.8M of cost savings through formal change control / budget management documentation which also authorized the acceleration of out-year scopes into FY2003. The cost savings were primarily associated with acceleration of planned activities related to construction and operational readiness of the Remote Handled Waste Facility.

Trends in	Total Function	al Suppor	t Cost Cat	egories			
	Yucca Mounta FY	in/Bechte 2003	I-SAIC				
(\$ in 000's)							
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change FY2	
EXECUTIVE DIRECTION	2,241	2,560	2,440	2,963	5,241	3,000	133.9%
HUMAN RESOURCES	1,633	1,835	4,494	5,105	6,549	4,916	301.0%
CFO	1,614	2,060	3,392	3,619	3,102	1,488	92.2%
PROCUREMENT	2,111	2,228	2,305	2,515	2,715	604	28.6%
LEGAL	1,433	394	192	248	361	-1,072	-74.8%
CENTRAL ADMIN SERVICES	3,274	4,267	7,976	11,866	10,859	7,585	231.7%
PROGRAM/PROJECT CONTROL	6,051	8,738	4,818	6,016	5,741	-310	-5.1%
INFORMATION OUTREACH	3,318	3,932	2,181	3,788	2,442	-876	-26.4%
INFORMATION SERVICES	10,781	14,336	11,453	14,841	21,146	10,365	96.1%
OTHER TOTAL GENERAL SUPPORT	0 32,456	0 40,350	8,455 47,706	-380 50,581	2,115 60,271	2,115 27,815	100.0% 85.7%
MISSION SUPPORT	52,430 FY 1999	FY 2000	FY 2001	FY 2002	60,271 FY 2003	Change	
		112000	112001	112002	112005	FY2	
ENVIRONMENTAL	6,872	6,621	4,738	4,769	3,697	-3,175	-46.2%
SAFETY AND HEALTH	2,454	3,064	3,180	2,160	4,387	1,933	78.8%
FACILITIES MANAGEMENT	7,857	7,459	8,372	9,250	9,822	1,965	25.0%
MAINTENANCE	453	609	2,314	2,353	5,393	4,940	1,090.5%
UTILITIES	13	0	17	407	399		2,969.2%
SAFEGUARDS AND SECURITY	335	450	217	689	1,375	1,040	310.4%
LOGISTICS SUPPORT	947	949	2,451	2,525	1,991	1,044	110.2%
	0	0	4,642	6,489	7,830	7,830	100.0%
LABORATORY/TECHNICAL SUPPORT TOTAL MISSION SUPPORT	0 18,931	0 19,152	0 25,931	0 28,642	0 34,894	0 15,963	0.0% 84.3%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change	
						FY2	
MANAGEMENT/INCENTIVE FEE	10,095	10,867	15,068	25,381	15,681	5,586	55.3%
TAXES	220	15	129	182	240	20	9.1%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC	10,315	10,882	15,197	25,563	15,921	5,606	
TOTAL FUNCTIONAL SUPPORT	61,702	70,384	88,834	104,786	111,086	49,384	80.0%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change FY2	
Mission Direct Operation	130,413	132,891	118,396	113,002	125,498	-4,915	-3.8%
Capital Construction	0	0	861	2,800	2,015	2,015	100.0%
TOTAL MISSION DIRECT	130,413	132,891	119,257	115,802	127,513	-2,900	-2.2%
Total Costs	192,115		208,091		238,599	46,484	24.2%
Total Costs w/o Construction		203,275		220,588 217,788	236,599	40,484	24.2%
Total Costs w/o Construction	192,115	203,275	207,230	217,700	230,384	44,409	23.170
General Support % Total Costs	16.9%	19.8%	22.9%	22.9%	25.3%		
Mission Support % Total Costs	9.9%	9.4%	12.5%	13.0%	14.6%		
Site Specific % Total Costs	5.4%	5.4%	7.3%	11.6%	6.7%		
Total Support % Total Costs	32.1%	34.6%	42.7%	47.5%	46.6%		
Total Support % Total Costs w/o Construction			1	1		1	1







I. Site and Current Status

In 2002, DOE received congressional and presidential approval to seek a license from the Nuclear Regulatory Commission (NRC) for the proposed Yucca Mountain repository for spent nuclear fuel and high-level radioactive waste. The agency within DOE responsible for siting, designing, operating, monitoring, and closing the repository, if licensed, is the Office of Civilian Radioactive Waste Management (OCRWM). Since February 12, 2001, the management and operating contractor for OCRW M and its Office of Repository Development has been Bechtel SAIC Company, LLC, (BSC). During FY 2003, OCRWM and BSC have focused on repository design and licensing activities, targeting DOE's goal of submitting a technically sound, docketable license application to the NRC by December 2004.

