U.S. Department of Energy

Support Cost By Functional Activity Report with Details from 28 Contractor Locations

Fiscal Year Ending September 30, 2004

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Results of Individual Participating Field Sites/Contractors

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

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SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT
INTRODUCTION

PURPOSE OF THE REPORT

The purpose of this report is to highlight the amounts of and trends in support costs 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.

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. Management of these costs is the responsibility of the predominant program at each site and represents 39.6 percent of the total cost of the 28 sites or approximately 30 percent of DOE's total $23.3 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 Government Accountability 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 costs automatically resulted in control of overhead.

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 requests from Congress and the GAO, the Department's Chief Financial Officer implemented the SCFA System. In implementing the SCFA to track support-related costs, the Chief

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SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT
INTRODUCTION

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.

The SCFA 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 costs 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 level 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 SCFA Report would be used primarily for one-to-one comparison purposes. There is significant disparity between the 28 sites and it could be misleading to compare maintenance costs at a 50-year-old manufacturing facility with those of a modern research facility.

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.

In addition to the SCFA Report, 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 laboratory progress with site offices and laboratories, and further encourages initiatives and communication of successes. Site offices, through performance based management, review and validate laboratory results and further promote lessons learned and best practices across laboratories. As a result, we view the SCFA Report as one of several tools to help improve support costs. We also recognize the other roles/tools of site offices, including institutional planning, performance appraisals, and broad sharing of lessons learned and best practices among laboratories/contractors who regularly update their progress. The functional cost report is not the only driver of improvement.

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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 Departmental Results and Trends section of this report includes 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.

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SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT
LIMITATIONS OF SUPPORT COST DATA

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 report was obtained by analyzing information contained in the contractors' financial management systems and apportioning costs into the SCFA 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.

FISCAL YEAR 2004
SUPPORT COST BY FUNCTIONAL ACTIVITY
DEPARTMENTAL RESULTS AND TRENDS

RESULTS

Total support costs in FY 2004 for 28 of the largest DOE contractors were over $7 billion. Support costs are divided into three major groupings: general support, mission support and site specific. General support costs ($2.2 billion in FY 2004) include management and administrative activities such as executive direction and human resources. Mission support costs ($4.0 billion in FY 2004) include activities more closely associated with site operations such as safety and health, environmental compliance, and maintenance. Site specific costs ($0.9 billion in FY 2004) include contractors' fees, local taxes, and the cost of laboratory directed research and development (LDRD) program costs, plant directed research, development and demonstration (PDRD) program costs, and site directed research, development and demonstration (SDRD) program costs.

Overall, while the trend is downward, FY 2004 support costs as a percentage of total costs were virtually unchanged from FY 2003.

FY 1995	43.8%
FY 2000	40.4%
FY 2003	39.6%
FY 2004	39.6%

I. Three Largest Support Cost Categories

In FY 2004 the three largest support cost categories (Maintenance, Information Services, and Safety and Health) accounted for over 33 percent of the total support costs at the 28 contributing sites. Here are the three largest cost categories and the sites representing the most cost:

#1 - Maintenance (Mission Support) **$861.9 Million (M)** **(12.0 percent of Total Support Costs) (Also ranked #1 in FY 2003)**

Savannah River
Y-12
Hanford
Lawrence Livermore National Laboratory
Los Alamos National Laboratory

A significant number 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 – Information Services (General Support) **$773.0M** **(10.8 percent of Total Support Costs)** (**Ranked #3 in FY 2003)**
Los Alamos National Laboratory
Sandia National Laboratory
Lawrence Livermore National Laboratory
Savannah River
Hanford

These costs rose in response to the continuing need for support of 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.

#3 – Safety and Health (Mission Support) **$762.4M** **(10.7 percent of Total Support Costs)** (**Ranked #2 in FY 2003)**
Savannah River
Los Alamos National Laboratory
Hanford
Idaho National Engineering and Environmental Laboratory
Oak Ridge Environmental Management and Enrichment Facility

These costs reflect a heightened emphasis on safety and are 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, and management oversight.

II. Three Support Cost Categories with the Largest Percentage Increase

Overall, from FY 2000 to FY 2004, support costs increased by approximately $1.3 billion. Here are the three categories (LDRD/PDRD/SDRD, Facilities Management, and Safeguards and Security) with the largest percentage increases in support costs from FY 2000 to FY 2004:

#1 – LDRD/PDRD/SDRD (Site Specific) **(105 percent increase from FY 2000 to FY 2004)**
Kansas City
Nevada
Pantex
Y-12
Idaho National Engineering and Environmental Lab

For FY 2000 Congress reduced the maximum allowable LDRD percentage from 6 percent to 4 percent of funds provided to laboratories. The percentage was restored in FY 2001 and has not changed. 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.

#2 – Facilities Management (55 percent increase from FY 2000 to FY 2004) (Mission Support)
Oak Ridge National Laboratory
Pantex
Oak Ridge Environmental Management and Enrichment Facility
Nevada
Y-12

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.

#3 – Safeguards and Security (50 percent increase from FY 2000 to FY 2004) (Mission Support)
Oak Ridge Environmental Management and Enrichment Facility
Oak Ridge National Laboratory
Lawrence Berkeley National Laboratory
Sandia National Laboratory
Y-12

The events of September 11, 2001, and increased emphasis on Homeland Security continue to drive safeguards and security costs higher. This category of costs accounted for the largest dollar increase from FY 2000 to FY 2004.

III. Two Support Cost Categories Decreased

Of the 22 support cost categories, two categories "Other" and "Legal" decreased in both dollars and as a percentage of total cost from FY 2000 to FY 2004. The "Other" category, which contains costs not identified in another support cost category, decreased by $14.8 million (16.4 percent). And "Legal," which includes costs associated with legal counsel and litigation support, decreased by $0.8 million (1.5 percent) due to subcontract litigation support reductions.

IV. Trends

The table below lists the 22 support cost categories and identifies how much each category changed as a percentage of total support cost between FY 2000 and FY 2004. Facilities Management, Safeguards and Security and LDRD/PDRD/SDRD were the three categories with the largest percentage increase. Maintenance, while dollar-wise the largest category, actually declined from FY 2000 to FY 2004 as a percentage of total support cost. (All dollars are in thousands.)

	FY 2004 As a % of Support Cost	FY 2000 As a % of Support Cost	FY 2004 Support Cost $	FY 2000 Support Cost $	Change As a % of Support Cost FY 2000 - FY 2004	$ Change FY 2000 - FY 2004
Safeguards and Sec.	9.86%	8.10%	705,417	471,173	1.76%	234,244
Facilities Mgmt	8.27%	6.56%	591,567	381,595	1.71%	209,972
LDRD/PDRD/SDRD	4.44%	2.66%	317,811	154,977	1.78%	162,834
Information Services	10.81%	10.82%	773,040	629,442	-0.01%	143,598
Safety and Health	10.66%	11.17%	762,440	650,259	-0.52%	112,181
Management Fee	7.20%	7.49%	514,964	436,060	-0.29%	78,904
Utilities	5.43%	5.61%	388,728	326,654	-0.18%	62,074
Executive Direction	2.68%	2.49%	191,424	145,113	0.18%	46,311
Program/Proj Control	3.15%	3.23%	225,678	188,025	-0.08%	37,653
Information Outreach	2.38%	2.35%	170,152	136,586	0.03%	33,566
Procurement	2.16%	2.12%	154,464	123,605	0.04%	30,859
Lab/Tech Support	2.56%	2.63%	183,021	152,838	-0.07%	30,183
Human Resources	2.87%	3.01%	205,081	175,081	-0.14%	30,000
Taxes	1.42%	1.24%	101,311	72,071	0.18%	29,240
Quality Assurance	2.07%	2.09%	147,798	121,472	-0.02%	26,326
Central Admin Serv.	2.89%	3.12%	207,018	181,438	-0.22%	25,580
CFO	2.14%	2.28%	153,405	132,525	-0.13%	20,880
Maintenance	12.05%	14.51%	861,869	844,607	-2.47%	17,262
Logistics Support	2.34%	2.59%	167,476	150,458	-0.24%	17,018
Environmental	2.78%	3.39%	198,755	197,494	-0.62%	1,261
Legal	0.79%	0.98%	56,405	57,257	-0.20%	-852
Other	1.06%	1.56%	75,896	90,756	-0.50%	-14,860
Total Support Cost	100.0%	100.0%	7,153,720	5,819,486	--	1,334,234

FISCAL YEAR 2004
SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT
COST SAVING INITIATIVES

As part of the FY 2004 submission for the Support Cost by Functional Activity Report, 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 initiatives have broad applicability and may provide opportunities that could be used by additional contractors across the Department.

Many of the Department's locations utilize Six Sigma, which 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.

In addition, detailed below are five cost saving initiatives identified by the Department's contractors with claimed savings of $14.9 million in FY 2004.

TEST AND SAMPLE REDUCTION
Initiative reported by Savannah River ($5.6M).

This category represents improvement projects where Six Sigma tools were able to reduce the operating requirements for frequency, location, or methods with respect to the collection and analysis of samples or conduct of radiological and environmental surveys. The improvements and subsequent savings were developed by evaluating the process requirements, collecting and analyzing data and conducting statistical tests to determine the optimum sampling, survey, and analyses necessary to manage the respective processes. For reporting purposes, the savings for individual projects were rolled up. One project is highlighted below. A process improvement project at the Effluent Treatment Facility saved $174,300 in FY 2004. The project resulted in lowered requirements for sample bottles, reduced waste, reduced labeling and less labor. In order to implement the changes it was necessary to revise procedures, and conduct training.

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SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT
COST SAVING INITIATIVES

TRAVEL SAVINGS

Initiative reported by Kansas City and Lawrence Berkeley National Lab. ($3.4 M).

Travel Offices have aggressively negotiated with airline carriers for favorable rates with substantial savings on frequently traveled destinations within the U.S. and overseas. Savings also resulted from purchasing non-refundable tickets.

REDUCTION OF HAND HELD RADIOS AND LICENSED VEHICLES

Initiative reported by Y-12 ($1.2 M).

Productivity Improvement Projects (PIP) reduced cost at Y-12.

One PIP reduced the number of handheld radios in an effort to minimize replacements required in response to upcoming federal regulation changes for portable radio frequencies. Over 300 radios were identified for reduction as a result of a review of utilization and specification of applicable response requirements for radio assignment.

Another PIP reviewed the utilization of Licensed Vehicles. The fleet manager established guidelines for the minimum usage under each vehicle category. The managers established a goal of 90 percent of vehicles in all categories will be in compliance with the established minimum mileage requirements. Monitoring and dispositioning systems/processes were established and costs were reduced.

SUPPLY CHAIN MANAGEMENT

Initiative reported by Bettis and Knolls Atomic Power Laboratories ($3.7 M).

Bettis Atomic Power Laboratory/Bechtel and Knolls Atomic Power Laboratory/Lockheed Martin have worked together to place joint contracts to optimize pricing and to reduce administrative effort for procurement of materials and services needed at their sites. These efforts have helped increase the buying power of the Naval Nuclear Propulsion Program while achieving a net savings.

DECONTAMINATION AND DEMOLITION

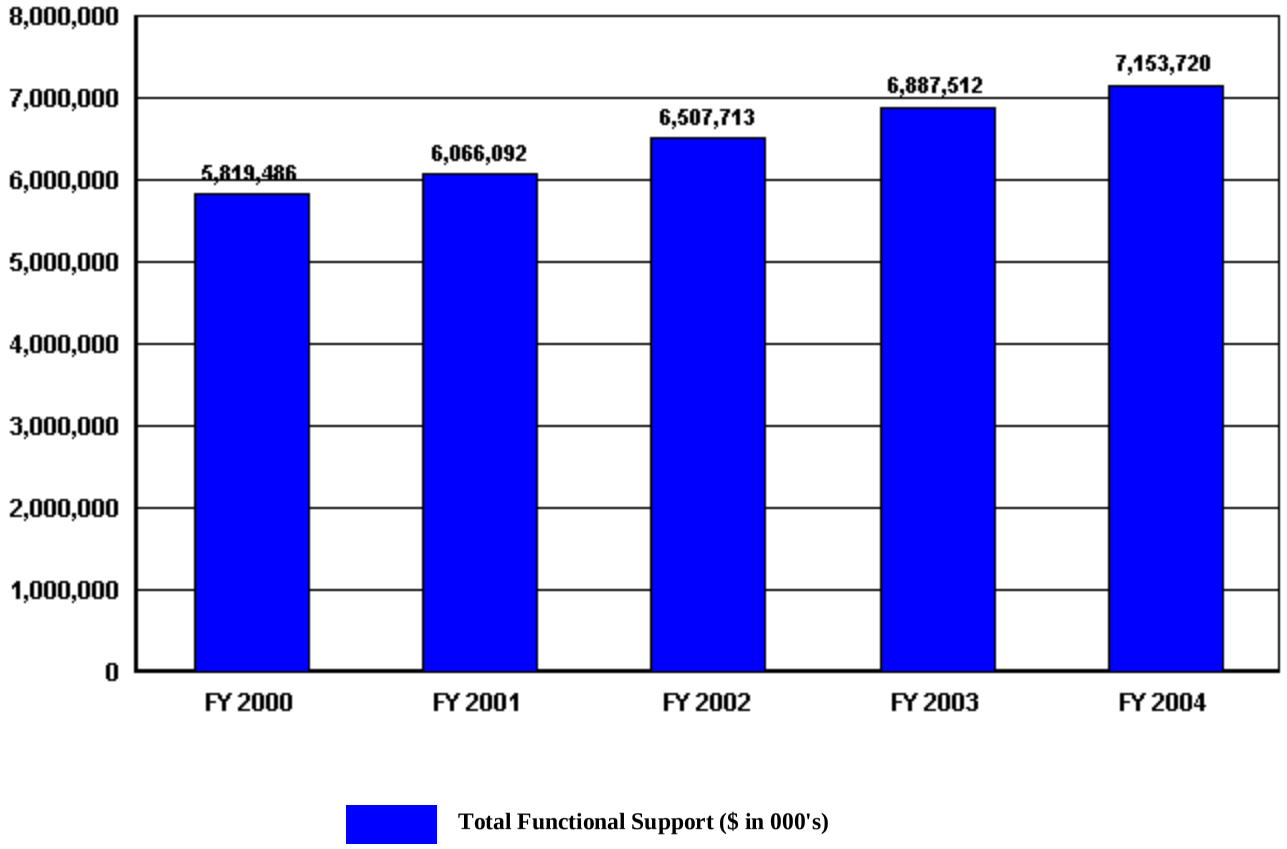
Initiative reported by Lawrence Livermore National Laboratory ($1.0 M).

The Building 222 complex decontamination and demolition was completed at a cost of under $200 per square foot, rivaling "best in class" for industry. The project opened up four acres of valuable space, eliminated over $13 million of deferred maintenance and nearly $1 million per year in annual maintenance, and avoided $3 million in compliance upgrades.

Trends in Total Support Cost by Functional Categories
TOTAL FOR ALL 28 SITES ($000)
FY 2004

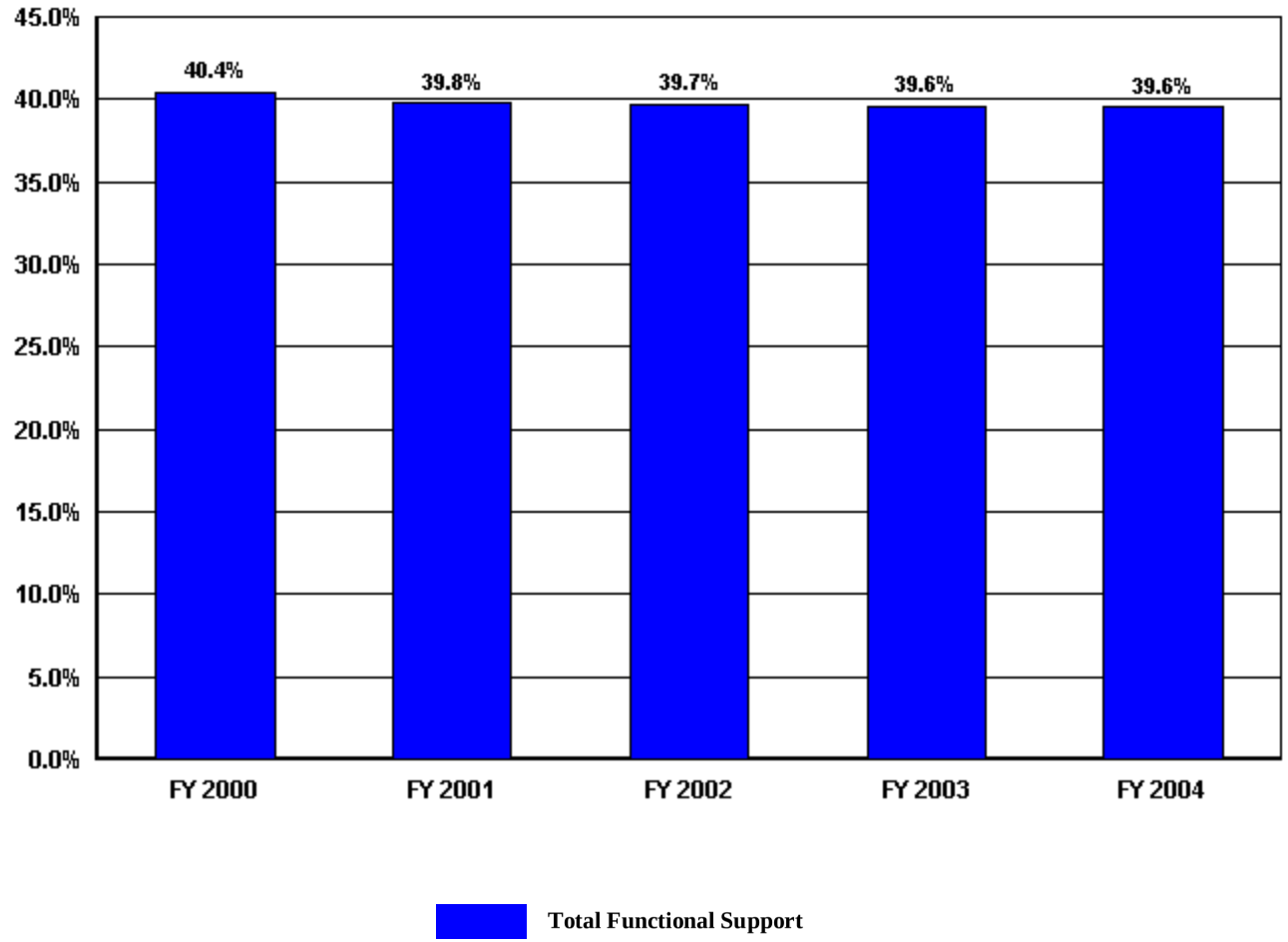
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	14,394,608	15,251,152	16,393,387	17,405,368	18,085,767	3,691,159	25.6%
Capital Construction	1,113,415	1,347,050	1,447,954	1,536,512	1,443,083	329,668	29.6%
Total Costs Less Construction	13,281,193	13,904,102	14,945,433	15,868,856	16,642,684	3,361,491	25.3%
Total Support Costs	**5,819,486**	**6,066,092**	**6,507,713**	**6,887,512**	**7,153,720**	**1,334,234**	**22.9%**
Mission Direct Operation	7,461,707	7,838,010	8,437,720	8,981,344	9,488,964	2,027,257	27.2%
Mission Direct Operation as % of Total Cost	**51.8%**	**51.4%**	**51.5%**	**51.6%**	**52.5%**		
Capital Construction as % of Total Cost	**7.7%**	**8.8%**	**8.8%**	**8.8%**	**8.0%**		
Total Support Cost as % of Total Cost	**40.4%**	**39.8%**	**39.7%**	**39.6%**	**39.6%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**40.4%**	**39.8%**	**39.7%**	**39.6%**	**39.6%**		
TOTAL SUPPORT COST	**5,819,486**	**6,066,092**	**6,507,713**	**6,887,512**	**7,153,720**	**1,334,234**	**22.9%**
TOTAL GENERAL SUPPORT as % of TOTAL	**12.9%**	**12.4%**	**12.1%**	**12.4%**	**12.2%**		
TOTAL GENERAL SUPPORT	**1,859,828**	**1,892,600**	**1,991,521**	**2,162,910**	**2,212,563**	**352,735**	**19.0%**
EXECUTIVE DIRECTION	145,113	152,803	172,997	186,601	191,424	46,311	31.9%
HUMAN RESOURCES	175,081	178,723	185,541	203,197	205,081	30,000	17.1%
CFO	132,525	146,687	139,671	146,118	153,405	20,880	15.8%
PROCUREMENT	123,605	125,446	128,259	144,617	154,464	30,859	25.0%
LEGAL	57,257	58,404	59,034	65,104	56,405	-852	-1.5%
CENTRAL ADMIN SERVICES	181,438	185,916	198,764	211,307	207,018	25,580	14.1%
PROGRAM/PROJECT CONTROL	188,025	184,874	187,146	221,984	225,678	37,653	20.0%
INFORMATION OUTREACH	136,586	136,092	144,341	146,407	170,152	33,566	24.6%
INFORMATION SERVICES	629,442	629,748	701,418	749,295	773,040	143,598	22.8%
OTHER	90,756	93,907	74,350	88,280	75,896	-14,860	-16.4%
TOTAL MISSION SUPPORT as % of TOTAL	**22.9%**	**22.6%**	**22.5%**	**22.2%**	**22.2%**		
TOTAL MISSION SUPPORT	**3,296,550**	**3,448,602**	**3,686,724**	**3,859,710**	**4,007,071**	**710,521**	**21.6%**
ENVIRONMENTAL	197,494	201,760	199,881	201,512	198,755	1,261	0.6%
SAFETY AND HEALTH	650,259	683,442	729,138	755,875	762,440	112,181	17.3%
FACILITIES MANAGEMENT	381,595	425,807	485,316	540,751	591,567	209,972	55.0%
MAINTENANCE	844,607	817,884	821,381	843,643	861,869	17,262	2.0%
UTILITIES	326,654	366,504	390,424	385,671	388,728	62,074	19.0%
SAFEGUARDS AND SECURITY	471,173	508,706	608,987	677,717	705,417	234,244	49.7%
LOGISTICS SUPPORT	150,458	161,145	165,631	165,327	167,476	17,018	11.3%
QUALITY ASSURANCE	121,472	127,844	125,949	131,545	147,798	26,326	21.7%
LABORATORY/TECHNICAL SUPPORT	152,838	155,510	160,017	157,669	183,021	30,183	19.7%
TOTAL SITE SPECIFIC as % of TOTAL	**4.6%**	**4.8%**	**5.1%**	**5.0%**	**5.2%**		
TOTAL SITE SPECIFIC	**663,108**	**724,890**	**829,468**	**864,892**	**934,086**	**270,978**	**40.9%**
MANAGEMENT/INCENTIVE FEE	436,060	406,432	454,564	465,405	514,964	78,904	18.1%
TAXES	72,071	83,852	94,428	89,948	101,311	29,240	40.6%
LDRD / PDRD / SDRD	154,977	234,606	280,476	309,539	317,811	162,834	105.1%

US Department of Energy
Total Functional Support
TOTAL FOR ALL 28 SITES



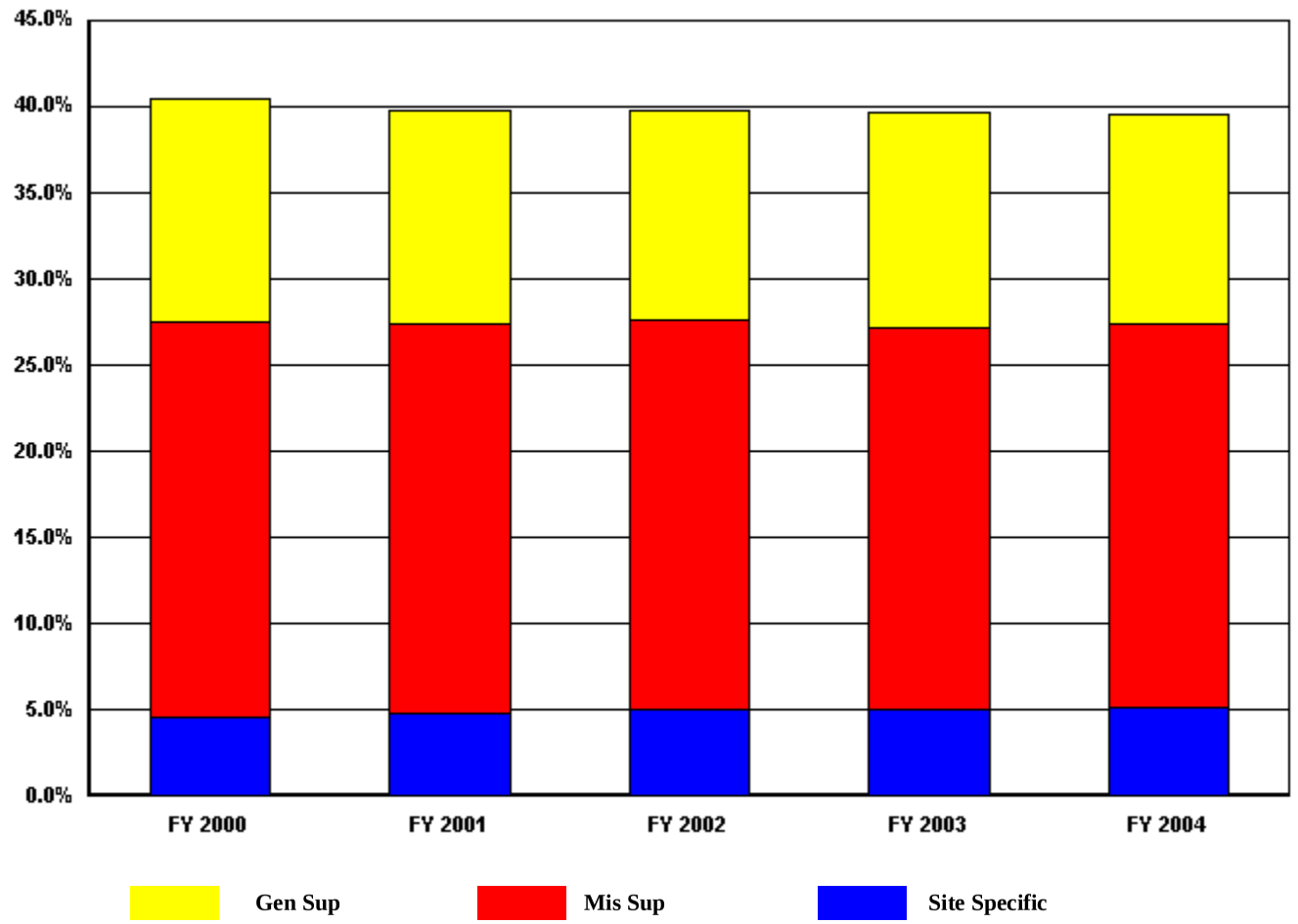
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	5,819,486	6,066,092	6,507,713	6,887,512	7,153,720

US Department of Energy
Total Functional Support as a % of Total Costs
TOTAL FOR ALL 28 SITES



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	40.4%	39.8%	39.7%	39.6%	39.6%

US Department of Energy
Percent of Support Category to Total
TOTAL FOR ALL 28 SITES

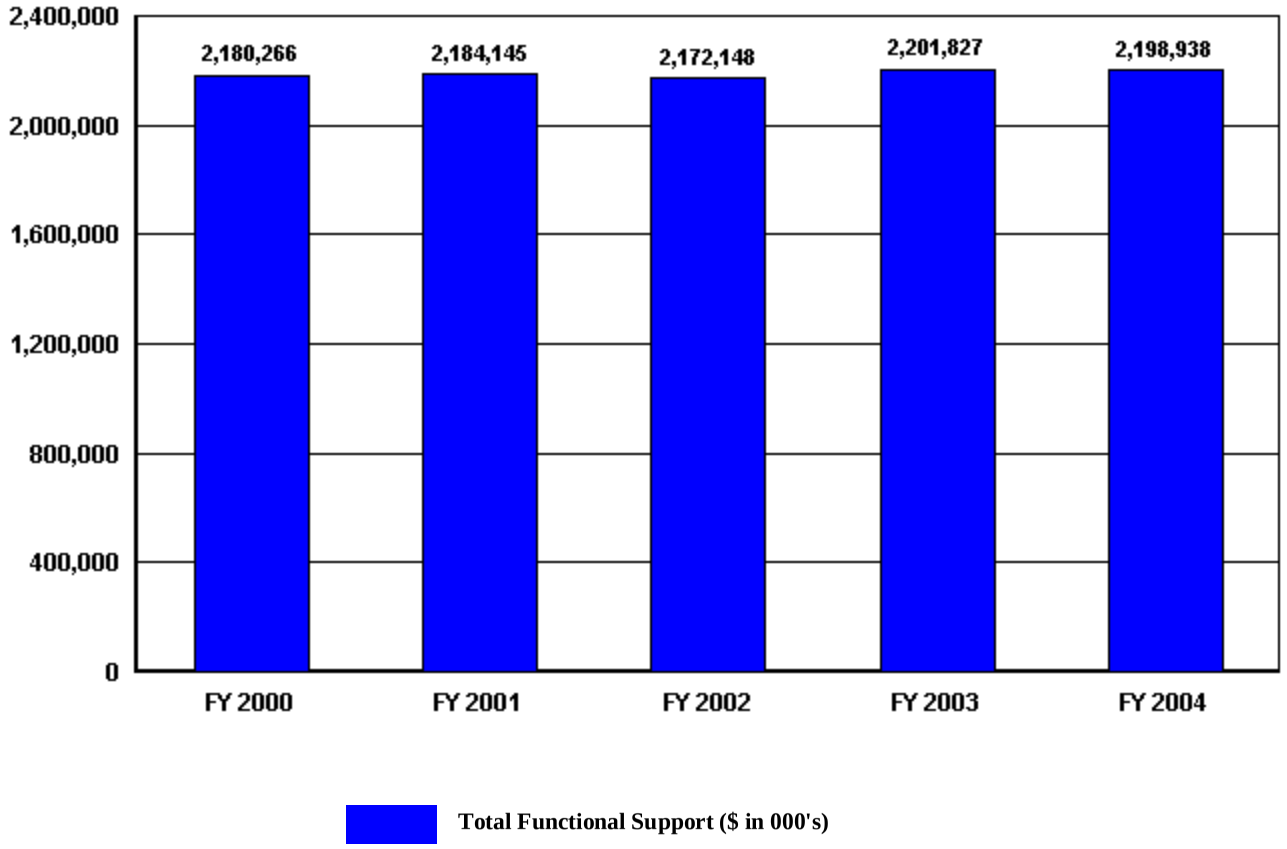


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	12.9%	12.4%	12.1%	12.4%	12.2%
Mis Sup	22.9%	22.6%	22.5%	22.2%	22.2%
Site Specific	4.6%	4.8%	5.1%	5.0%	5.2%