For more than 20 years, scientists have extensively studied Yucca Mountain's geology, hydrology, geochemistry, biota, and climate. Scientists and engineers have mapped geologic structures, including rock units, faults, fractures, and volcanic features; excavated more than 200 pits and trenches to remove rocks and other material for direct observation; drilled more than 450 boreholes; collected over 75,000 feet of core, and some 18,000 geologic and hydrologic samples; constructed six and one-half miles of tunnels to provide direct access for studying the rock that would house the repository; conducted the largest known test in history to simulate and analyze above-ambient thermal effects on rock, heating some million cubic feet of rock above the boiling point of water; tested mechanical, chemical, and hydrologic properties of rock samples; and analyzed over 13,000 engineered material samples to determine their corrosion resistance in a variety of environments.

Located about 100 miles northwest of Las Vegas, Yucca Mountain sits on land owned or controlled by three federal agencies: a corner of DOE's Nevada Test Site, some Bureau of Land Management acreage, and a small portion of the Air Force's Nevada Test and Training Range. The mountain comprises layers of volcanic tuff, rock created by volcanic ash, melted or compressed together, after major eruptions from a now-defunct volcano that was active about 12 to 15 million years ago.

In the current climate, Yucca Mountain averages about 7.5 inches of precipitation per year. Partly as a result, the water table is extremely deep. The proposed repository would be located in unsaturated rock about 1,000 feet beneath the mountain's surface and about 1,000 feet above the water table.

The Nuclear Waste Policy Act, as amended, provides that consumers who use nuclear power pay for the disposal of commercial spent nuclear fuel. For this purpose, the federal government collects a fee of one mill (one-tenth of a cent) per kilowatt-hour of nucleargenerated electricity. This money goes into the Nuclear Waste Fund to pay for geologic disposal of the commercial spent nuclear fuel. In addition, the federal government will

use general tax revenues for the codisposal of high-level radioactive waste generated by Department of Defense programs.

Additional information about OCRWM, the Office of Repository Development (ORD), and the Yucca Mountain Project can be found on OCRWM's Web site: ocrwm.doe.gov

II. Highlights of Trends

A summary of the changes in various functional cost categories from FY 1999 to FY 2003 is as follows:

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change FY99-03
General Support	\$32,456	\$40,350	\$47,706	\$50,581	\$60,271	85.7%
Mission Support	18,931	19,152	25,931	28,642	34,894	84.3%
Site Specific	10,315	10,882	15,197	25,563	15,921	54.3%
Total Support	61,702	70,384	88,834	104,786	111,086	80.0%
Mission Direct Capital/Construction	130,413	132,891	118,396 861	113,002 2,800	125,498 2,015	-3.8%
Total Site	\$192,115	\$203,275	\$208,091	\$220,588	\$238,599	24.2%
Support Cost Ratio	32.1%	34.6%	42.7%	47.5%	46.6%	45.0%

III. Analysis of Change in Support Costs from Prior Fiscal Year

Between FY 2002 and FY 2003, the focus of the Yucca Mountain Project shifted considerably. Science activities continue, but when Congress and President George W. Bush legally designated Yucca Mountain as an appropriate site, DOE was authorized to prepare and submit a license application to the NRC. The legal designation ended the formal site characterization period and shifted the focus during FY 2003 to design and licensing activities.

Significant changes in specific line items from FY 2002 to FY 2003 result from the following:

General Support

• <u>Executive Direction</u>. The increase in costs for the Executive Direction function are due primarily to expansion of the Employee Concerns Program — essential to establishing a Safety-Conscious Work Environment, which is required by the NRC — and to BSC's Six Sigma program.

• <u>Human Resources.</u> The Human Resources cost increase is due to the implementation and customization of a BSC stand-alone version of PeopleSoft to support the Human Resources Information System.

• <u>Information Services.</u> A number of important activities contribute to the increase in Information Services costs: general upgrades to desk computers, file servers, and network equipment; updating of Lotus Notes; and creation of a new database to support the Corrective Action Program. Each of these is important to License Application (LA) activities.

Mission Support

• <u>Safety and Health.</u> The increase in the Safety and Health category reflects re-planning of some Site-related safety and health work scope. In FY 2002, radon monitoring and Area 25 safety and health activities were planned under Site Operations and classified as "Civilian and Radioactive Waste (RW)." In FY 2003, these activities were planned under Environmental, Safety and Health and re-classified as "Safety and Health."

• Facilities Management. Includes \$6.5M in lease costs.

• <u>Maintenance</u>. The increase in Maintenance is due to a more comprehensive interpretation of the items to be included in this category. These new items re-classified from Civilian and Radioactive Waste, include (1) management and maintenance planning costs; (2) field engineering necessary to support the design and performance evaluations for sustaining the property, plant, and equipment in a suitable working condition; and (3) inclusion of potable water and all power distribution systems. In addition, total Maintenance costs increased from FY 2002 to FY 2003 because of the continuing problem of limited resources being allocated for major upgrades of aging surface and subsurface facilities and equipment. Without the upgrades, essential overall maintenance costs increase simply to keep the facilities and equipment in a safe and working condition.

• <u>Safeguards and Security.</u> The increase in Safeguards and Security costs results from implementation of the new Foreign Access Central Tracking System (FACTS), and the addition of administrative personnel.

• <u>Quality Assurance</u>. The increase in the Quality Assurance (QA) category is due to work scope being added for internal QA surveillance and audits, compliance and performance-based audits, and all corrective action functions. In addition, with the

Project's increase in LA activities, QA support of related documentation reviews also increased.

Site Specific

• <u>Management/Award/Incentive Fee.</u> The Award Fee decreased because there were no significant milestones scheduled in FY 2003.

IV. Major Cost Drivers that May Cause Our Costs to Appear Out of Line with Similar Sites

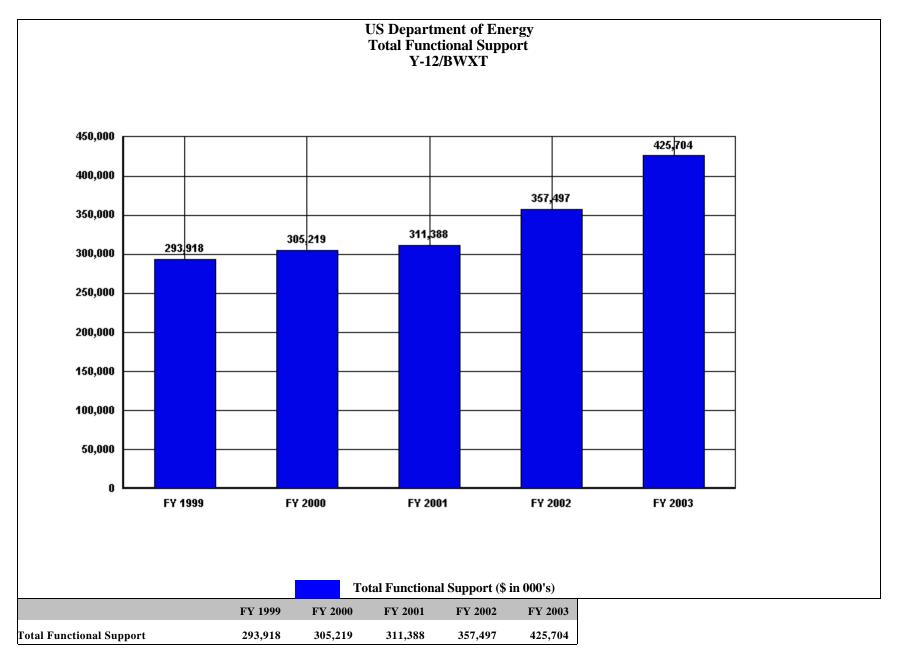
In 1987, Congress amended the Nuclear Waste Policy Act and directed DOE to study only Yucca Mountain. As a result, Yucca Mountain's activities are unique within the Department's complex. Moreover, annual funding for the Yucca Mountain Project has historically been unpredictable, which has impacted schedules and milestones. The OCRWM and ORD managers frequently have had to change focus and shift gears to respond to the limitations imposed by ongoing funding constraints.