Trends in Total Support Cost by Functional Categories
Total EM Sites ($000)
FY 2004

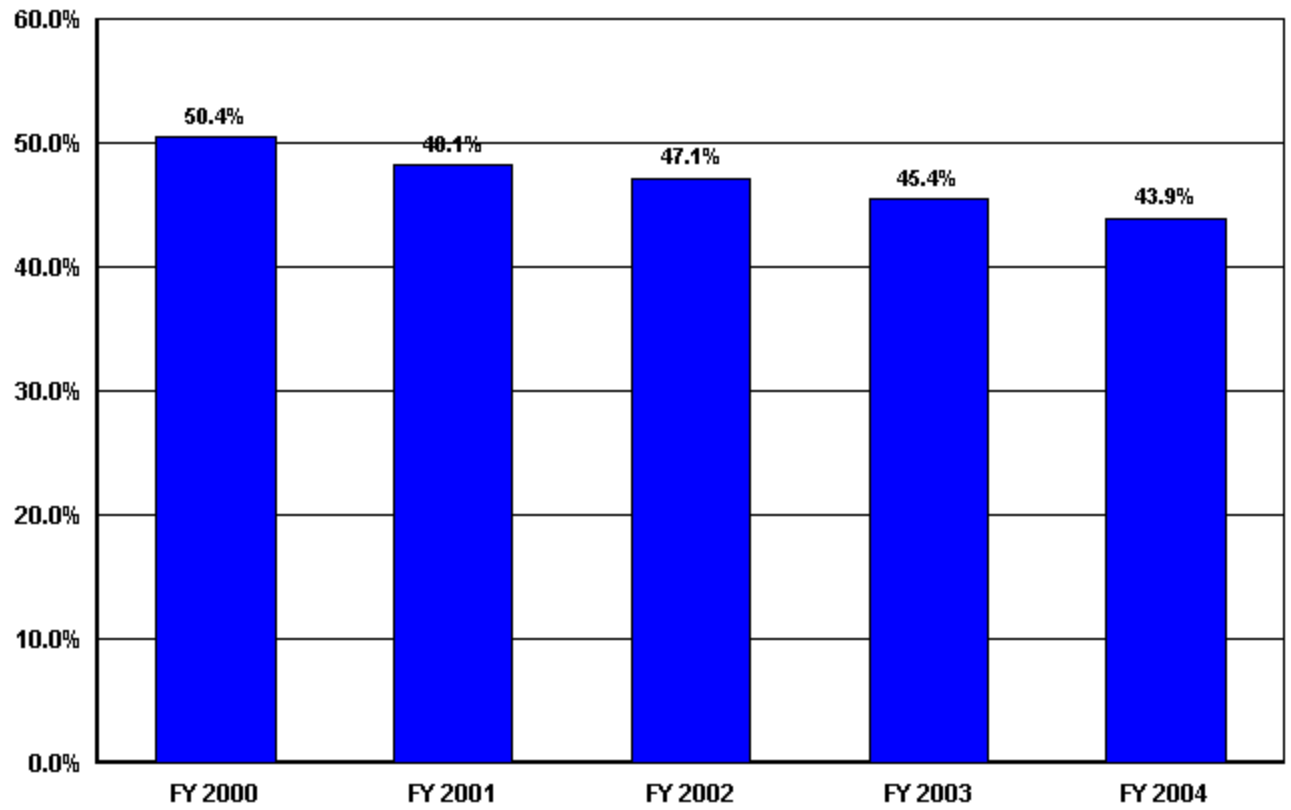
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	4,325,217	4,536,399	4,607,291	4,848,657	5,008,669	683,452	15.8%
Capital Construction	280,913	331,611	307,985	245,417	213,373	-67,540	-24.0%
Total Costs Less Construction	4,044,304	4,204,788	4,299,306	4,603,240	4,795,296	750,992	18.6%
Total Support Costs	**2,180,266**	**2,184,145**	**2,172,148**	**2,201,827**	**2,198,938**	**18,672**	**0.9%**
Mission Direct Operation	1,864,038	2,020,643	2,127,158	2,401,413	2,596,358	732,320	39.3%
Mission Direct Operation as % of Total Cost	**43.1%**	**44.5%**	**46.2%**	**49.5%**	**51.8%**		
Capital Construction as % of Total Cost	**6.5%**	**7.3%**	**6.7%**	**5.1%**	**4.3%**		
Total Support Cost as % of Total Cost	**50.4%**	**48.1%**	**47.1%**	**45.4%**	**43.9%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**50.4%**	**48.1%**	**47.1%**	**45.4%**	**43.9%**		
TOTAL SUPPORT COST	**2,180,266**	**2,184,145**	**2,172,148**	**2,201,827**	**2,198,938**	**18,672**	**0.9%**
TOTAL GENERAL SUPPORT as % of TOTAL	**14.0%**	**13.0%**	**12.2%**	**11.9%**	**11.0%**		
TOTAL GENERAL SUPPORT	**607,658**	**589,206**	**561,845**	**575,904**	**549,459**	**-58,199**	**-9.6%**
EXECUTIVE DIRECTION	38,437	35,307	36,173	33,594	33,549	-4,888	-12.7%
HUMAN RESOURCES	59,871	55,974	54,253	56,086	56,169	-3,702	-6.2%
CFO	39,847	51,980	40,540	40,550	39,979	132	0.3%
PROCUREMENT	40,156	41,558	39,939	42,938	42,530	2,374	5.9%
LEGAL	22,621	22,765	22,213	25,232	16,732	-5,889	-26.0%
CENTRAL ADMIN SERVICES	62,286	59,700	60,169	67,051	58,571	-3,715	-6.0%
PROGRAM/PROJECT CONTROL	94,701	97,473	96,626	93,838	96,536	1,835	1.9%
INFORMATION OUTREACH	36,202	29,958	27,861	24,685	20,601	-15,601	-43.1%
INFORMATION SERVICES	185,404	177,301	164,880	169,817	155,886	-29,518	-15.9%
OTHER	28,133	17,190	19,191	22,113	28,906	773	2.7%
TOTAL MISSION SUPPORT as % of TOTAL	**30.3%**	**29.5%**	**29.0%**	**27.8%**	**26.7%**		
TOTAL MISSION SUPPORT	**1,312,126**	**1,340,284**	**1,337,161**	**1,349,021**	**1,339,797**	**27,671**	**2.1%**
ENVIRONMENTAL	88,233	93,231	83,457	81,935	73,384	-14,849	-16.8%
SAFETY AND HEALTH	305,522	333,897	345,275	334,331	333,109	27,587	9.0%
FACILITIES MANAGEMENT	139,265	133,842	116,922	133,089	128,724	-10,541	-7.6%
MAINTENANCE	330,619	309,199	308,796	304,468	291,694	-38,925	-11.8%
UTILITIES	88,220	89,908	94,409	99,481	92,763	4,543	5.1%
SAFEGUARDS AND SECURITY	159,925	174,080	190,564	208,714	218,904	58,979	36.9%
LOGISTICS SUPPORT	61,283	66,276	61,799	60,786	59,404	-1,879	-3.1%
QUALITY ASSURANCE	62,346	60,422	56,553	51,171	53,313	-9,033	-14.5%
LABORATORY/TECHNICAL SUPPORT	76,713	79,429	79,386	75,046	88,502	11,789	15.4%
TOTAL SITE SPECIFIC as % of TOTAL	**6.0%**	**5.6%**	**5.9%**	**5.7%**	**6.2%**		
TOTAL SITE SPECIFIC	**260,482**	**254,655**	**273,142**	**276,902**	**309,682**	**49,200**	**18.9%**
MANAGEMENT/INCENTIVE FEE	244,375	212,651	231,932	238,698	278,122	33,747	13.8%
TAXES	11,868	21,385	21,913	19,642	20,681	8,813	74.3%
LDRD / PDRD / SDRD	4,239	20,619	19,297	18,562	10,879	6,640	156.6%

US Department of Energy
Total Functional Support
Total EM Sites



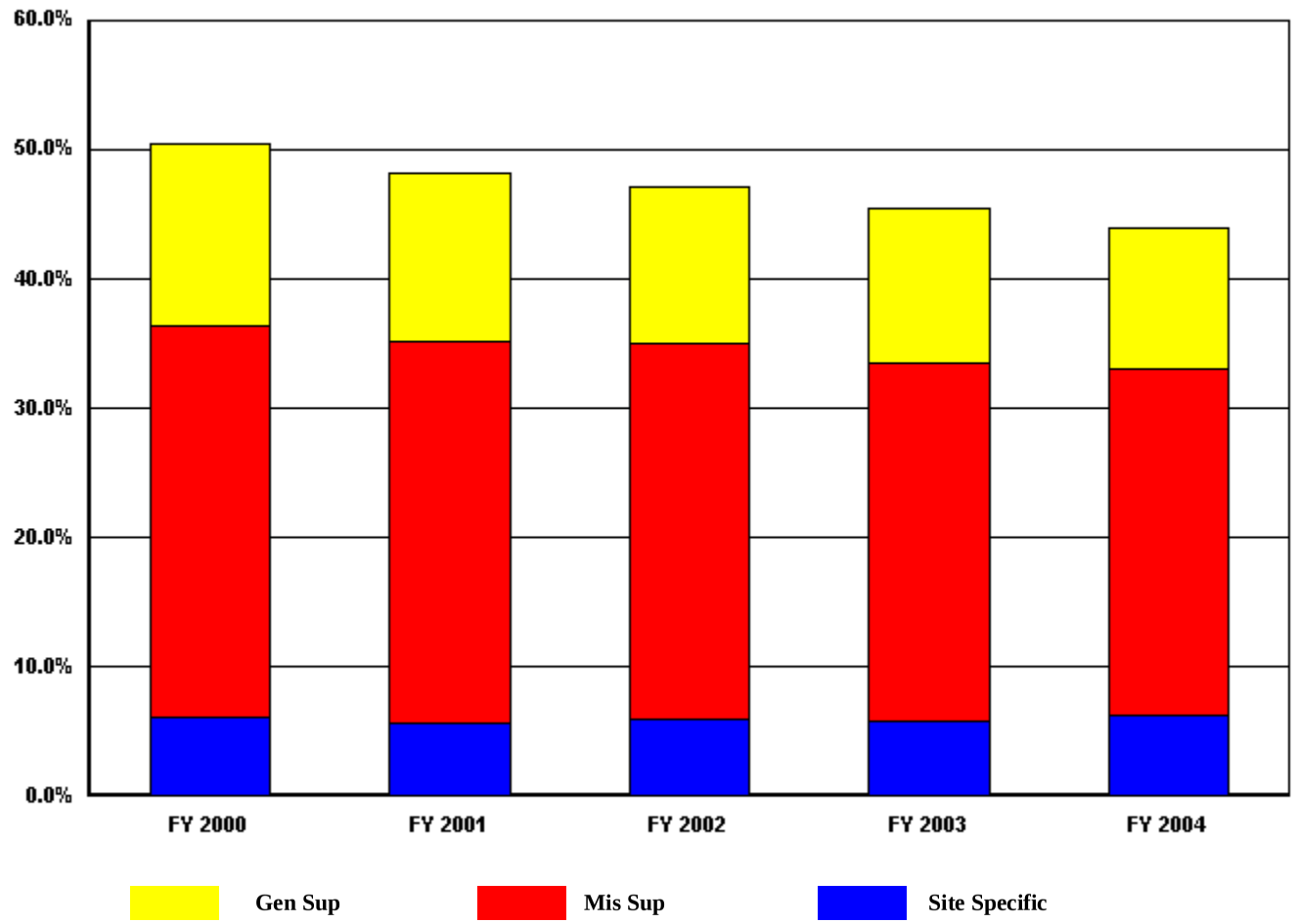
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	2,180,266	2,184,145	2,172,148	2,201,827	2,198,938

US Department of Energy
Total Functional Support as a % of Total Costs
Total EM Sites



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	50.4%	48.1%	47.1%	45.4%	43.9%

US Department of Energy
Percent of Support Category to Total
Total EM Sites

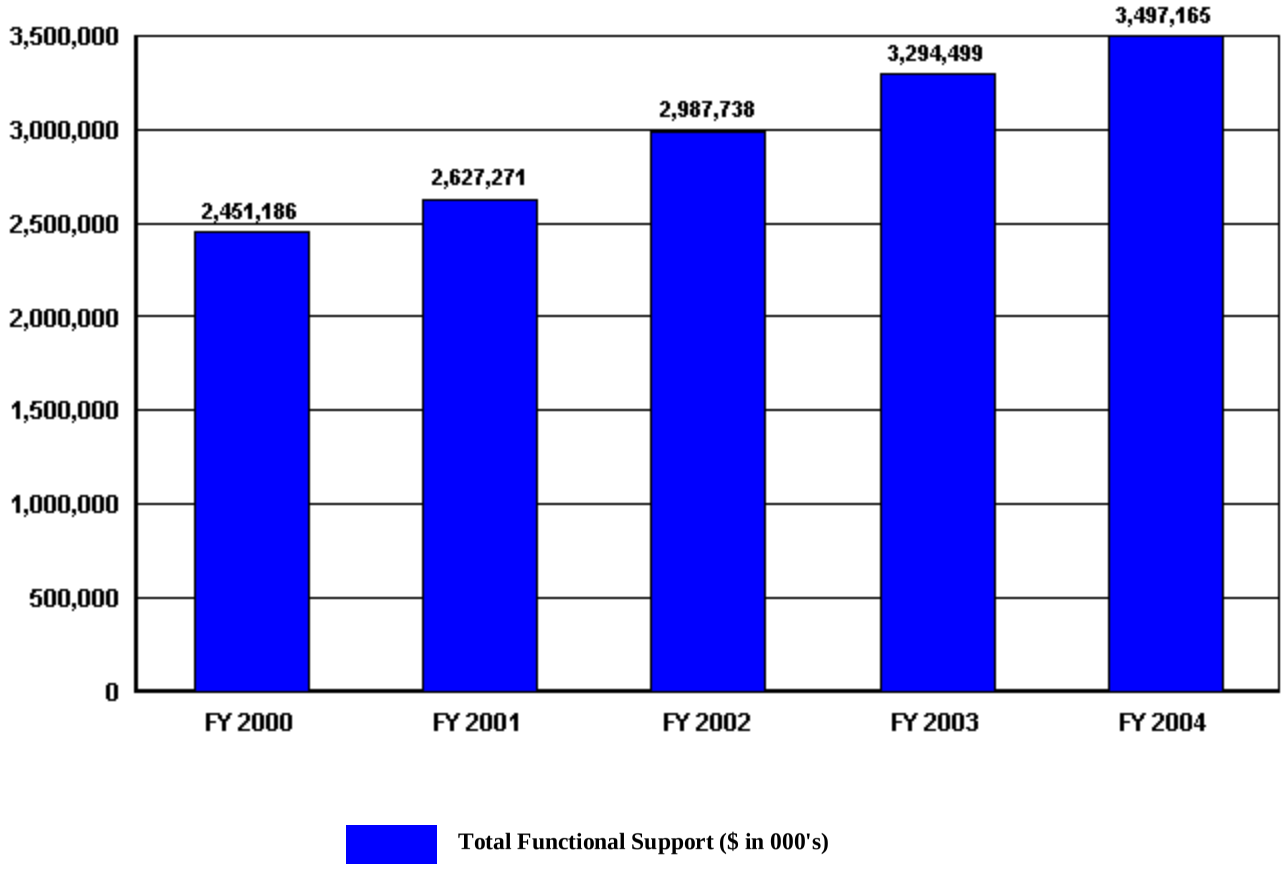


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	14.0%	13.0%	12.2%	11.9%	11.0%
Mis Sup	30.3%	29.5%	29.0%	27.8%	26.7%
Site Specific	6.0%	5.6%	5.9%	5.7%	6.2%

Trends in Total Support Cost by Functional Categories
Total NNSA Sites ($000)
FY 2004

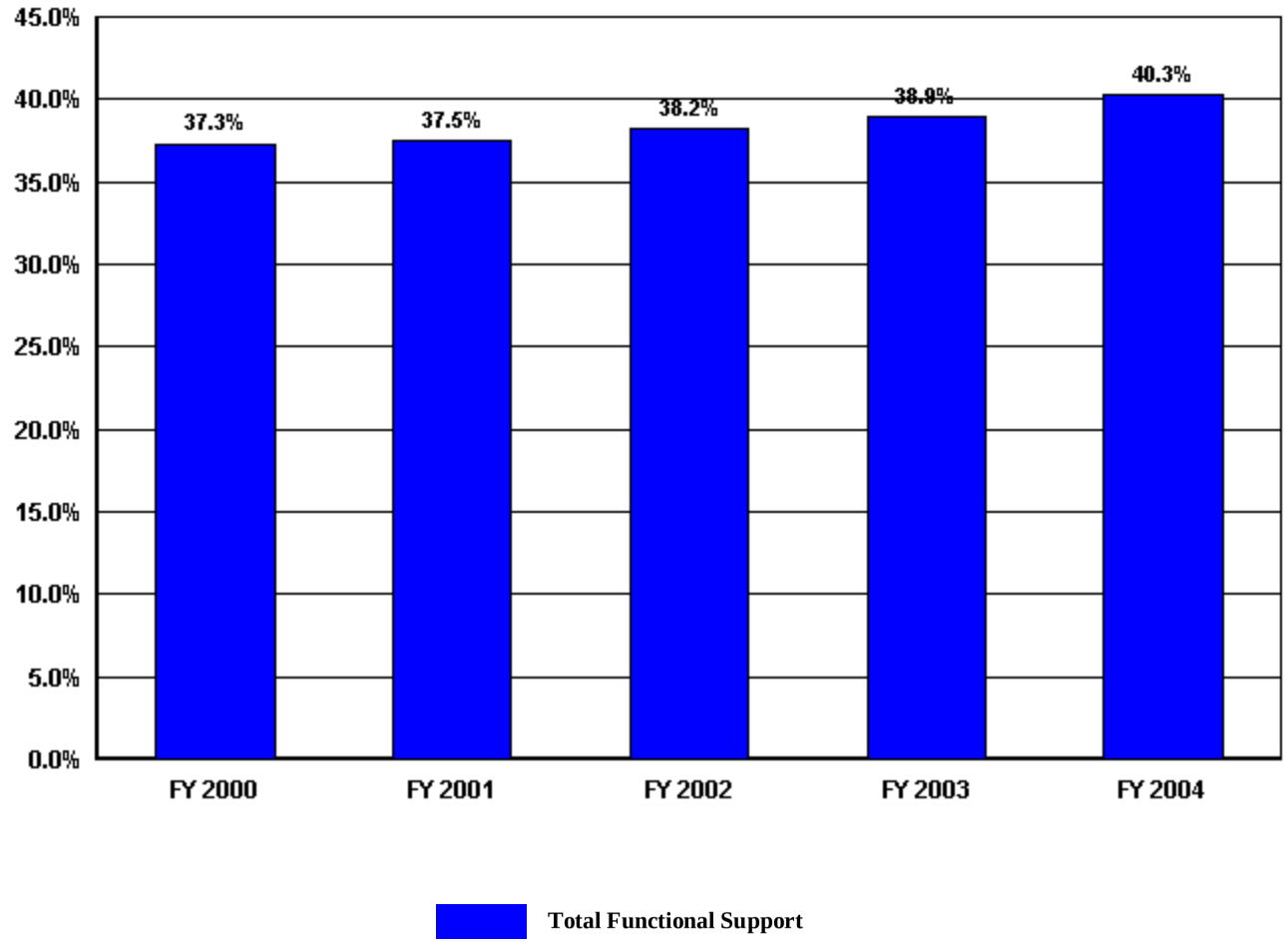
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	6,574,787	7,012,121	7,828,446	8,462,837	8,683,649	2,108,862	32.1%
Capital Construction	549,330	673,316	725,250	867,559	773,737	224,407	40.9%
Total Costs Less Construction	6,025,457	6,338,805	7,103,196	7,595,278	7,909,912	1,884,455	31.3%
Total Support Costs	**2,451,186**	**2,627,271**	**2,987,738**	**3,294,499**	**3,497,165**	**1,045,979**	**42.7%**
Mission Direct Operation	3,574,271	3,711,534	4,115,458	4,300,779	4,412,747	838,476	23.5%
Mission Direct Operation as % of Total Cost	**54.4%**	**52.9%**	**52.6%**	**50.8%**	**50.8%**		
Capital Construction as % of Total Cost	**8.4%**	**9.6%**	**9.3%**	**10.3%**	**8.9%**		
Total Support Cost as % of Total Cost	**37.3%**	**37.5%**	**38.2%**	**38.9%**	**40.3%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**37.3%**	**37.5%**	**38.2%**	**38.9%**	**40.3%**		
TOTAL SUPPORT COST	**2,451,186**	**2,627,271**	**2,987,738**	**3,294,499**	**3,497,165**	**1,045,979**	**42.7%**
TOTAL GENERAL SUPPORT as % of TOTAL	**12.0%**	**11.7%**	**11.7%**	**12.3%**	**12.8%**		
TOTAL GENERAL SUPPORT	**790,146**	**821,262**	**914,502**	**1,041,699**	**1,108,136**	**317,990**	**40.2%**
EXECUTIVE DIRECTION	66,915	76,710	87,114	91,919	90,692	23,777	35.5%
HUMAN RESOURCES	83,213	88,278	94,814	106,969	107,785	24,572	29.5%
CFO	53,351	52,690	55,212	56,317	61,594	8,243	15.5%
PROCUREMENT	52,681	55,128	58,320	69,829	76,261	23,580	44.8%
LEGAL	24,175	24,326	24,400	27,097	24,503	328	1.4%
CENTRAL ADMIN SERVICES	80,117	80,302	88,861	95,421	96,698	16,581	20.7%
PROGRAM/PROJECT CONTROL	48,715	47,484	49,864	86,190	105,388	56,673	116.3%
INFORMATION OUTREACH	53,923	56,990	60,209	63,009	64,036	10,113	18.8%
INFORMATION SERVICES	300,421	304,760	377,959	419,544	454,288	153,867	51.2%
OTHER	26,635	34,594	17,749	25,404	26,891	256	1.0%
TOTAL MISSION SUPPORT as % of TOTAL	**20.8%**	**20.7%**	**21.1%**	**21.2%**	**22.0%**		
TOTAL MISSION SUPPORT	**1,366,927**	**1,449,443**	**1,652,982**	**1,791,833**	**1,906,794**	**539,867**	**39.5%**
ENVIRONMENTAL	77,307	73,969	83,114	80,177	83,305	5,998	7.8%
SAFETY AND HEALTH	236,405	239,448	278,483	310,907	310,606	74,201	31.4%
FACILITIES MANAGEMENT	176,295	210,956	274,355	300,763	343,463	167,168	94.8%
MAINTENANCE	323,468	322,556	316,305	351,713	376,126	52,658	16.3%
UTILITIES	145,395	172,320	189,894	175,314	182,835	37,440	25.8%
SAFEGUARDS AND SECURITY	265,612	279,663	346,474	396,448	411,734	146,122	55.0%
LOGISTICS SUPPORT	57,586	62,337	70,003	70,500	72,398	14,812	25.7%
QUALITY ASSURANCE	44,977	47,888	51,093	58,954	72,482	27,505	61.2%
LABORATORY/TECHNICAL SUPPORT	39,882	40,306	43,261	47,057	53,845	13,963	35.0%
TOTAL SITE SPECIFIC as % of TOTAL	**4.5%**	**5.1%**	**5.4%**	**5.4%**	**5.6%**		
TOTAL SITE SPECIFIC	**294,113**	**356,566**	**420,254**	**460,967**	**482,235**	**188,122**	**64.0%**
MANAGEMENT/INCENTIVE FEE	129,745	127,853	143,976	157,538	163,930	34,185	26.3%
TAXES	56,174	60,126	68,537	68,278	73,725	17,551	31.2%
LDRD / PDRD / SDRD	108,194	168,587	207,741	235,151	244,580	136,386	126.1%

US Department of Energy
Total Functional Support
Total NNSA Sites



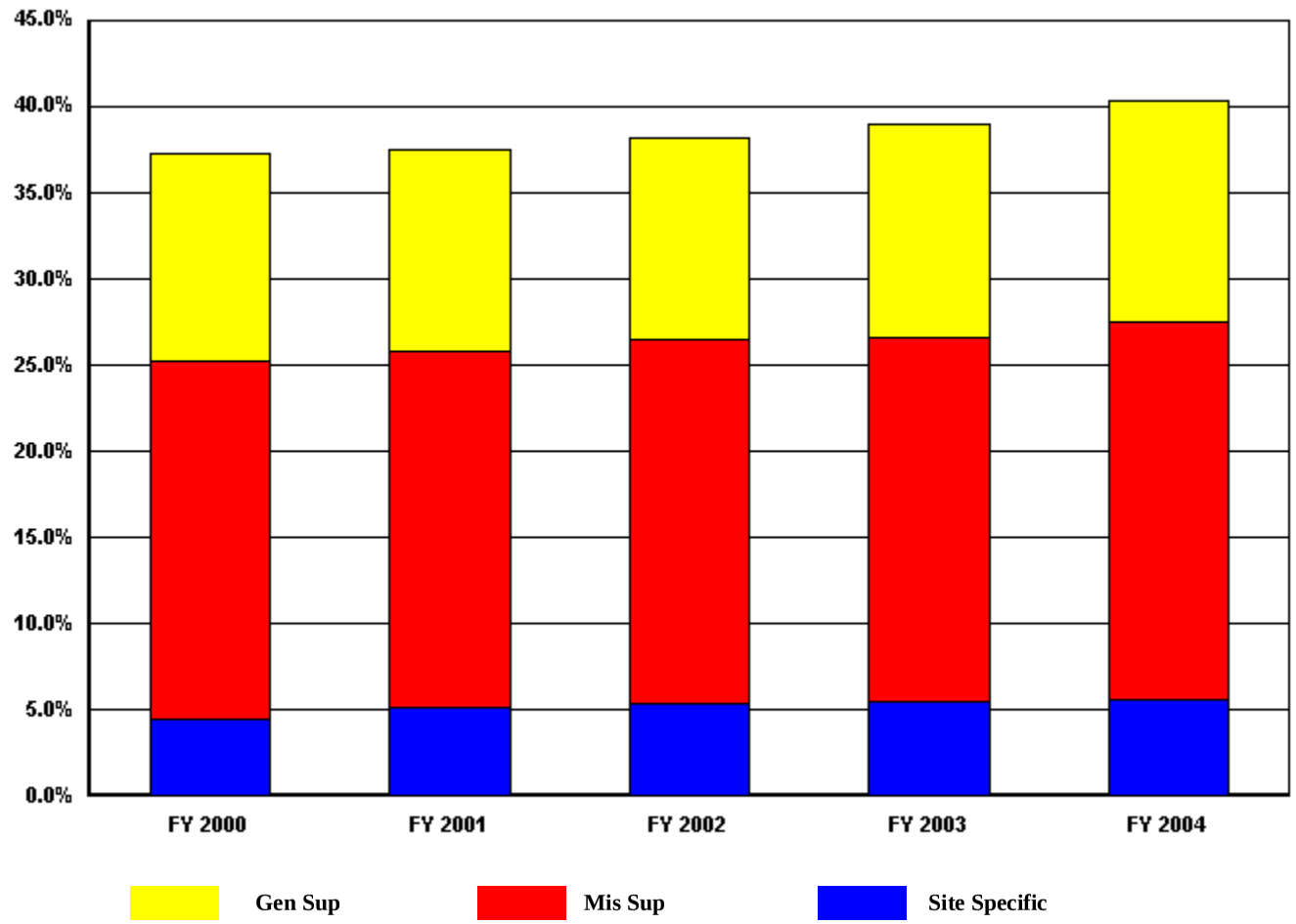
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	2,451,186	2,627,271	2,987,738	3,294,499	3,497,165

US Department of Energy
Total Functional Support as a % of Total Costs
Total NNSA Sites



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	37.3%	37.5%	38.2%	38.9%	40.3%