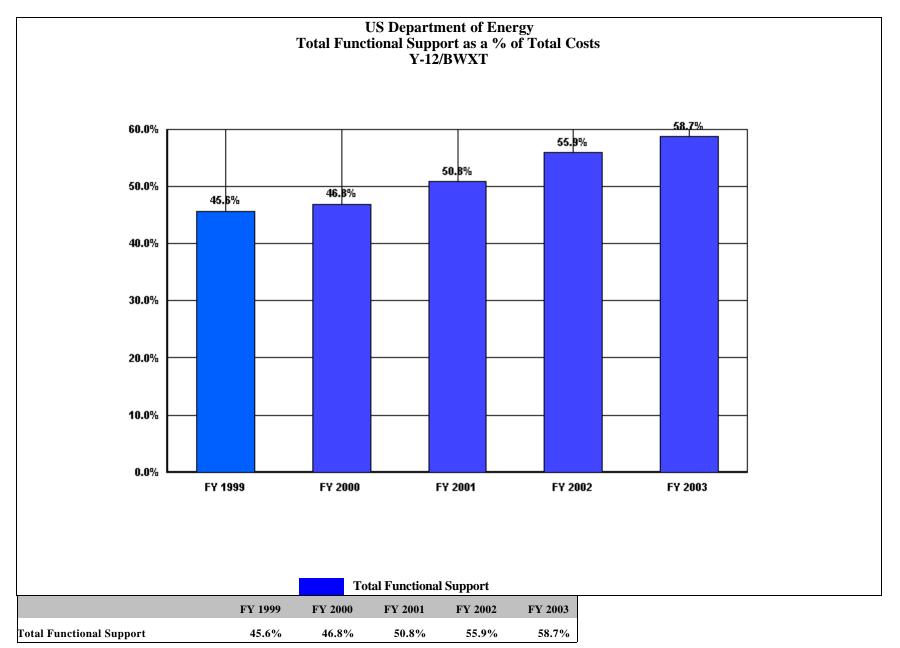
V. Other

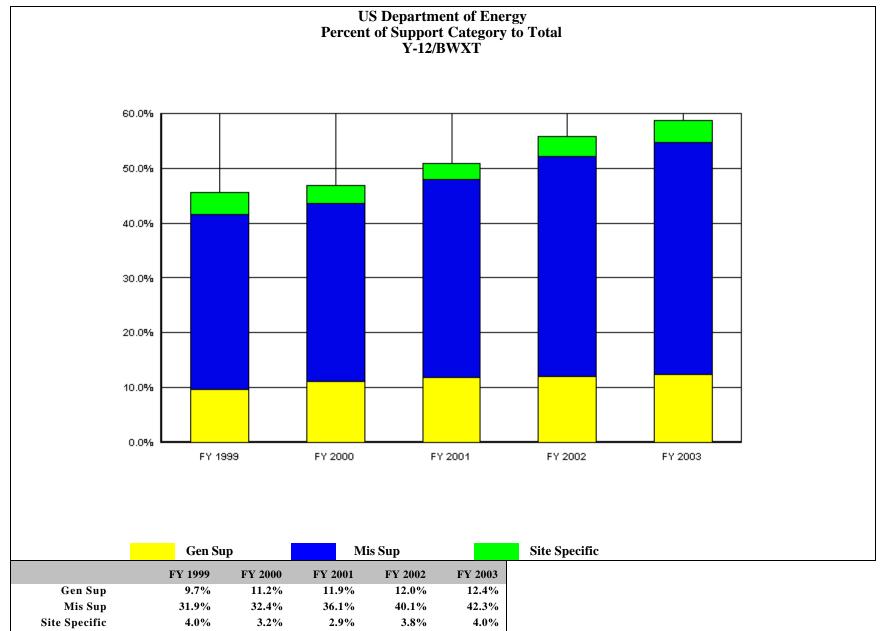
Details of costs included in the "Other" category are as follows:

Description	FY 2002 (in \$000s)	FY 2003 (in \$000s)
Prior M&O Subcontractor Cost	\$-548	\$1,440
Executive Direction (All-Hands Meetings)	140	340
Severance Pay		335
Transition Costs	28	
Total	\$-380	\$2,115

Trends in 7	Fotal Function	al Suppor	t Cost Cat	egories			
		BWXT 2003					
(\$ in 000's)							
GENERAL SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
EXECUTIVE DIRECTION	4,056	5,108	4,636	1,950	2,424	-1,632	-40.2%
HUMAN RESOURCES	5,851	6,595	6,784	5,772	13,503	7,652	130.8%
CFO	8,543	9,736	10,152	9,530	9,704	1,161	13.6%
PROCUREMENT	3,394	3,244	3,146	3,524	4,550	1,156	34.1%
LEGAL	1,464	1,889	1,982	2,489	3,393	1,929	131.8%
CENTRAL ADMIN SERVICES	5,625	7,064	7,299	8,724	12,661	7,036	125.1%
PROGRAM/PROJECT CONTROL	2,125	2,214	5,996	12,389	16,538	14,413	678.3%
INFORMATION OUTREACH	1,210	1,447	1,461	1,717	2,223	1,013	83.7%
INFORMATION SERVICES	26,000	29,819	29,092	28,747	23,727	-2,273	-8.7%
OTHER	4,214	5,774	2,107	2,062	1,186	-3,028	-71.9%
TOTAL GENERAL SUPPORT	62,482	72,890	72,655	76,904	89,909	27,427	43.9%
MISSION SUPPORT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
ENVIRONMENTAL	10,035	9,027	8,547	6,072	8,381	-1,654	-16.5%
SAFETY AND HEALTH	36,548	41,294	42,543	43,139	49,487	12,939	35.4%
FACILITIES MANAGEMENT	7,804	7,576	6,140	8,759	14,367	6,563	84.1%
MAINTENANCE	53,357	50,456	49,797	62,211	85,061	31,704	59.4%
UTILITIES	40,742	34,215	38,129	39,654	40,321	-421	-1.0%
SAFEGUARDS AND SECURITY	29,858	42,220	48,981	64,945	75,049	45,191	151.4%
LOGISTICS SUPPORT	2,877	3,470	3,064	4,211	7,340	4,463	155.1%
QUALITY ASSURANCE	11,042	9,432	10,263	14,040	12,334	1,292	11.7%
LABORATORY/TECHNICAL SUPPORT	13,213	13,718	13,700	13,355	14,755	1,542	11.7%
TOTAL MISSION SUPPORT	205,476	211,408	221,164	256,386	307,095	101,619	49.5%
SITE SPECIFIC	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1 FY20	
MANAGEMENT/INCENTIVE FEE	27,127	18,958	16,346	18,102	24,000	-3,127	-11.5%
TAXES	-1,167	1,963	1,223	4,690	2,069	3,236	277.3%
LDRD / PDRD / SDRD	0	0	0	1,415	2,631	2,631	100.0%
TOTAL SITE SPECIFIC	25,960	20,921	17,569	24,207	28,700	2,740	10.6%
TOTAL FUNCTIONAL SUPPORT	293,918	305,219	311,388	357,497	425,704	131,786	44.8%
MISSION DIRECT	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Change 1	
Mission Direct Operation	316,394	330,285	291,442	259,927	216,787	FY20 -99,607	-31.5%
Capital Construction	33,642	16,093	9,945	22,194	83,199	49,557	147.3%
TOTAL MISSION DIRECT	350,036	346,378	301,387	282,121	299,986	-50,050	-14.3%
		,			,		
Total Costs	643,954	651,597	612,775	639,618	725,690	81,736	12.7%
Total Costs w/o Construction	610,312	635,504	602,830	617,424	642,491	32,179	5.3%
General Support % Total Costs	9.7%	11.2%	11.9%	12.0%	12.4%		
				40.1%	42.3%		
	31.9%	1/4%	16 1%	401 90			
Mission Support % Total Costs	31.9% 4.0%	32.4%	36.1% 2.9%				
Mission Support % Total Costs Site Specific % Total Costs Total Support % Total Costs	31.9% 4.0% 45.6%	32.4% 3.2% 46.8%	36.1% 2.9% 50.8%	40.1% 3.8% 55.9%	42.3% 4.0% 58.7%		