US Department of Energy
Percent of Support Category to Total
Total NNSA Sites

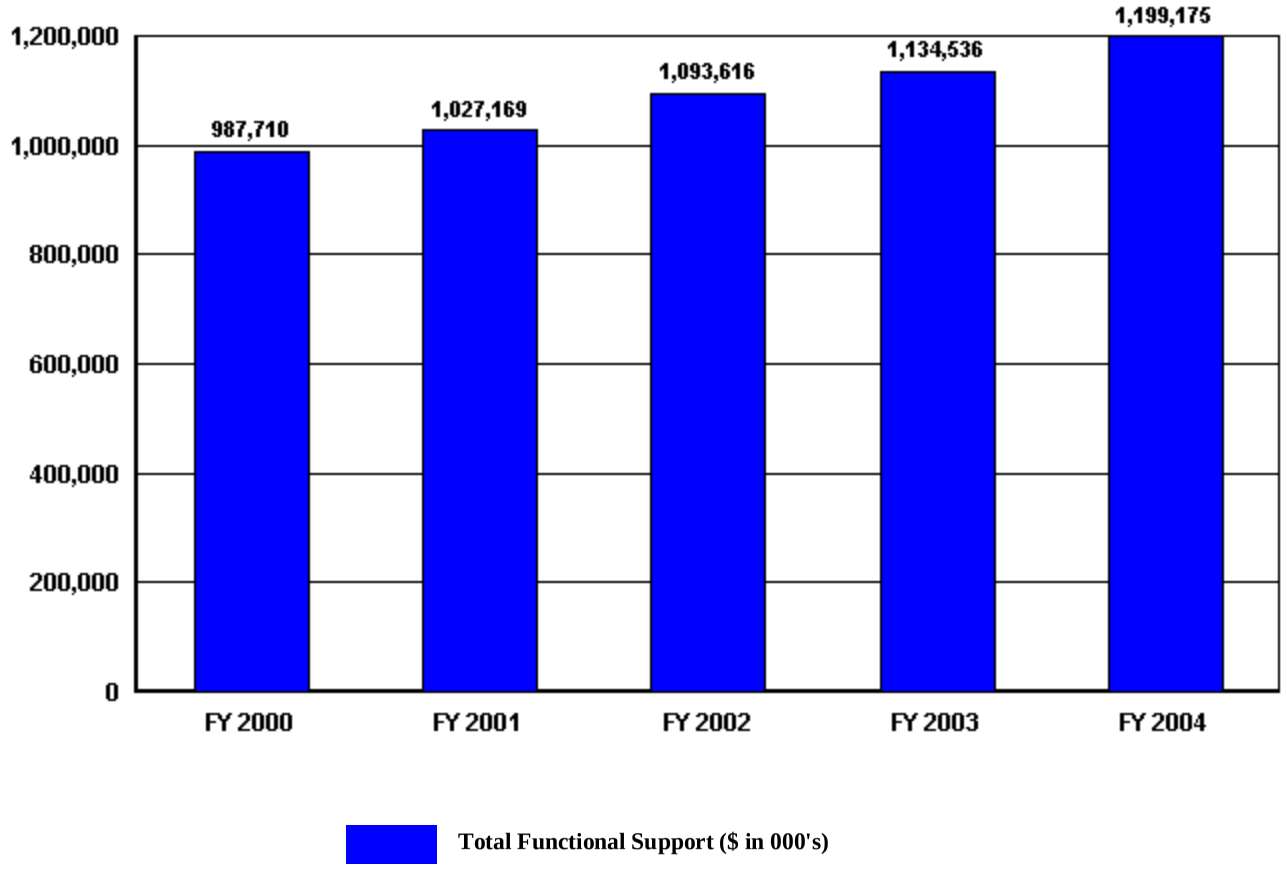


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	12.0%	11.7%	11.7%	12.3%	12.8%
Mis Sup	20.8%	20.7%	21.1%	21.2%	22.0%
Site Specific	4.5%	5.1%	5.4%	5.4%	5.6%

Trends in Total Support Cost by Functional Categories
Total SC Sites ($000)
FY 2004

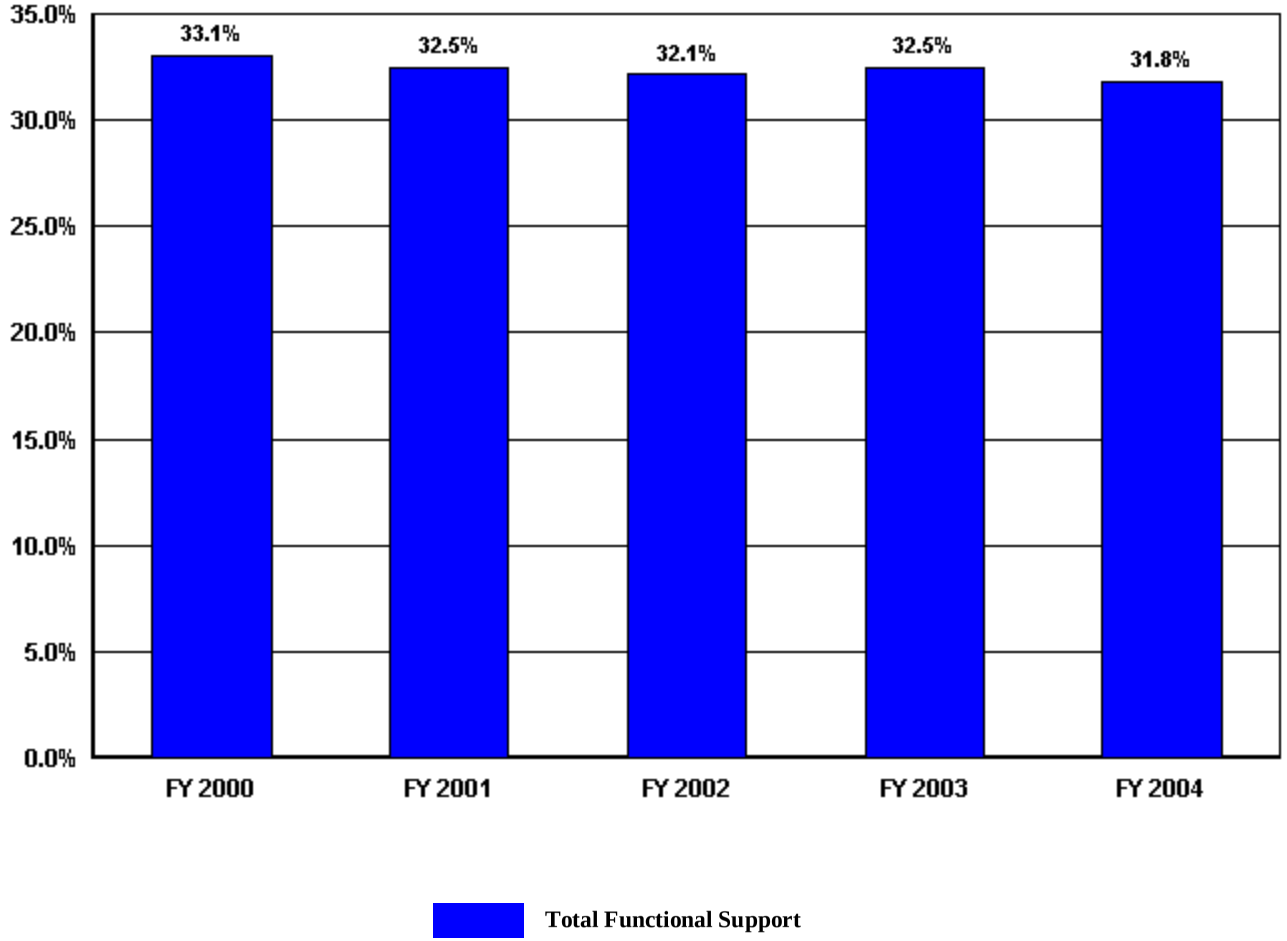
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	2,987,102	3,161,664	3,403,677	3,494,621	3,767,686	780,584	26.1%
Capital Construction	278,649	335,901	404,320	414,893	442,388	163,739	58.8%
Total Costs Less Construction	2,708,453	2,825,763	2,999,357	3,079,728	3,325,298	616,845	22.8%
Total Support Costs	**987,710**	**1,027,169**	**1,093,616**	**1,134,536**	**1,199,175**	**211,465**	**21.4%**
Mission Direct Operation	1,720,743	1,798,594	1,905,741	1,945,192	2,126,123	405,380	23.6%
Mission Direct Operation as % of Total Cost	**57.6%**	**56.9%**	**56.0%**	**55.7%**	**56.4%**		
Capital Construction as % of Total Cost	**9.3%**	**10.6%**	**11.9%**	**11.9%**	**11.7%**		
Total Support Cost as % of Total Cost	**33.1%**	**32.5%**	**32.1%**	**32.5%**	**31.8%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**33.1%**	**32.5%**	**32.1%**	**32.5%**	**31.8%**		
TOTAL SUPPORT COST	**987,710**	**1,027,169**	**1,093,616**	**1,134,536**	**1,199,175**	**211,465**	**21.4%**
TOTAL GENERAL SUPPORT as % of TOTAL	**12.2%**	**11.9%**	**11.8%**	**12.1%**	**11.4%**		
TOTAL GENERAL SUPPORT	**363,764**	**376,752**	**402,677**	**424,090**	**429,345**	**65,581**	**18.0%**
EXECUTIVE DIRECTION	34,279	35,001	42,820	51,517	55,702	21,423	62.5%
HUMAN RESOURCES	26,611	27,223	28,459	30,851	32,289	5,678	21.3%
CFO	33,712	34,997	36,541	42,056	44,732	11,020	32.7%
PROCUREMENT	24,591	22,371	23,147	24,691	28,635	4,044	16.4%
LEGAL	7,559	9,044	9,725	10,361	11,486	3,927	52.0%
CENTRAL ADMIN SERVICES	31,557	34,761	34,617	34,730	36,095	4,538	14.4%
PROGRAM/PROJECT CONTROL	29,612	28,511	28,649	29,945	12,499	-17,113	-57.8%
INFORMATION OUTREACH	30,432	35,012	37,797	42,160	68,346	37,914	124.6%
INFORMATION SERVICES	112,233	118,083	125,258	121,072	122,758	10,525	9.4%
OTHER	33,178	31,749	35,664	36,707	16,803	-16,375	-49.4%
TOTAL MISSION SUPPORT as % of TOTAL	**18.0%**	**17.8%**	**17.4%**	**17.5%**	**17.5%**		
TOTAL MISSION SUPPORT	**536,916**	**563,614**	**593,058**	**612,933**	**657,837**	**120,921**	**22.5%**
ENVIRONMENTAL	23,255	27,609	26,191	33,293	35,963	12,708	54.6%
SAFETY AND HEALTH	101,803	102,848	99,691	102,366	110,166	8,363	8.2%
FACILITIES MANAGEMENT	50,661	65,229	76,991	88,843	99,914	49,253	97.2%
MAINTENANCE	162,258	151,535	163,537	154,139	165,324	3,066	1.9%
UTILITIES	90,003	100,226	102,147	107,163	108,243	18,240	20.3%
SAFEGUARDS AND SECURITY	33,664	42,016	50,075	51,543	56,017	22,353	66.4%
LOGISTICS SUPPORT	27,397	25,994	27,943	28,967	30,743	3,346	12.2%
QUALITY ASSURANCE	11,870	12,654	9,374	11,339	11,078	-792	-6.7%
LABORATORY/TECHNICAL SUPPORT	36,005	35,503	37,109	35,280	40,389	4,384	12.2%
TOTAL SITE SPECIFIC as % of TOTAL	**2.9%**	**2.7%**	**2.9%**	**2.8%**	**3.0%**		
TOTAL SITE SPECIFIC	**87,030**	**86,803**	**97,881**	**97,513**	**111,993**	**24,963**	**28.7%**
MANAGEMENT/INCENTIVE FEE	40,472	39,191	40,795	40,109	43,085	2,613	6.5%
TAXES	4,014	2,212	3,648	1,578	6,556	2,542	63.3%
LDRD / PDRD / SDRD	42,544	45,400	53,438	55,826	62,352	19,808	46.6%

US Department of Energy
Total Functional Support
Total SC Sites



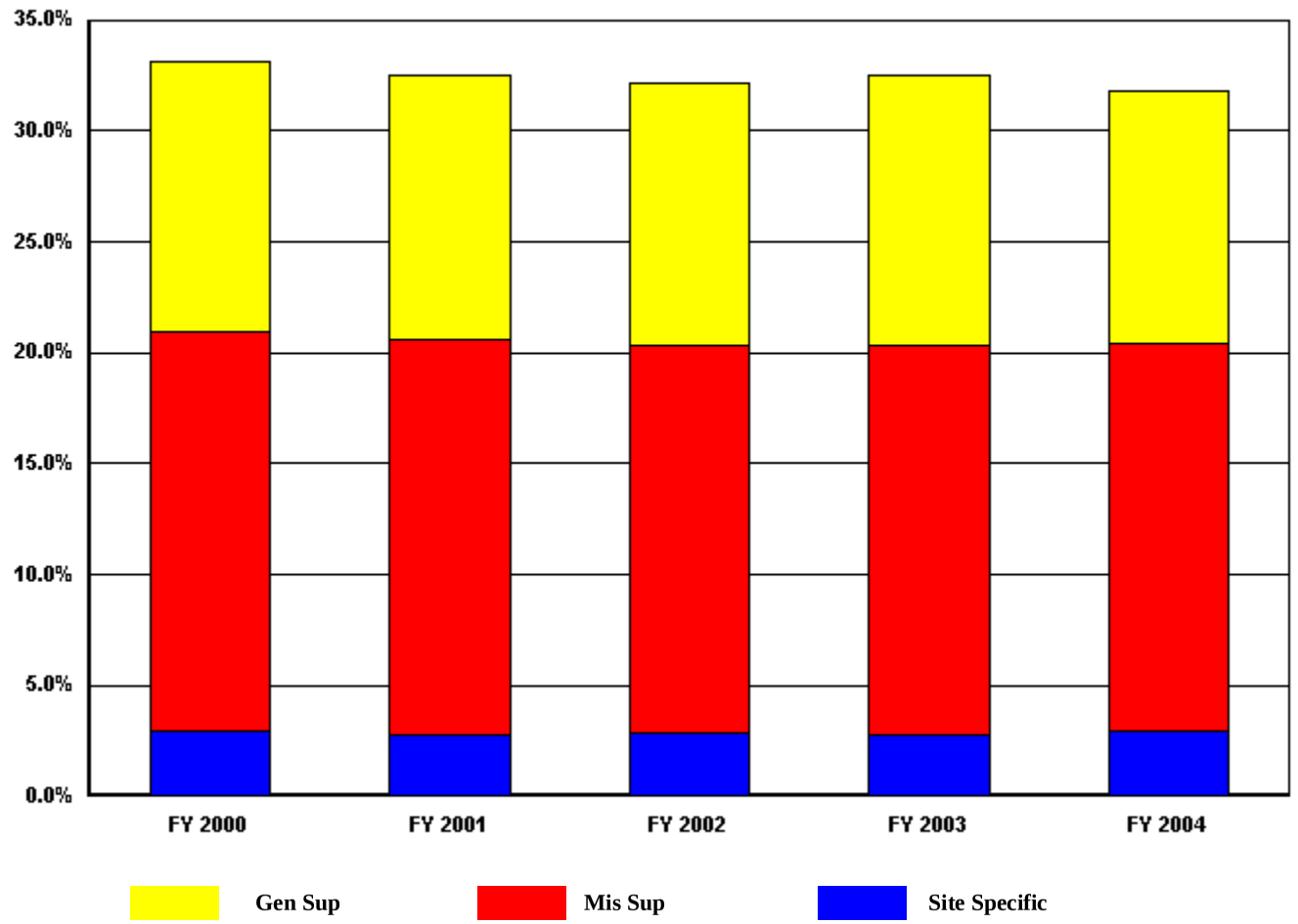
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	987,710	1,027,169	1,093,616	1,134,536	1,199,175

US Department of Energy
Total Functional Support as a % of Total Costs
Total SC Sites



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	33.1%	32.5%	32.1%	32.5%	31.8%

US Department of Energy
Percent of Support Category to Total
Total SC Sites

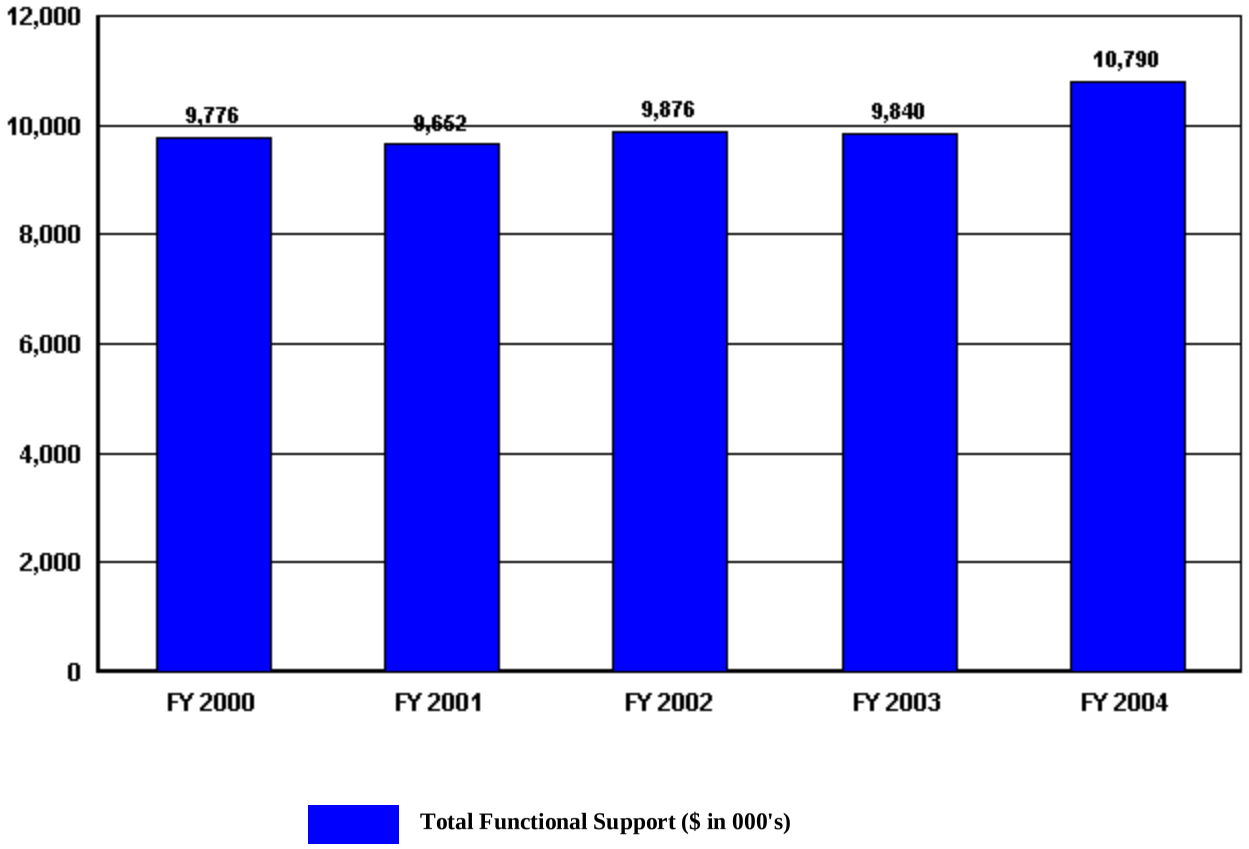


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	12.2%	11.9%	11.8%	12.1%	11.4%
Mis Sup	18.0%	17.8%	17.4%	17.5%	17.5%
Site Specific	2.9%	2.7%	2.9%	2.8%	3.0%

Trends in Total Support Cost by Functional Categories
Ames National Lab/Iowa State University ($000)
FY 2004

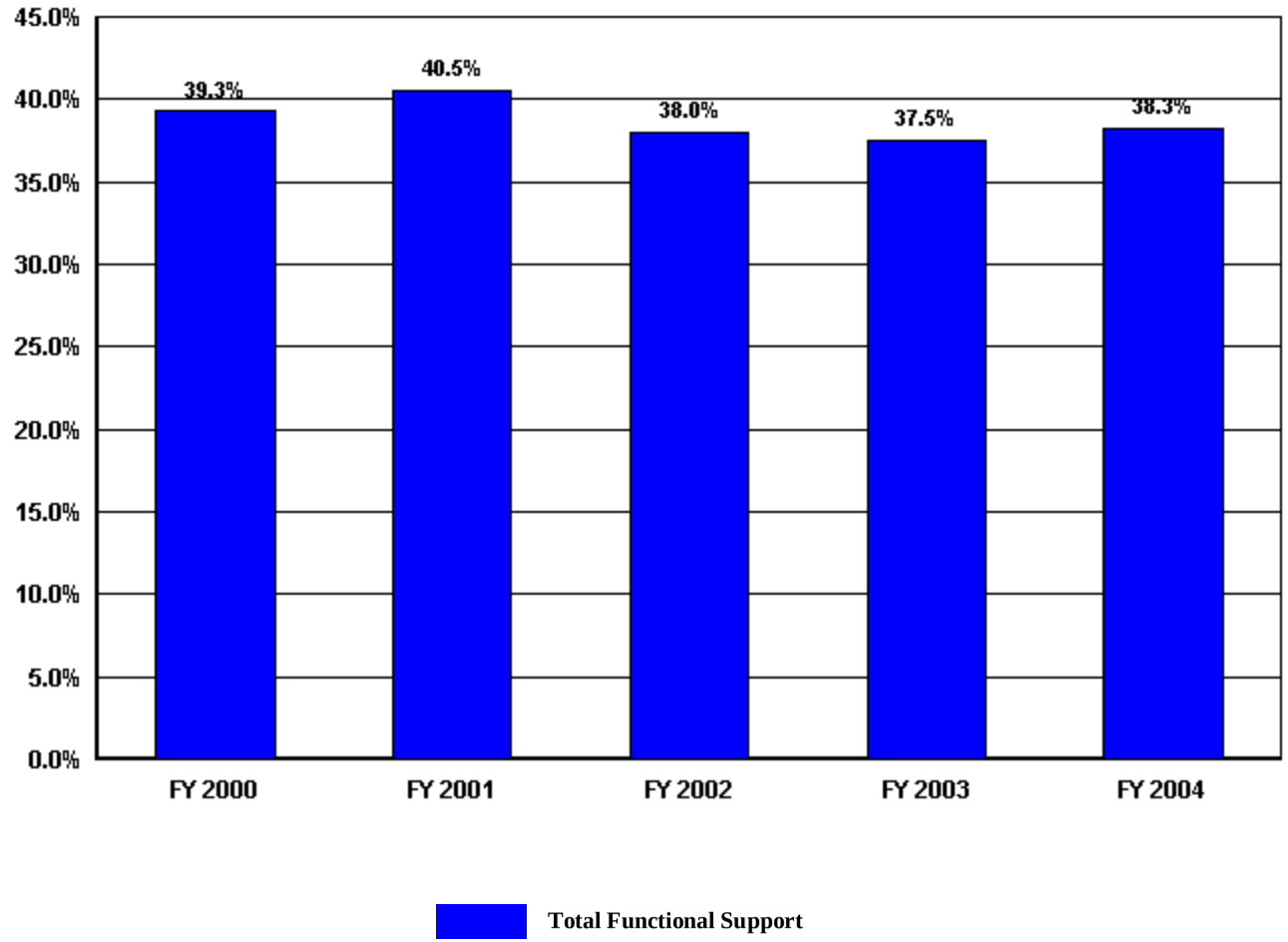
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	24,898	23,804	25,973	26,240	28,196	3,298	13.2%
Capital Construction	2,066	1,654	2,538	1,650	2,435	369	17.9%
Total Costs Less Construction	22,832	22,150	23,435	24,590	25,761	2,929	12.8%
Total Support Costs	**9,776**	**9,652**	**9,876**	**9,840**	**10,790**	**1,014**	**10.4%**
Mission Direct Operation	13,056	12,498	13,559	14,750	14,971	1,915	14.7%
Mission Direct Operation as % of Total Cost	**52.4%**	**52.5%**	**52.2%**	**56.2%**	**53.1%**		
Capital Construction as % of Total Cost	**8.3%**	**6.9%**	**9.8%**	**6.3%**	**8.6%**		
Total Support Cost as % of Total Cost	**39.3%**	**40.5%**	**38.0%**	**37.5%**	**38.3%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**39.3%**	**40.5%**	**38.0%**	**37.5%**	**38.3%**		
TOTAL SUPPORT COST	**9,776**	**9,652**	**9,876**	**9,840**	**10,790**	**1,014**	**10.4%**
TOTAL GENERAL SUPPORT as % of TOTAL	**17.4%**	**17.9%**	**15.9%**	**13.7%**	**15.0%**		
TOTAL GENERAL SUPPORT	**4,331**	**4,251**	**4,128**	**3,593**	**4,232**	**-99**	**-2.3%**
EXECUTIVE DIRECTION	656	653	639	654	678	22	3.4%
HUMAN RESOURCES	235	243	251	258	264	29	12.3%
CFO	802	867	901	932	1,335	533	66.5%
PROCUREMENT	164	179	187	188	231	67	40.9%
LEGAL	0	0	0	0	0	0	0.0%
CENTRAL ADMIN SERVICES	209	186	153	155	144	-65	-31.1%
PROGRAM/PROJECT CONTROL	1,217	1,230	1,220	1,195	1,332	115	9.4%
INFORMATION OUTREACH	348	360	366	362	342	-6	-1.7%
INFORMATION SERVICES	843	843	778	922	848	5	0.6%
OTHER	-143	-310	-367	-1,073	-942	-799	-558.7%
TOTAL MISSION SUPPORT as % of TOTAL	**18.4%**	**19.1%**	**18.7%**	**20.2%**	**19.6%**		
TOTAL MISSION SUPPORT	**4,571**	**4,558**	**4,859**	**5,297**	**5,523**	**952**	**20.8%**
ENVIRONMENTAL	30	31	40	37	39	9	30.0%
SAFETY AND HEALTH	1,024	994	1,055	1,128	1,114	90	8.8%
FACILITIES MANAGEMENT	163	140	276	436	278	115	70.6%
MAINTENANCE	1,294	1,325	1,325	1,335	1,527	233	18.0%
UTILITIES	860	902	965	962	930	70	8.1%
SAFEGUARDS AND SECURITY	142	152	212	219	211	69	48.6%
LOGISTICS SUPPORT	289	299	324	353	375	86	29.8%
QUALITY ASSURANCE	58	59	60	62	66	8	13.8%
LABORATORY/TECHNICAL SUPPORT	711	656	602	765	983	272	38.3%
TOTAL SITE SPECIFIC as % of TOTAL	**3.5%**	**3.5%**	**3.4%**	**3.6%**	**3.7%**		
TOTAL SITE SPECIFIC	**874**	**843**	**889**	**950**	**1,035**	**161**	**18.4%**
MANAGEMENT/INCENTIVE FEE	858	843	889	950	1,035	177	20.6%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	16	0	0	0	0	-16	-100.0%

US Department of Energy
Total Functional Support
Ames National Lab/Iowa State University



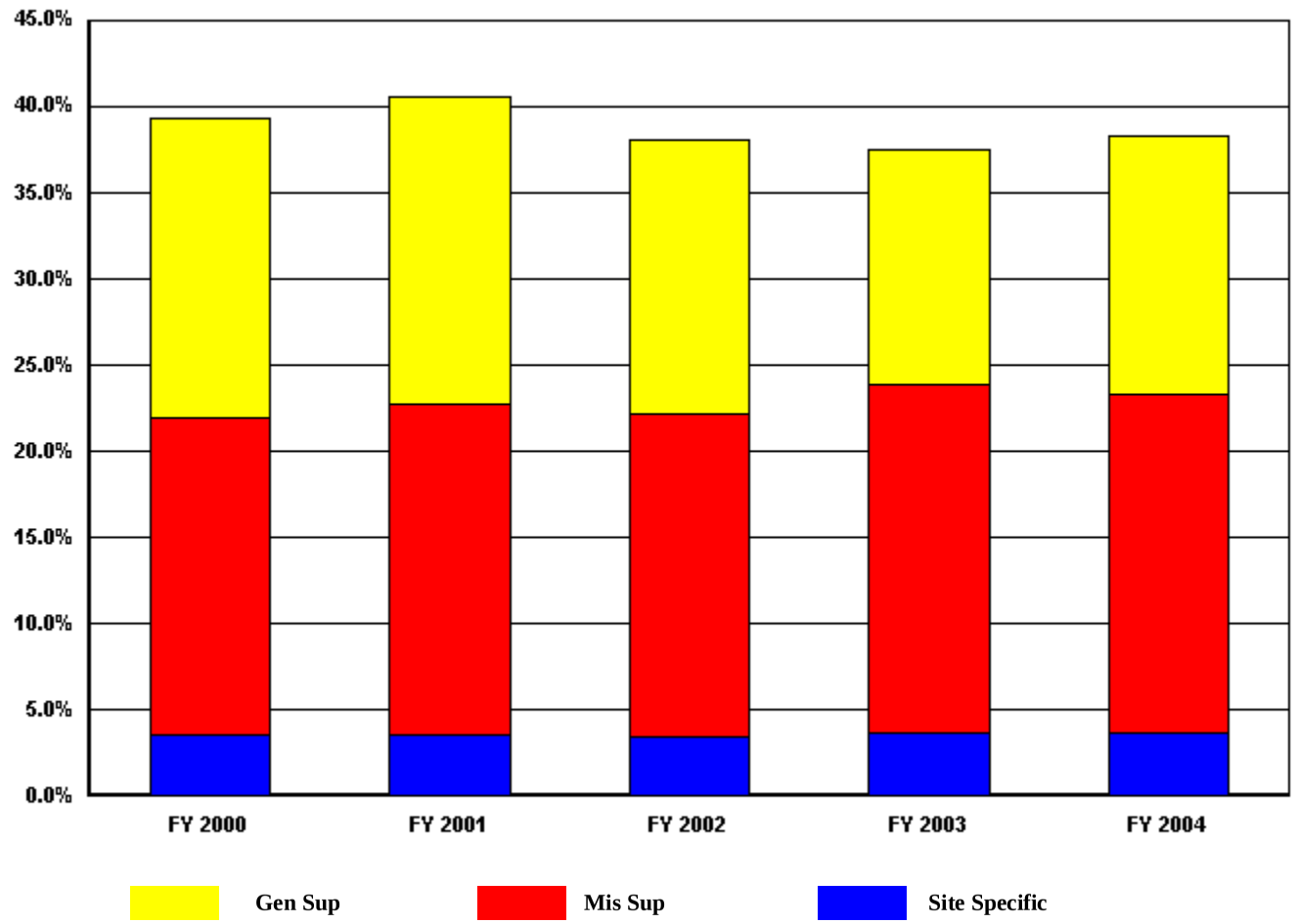
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	9,776	9,652	9,876	9,840	10,790

US Department of Energy
Total Functional Support as a % of Total Costs
Ames National Lab/Iowa State University



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	39.3%	40.5%	38.0%	37.5%	38.3%

US Department of Energy
Percent of Support Category to Total
Ames National Lab/Iowa State University



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	17.4%	17.9%	15.9%	13.7%	15.0%
Mis Sup	18.4%	19.1%	18.7%	20.2%	19.6%
Site Specific	3.5%	3.5%	3.4%	3.6%	3.7%

SITE PROFILE
Ames National Lab/Iowa State University

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 (Energy Efficiency, Environmental Management, Fossil Energy, Science, 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:

- Uniform atomic-scale growth at low temperature
  Physicists at Ames Laboratory have discovered an intriguing type of self-organization takes place with lead (Pb) deposited on silicon (Si) if the growth is carried out at low temperature — around 185 Kelvin, or minus 126 degrees Fahrenheit. In all other systems studied so far, the deposited metal atoms stack up in islands of very wide height variation. But for Pb grown on Si (oriented along the (111) crystal axis), the atoms seem to be “intelligent” and make only one height choice. Growing atomic structures and ultrathin metal films in uniform sizes and with highly ordered geometries has implications for technological applications that include switches, lasing materials, and semiconductors that allow computer chips to run faster.