I. SITE CHARACTERISTICS

The Y-12 National Security Complex performs missions that are vital to the U. S. Department of Energy (DOE) National Nuclear Security Administration (NNSA). These missions are:

Manufacturing and assessing nuclear weapons secondaries, cases, and other weapons components;

Safeguarding special nuclear materials; and

Preventing the proliferation of weapons of mass destruction.

The Y-12 Complex covers approximately 800 acres, nearly 600 acres of which are enclosed by perimeter security fences. Security and emergency management buffer areas exist outside the main site but within the Oak Ridge Reservation. Real property includes more than 650 buildings and other structures with floor area of approximately 7.7 million square feet.

A BWXT Y-12 workforce of approximately 4,500 people support NNSA-related activities and rely upon a diverse infrastructure to perform assigned tasks in support of Y-12 missions. Buildings and facility types include large production, light and heavy laboratory, sophisticated and standard warehousing, and a mix of new and World War II-vintage technical and administrative office structures. Over 70% of the floor space at Y-12 was constructed prior to 1950 as a part of the Manhattan Project.

II. HIGHLIGHTS OF TRENDS

In looking at raw data, it appears that the functional cost at the Y-12 plant has increased by approximately \$132M since 1999. Consequently, functional costs as a percentage of total costs have increased from 45.6% in 1999 to 58.7% in FY 2003. An escalation of 3.5% over this time period would account for \$44M of this cost increase. The other cost increases are driven by: changes in priorities that are supported by both the contractor and DOE/NNSA, changes in the BWXT Y-12 organizational structure, and changes driven by recommendations from the FY 2002 Function Support Cost Peer Review. The most significant of these changes are:

Changes in Priorities:

Over the last few years, Y-12 has placed more emphasis into integrating safety into every activity that takes place at the facility. With such an emphasis on Health and Safety activities, more resources are identified as being safety related and therefore are being classified as Health and Safety as opposed to Mission Direct in regards to functional cost reporting. In addition, increased efforts to resolve deficiencies in the Fire Protection area

and the beginning implementation of a Behavior Based Safety program have driven Safety and Health costs higher. This increased emphasis has generated a \$13M increase in the Health & Safety category since 1999.

Fiscal Years 2000 through 2003 have seen significant changes in the area of Safeguards and Security. First, a decision was made in Oak Ridge to subcontract security activities to Wackenhut Services Inc. (WSI). This is significant from a functional cost perspective in that all cost incurred by WSI are considered security cost. In the past, some of these costs necessary to execute the security function may have been incurred on other functional cost lines like CFO, Quality, Executive Direction, Fee, etc. A second significant change in the area of Safeguards and Security is the decision to direct fund the safeguards and security scope of work. With Safeguards and Security having direct funding status, many of the critical unfunded needs in this area are receiving attention and consideration of funding. This environment is adding scope to the safeguards and security area and therefore costs are increasing. The unfortunate events of September 11, 2001, and the country's response to these events continue to drive Safeguards and Security costs higher in FY 03 than in previous years. The combined impact of these changes in the Safeguards and Security area has driven an increase in cost of \$45.2M from FY 1999 to FY 2003.

One of the major components of the BWXT management plan was the creation of a strong planning and integration function. At the beginning of FY 2001, 23 employees were aligned with the Program/Project Planning & Control (PPPC) functional cost activity. At the end of FY 2003, over 200 employees and subcontractors were aligned with the PPPC functional area. While this strategy does reflect an increase in total functional cost, it is recognized by BWXT Y-12 and the NNSA Y-12 Area Office that a strong PPPC function enhances both the contractor and the government's ability to manage the work that is being performed at Y-12. The implementation of this strategy has caused the PPPC functional category to be increased by \$14.4M from FY 1999 to FY 2003.

Organizational Changes

In FY 2002, all administrative support employees began to be centralized under a single organization. This made it very easy to identify and properly categorize these employees as Central Administrative Services. In previous years, the cost associated with these employees were scattered across multiple functional cost lines. For example, a secretary in the Safeguards and Security organization would have been categorized as Safeguards and Security in previous years. However, with the organizational change, all secretaries and administrative support employees are easily identified as Central Administrative Services. This change has led to an increase in the Central Administrative Services category of \$7.0M from FY 1999 to FY 2003.

FSCR Peer Review Recommendations

During the FY 2002 Functional Cost Peer Review, Y-12 was instructed to move certain costs from Mission Direct to the General Support and Mission Support categories. Specifically, these costs are: \$6.2M of legacy Workers Compensation moved to Human Resources, \$.3M of Legal costs associated with Legacy Workers Compensation, \$1.0M of Safety & Health, \$5.8M of Facilities Management, and \$9.0M of Maintenance. The total of the costs previously reported as Mission Direct that are now reported as functional costs are \$22.3M.

III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

The trend from FY 2002 to FY 2003 shows an increase in the value of functional costs as percent of total costs from 55.9% 58.7%. If you reverse the decisions of FSCR Peer Review and leave the \$22.3M that was changed from Mission Direct to Support cost, the FY 2003 Total Support Cost as a Percent of Total Cost would have been 55.6%, or slightly lower than the FY 2002 percentage.

Executive Direction – \$.5M increase from FY 2002. Organizational changes in FY 2003 led to 3 additional FTE's being classified as Executive Direction in FY 2003.

Human Resources - \$7.7M increase from FY 2002. A reclassification of \$6.2M of Legacy Workers Compensation payments and accruals for existing claims from Mission Direct to support cost accounted for most of this increase. The additional \$1.5M increase is due to a reclassification of relocation costs from the Other category to Human Resources.

Chief Financial Officer – No significant change.

Legal – \$.9M increase from FY 2002 to FY 2003. Increased costs due to increased litigation and workers compensation management

Procurement – \$1.0M increase from FY 2002 to FY 2003. Additional FTE's have been added to support workload driven by increased capital work scope.

Central Administrative Services - \$3.9M increase from FY 2002 to FY 2003. Organizational change made it possible to collect all of the administrative support employees cost in one functional category. Earlier organizational cost alignments did not allow for this. Increased cost was scattered across multiple functional cost categories in previous years.

Program/Project Planning & Control - Increase of \$4.1M from FY 2002 to FY 2003. One of the major components of the BWXT Y-12 management plan was the creation of a strong planning and integration function. At the beginning of FY 2001, 23 employees were aligned with the Program/Project Planning & Control (PPPC) functional cost activity. At the end of FY 2003, over 200 employees and subcontractors were aligned with the PPPC functional area. While this strategy does reflect an increase in total functional cost, it is recognized by BWXT Y-12 and the NNSA Y-12 Area Office that a strong PPPC function enhances both the contractor and the governments' ability to manage the work that is being performed at Y-12.

Information /Outreach Activities - No significant change.

Information Services – Decrease of \$5.0M. Reclassification of hardware and software maintenance contracts to the Maintenance category represents \$2.0M of this decrease. Another reason for the decrease in cost in this area is making a more accurate distinction between Information Services and Cyber Security. Certain costs previously incurred as Information Services are now being incurred as Cyber Security and reflected in the Security functional cost category.

Environmental - \$2.3M increase from FY 2002 to FY 2003. \$1.5M was spent on B-25 boxes which are used in waste disposal. The additional increase is due to applying more resources to site-wide Waste Management activities.

Safety and Health - \$6.3M increase from FY 2002 to FY 2003. \$1.0M of the increase is represented by cost previously classified as Mission Direct. \$2.0M of the increase is due to the reclassification of Facility Safety Engineering cost as Safety & Health cost. \$1.0M of the increase is due to the initial activities related to implementing a Behavior Based Safety Initiative.