- Self-assembling Polymers act like Bio-molecules
  A group of bioinspired polymers are being studied by researchers at Ames Laboratory to understand how they are able to form and react to stimuli similar to the way proteins, lipids, and DNA react in nature. Unlocking how these soluble block polymers are able to self-assemble could potentially lead to a variety of uses such as controlled release systems for sustained and modulated delivery of drugs or gene therapies. The polymers respond to changes in temperature and pH, forming a polymer gel as temperature and/or pH rises and reversing the process (dissolving) as the temperature or pH drops.

- Telltale Toolmarks Help Solve Crime

When tools such as screwdrivers, pliers and wire cutters are manufactured, the manufacturing process leaves certain imperfections, or patterns, embedded in the tools' surfaces. Because these patterns are believed to be unique for each tool, when criminals use them to perpetrate crimes, such as jimmying a door to gain access to a location, the patterns on the tools are often transferred to the crime scene. Two research projects at the Ames Laboratory have responded to the challenge in an attempt to establish tool mark uniqueness. The first involved building a database of tool mark images and developing an algorithm to statistically analyze the images. The database consists of digital images of marks on tool surfaces left during six different manufacturing processes. Researchers are also using 3-D characterization methods and statistical methods to identify toolmarks. Their research involves using a profilometer, a scanning tool that measures the height or depth of toolmarks, and then develops a type of contour map of the marks from the scan. The map can then be used to precisely identify a tool mark, allowing forensic specialists to match the mark on the tool to the marks made by the tool at the crime scene.

- Carbon-Doped Superconductors Withstand Higher Magnetic Fields
  Ames Laboratory physicists have found a way to enhance the properties of magnesium diboride, MgB2, superconductors by doping them with carbon atoms, doubling the magnetic field the material can withstand. The work may one day ease the expense associated with current superconducting materials that generate the intense magnetic fields required for such applications as magnetic resonance imaging for medical diagnostics, high-field magnets for research, and superconducting magnets for particle accelerators. Experiments have shown that a 5 percent substitution of boron with carbon more than doubles the magnetic field MgB2 can withstand and still remain superconducting, raising it from 16 Tesla for the pure material to 36 Tesla.

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 665 people (318 FTE's) worked at Ames Laboratory in FY 2004.

TRENDS

Ames Laboratory's total costs increased from $24,898K in FY 2000 to $28,196K in FY 2004. This was an increase of 13.2%. The Laboratory's total functional support costs increased from $9,776K in FY 2000 to $10,790K in FY 2004, an increase of 10.4%.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

CFO
Chief Financial Officer – $533K
A Budget Office position vacated in FY 1999 was filled six months into FY 2000, increase of 0.5 FTE (~$30K). FY 2004 costs reflect a normalized level of effort 1.0 FTE. In FY 2004, a new financial software package was procured ($361K). The remainder of the increase was due to normal escalation of a relatively stable budget that is comprised primarily of people.

PROCUREMENT
Procurement - $67K
In FY 2004 an external consultant was hired to assist in the procurement of a new financial software package ($42K). The remainder of the increase was due to normal escalation.

FACILITIES MANAGEMENT
Facilities Management – $115K
Two new research initiatives were funded in FY 2002; increasing space rental costs.

LABORATORY/TECHNICAL SUPPORT
Laboratory/Technical Support – $272K
Increases in the need for Laboratory Technical Services parallel the increase in research funding. The Materials Preparation Center also saw a significant increase in work for external customers.

CAPITAL CONSTRUCTION
The major driver of the change was late receipt of DOE capital funds in FY 2003. DOE was under a continuing resolution until March of FY 2003. Prior to April 1, 2003 (the date that Ames received a fully executed and signed March 2003 Contract Modification containing 100% funding for FY 2003) Ames had received only 45.9% of the FY 2003 capital equipment funds in KC02, our largest funding source. Since the timeframe for delivery of high tech research capital equipment is normally up to six months and can be from 1 to 2 years, the late receipt of funds did not allow the majority of FY 2003 funds to even be committed until more than six months of the fiscal year had passed; therefore, a large portion of the costs for FY 2003 capital procurements were pushed into FY 2004.

COST SAVINGS INITIATIVES

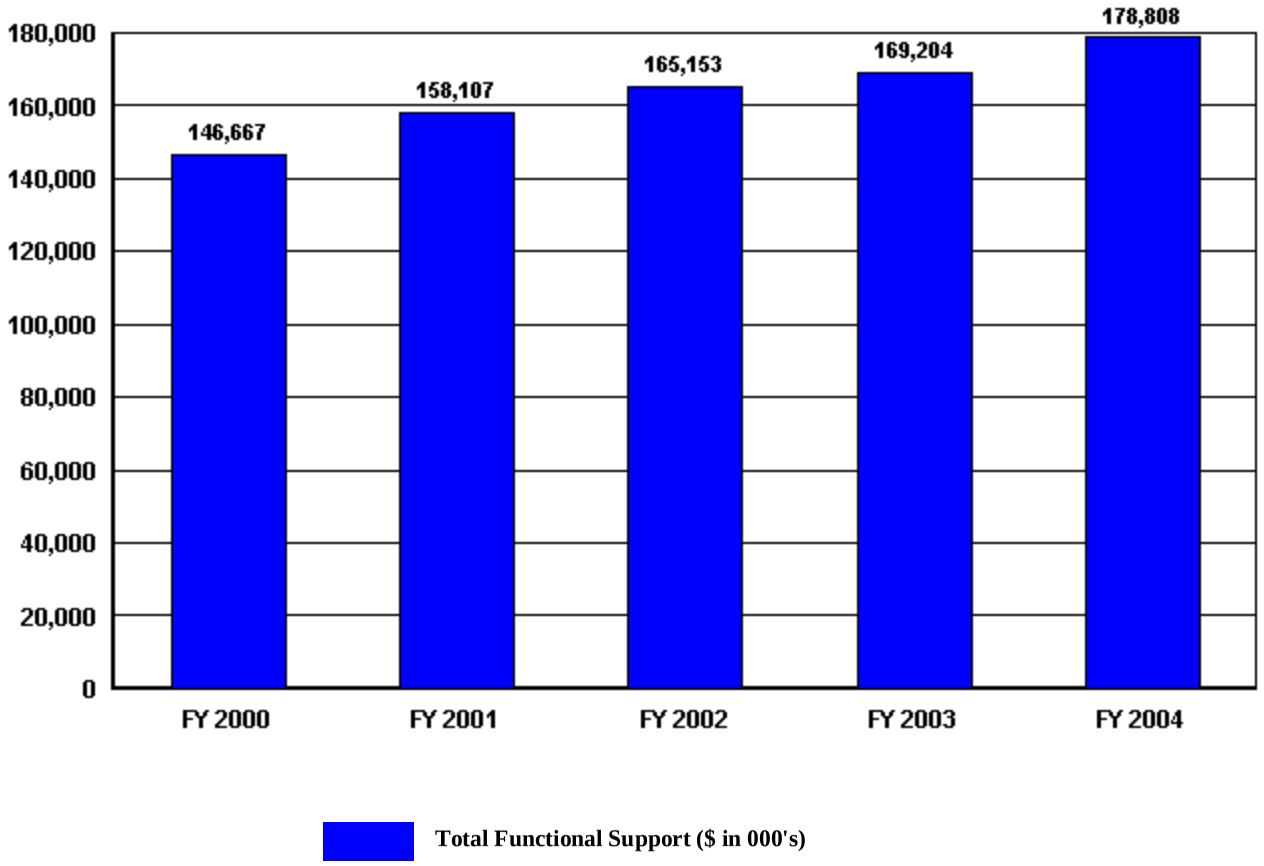
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

Trends in Total Support Cost by Functional Categories
Argonne National Lab/University of Chicago ($000)
FY 2004

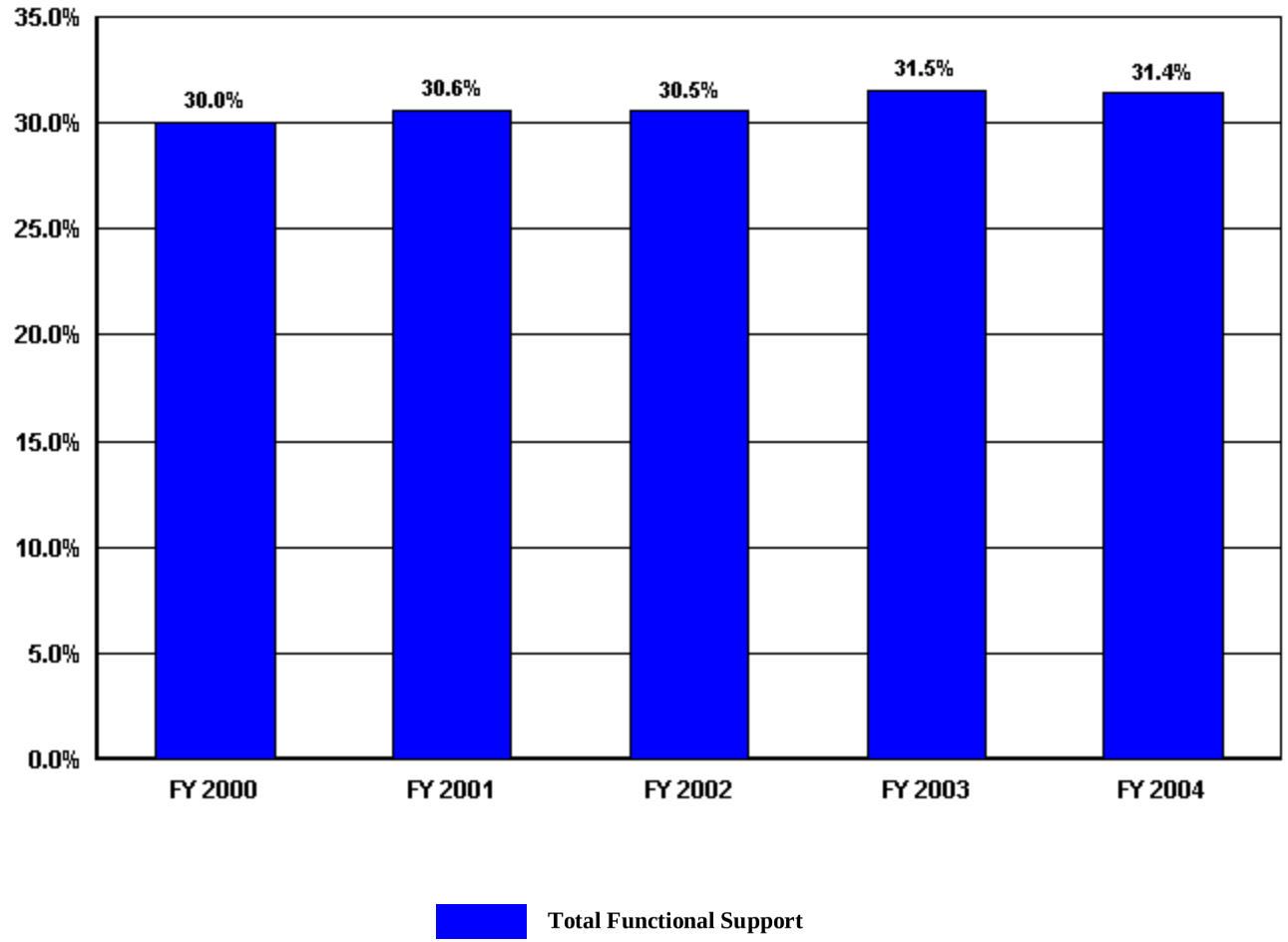
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	488,333	516,931	540,849	536,503	569,758	81,425	16.7%
Capital Construction	19,045	29,182	26,194	26,001	35,565	16,520	86.7%
Total Costs Less Construction	469,288	487,749	514,655	510,502	534,193	64,905	13.8%
Total Support Costs	**146,667**	**158,107**	**165,153**	**169,204**	**178,808**	**32,141**	**21.9%**
Mission Direct Operation	322,621	329,642	349,502	341,298	355,385	32,764	10.2%
Mission Direct Operation as % of Total Cost	**66.1%**	**63.8%**	**64.6%**	**63.6%**	**62.4%**		
Capital Construction as % of Total Cost	**3.9%**	**5.6%**	**4.8%**	**4.8%**	**6.2%**		
Total Support Cost as % of Total Cost	**30.0%**	**30.6%**	**30.5%**	**31.5%**	**31.4%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**30.0%**	**30.6%**	**30.5%**	**31.5%**	**31.4%**		
TOTAL SUPPORT COST	**146,667**	**158,107**	**165,153**	**169,204**	**178,808**	**32,141**	**21.9%**
TOTAL GENERAL SUPPORT as % of TOTAL	**10.7%**	**11.0%**	**11.0%**	**11.1%**	**11.4%**		
TOTAL GENERAL SUPPORT	**52,129**	**56,665**	**59,713**	**59,534**	**65,181**	**13,052**	**25.0%**
EXECUTIVE DIRECTION	5,170	5,857	8,024	9,716	11,716	6,546	126.6%
HUMAN RESOURCES	4,131	4,171	4,215	4,021	4,069	-62	-1.5%
CFO	5,043	4,982	5,043	4,448	4,005	-1,038	-20.6%
PROCUREMENT	4,191	4,107	4,216	4,333	4,507	316	7.5%
LEGAL	2,043	2,394	2,500	2,664	3,572	1,529	74.8%
CENTRAL ADMIN SERVICES	10,217	10,912	11,064	10,532	9,964	-253	-2.5%
PROGRAM/PROJECT CONTROL	787	797	696	975	1,894	1,107	140.7%
INFORMATION OUTREACH	4,233	4,102	3,963	4,157	3,969	-264	-6.2%
INFORMATION SERVICES	16,437	17,796	18,776	17,925	20,857	4,420	26.9%
OTHER	-123	1,547	1,216	763	628	751	610.6%
TOTAL MISSION SUPPORT as % of TOTAL	**15.5%**	**15.6%**	**15.5%**	**16.4%**	**15.6%**		
TOTAL MISSION SUPPORT	**75,606**	**80,550**	**84,060**	**87,825**	**89,027**	**13,421**	**17.8%**
ENVIRONMENTAL	4,532	5,120	7,462	7,353	7,828	3,296	72.7%
SAFETY AND HEALTH	17,313	16,702	13,365	14,951	15,900	-1,413	-8.2%
FACILITIES MANAGEMENT	7,322	8,233	9,942	11,087	8,957	1,635	22.3%
MAINTENANCE	16,627	16,769	17,481	18,599	20,631	4,004	24.1%
UTILITIES	16,838	18,495	19,070	19,913	20,181	3,343	19.9%
SAFEGUARDS AND SECURITY	7,224	9,079	10,566	9,630	9,908	2,684	37.2%
LOGISTICS SUPPORT	5,336	5,665	5,679	5,849	5,355	19	0.4%
QUALITY ASSURANCE	414	366	376	443	267	-147	-35.5%
LABORATORY/TECHNICAL SUPPORT	0	121	119	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**3.9%**	**4.0%**	**4.0%**	**4.1%**	**4.3%**		
TOTAL SITE SPECIFIC	**18,932**	**20,892**	**21,380**	**21,845**	**24,600**	**5,668**	**29.9%**
MANAGEMENT/INCENTIVE FEE	5,998	5,419	6,195	5,834	6,145	147	2.5%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	12,934	15,473	15,185	16,011	18,455	5,521	42.7%

US Department of Energy
Total Functional Support
Argonne National Lab/University of Chicago



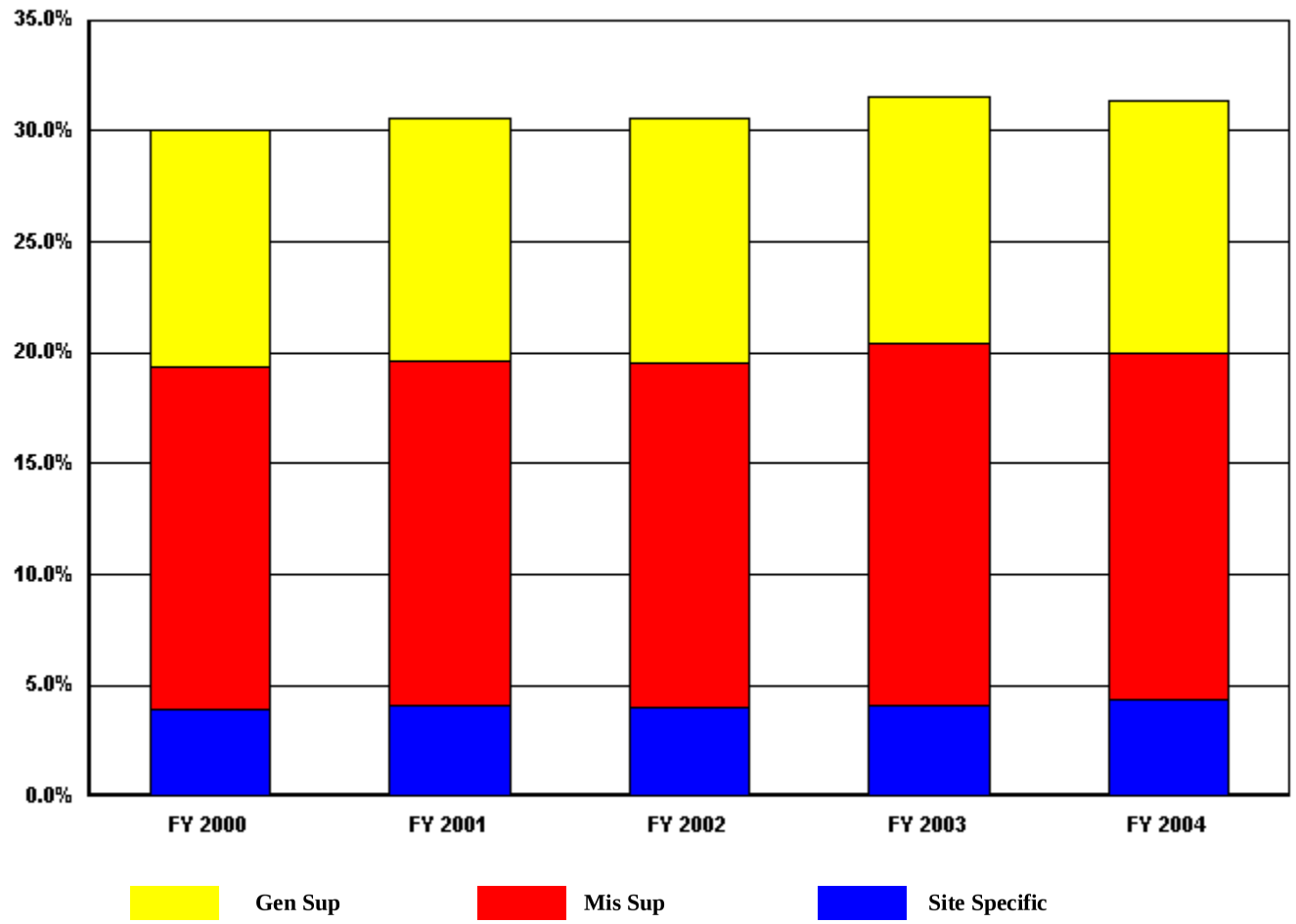
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	146,667	158,107	165,153	169,204	178,808

US Department of Energy
Total Functional Support as a % of Total Costs
Argonne National Lab/University of Chicago



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	30.0%	30.6%	30.5%	31.5%	31.4%

US Department of Energy
Percent of Support Category to Total
Argonne National Lab/University of Chicago



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	10.7%	11.0%	11.0%	11.1%	11.4%
Mis Sup	15.5%	15.6%	15.5%	16.4%	15.6%
Site Specific	3.9%	4.0%	4.0%	4.1%	4.3%

SITE PROFILE
Argonne National Lab/University of Chicago

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

Argonne National Laboratory is one of the U.S. Department of Energy's largest research centers. It 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 II Manhattan Project. It was at the Met Lab 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.

Today, the laboratory has about 3,800 employees, including about 1,200 scientists and engineers, of whom about 700 hold doctorate degrees. Argonne's annual operating budget of about $520 million supports upwards of 2,000 research projects, ranging from studies of the atomic nucleus to global climate change. 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 forest preserve about 25 miles southwest of Chicago's Loop. About 3,200 of Argonne's 3,800 employees work on the site's 1,500 wooded acres. The site also houses the U.S. Department of Energy's Chicago Operations Office. The Argonne-West site occupies approximately 900 acres about 50 miles west of Idaho Falls in the Snake River Valley. It is the home of most of Argonne's major nuclear reactor research facilities. About 600 of Argonne's employees work there.

Argonne research falls into five 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. Argonne's exciting, cutting-edge research brings value to society today by helping lay the foundation for tomorrow's technological breakthroughs.

• 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 university to

build and operate. They are used by scientists from Argonne, industry, academia, and other national laboratories, and often by scientists from other nations. 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.

• National Security has increased in significance in recent years for the nation and for Argonne research. Argonne capabilities developed over the years for other purposes are helping counter the threats of terrorism. These capabilities include expertise in the nuclear fuel cycle, biology, chemistry, and systems analysis and modeling. This research is helping develop highly sensitive instruments and technologies to detect chemical, biological and radioactive threats and identify their sources. Other research is helping to detect and deter possible weapons proliferation or actual attacks.

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. More people attend educational programs at Argonne than at any other DOE national laboratory.

Argonne is operated by the University of Chicago for the U.S. Department of Energy's Office of Science.

TRENDS

Functional support costs have averaged 30.8% of the total Laboratory budget for the period FY 2000 through FY 2004. General Support costs increased by 9.5% in FY 2004. This was due to increases in legal fees and costs associated with national security and computing and information services.

Mission Support Costs experienced an increase in FY 2004 as a result of increased Safety and Health activities plus increased Safeguards & Security related expenses associated with physical site protection and cyber security.

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 FY 2000 to $18.5M in FY 2004.

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 in an era of relatively flat R&D budgets.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

EXECUTIVE DIRECTION
The nearly $2,000K increase in Executive Direction is due to the addition of science advisors and establishment of a new Associate Laboratory Director for National Security.

LEGAL
The cost for litigation and patent prosecution by outside legal firms rose by $908K in FY 2004.

PROGRAM/PROJECT CONTROL
The $919K cost increase is associated with staffing the new Office of Project Management and continued development of a lab-wide earned value and project management system.

QUALITY ASSURANCE
The $176K reduction in Quality Assurance (QA) is due to elimination of several positions.

COST SAVINGS INITIATIVES

($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

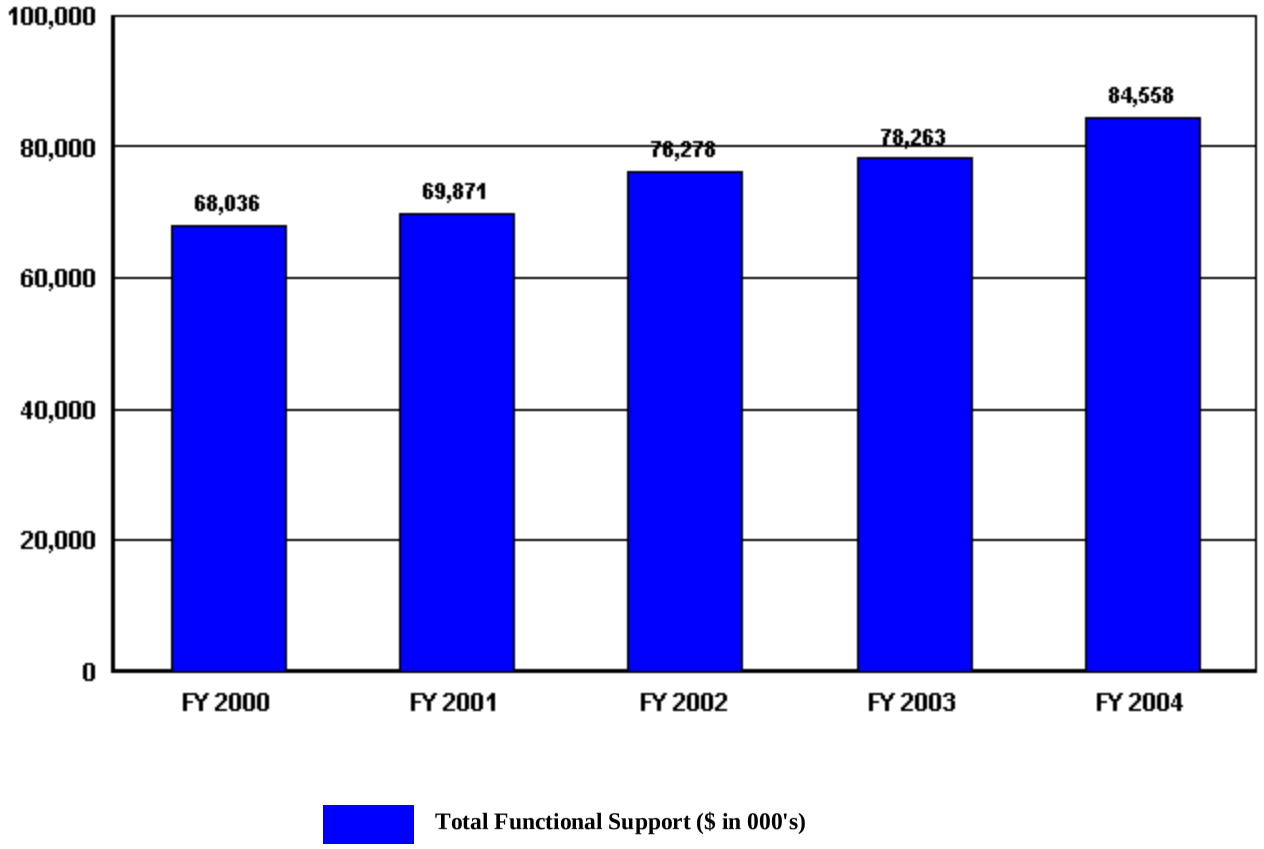
Subcontract Negotiation Savings	5,260	Argonne takes an aggressive approach in contract negotiations for subcontracts and purchase orders. This has resulted in significant cost savings/cost avoidance each year. Savings in FY 2004 totaled $5,260K.	
Fringe Benefit Savings	2,383	Argonne has taken numerous 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 FY 2004 is provided below: Argonne increased all medical plan participant's medical contribution which resulted in annual savings of $1,332K. Argonne increased the HMO prescription drug co-payment. This resulted in an annual savings of $279K. Argonne increased the PPO and Indemnity prescription drug co-payment resulting in annual savings of $312K. Argonne participated in 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. The annual membership fee of $28K will result in a savings of $460K annually. FY 2004 Savings $488,000 Investment $ 28,000 Net Savings $460,000	

Software License Savings	400	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 departments to purchase individual Microsoft software licenses and continues to provide annual savings of $400K.	