Facilities Management – Increase of \$5.6M from FY 02 to FY 03. \$5.8M was reclassified from Mission Direct to Facilities Management per finding in FSCR peer review.

Maintenance – Increase of \$22.9M from FY 02 to FY 03. A focus on restoring the dilapidated Y-12 infrastructure has caused a sharp increase in maintenance cost. In addition, per the FSCR peer review findings, \$9.0M in maintenance cost was moved from Mission Direct to the Maintenance support line and \$5.9M in maintenance cost was moved from other Functional categories to Maintenance due to the FSCR peer review findings.

Utilities – No significant change.

Safeguards and Security - A significant change that is impacting the Safeguards and Security functional category is the decision to direct fund the safeguards and security scope of work. With Safeguards and Security having direct funding status, many of the critical unfunded needs in this area are receiving attention and consideration of funding. This environment is adding scope to the safeguards and security area and therefore costs are increasing. The unfortunate events of September 11, 2001, and increased emphasis on Homeland Security continue to drive Safeguards and Security costs higher in FY 03 than in previous years. The combined impact of these changes in the Safeguards and Security area have driven an increase in cost of \$10M between FY 2002 and FY 2003.

Logistics Support – An increase of \$3.1M from FY 2002 to FY 2003. Increased Capital activity across the site has driven a need to increase the material control, receipt, and delivery resources. FTE's have been added to support these programs. In addition, based upon an analysis of the inventory, a \$1.9M entry to the Reserve for Loss inventory account was recorded in FY 2003.

Quality Assurance – No significant change.

Laboratory & Technical Support – No significant change.

Other - Major cost elements in this category	include:
Legal Settlements	\$.4M
Termination Allowance Accrual	.4M
Outplacement Activities	.1M

Taxes – Total Sales and Use taxes paid for FY 2003 were \$6.5 M. These costs are incurred as a part of material costs and are spread across the functional categories as a part of material cost.

IV. COST SAVINGS INITIATIVES

Fork Lift Utilization	\$250K
Inventory Verification Process	\$450K
Maintenance Job Request Process	\$1,750K
Job Application Process	\$325K
Security Clearance Cycle Time	\$2,400K

FISCAL YEAR 2003 SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT APPENDIX A

All 28 Submitting Sites & Contractors

Ames Laboratory/Iowa State Argonne National Laboratory/University of Chicago Bettis Atomic Power Laboratory/Bechtel Brookhaven National Laboratory/Brookhaven Science Associates Fermi National Accelerator Laboratory/University Research Association Hanford/Fluor Daniel & Bechtel Idaho National Engineering & Environmental Lab/Bechtel BWXT Idaho, LLC Kansas City/Honeywell, FM&T Knolls Atomic Power Laboratory/Lockheed Martin Los Alamos National Laboratory/University of California Lawrence Berkeley National Laboratory/University of California Lawrence Livermore National Laboratory/University of California National Renewable Energy Laboratory/Midwest Research Institute Nevada/Bechtel Nevada Oak Ridge Environmental Management & Enrichment Facility/Bechtel Jacobs Oak Ridge National Laboratory/UT-Battelle, LLC Pacific Northwest National Laboratory/Batelle Memorial Institute Pantex/BWXT Princeton Plasma Physics Laboratory/Princeton University Rocky Flats/Kaiser-Hill Sandia National Laboratory/Lockheed Martin Savannah River/Westinghouse & Wackenhut Stanford Linear Accelerator Center/Stanford University Strategic Petroleum Reserve/DynMcDermott Petroleum Operations Waste Isolation Pilot Plan/Westinghouse West Valley/West Valley Nuclear Services Yucca Mountain/Bechtel-SAIC Y12/BWXT

Two sites within the Ohio Field Office complex, Mound and Fernald, that contributed cost data in the FY 2002 Support Cost by Functional Activity report, are not included in the FY 2003 report. Both sites are scheduled for closure in FY 2006. Accordingly, all Mound and Fernald data has been eliminated for comparison purposes in prior year information.

This report available online at: http://www.mbe.doe.gov/progliaison/scfa.htm