Trends in Total Support Cost by Functional Categories
Bettis Atomic Power Lab/Bechtel ($000)
FY 2004

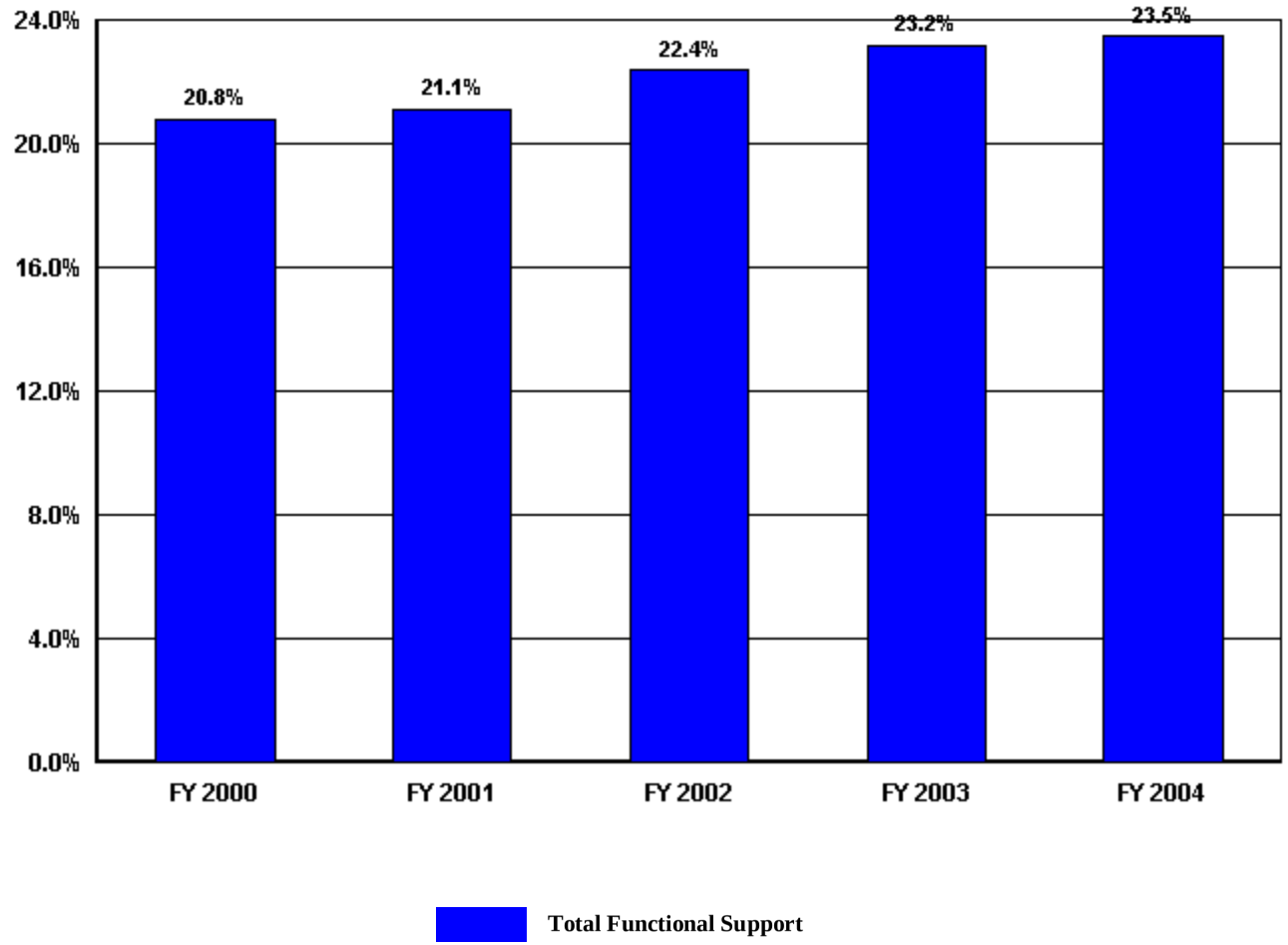
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	327,079	331,052	340,980	337,705	360,172	33,093	10.1%
Capital Construction	24,057	20,663	19,401	18,274	21,438	-2,619	-10.9%
Total Costs Less Construction	303,022	310,389	321,579	319,431	338,734	35,712	11.8%
Total Support Costs	**68,036**	**69,871**	**76,278**	**78,263**	**84,558**	**16,522**	**24.3%**
Mission Direct Operation	234,986	240,518	245,301	241,168	254,176	19,190	8.2%
Mission Direct Operation as % of Total Cost	**71.8%**	**72.7%**	**71.9%**	**71.4%**	**70.6%**		
Capital Construction as % of Total Cost	**7.4%**	**6.2%**	**5.7%**	**5.4%**	**6.0%**		
Total Support Cost as % of Total Cost	**20.8%**	**21.1%**	**22.4%**	**23.2%**	**23.5%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**20.8%**	**21.1%**	**22.4%**	**23.2%**	**23.5%**		
TOTAL SUPPORT COST	**68,036**	**69,871**	**76,278**	**78,263**	**84,558**	**16,522**	**24.3%**
TOTAL GENERAL SUPPORT as % of TOTAL	**6.9%**	**6.8%**	**7.3%**	**8.2%**	**7.8%**		
TOTAL GENERAL SUPPORT	**22,494**	**22,636**	**24,754**	**27,852**	**28,121**	**5,627**	**25.0%**
EXECUTIVE DIRECTION	3,002	3,193	3,206	3,330	3,487	485	16.2%
HUMAN RESOURCES	3,998	3,640	3,825	4,143	4,503	505	12.6%
CFO	1,892	2,233	2,236	2,785	2,881	989	52.3%
PROCUREMENT	1,850	2,100	2,178	2,012	2,262	412	22.3%
LEGAL	89	122	137	157	199	110	123.6%
CENTRAL ADMIN SERVICES	1,331	1,229	1,427	1,324	1,481	150	11.3%
PROGRAM/PROJECT CONTROL	262	444	500	559	644	382	145.8%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	10,070	9,675	11,245	13,542	12,664	2,594	25.8%
OTHER	0	0	0	0	0	0	0.0%
TOTAL MISSION SUPPORT as % of TOTAL	**12.5%**	**12.7%**	**13.7%**	**13.4%**	**14.2%**		
TOTAL MISSION SUPPORT	**40,793**	**41,902**	**46,557**	**45,173**	**51,097**	**10,304**	**25.3%**
ENVIRONMENTAL	5,174	5,535	6,141	5,815	6,219	1,045	20.2%
SAFETY AND HEALTH	11,661	11,994	12,825	14,277	16,855	5,194	44.5%
FACILITIES MANAGEMENT	3,081	3,227	4,319	2,282	2,336	-745	-24.2%
MAINTENANCE	6,847	5,757	5,949	6,859	9,066	2,219	32.4%
UTILITIES	2,232	2,499	2,854	2,846	2,739	507	22.7%
SAFEGUARDS AND SECURITY	5,290	6,020	6,554	6,769	7,482	2,192	41.4%
LOGISTICS SUPPORT	2,134	2,459	2,950	2,423	2,026	-108	-5.1%
QUALITY ASSURANCE	4,374	4,411	4,965	3,902	4,374	0	0.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**1.5%**	**1.6%**	**1.5%**	**1.6%**	**1.5%**		
TOTAL SITE SPECIFIC	**4,749**	**5,333**	**4,967**	**5,238**	**5,340**	**591**	**12.4%**
MANAGEMENT/INCENTIVE FEE	4,504	5,069	4,577	4,531	4,605	101	2.2%
TAXES	245	264	390	707	735	490	200.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Bettis Atomic Power Lab/Bechtel



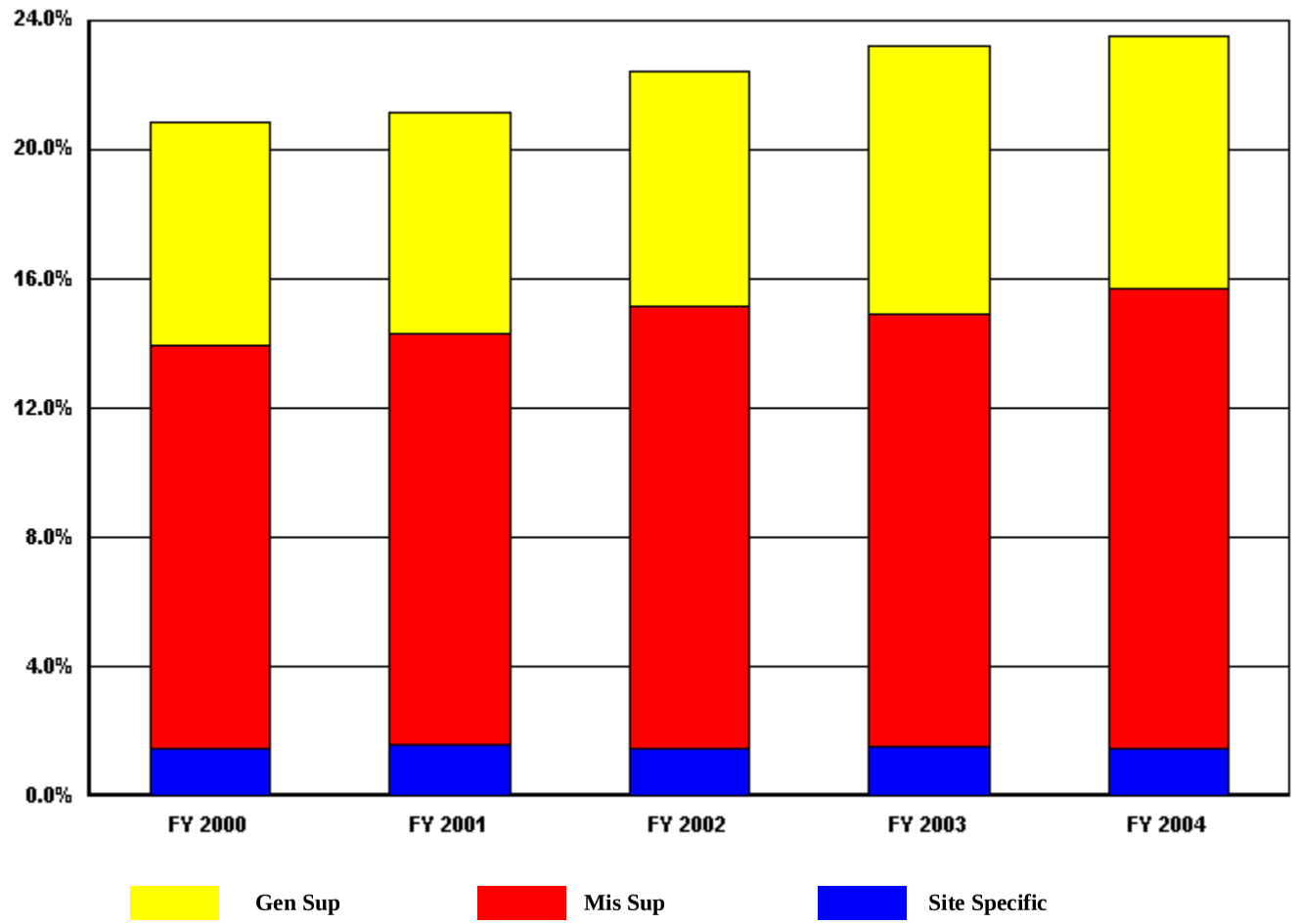
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	68,036	69,871	76,278	78,263	84,558

US Department of Energy
Total Functional Support as a % of Total Costs
Bettis Atomic Power Lab/Bechtel



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	20.8%	21.1%	22.4%	23.2%	23.5%

US Department of Energy
Percent of Support Category to Total
Bettis Atomic Power Lab/Bechtel



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	6.9%	6.8%	7.3%	8.2%	7.8%
Mis Sup	12.5%	12.7%	13.7%	13.4%	14.2%
Site Specific	1.5%	1.6%	1.5%	1.6%	1.5%

SITE PROFILE
Bettis Atomic Power Lab/Bechtel

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

Bettis Laboratory is a Research and Development (R&D) 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 future ships including the VIRGINIA class of submarines and the CVN 21 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.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

SAFETY AND HEALTH
Increased as a result of a mandatory EPA Corrective Measures Implementation Order.

COST SAVINGS INITIATIVES

($ in 000's)

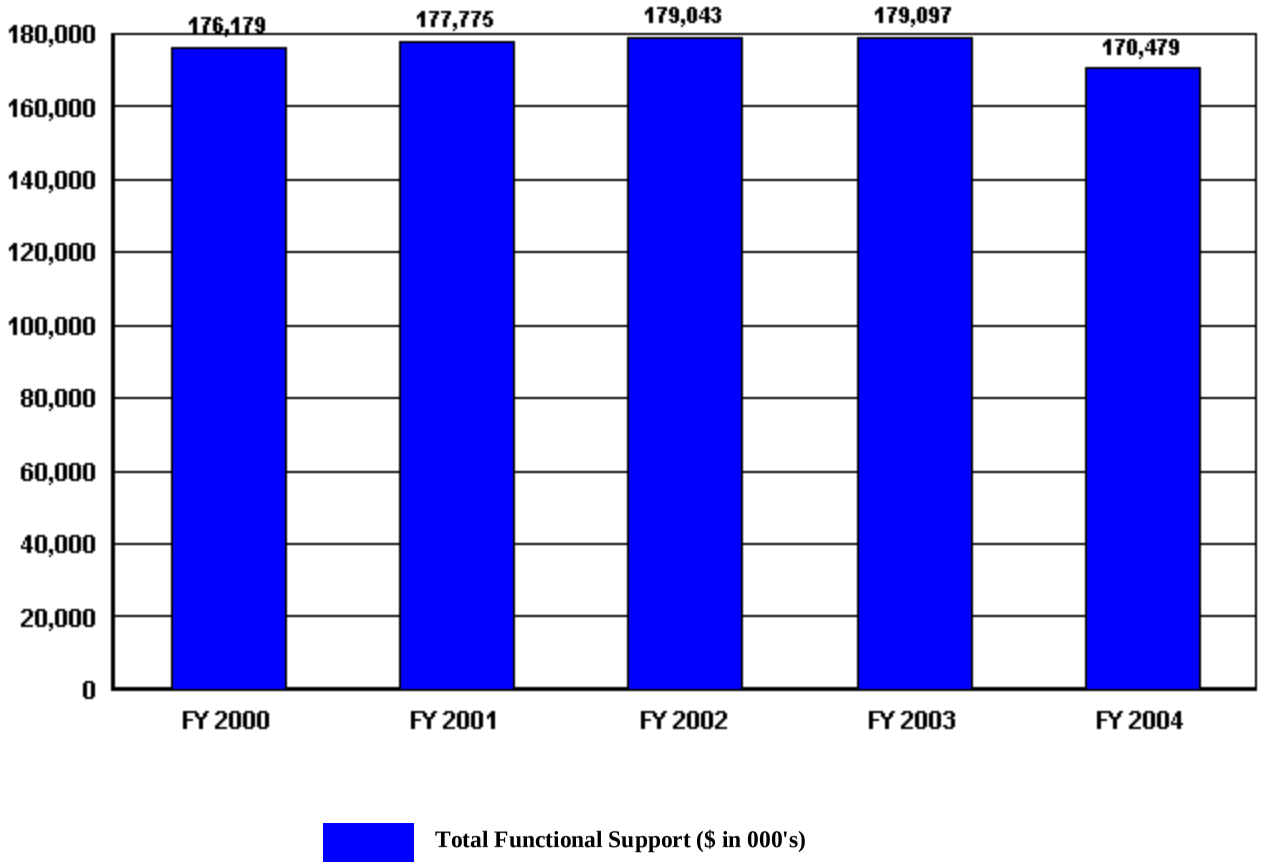
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Supply Chain Management	1,527	Bechtel Bettis, Inc. and Knolls Atomic Power Lab/Lockheed Martin have worked together to place joint contracts to optimize pricing and to reduce administrative effort for procurement of materials and services needed at all sites. These efforts have helped increase the buying power of the Naval Nuclear Propulsion Program while achieving a net savings. In FY04, the joint procurements resulted in a material savings of $1,527,000 for Bechtel Bettis, Inc.	

Deconstruction and Decontamination	400	Bechtel Bettis, Inc. placed a single contract for Deconstruction and Decontamination work being performed at the BBI Pittsburgh and Naval Reactors Facility in Idaho. In the past, these contracts have been solicited and awarded separately. The economies of scale of one supplier supporting both sites provided substantial savings to the Government of approximately $2.0M over the next 5 years, or $400,000 each year.	
Construction	269	Bechtel Bettis, Inc. established the General Construction Blanket contract in FY04 and awarded 27 tasks with this process. This streamlined process allows for competitive solicitation of construction effort with subsequent placement as a task on an existing contract, versus placement of a new contract each time. The estimated savings associated with this streamlined process is $269,000.	

Trends in Total Support Cost by Functional Categories
Brookhaven National Lab/Brookhaven Science Assoc. ($000)
FY 2004

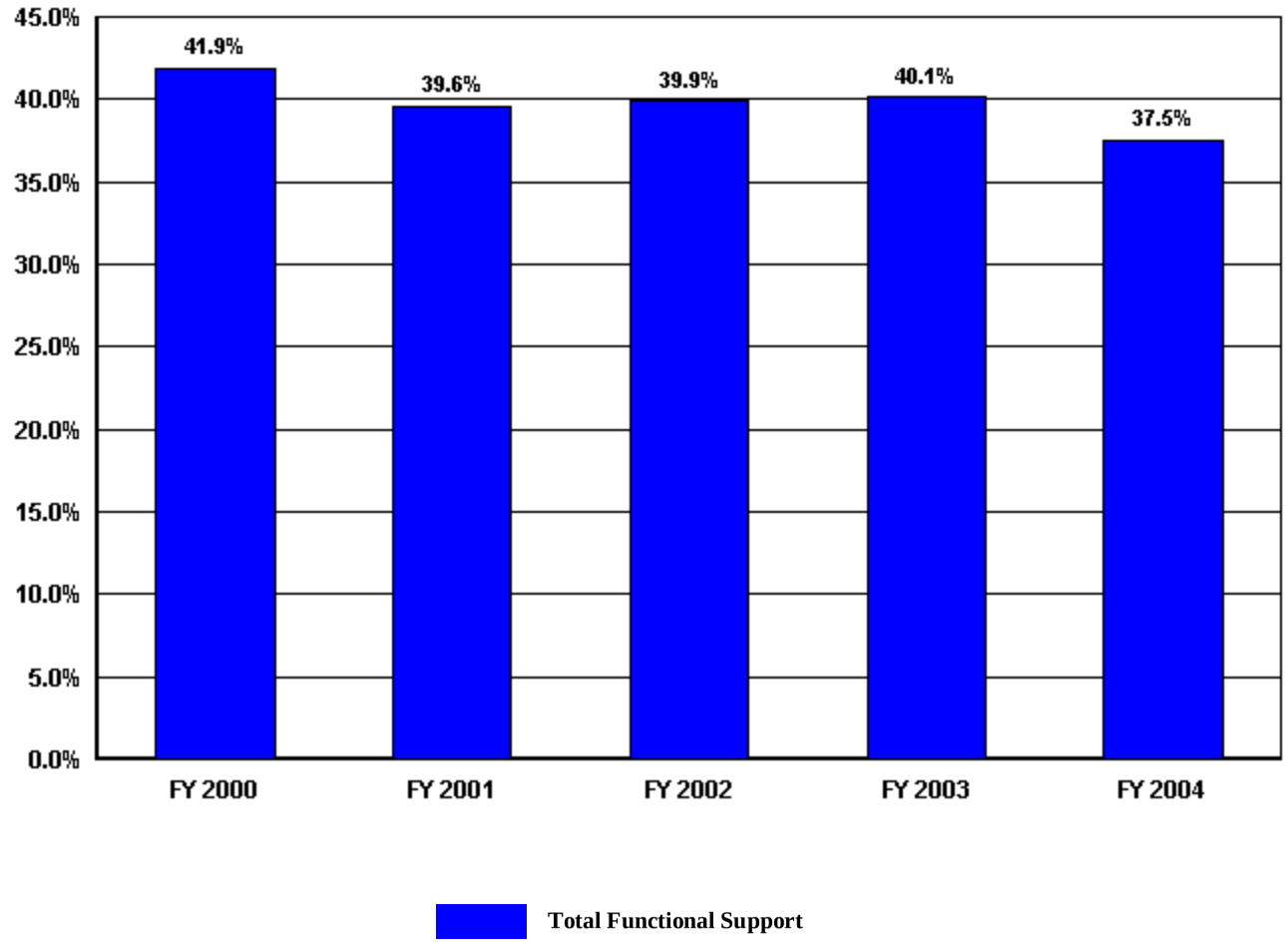
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	420,515	448,953	449,038	446,464	454,425	33,910	8.1%
Capital Construction	33,396	43,491	37,302	32,622	30,439	-2,957	-8.9%
Total Costs Less Construction	387,119	405,462	411,736	413,842	423,986	36,867	9.5%
Total Support Costs	**176,179**	**177,775**	**179,043**	**179,097**	**170,479**	**-5,700**	**-3.2%**
Mission Direct Operation	210,940	227,687	232,693	234,745	253,507	42,567	20.2%
Mission Direct Operation as % of Total Cost	**50.2%**	**50.7%**	**51.8%**	**52.6%**	**55.8%**		
Capital Construction as % of Total Cost	**7.9%**	**9.7%**	**8.3%**	**7.3%**	**6.7%**		
Total Support Cost as % of Total Cost	**41.9%**	**39.6%**	**39.9%**	**40.1%**	**37.5%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**41.9%**	**39.6%**	**39.9%**	**40.1%**	**37.5%**		
TOTAL SUPPORT COST	**176,179**	**177,775**	**179,043**	**179,097**	**170,479**	**-5,700**	**-3.2%**
TOTAL GENERAL SUPPORT as % of TOTAL	**15.5%**	**14.3%**	**14.6%**	**15.4%**	**11.9%**		
TOTAL GENERAL SUPPORT	**65,290**	**64,311**	**65,703**	**68,535**	**54,106**	**-11,184**	**-17.1%**
EXECUTIVE DIRECTION	7,383	7,428	7,386	7,665	7,725	342	4.6%
HUMAN RESOURCES	3,706	3,974	3,827	3,856	3,927	221	6.0%
CFO	2,564	2,560	2,262	2,187	2,390	-174	-6.8%
PROCUREMENT	1,911	1,343	1,573	1,592	2,087	176	9.2%
LEGAL	535	912	1,354	1,063	1,090	555	103.7%
CENTRAL ADMIN SERVICES	4,969	5,367	5,647	5,944	6,209	1,240	25.0%
PROGRAM/PROJECT CONTROL	19,241	19,884	19,557	20,283	2,571	-16,670	-86.6%
INFORMATION OUTREACH	3,387	3,593	3,724	4,397	5,139	1,752	51.7%
INFORMATION SERVICES	17,657	16,052	17,030	16,852	16,712	-945	-5.4%
OTHER	3,937	3,198	3,343	4,696	6,256	2,319	58.9%
TOTAL MISSION SUPPORT as % of TOTAL	**23.5%**	**22.7%**	**22.3%**	**21.9%**	**22.2%**		
TOTAL MISSION SUPPORT	**99,001**	**101,923**	**100,303**	**97,712**	**101,082**	**2,081**	**2.1%**
ENVIRONMENTAL	2,968	2,852	2,746	2,671	3,989	1,021	34.4%
SAFETY AND HEALTH	17,924	18,040	18,616	17,457	18,154	230	1.3%
FACILITIES MANAGEMENT	3,796	3,965	5,491	4,980	5,130	1,334	35.1%
MAINTENANCE	29,136	30,261	29,626	28,035	27,726	-1,410	-4.8%
UTILITIES	23,472	24,458	20,479	21,691	24,223	751	3.2%
SAFEGUARDS AND SECURITY	5,952	6,339	7,173	7,099	7,548	1,596	26.8%
LOGISTICS SUPPORT	3,218	3,233	3,220	3,190	3,304	86	2.7%
QUALITY ASSURANCE	298	485	620	731	739	441	148.0%
LABORATORY/TECHNICAL SUPPORT	12,237	12,290	12,332	11,858	10,269	-1,968	-16.1%
TOTAL SITE SPECIFIC as % of TOTAL	**2.8%**	**2.6%**	**2.9%**	**2.9%**	**3.4%**		
TOTAL SITE SPECIFIC	**11,888**	**11,541**	**13,037**	**12,850**	**15,291**	**3,403**	**28.6%**
MANAGEMENT/INCENTIVE FEE	6,791	6,428	6,869	6,719	6,908	117	1.7%
TAXES	890	907	884	0	2,089	1,199	134.7%
LDRD / PDRD / SDRD	4,207	4,206	5,284	6,131	6,294	2,087	49.6%

US Department of Energy
Total Functional Support
Brookhaven National Lab/Brookhaven Science Assoc.



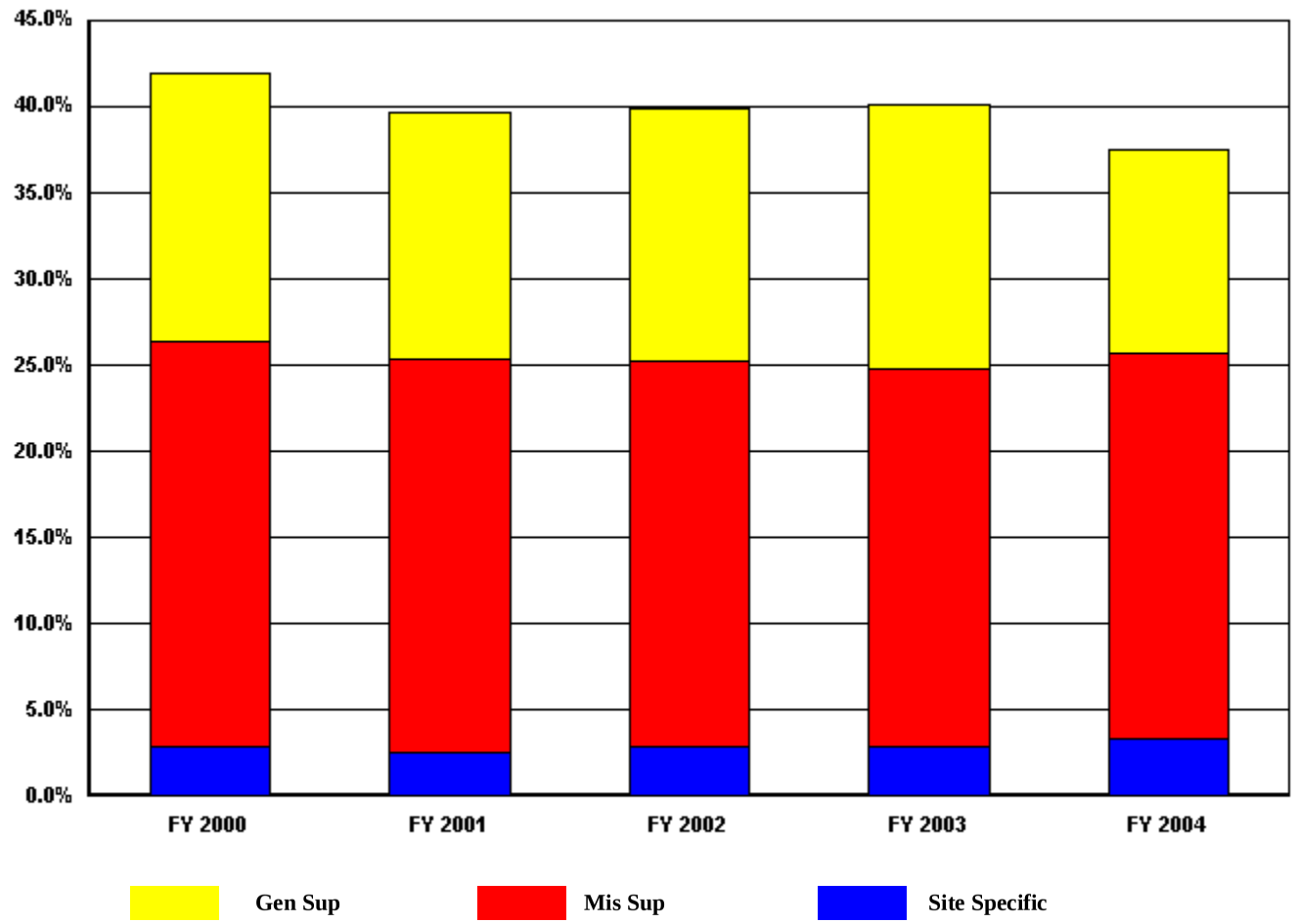
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	176,179	177,775	179,043	179,097	170,479

US Department of Energy
Total Functional Support as a % of Total Costs
Brookhaven National Lab/Brookhaven Science Assoc.



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	41.9%	39.6%	39.9%	40.1%	37.5%

US Department of Energy
Percent of Support Category to Total
Brookhaven National Lab/Brookhaven Science Assoc.



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	15.5%	14.3%	14.6%	15.4%	11.9%
Mis Sup	23.5%	22.7%	22.3%	21.9%	22.2%
Site Specific	2.8%	2.6%	2.9%	2.9%	3.4%

SITE PROFILE
Brookhaven National Lab/Brookhaven Science Assoc.

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

MISSION

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). Six 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 DOE's strategic mission, is to:

- Conceive, design, construct, and operate complex, "leading edge", user-oriented facilities in a safe and environmentally friendly 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 Therapy Facility

Scanning Transmission Electron Microscope
Transmission Electron Microscope
Positron Emission Tomography (PET)

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
NASA Space Radiation Laboratory (NSRL)
Center for Accelerator Physics
Computational Science Center
Center for Spectroscopy in Molecular Science
Environmental and Waste Technology Center
RIKEN BNL Research Center
Free Air Carbon Enrichment Facilities
Center for Functional Nanomaterials
National Nuclear Data Center

BNL is a 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 FY 2004, the Laboratory reported 2,700 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 FY 2004, the Laboratory received $60.0M from Work for Others (WFO), which includes $15.0M 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. A part time off-site housing coordinator assists visitors in finding accommodations in the local area. Residents may be housed for periods from one day to several years. Many of the apartment units are over 50 years old, and it is anticipated that future replacements may be possible 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 Office 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 Environmental Services and 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 364 buildings and 326 portable structures in use with a total area of 4.1 million square feet. Approximately 80% of BNL's building space is over 30 years old, with 33% 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 Environmental Safety & Health standards is extremely costly.

The large research facilities consume extraordinary amounts of electricity for their operation. Since this report includes the electric power to operate large research machines, a direct mission activity, with the traditional general use electric power, BNL's Mission Direct Costs are understated. In addition, the Laboratory's unit price is projected to increase approximately 60% beginning in the last quarter of FY 2005. 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.

In addition, BNL's reported Functional Costs also include Payment in lieu of Taxes (PILT) that the Chicago Operations Office handles on behalf of the Laboratory. This fiscal year, DOE paid $1,031,200 in October 2003 for years 2001/2002 and $1,056,939 in September 2004 for years 2003/2004.

TRENDS

BNL's support costs reflect 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 Lab wide 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.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

PROCUREMENT
The Procurement Activity increased by $495K. This increase was caused by a change in the organizational burden methodology as noted above, the full year effect of filling several open requisitions as well as Environmental Restoration Divison's (ERD) need for additional direct procurement services.

PROGRAM/PROJECT CONTROL
The Program, Project Planning & Control Activity decreased by $17,712K. As noted above, organizational burdens are classified under the same category as the labor is classified. The large decrease in this area is partially offset by ERD's use of outside subcontracts for project planning.

OTHER
The following FY 2004 costs are included as OTHER:
Laboratory Housing (net) $5K; Year End Variance and Misc ($94K); Legal Settlements $581K; Post Docs, Goldhaber Fellows $2,477K; Program Development $3,287K; Total = $6,256K

ENVIRONMENTAL
The Environmental category increased by $1,318K. Part of the increase was related to the change in the organizational methodology as noted above; however, the primary increase relates to the change in the treatment of Waste Management costs. In FY03, all of the waste management costs were considered Mission Direct. In refining our process, we reclassified those waste management expenses related to Mission Direct.

TAXES
The Chicago office paid the PILT payment for 2001/2002 in the amount of $1,031,200 in October 2003 and the PILT payment for 2003/2004 in the amount of $1,056,939 in September 2004.

COST SAVINGS INITIATIVES
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

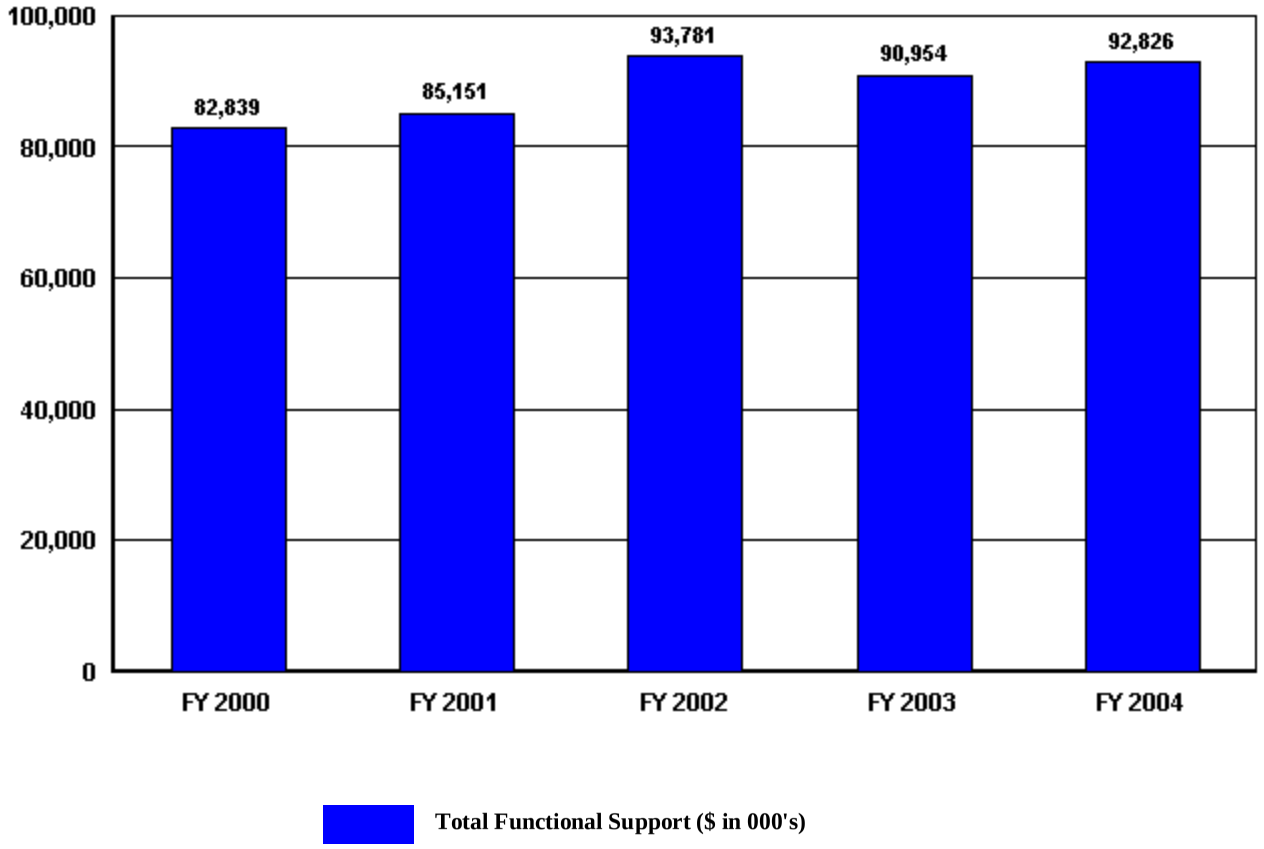
Utility Savings	14,391	As stated in the Functional Cost Profile, over the years, BNL has benefited from an agreement between the New York Power Authority (NYPA) and the local electrical utility. As a result, the following energy related cost savings were realized: NYPA Load Curtailment Program saved $1.1M. Long Island Power Authority (LIPA) Load Curtailment Program saved $25K. Fuel oil purchasing strategy (i.e., time purchases) saved $62K. Fuel oil pre-purchase savings for FY05 amounted to $44K. NYPA Power Contract Savings (compared to LIPA) was $13.7M.	
Waste Management Savings	125	The Waste Management Division saved over $125K in waste disposal handling costs by changing the way wastes were classified, handled and stored.	
Legal Office Savings	185	The Legal Office placed a strong emphasis on utilizing Alternate Dispute Resolution to reduce the costs associated with litigation. During FY 2004, three cases were settled for $115K. If the Legal Office were forced to fully litigate these cases, it could have cost the Lab at least $300K for outside counsel (assuming that the Lab would have won on the ultimate question of liability).	

Business Systems Division Savings	50	Additions and changes to the Business Systems Division (BSD) programs helped to avoid the addition of at least 4.2 FTE's, as well as travel and off-site training costs throughout the Laboratory. Improvements to existing financial modules in 2004 resulted in considerable savings in time, effort and cost for many departments. In addition, by providing information regarding the Lab's PeopleSoft e-Compensation module to another DOE-funded lab, the other lab was able to save six person-months of design, code, and testing time. The value of this cost avoidance is ~$50K, plus the value of their managers' time that was saved.	
Support Organization Savings	70	Many other efforts were made to reduce costs within the support organizations. There was an overall reduction of 53 FTE's. Some departments reduced space costs by consolidating operations and, where possible, used existing space, thus avoiding construction costs. Certain reports were placed on a secure website eliminating copy services and distribution costs. There was a savings of ~$70K due to the delay in filling several positions and the replacement of some positions at a lower salary. Many other cost savings that were undertaken during FY 2004 will result in additional savings in FY 2005 and beyond.	

Trends in Total Support Cost by Functional Categories
Fermi National Accelerator Lab/University Research ($000)
FY 2004

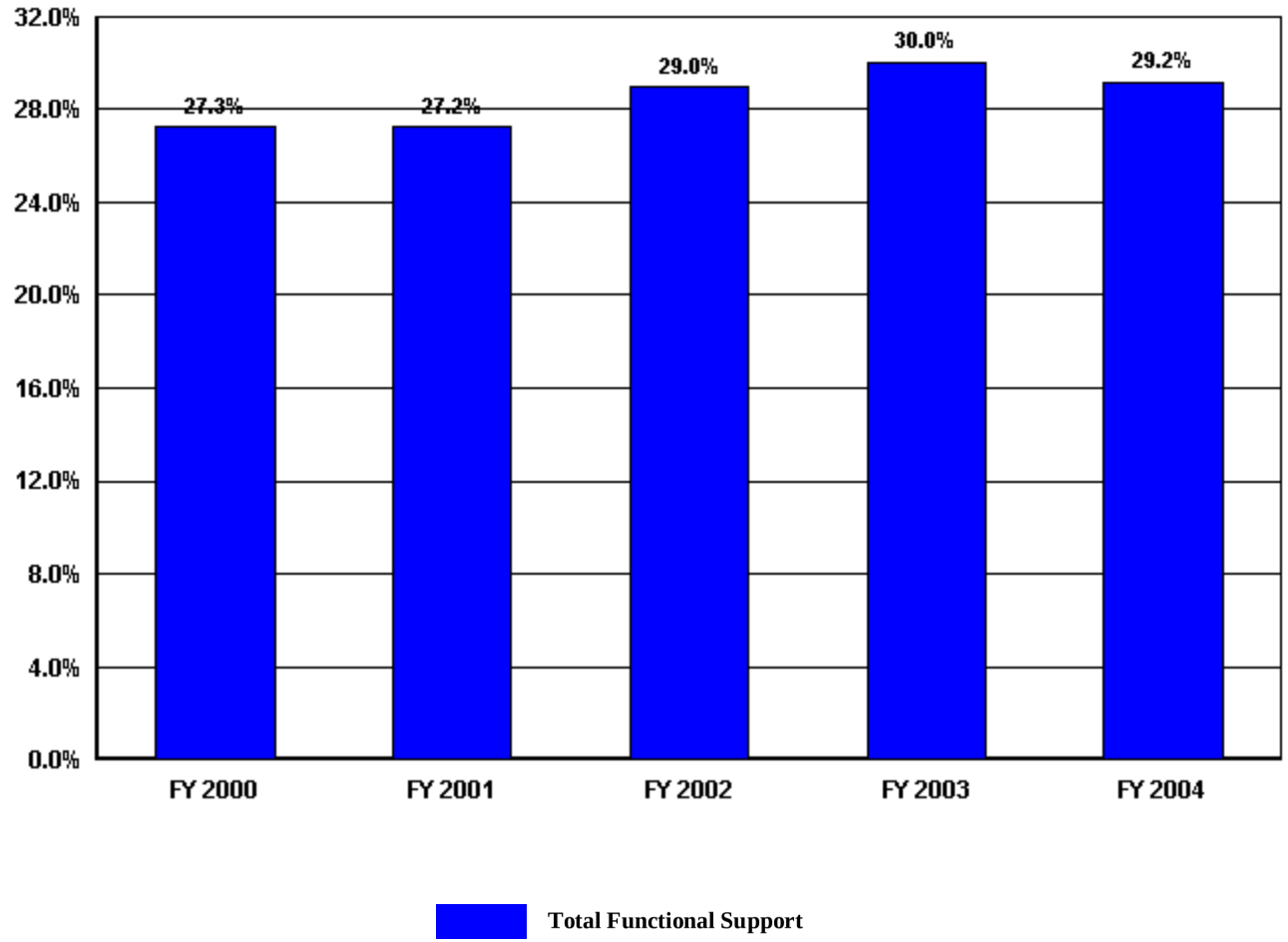
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	303,996	312,709	323,866	302,734	318,041	14,045	4.6%
Capital Construction	83,746	79,669	69,658	54,529	59,326	-24,420	-29.2%
Total Costs Less Construction	220,250	233,040	254,208	248,205	258,715	38,465	17.5%
Total Support Costs	**82,839**	**85,151**	**93,781**	**90,954**	**92,826**	**9,987**	**12.1%**
Mission Direct Operation	137,411	147,889	160,427	157,251	165,889	28,478	20.7%
Mission Direct Operation as % of Total Cost	**45.2%**	**47.3%**	**49.5%**	**51.9%**	**52.2%**		
Capital Construction as % of Total Cost	**27.5%**	**25.5%**	**21.5%**	**18.0%**	**18.7%**		
Total Support Cost as % of Total Cost	**27.3%**	**27.2%**	**29.0%**	**30.0%**	**29.2%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**27.3%**	**27.2%**	**29.0%**	**30.0%**	**29.2%**		
TOTAL SUPPORT COST	**82,839**	**85,151**	**93,781**	**90,954**	**92,826**	**9,987**	**12.1%**
TOTAL GENERAL SUPPORT as % of TOTAL	**8.4%**	**8.5%**	**9.3%**	**9.1%**	**9.5%**		
TOTAL GENERAL SUPPORT	**25,466**	**26,675**	**30,058**	**27,651**	**30,181**	**4,715**	**18.5%**
EXECUTIVE DIRECTION	4,547	4,668	5,441	4,825	4,969	422	9.3%
HUMAN RESOURCES	2,589	2,880	3,202	3,484	3,468	879	34.0%
CFO	1,577	1,613	1,725	2,058	2,169	592	37.5%
PROCUREMENT	1,551	1,583	1,788	1,738	1,824	273	17.6%
LEGAL	418	451	1,080	1,994	2,175	1,757	420.3%
CENTRAL ADMIN SERVICES	1,938	2,090	2,455	1,734	1,923	-15	-0.8%
PROGRAM/PROJECT CONTROL	766	641	351	301	288	-478	-62.4%
INFORMATION OUTREACH	1,601	1,723	1,928	2,449	2,743	1,142	71.3%
INFORMATION SERVICES	11,164	10,991	12,023	9,051	10,603	-561	-5.0%
OTHER	-685	35	65	17	19	704	102.8%
TOTAL MISSION SUPPORT as % of TOTAL	**17.9%**	**17.8%**	**18.8%**	**19.9%**	**18.6%**		
TOTAL MISSION SUPPORT	**54,290**	**55,541**	**60,743**	**60,172**	**59,030**	**4,740**	**8.7%**
ENVIRONMENTAL	2,464	2,137	1,869	1,466	1,265	-1,199	-48.7%
SAFETY AND HEALTH	8,532	8,726	8,951	9,341	10,080	1,548	18.1%
FACILITIES MANAGEMENT	1,735	1,466	2,247	2,275	2,706	971	56.0%
MAINTENANCE	16,825	17,063	18,246	18,319	19,517	2,692	16.0%
UTILITIES	15,673	15,915	17,517	17,196	16,078	405	2.6%
SAFEGUARDS AND SECURITY	1,750	2,420	2,712	2,835	2,984	1,234	70.5%
LOGISTICS SUPPORT	4,434	4,518	4,629	4,657	4,126	-308	-6.9%
QUALITY ASSURANCE	0	0	0	41	17	17	100.0%
LABORATORY/TECHNICAL SUPPORT	2,877	3,296	4,572	4,042	2,257	-620	-21.6%
TOTAL SITE SPECIFIC as % of TOTAL	**1.0%**	**0.9%**	**0.9%**	**1.0%**	**1.1%**		
TOTAL SITE SPECIFIC	**3,083**	**2,935**	**2,980**	**3,131**	**3,615**	**532**	**17.3%**
MANAGEMENT/INCENTIVE FEE	3,083	2,935	2,980	3,131	3,615	532	17.3%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Fermi National Accelerator Lab/University Research



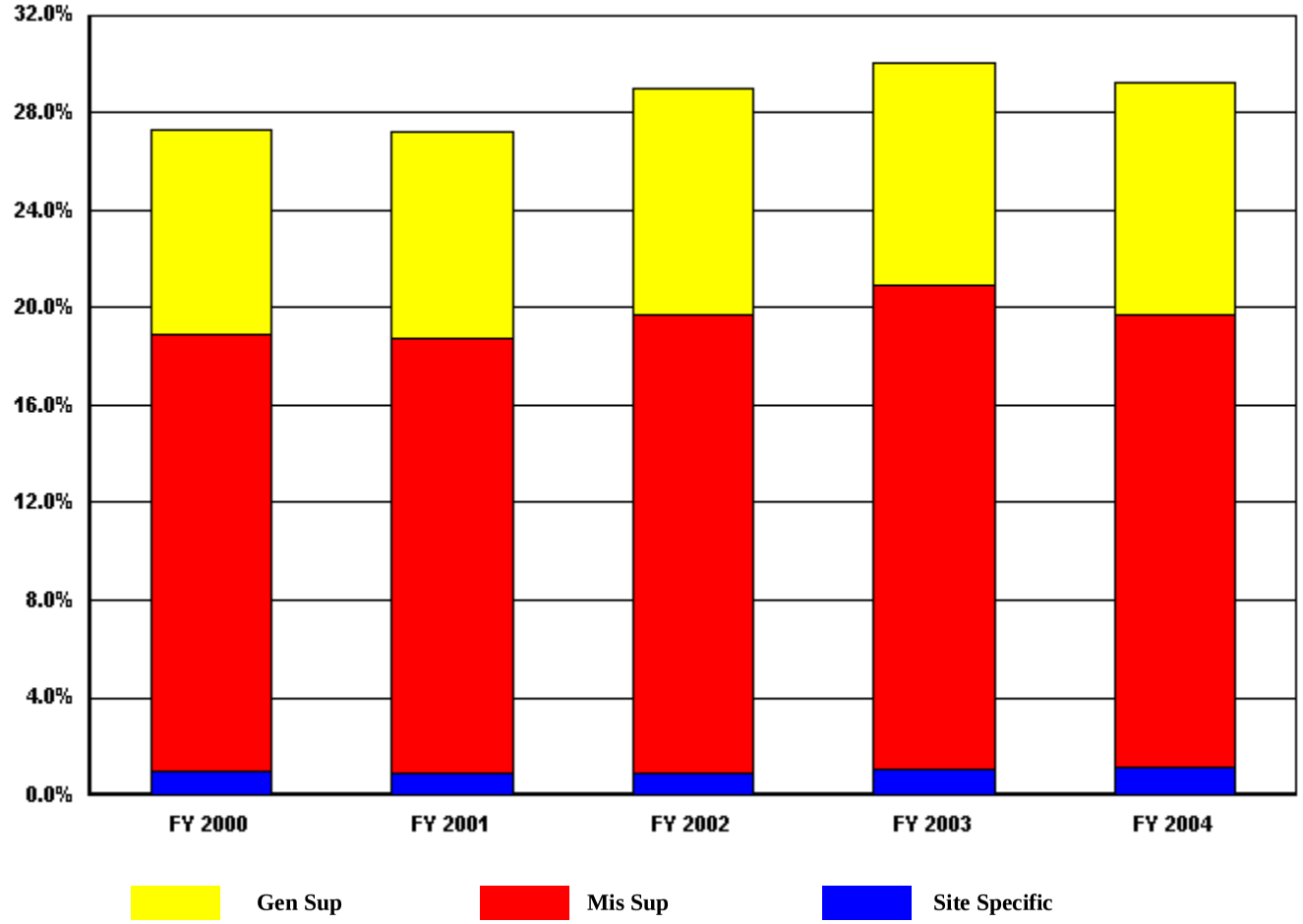
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	82,839	85,151	93,781	90,954	92,826

US Department of Energy
Total Functional Support as a % of Total Costs
Fermi National Accelerator Lab/University Research



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	27.3%	27.2%	29.0%	30.0%	29.2%

US Department of Energy
Percent of Support Category to Total
Fermi National Accelerator Lab/University Research



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	8.4%	8.5%	9.3%	9.1%	9.5%
Mis Sup	17.9%	17.8%	18.8%	19.9%	18.6%
Site Specific	1.0%	0.9%	0.9%	1.0%	1.1%

SITE PROFILE
Fermi National Accelerator Lab/University Research

SITE OVERVIEW AND CHARACTERISTIC

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 FY 2000 to FY 2004:

   General Support costs are up 18.5% over five years, less than the rate of wage increases in that period. (General Support costs are primarily labor.) Mission Support costs have held steady for the past three years at approximately $60M. Overall support costs have fluctuated commensurate with site costs, within a rather small dollar range (11%) of $83M to $93M in the past five years.

2. Trend in Functional Support Costs as a percentage of Total Site Costs from FY 2000 to FY 2004:

   Overall support costs have been 29-30% of total site costs for the past three years, well within the historical range for the Lab of 27% to 31% since 1995. The lower rate for FY 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 — 2004 is due to increased power costs from increased "up-time" of the accelerator and increases in legal and facilities management costs.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

QUALITY ASSURANCE
In FY 2004, this category decreased by 60% or $24K, due to reduction in scope of work on the self-assessment program and higher costs in FY 2003 for training on new QA software.

LABORATORY/TECHNICAL SUPPORT
This category decreased by $1.8M from FY 2003 to FY 2004. Based upon the recommendation of the FMSIC Peer Review team in 2004, "development and test" costs were reclassified as Mission Direct in 2004.

COST SAVINGS INITIATIVES

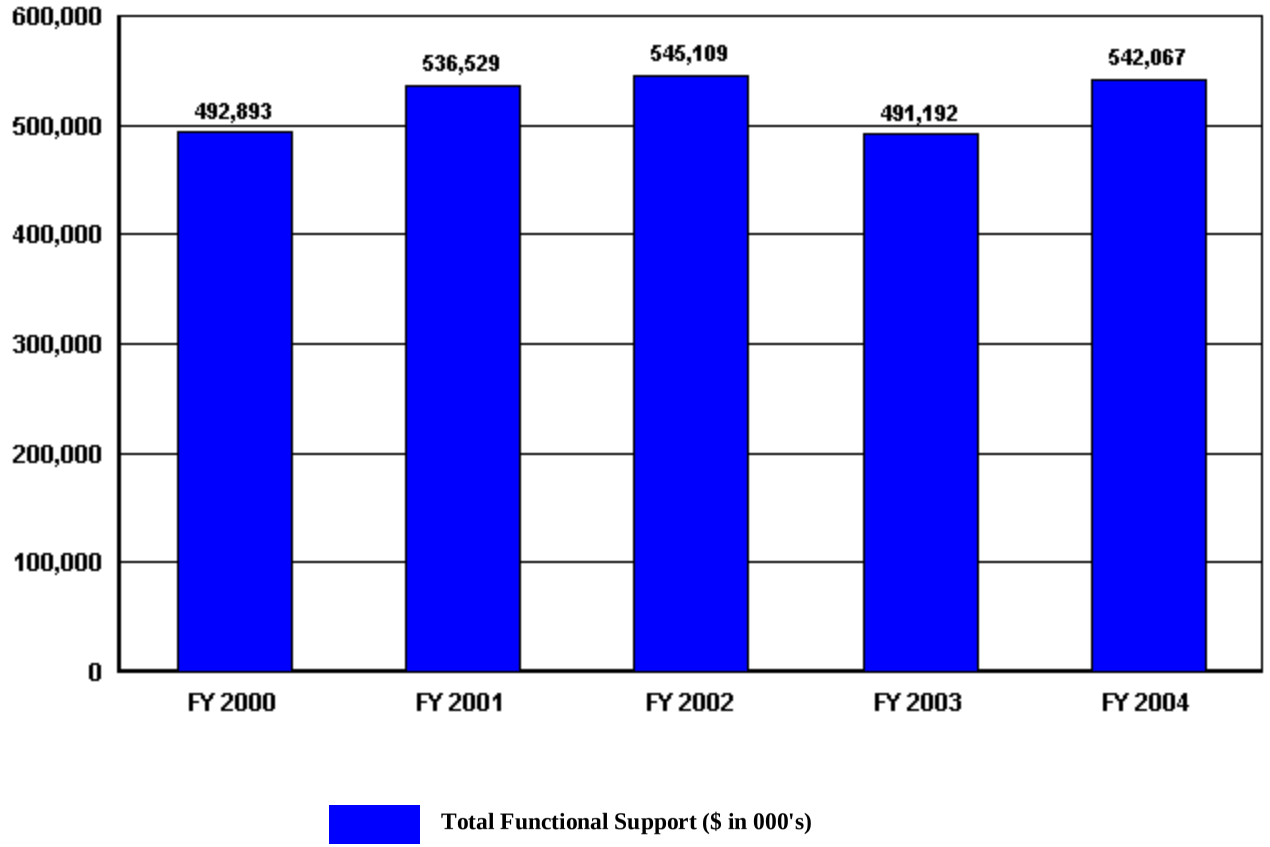
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

Trends in Total Support Cost by Functional Categories
Hanford/Fluor Daniel, Bechtel & CH2M Hill ($000)
FY 2004

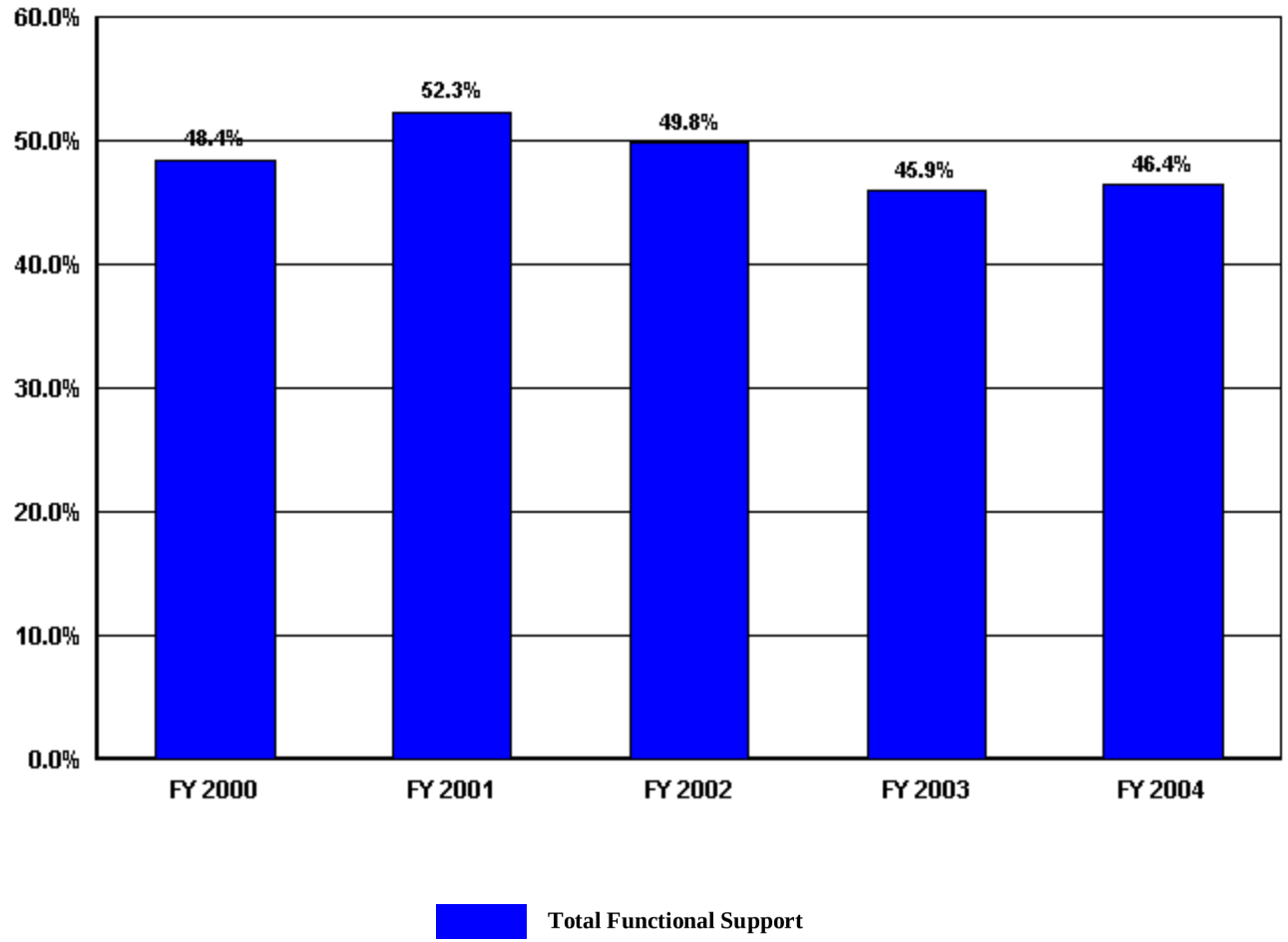
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	1,018,608	1,026,383	1,094,351	1,069,009	1,167,697	149,089	14.6%
Capital Construction	73,000	73,694	58,732	56,468	58,847	-14,153	-19.4%
Total Costs Less Construction	945,608	952,689	1,035,619	1,012,541	1,108,850	163,242	17.3%
Total Support Costs	**492,893**	**536,529**	**545,109**	**491,192**	**542,067**	**49,174**	**10.0%**
Mission Direct Operation	452,715	416,160	490,510	521,349	566,783	114,068	25.2%
Mission Direct Operation as % of Total Cost	**44.4%**	**40.5%**	**44.8%**	**48.8%**	**48.5%**		
Capital Construction as % of Total Cost	**7.2%**	**7.2%**	**5.4%**	**5.3%**	**5.0%**		
Total Support Cost as % of Total Cost	**48.4%**	**52.3%**	**49.8%**	**45.9%**	**46.4%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**48.4%**	**52.3%**	**49.8%**	**45.9%**	**46.4%**		
TOTAL SUPPORT COST	**492,893**	**536,529**	**545,109**	**491,192**	**542,067**	**49,174**	**10.0%**
TOTAL GENERAL SUPPORT as % of TOTAL	**13.3%**	**13.4%**	**12.4%**	**12.1%**	**11.6%**		
TOTAL GENERAL SUPPORT	**135,810**	**137,516**	**135,448**	**129,237**	**135,314**	**-496**	**-0.4%**
EXECUTIVE DIRECTION	8,928	9,270	8,855	8,275	6,793	-2,135	-23.9%
HUMAN RESOURCES	16,020	15,790	14,574	14,630	17,329	1,309	8.2%
CFO	6,535	10,462	9,260	8,271	8,880	2,345	35.9%
PROCUREMENT	10,350	11,112	9,967	10,633	10,559	209	2.0%
LEGAL	3,992	3,647	4,866	4,780	4,227	235	5.9%
CENTRAL ADMIN SERVICES	10,327	10,407	10,689	10,001	10,290	-37	-0.4%
PROGRAM/PROJECT CONTROL	30,329	26,434	27,840	25,810	27,604	-2,725	-9.0%
INFORMATION OUTREACH	6,255	4,825	4,904	4,228	3,804	-2,451	-39.2%
INFORMATION SERVICES	43,016	43,614	40,563	40,913	41,826	-1,190	-2.8%
OTHER	58	1,955	3,930	1,696	4,002	3,944	6,800.0%
TOTAL MISSION SUPPORT as % of TOTAL	**28.8%**	**32.0%**	**30.5%**	**30.2%**	**30.1%**		
TOTAL MISSION SUPPORT	**293,671**	**328,115**	**333,728**	**323,217**	**350,948**	**57,277**	**19.5%**
ENVIRONMENTAL	26,194	31,417	23,906	21,693	25,868	-326	-1.2%
SAFETY AND HEALTH	70,070	70,632	75,905	73,126	77,562	7,492	10.7%
FACILITIES MANAGEMENT	43,702	44,127	42,673	40,183	40,257	-3,445	-7.9%
MAINTENANCE	67,260	83,920	90,036	84,682	81,221	13,961	20.8%
UTILITIES	9,632	10,488	10,133	10,869	10,120	488	5.1%
SAFEGUARDS AND SECURITY	26,941	28,311	31,750	33,980	41,198	14,257	52.9%
LOGISTICS SUPPORT	19,041	20,513	19,117	18,383	17,445	-1,596	-8.4%
QUALITY ASSURANCE	7,473	7,772	9,279	8,359	8,343	870	11.6%
LABORATORY/TECHNICAL SUPPORT	23,358	30,935	30,929	31,942	48,934	25,576	109.5%
TOTAL SITE SPECIFIC as % of TOTAL	**6.2%**	**6.9%**	**6.9%**	**3.6%**	**4.8%**		
TOTAL SITE SPECIFIC	**63,412**	**70,898**	**75,933**	**38,738**	**55,805**	**-7,607**	**-12.0%**
MANAGEMENT/INCENTIVE FEE	61,683	59,262	63,746	27,384	46,246	-15,437	-25.0%
TAXES	1,729	11,636	12,187	11,354	9,559	7,830	452.9%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Hanford/Fluor Daniel, Bechtel & CH2M Hill



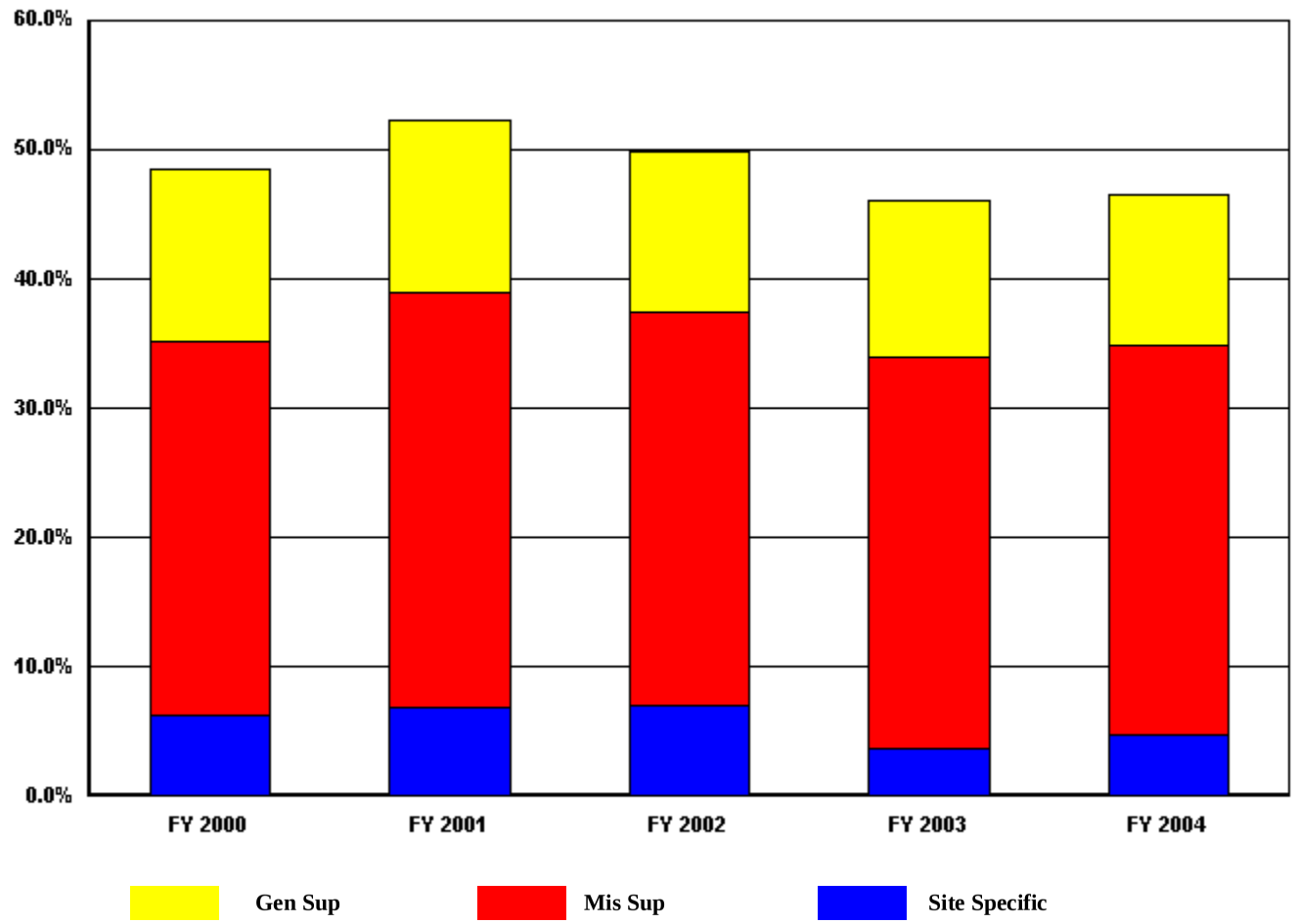
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	492,893	536,529	545,109	491,192	542,067

US Department of Energy
Total Functional Support as a % of Total Costs
Hanford/Fluor Daniel, Bechtel & CH2M Hill



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	48.4%	52.3%	49.8%	45.9%	46.4%

US Department of Energy
Percent of Support Category to Total
Hanford/Fluor Daniel, Bechtel & CH2M Hill



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	13.3%	13.4%	12.4%	12.1%	11.6%
Mis Sup	28.8%	32.0%	30.5%	30.2%	30.1%
Site Specific	6.2%	6.9%	6.9%	3.6%	4.8%

SITE PROFILE
Hanford/Fluor Daniel, Bechtel & CH2M Hill

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 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.

Hanford receives its funding primarily from Environmental Management (EM). The annual operating budget exceeds one billion dollars. In FY 2004, 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.

The site continues to focus on its objectives of restoring the River Corridor and transitioning the Plateau. 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.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

OTHER
The increase ($2,306K) is largely due to a one-time payment for Home Office general & administrative costs for one Hanford contractor.

SAFEGUARDS AND SECURITY
This increase ($7,218K) reflects additional cost for enhanced security efforts on and around the Hanford site.

LABORATORY/TECHNICAL SUPPORT
The apparent increase ($16,992K) in this category is a change in functional categories for the 222-S laboratory. In 2003, the 222-S lab was categorized in various support and mission categories. In 2004, the entire 222-S laboratory is categorized in laboratory/technical support. The change was an overall wash, without significant increase or decrease between years.

MANAGEMENT/INCENTIVE FEE
FY 2003 fee had been substantially reduced to better match fee recognition to the period in which fee was planned to be earned. The FY 2004 fee increase ($18,862K) reflects the new fee profile as negotiated during FY 2004.

COST SAVINGS INITIATIVES

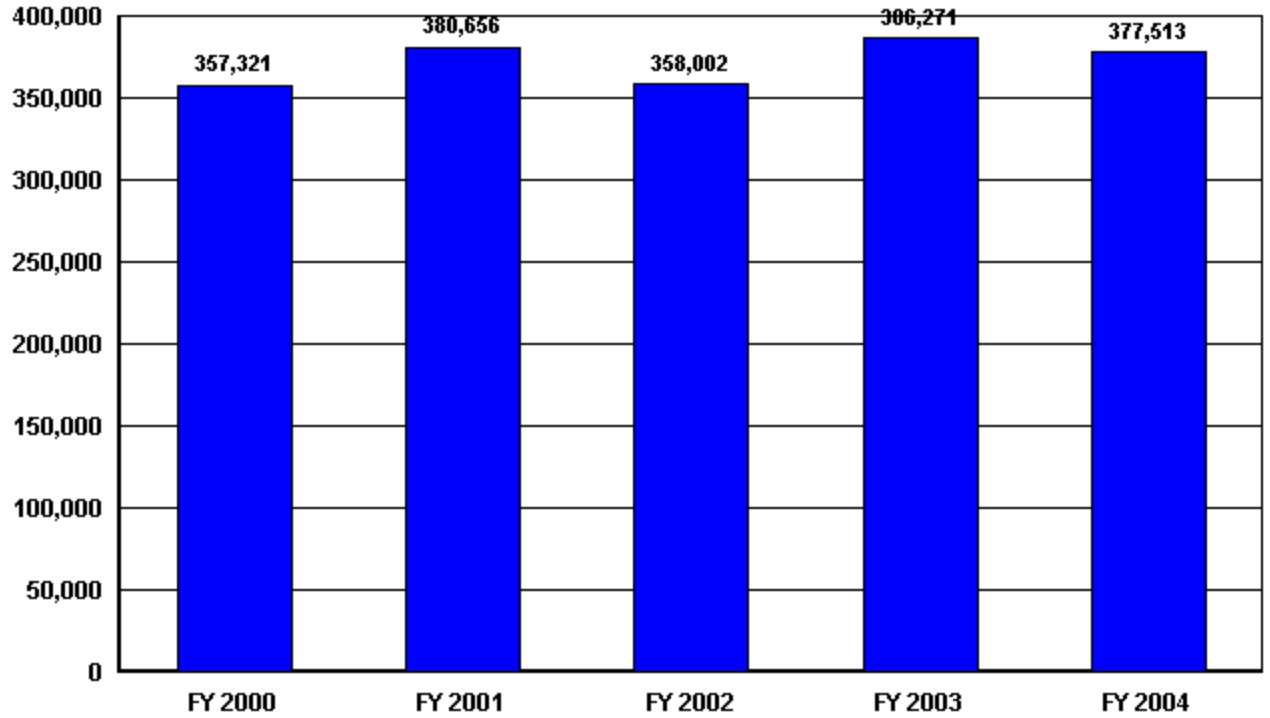
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

Trends in Total Support Cost by Functional Categories
Idaho Eng & Envir Lab/Bechtel BWXT Idaho ($000)
FY 2004

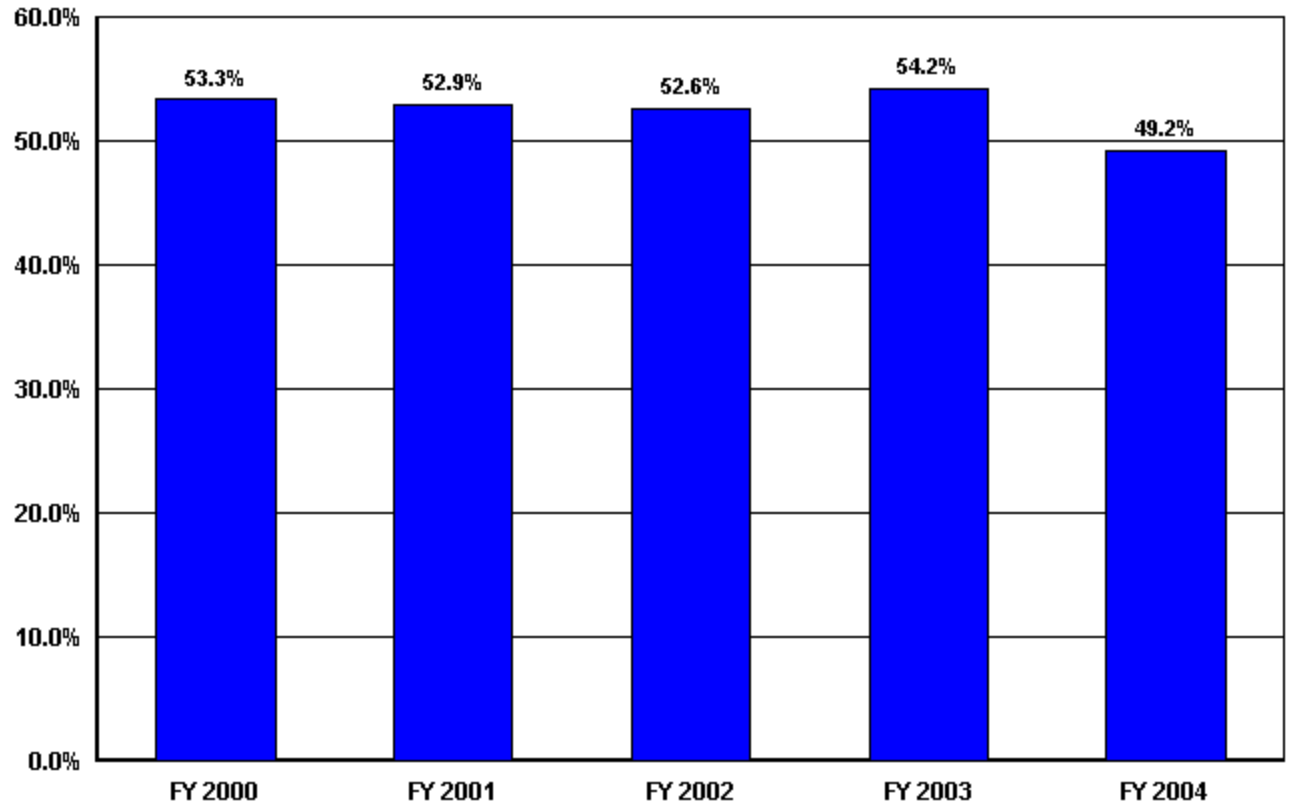
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	670,191	719,531	680,174	712,704	766,686	96,495	14.4%
Capital Construction	31,823	30,673	26,100	15,280	16,005	-15,818	-49.7%
Total Costs Less Construction	638,368	688,858	654,074	697,424	750,681	112,313	17.6%
Total Support Costs	**357,321**	**380,656**	**358,002**	**386,271**	**377,513**	**20,192**	**5.7%**
Mission Direct Operation	281,047	308,202	296,072	311,153	373,168	92,121	32.8%
Mission Direct Operation as % of Total Cost	**41.9%**	**42.8%**	**43.5%**	**43.7%**	**48.7%**		
Capital Construction as % of Total Cost	**4.7%**	**4.3%**	**3.8%**	**2.1%**	**2.1%**		
Total Support Cost as % of Total Cost	**53.3%**	**52.9%**	**52.6%**	**54.2%**	**49.2%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**53.3%**	**52.9%**	**52.6%**	**54.2%**	**49.2%**		
TOTAL SUPPORT COST	**357,321**	**380,656**	**358,002**	**386,271**	**377,513**	**20,192**	**5.7%**
TOTAL GENERAL SUPPORT as % of TOTAL	**18.2%**	**17.0%**	**16.1%**	**17.2%**	**14.9%**		
TOTAL GENERAL SUPPORT	**121,893**	**122,327**	**109,316**	**122,257**	**113,929**	**-7,964**	**-6.5%**
EXECUTIVE DIRECTION	9,166	10,924	12,715	13,272	13,071	3,905	42.6%
HUMAN RESOURCES	10,936	10,127	9,510	9,576	9,392	-1,544	-14.1%
CFO	5,046	9,438	5,918	6,281	7,008	1,962	38.9%
PROCUREMENT	7,533	5,975	5,867	6,382	8,656	1,123	14.9%
LEGAL	7,681	9,479	9,341	9,979	4,702	-2,979	-38.8%
CENTRAL ADMIN SERVICES	17,846	17,145	15,147	20,359	16,328	-1,518	-8.5%
PROGRAM/PROJECT CONTROL	13,791	13,650	12,033	13,805	12,502	-1,289	-9.3%
INFORMATION OUTREACH	17,800	11,922	9,591	9,103	6,809	-10,991	-61.7%
INFORMATION SERVICES	31,932	34,431	27,168	32,461	35,311	3,379	10.6%
OTHER	162	-764	2,026	1,039	150	-12	-7.4%
TOTAL MISSION SUPPORT as % of TOTAL	**30.8%**	**28.3%**	**28.3%**	**28.8%**	**27.4%**		
TOTAL MISSION SUPPORT	**206,207**	**203,444**	**192,374**	**205,079**	**210,246**	**4,039**	**2.0%**
ENVIRONMENTAL	10,383	10,107	8,740	9,333	2,420	-7,963	-76.7%
SAFETY AND HEALTH	50,497	46,354	47,705	49,189	58,985	8,488	16.8%
FACILITIES MANAGEMENT	19,217	18,927	18,516	31,115	25,759	6,542	34.0%
MAINTENANCE	61,416	63,443	53,315	49,239	52,181	-9,235	-15.0%
UTILITIES	8,911	8,413	10,964	15,932	15,185	6,274	70.4%
SAFEGUARDS AND SECURITY	22,364	21,693	21,514	25,442	30,067	7,703	34.4%
LOGISTICS SUPPORT	10,836	11,517	10,104	11,917	12,544	1,708	15.8%
QUALITY ASSURANCE	15,739	15,178	12,252	10,750	11,379	-4,360	-27.7%
LABORATORY/TECHNICAL SUPPORT	6,844	7,812	9,264	2,162	1,726	-5,118	-74.8%
TOTAL SITE SPECIFIC as % of TOTAL	**4.4%**	**7.6%**	**8.3%**	**8.3%**	**7.0%**		
TOTAL SITE SPECIFIC	**29,221**	**54,885**	**56,312**	**58,935**	**53,338**	**24,117**	**82.5%**
MANAGEMENT/INCENTIVE FEE	22,342	30,891	33,778	37,109	38,109	15,767	70.6%
TAXES	2,640	3,375	3,237	3,264	4,350	1,710	64.8%
LDRD / PDRD / SDRD	4,239	20,619	19,297	18,562	10,879	6,640	156.6%

US Department of Energy
Total Functional Support
Idaho Eng & Envir Lab/Bechtel BWXT Idaho



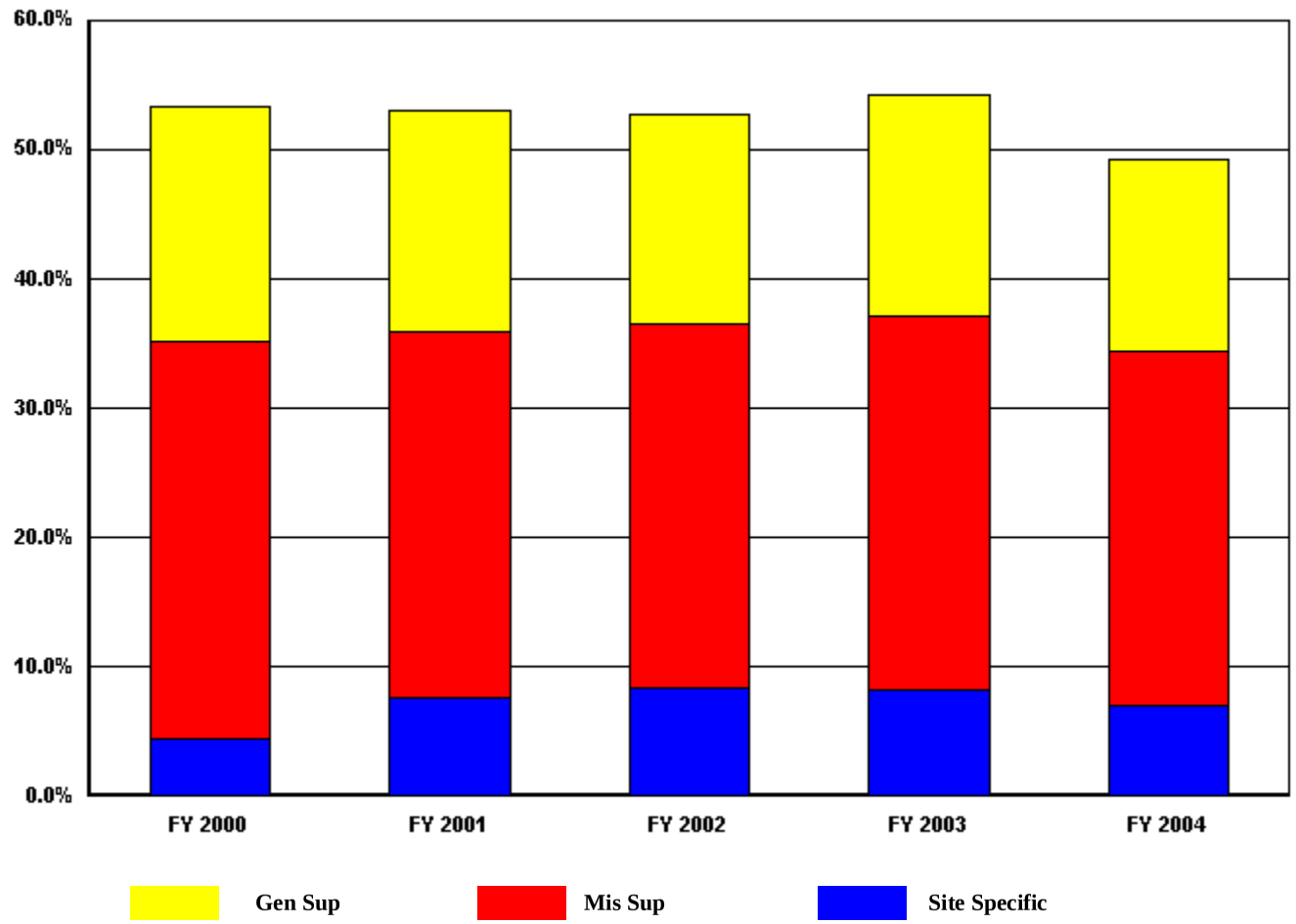
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	357,321	380,656	358,002	386,271	377,513

US Department of Energy
Total Functional Support as a % of Total Costs
Idaho Eng & Envir Lab/Bechtel BWXT Idaho



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	53.3%	52.9%	52.6%	54.2%	49.2%

US Department of Energy
Percent of Support Category to Total
Idaho Eng & Envir Lab/Bechtel BWXT Idaho



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	18.2%	17.0%	16.1%	17.2%	14.9%
Mis Sup	30.8%	28.3%	28.3%	28.8%	27.4%
Site Specific	4.4%	7.6%	8.3%	8.3%	7.0%

SITE PROFILE
Idaho Eng & Envir Lab/Bechtel BWXT Idaho

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

The mission of the Idaho National Engineering and Environmental Laboratory (INEEL) is to develop and deliver cost-effective solutions to both fundamental and advanced challenges in nuclear energy and other energy resources, national security, and environmental management.

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, federally funded research and development 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 2,150 employees work in town locations while 3,100 employees work in site locations.
- INEEL provides support services of $24M 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 years) waste cleanup activities include the following items:
    Transuranic Waste — High-Level Waste
    Low-Level Waste — Mixed Low-Level Waste
    Environmental Media Contamination — Spent Nuclear Fuel
  - Research and Development — The INEEL is involved in scientific research and development. Examples include bioprocessing, chemical separations, materials science, sensors, national security, etc.
  - Nuclear Energy and Operations — Development of advanced nuclear energy technologies and 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.

TRENDS

- FY 2000 Total Functional Support increased 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.
- FY 2004 Total Functional Support decreased by $8.8M due to work force restructuring activities as well as reductions in LDRD costs.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

PROCUREMENT
Increased ($2,274K) due to hiring additional employees and increased subcontract usage in support of accelerated cleanup activities.

LEGAL
Decreased ($5,277K) due to a reduction in the Qui Tam accrual as well as a reduction in Pit 9 legal subcontracts.

CENTRAL ADMIN SERVICES
Decreased ($4,031K) due to work force restructuring activities.

INFORMATION OUTREACH
Decreased ($2,294K) due mainly to reclassification of costs to the Human Resources support account.

INFORMATION SERVICES
Increased ($2,850K) due to increases for licensing activities, CRAY system support activities, and other various information services related activities.

OTHER
Decreased ($889K) due to a reduction in the amount of work force restructuring incentive payments. The Other category for $150K is made up of $60K for general liability Insurance and $90K for work force restructuring incentive payments.

ENVIRONMENTAL
Decreased ($6,913K) due to work force restructuring activities (movement of FTEs).

SAFETY AND HEALTH
Increased ($9,796K) due to work force restructuring activities (movement of FTEs).

FACILITIES MANAGEMENT
Decreased ($5,356K) due to work force restructuring activities (movement of FTEs).

MAINTENANCE
Increased ($2,942K) due to work force restructuring activities and increases in material purchases.

SAFEGUARDS AND SECURITY
Increased ($4,625K) due to additional FTEs for design basis threat requirements and to support accelerated clean-up activities.

LABORATORY/TECHNICAL SUPPORT
Decreased ($436K) due to organizational changes in this support area.

TAXES
Increased ($1,086K) due to additional reimbursable franchise taxes for FY 1999 through FY 2004 as a result of an Idaho State Tax Commission audit.

LDRD / PDRD / SDRD
Decreased ($7,683K) due to reductions in LDRD work scope.

COST SAVINGS INITIATIVES

($ in 000's)

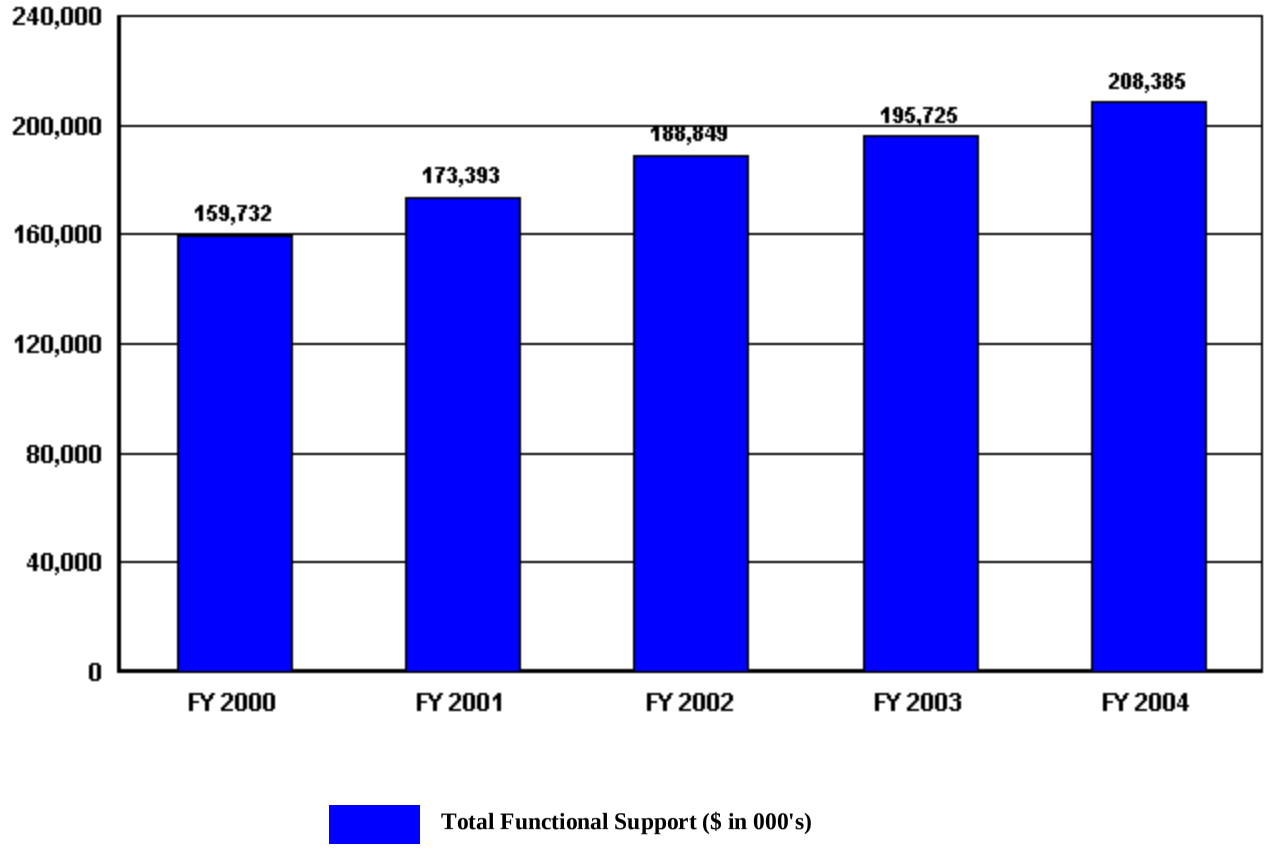
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

An integrated approach to cost management	0	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 and the use of laboratory senior management in various cost saving initiatives such as the work force restructuring activities that occurred during FY 2003 and FY 2004. 3) Employ outside experts to independently review and validate cost estimates. 4) Utilize performance measures and benchmarks to provide overall indicators of cost efficiency.	

Trends in Total Support Cost by Functional Categories
Kansas City/Honeywell, FM&T ($000)
FY 2004

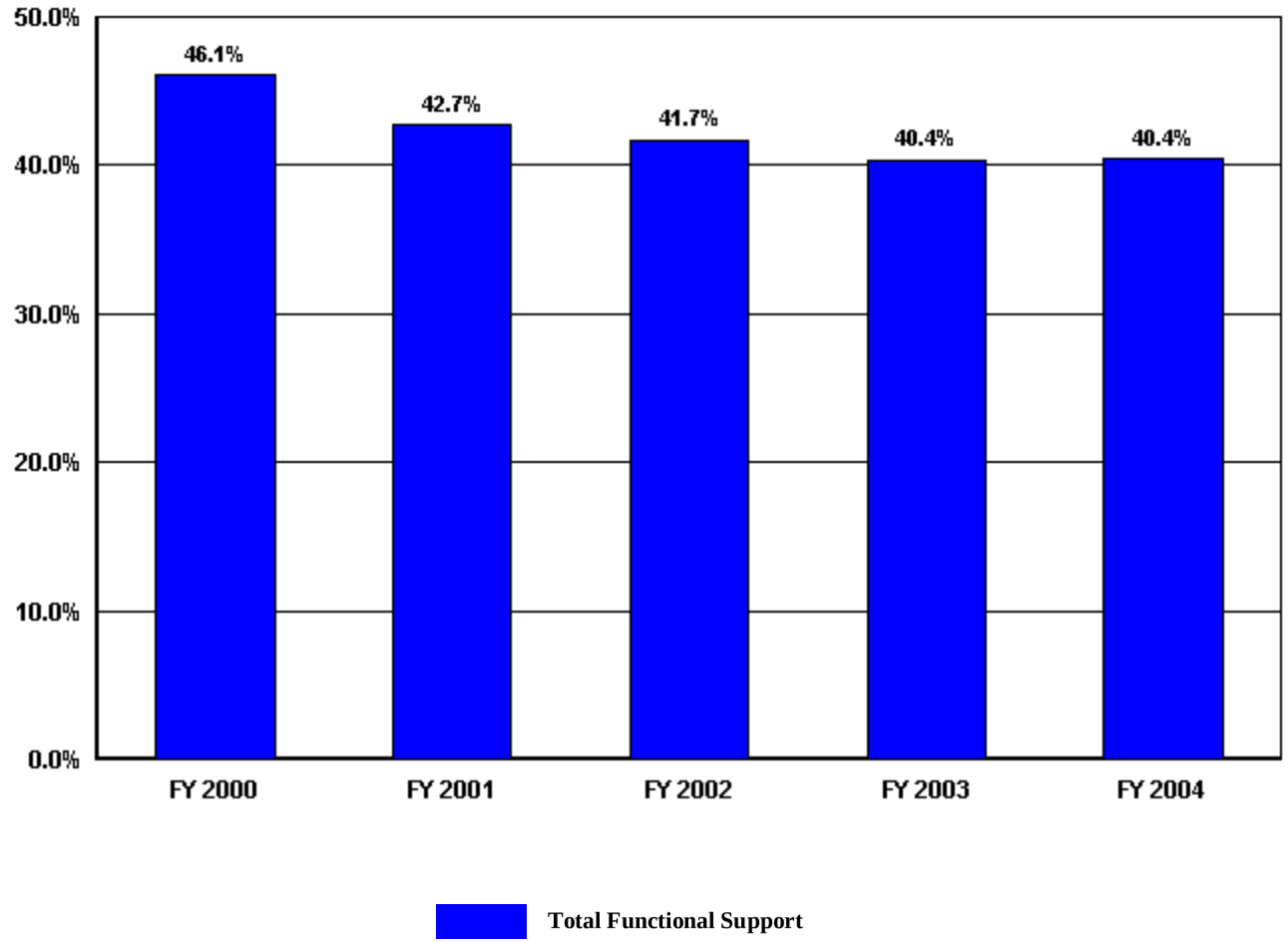
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	346,785	406,112	452,522	484,983	515,898	169,113	48.8%
Capital Construction	23,071	45,427	55,396	66,438	58,710	35,639	154.5%
Total Costs Less Construction	323,714	360,685	397,126	418,545	457,188	133,474	41.2%
Total Support Costs	**159,732**	**173,393**	**188,849**	**195,725**	**208,385**	**48,653**	**30.5%**
Mission Direct Operation	163,982	187,292	208,277	222,820	248,803	84,821	51.7%
Mission Direct Operation as % of Total Cost	**47.3%**	**46.1%**	**46.0%**	**45.9%**	**48.2%**		
Capital Construction as % of Total Cost	**6.7%**	**11.2%**	**12.2%**	**13.7%**	**11.4%**		
Total Support Cost as % of Total Cost	**46.1%**	**42.7%**	**41.7%**	**40.4%**	**40.4%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**46.1%**	**42.7%**	**41.7%**	**40.4%**	**40.4%**		
TOTAL SUPPORT COST	**159,732**	**173,393**	**188,849**	**195,725**	**208,385**	**48,653**	**30.5%**
TOTAL GENERAL SUPPORT as % of TOTAL	**15.5%**	**15.0%**	**14.9%**	**14.2%**	**13.7%**		
TOTAL GENERAL SUPPORT	**53,593**	**60,737**	**67,402**	**68,841**	**70,893**	**17,300**	**32.3%**
EXECUTIVE DIRECTION	3,723	4,598	4,216	5,741	5,942	2,219	59.6%
HUMAN RESOURCES	4,320	4,947	4,467	3,896	3,625	-695	-16.1%
CFO	3,518	5,266	4,286	5,209	5,834	2,316	65.8%
PROCUREMENT	5,026	6,108	6,299	6,453	6,769	1,743	34.7%
LEGAL	620	1,238	2,053	2,096	1,040	420	67.7%
CENTRAL ADMIN SERVICES	1,007	209	430	220	268	-739	-73.4%
PROGRAM/PROJECT CONTROL	4,513	6,410	7,172	8,207	8,581	4,068	90.1%
INFORMATION OUTREACH	2,628	3,163	3,888	2,812	3,494	866	33.0%
INFORMATION SERVICES	28,250	29,926	33,391	34,207	35,340	7,090	25.1%
OTHER	-12	-1,128	1,200	0	0	12	100.0%
TOTAL MISSION SUPPORT as % of TOTAL	**24.2%**	**22.5%**	**21.2%**	**20.9%**	**21.5%**		
TOTAL MISSION SUPPORT	**83,943**	**91,366**	**95,841**	**101,175**	**110,680**	**26,737**	**31.9%**
ENVIRONMENTAL	5,776	5,131	5,355	5,296	5,311	-465	-8.1%
SAFETY AND HEALTH	3,304	4,344	5,007	4,926	5,645	2,341	70.9%
FACILITIES MANAGEMENT	5,483	6,727	8,143	10,071	10,014	4,531	82.6%
MAINTENANCE	34,685	36,135	35,189	36,923	43,477	8,792	25.3%
UTILITIES	11,203	12,898	13,458	12,824	13,127	1,924	17.2%
SAFEGUARDS AND SECURITY	7,279	8,721	10,071	11,247	11,592	4,313	59.3%
LOGISTICS SUPPORT	5,631	6,270	6,399	6,795	7,726	2,095	37.2%
QUALITY ASSURANCE	7,357	7,450	8,203	9,165	9,450	2,093	28.4%
LABORATORY/TECHNICAL SUPPORT	3,225	3,690	4,016	3,928	4,338	1,113	34.5%
TOTAL SITE SPECIFIC as % of TOTAL	**6.4%**	**5.2%**	**5.7%**	**5.3%**	**5.2%**		
TOTAL SITE SPECIFIC	**22,196**	**21,290**	**25,606**	**25,709**	**26,812**	**4,616**	**20.8%**
MANAGEMENT/INCENTIVE FEE	20,973	19,837	22,556	22,445	23,458	2,485	11.8%
TAXES	1,223	1,453	1,706	1,602	1,228	5	0.4%
LDRD / PDRD / SDRD	0	0	1,344	1,662	2,126	2,126	100.0%

US Department of Energy
Total Functional Support
Kansas City Plant/Honeywell, FM&T



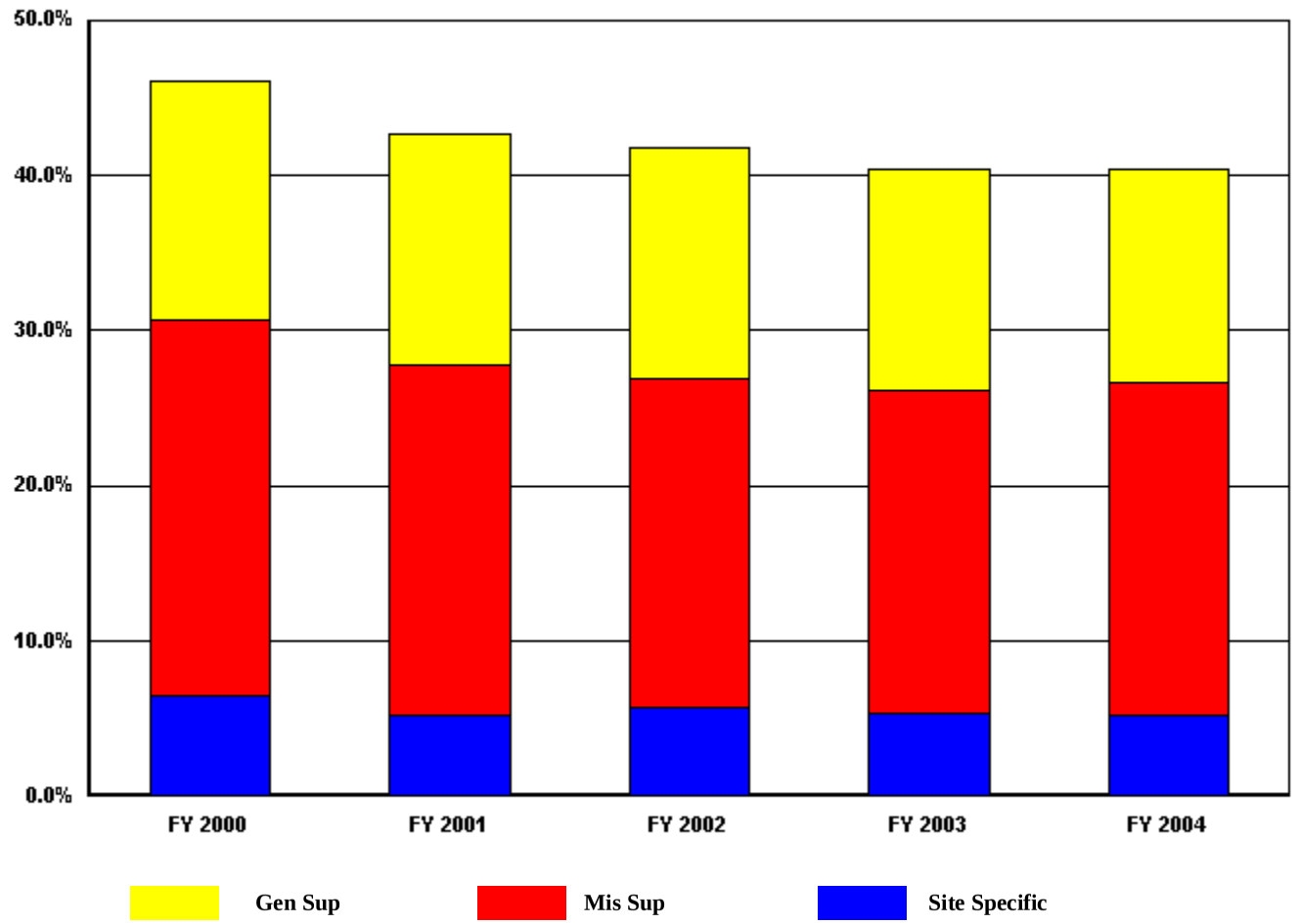
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	159,732	173,393	188,849	195,725	208,385

US Department of Energy
Total Functional Support as a % of Total Costs
Kansas City Plant/Honeywell, FM&T



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	46.1%	42.7%	41.7%	40.4%	40.4%

US Department of Energy
Percent of Support Category to Total
Kansas City Plant/Honeywell, FM&T



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	15.5%	15.0%	14.9%	14.2%	13.7%
Mis Sup	24.2%	22.5%	21.2%	20.9%	21.5%
Site Specific	6.4%	5.2%	5.7%	5.3%	5.2%

SITE PROFILE
Kansas City Plant/Honeywell, FM&T

SITE OVERVIEW AND CHARACTERISTIC

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.

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) have increased steadily each year from FY 2000 through FY 2004. During the

five year period, direct mission costs increased by 52%, while total functional support costs only increased by 30%. General Support functions have remained at 16-17% of operating costs, while Mission Support functions have decreased from 26% to 24% during this time frame. A plant pension contribution requirement was driven in FY 2003 and FY 2004 by the drop in equity markets over the prior three-year period and low treasury rates (note: the last required contribution was prior to the five-year functional cost period). The pension contributions ($10.5M in FY 2003 and $24.2M in FY 2004) impacted all categories through salaried and hourly labor pricing.

General Support

FY 2004 General Support costs represent a $17.3 million increase from the FY 2000 level. Element trends within the category reflect increases in Executive Direction ($2.2M), Chief Financial Officer ($2.3M), Procurement ($1.7M), Program/Project Planning & Control ($4.1M), and Information Services ($7.1M). The remaining five elements result in an offset of -$0.1M.

Executive Direction reflects the addition of seven associates in the Six Sigma and Business Excellence organization and the addition of five senior management staff over the five-year period. The change in Chief Financial Officer and Procurement was influenced by the increase in pension contributions. Chief Financial Officer also reflects the addition of ten associates and Procurement trends reflect increased contract support services. Program/Project Planning & Control reflects an increase in labor costs for 25 associates and the additional travel and expenses related to supporting additional campaigns and increased direct mission work. The Information Services trend is driven by software procurements including DigitalWorks projects, software/hardware maintenance contracts (ASAP-Microsoft Enterprise license, PeopleSoft ERP systems, Oracle licenses, Xerox contract etc.), communication services, contract support services, and an additional 38 associates in the organization addressing critical skill initiatives during this period.

Mission Support

The $26.7 million increase in Mission Support costs from FY 2000 to FY 2004 is primarily attributed to increases in Safety & Health ($2.3M), Facilities Management ($4.5M), Maintenance ($8.8M), Utilities ($1.9M), Safeguards & Security ($4.3M), Logistics Support ($2.1M) and Quality Assurance ($2.1M).

Safety and Health reflects an increase of nine associates and expenses related to contract medical services and plant-wide ergonomic improvements. Facility Management, Maintenance, and Utility costs continue to be a driver of the Mission Support cost category. 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, upgrading main entrance, asbestos abatement, and infrastructure refurbishment. Since Maintenance and Utilities are largely comprised of hourly associates, labor costs have been influenced by pension expenses during the last two years. The Safeguards & Security cost increase reflects heightened security measures put into place since September 11, 2001 and cyber security initiatives. Security costs reflect the hiring of additional Security Police Officers since the second half of FY 2002. Logistics Support and Quality Assurance labor costs reflect the increase in pension expense and escalation.

Site Specific

The change in Site Specific costs between FY 2000 and FY 2004 is attributed to an increase in management/award incentive fees and the support of Program Directed Research and Development (PDRD) activities which were initiated in FY 2001.

Global Cost Drivers/Anomalies

Workload and funding reductions have included early and regular retirements and have created a disproportionate amount of retirees to current associates (the plant census has been reduced by 54% since 1990). 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 1:1.5. Retiree Insurance is a significant fixed expense for the plant and is allocated to all cost categories.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

CFO

Chief Financial Officer ($625K increase) reflects the addition of four associates supporting resource planning, special projects, and leadership development.

LEGAL

The decrease in Legal ($1,056K) is due to outside legal services in FY 2003 that were not required in FY 2004.

INFORMATION OUTREACH

Information Outreach ($682K increase) reflects the addition of a Business Development organization established to grow complementary work.

INFORMATION SERVICES
Information Services ($1,133K increase) reflects new DigitalWorks projects, including PeopleSoft Time and Labor, Order Management Improvements and Electronic Records Management, and a PC Refresh investment.

SAFETY AND HEALTH
Safety and Health ($719K increase) established a plant-wide initiative in FY 2004 to improve ergonomic issues and awareness by upgrading multiple workstations, replacing unique equipment, and providing plant training.

MAINTENANCE
Maintenance costs ($6,554K increase) were influenced by the increase in the hourly pension contribution. Maintenance increased in FY 2004 due to numerous special projects including the clean up of Department 61, the construction of a new plant entrance, installation of a new facility telephone switch, and deferred maintenance projects including work performed on parking lots and the roof, in addition to increases in the hourly pension contribution.

LOGISTICS SUPPORT
Logistics Support ($931K increase) due to hourly pension contribution.

COST SAVINGS INITIATIVES
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

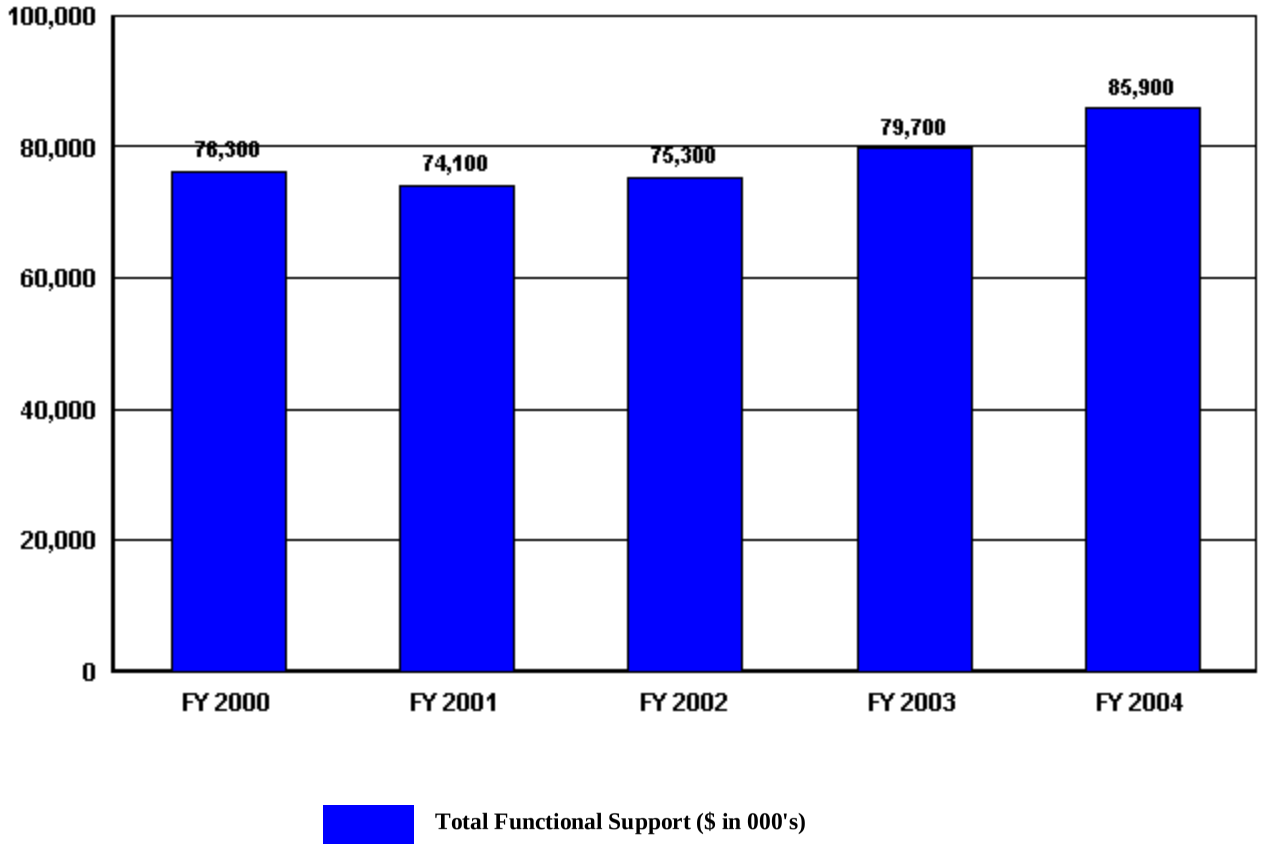
Six Sigma Process Improvements	0	Honeywell continues to apply a Six Sigma process improvement culture to business operations to generate cost savings and/or cost avoidances. Efforts have evolved through the use of Six Sigma tools with FY 2004 technical projects reflecting the Design for Six Sigma initiative. Six Sigma savings represent efficiency gains from improving established processes and procedures. The following projects are examples of process improvements associated with support activities and the Design for Six Sigma effort.	
HR On-Demand/Associate Reference Center Project	332	This project created one place on an internal website for associates to look for human resource and general information regarding working at Federal Manufacturing & Technologies. Prior to the project, an associate had to know the owner of a topic in order to find information within the owning organization's website. While the owners still maintain their content, the new system is organized by type of information and provides links to forms, websites, and procedures related to the subject.	
Evaluated Receipt Settlement Team	49	This project utilized a PeopleSoft software capability to establish a two-way match process for certain activities. Payment vouchers are created from receivers for certain purchase orders/suppliers eliminating a level of handling and processing paperwork within Accounts Payable. The pilot project reflects the testing of this process for one vendor with an expected reduction of 100 invoices per month.	

Improving Efficiency of Filter Assembly Testing	59	The cycle time to run two tests on an assembly was investigated and the process was changed. The new process combined two tests into one, added the capability to test up to six units at the same time rather than one, and adjusted critical parameters to reduce the testing cycle time.	
Purchase of Non-refundable Tickets for Travel	1,100	Honeywell began purchasing non-refundable tickets for associate travel in FY 2002. This initiative reflects the utilization of an approach that was being applied at some other sites.	

Trends in Total Support Cost by Functional Categories
Knolls Atomic Power Lab/Lockheed Martin ($000)
FY 2004

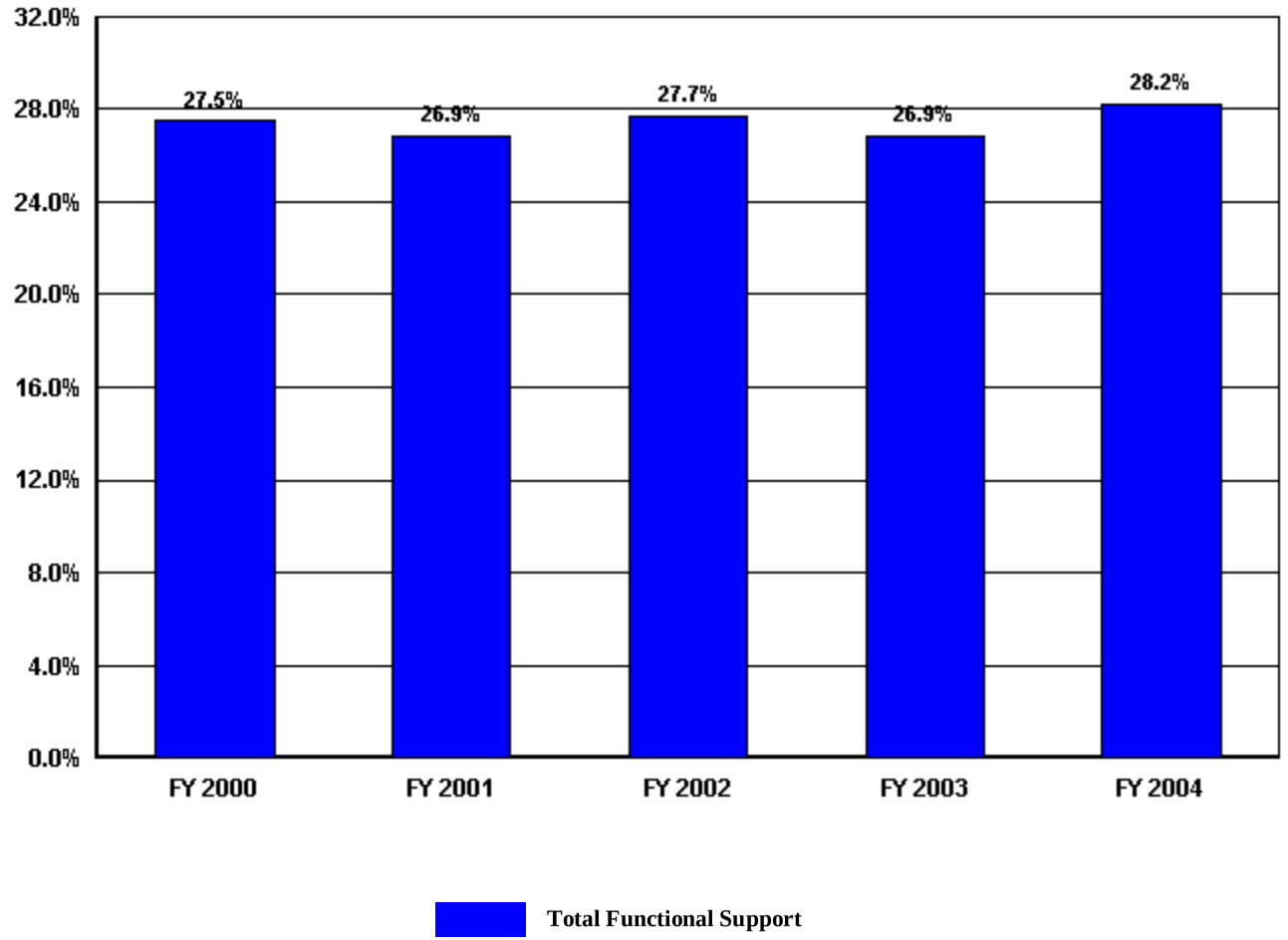
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	277,200	275,700	271,600	296,500	304,300	27,100	9.8%
Capital Construction	26,300	22,900	15,900	27,300	17,300	-9,000	-34.2%
Total Costs Less Construction	250,900	252,800	255,700	269,200	287,000	36,100	14.4%
Total Support Costs	**76,300**	**74,100**	**75,300**	**79,700**	**85,900**	**9,600**	**12.6%**
Mission Direct Operation	174,600	178,700	180,400	189,500	201,100	26,500	15.2%
Mission Direct Operation as % of Total Cost	**63.0%**	**64.8%**	**66.4%**	**63.9%**	**66.1%**		
Capital Construction as % of Total Cost	**9.5%**	**8.3%**	**5.9%**	**9.2%**	**5.7%**		
Total Support Cost as % of Total Cost	**27.5%**	**26.9%**	**27.7%**	**26.9%**	**28.2%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**27.5%**	**26.9%**	**27.7%**	**26.9%**	**28.2%**		
TOTAL SUPPORT COST	**76,300**	**74,100**	**75,300**	**79,700**	**85,900**	**9,600**	**12.6%**
TOTAL GENERAL SUPPORT as % of TOTAL	**7.9%**	**7.5%**	**8.4%**	**8.8%**	**9.1%**		
TOTAL GENERAL SUPPORT	**21,900**	**20,700**	**22,900**	**26,100**	**27,800**	**5,900**	**26.9%**
EXECUTIVE DIRECTION	1,800	3,100	2,800	3,000	3,200	1,400	77.8%
HUMAN RESOURCES	2,700	2,800	3,400	3,900	4,300	1,600	59.3%
CFO	3,700	2,900	2,500	3,100	4,000	300	8.1%
PROCUREMENT	1,700	2,000	1,700	2,000	1,900	200	11.8%
LEGAL	1,400	400	200	500	200	-1,200	-85.7%
CENTRAL ADMIN SERVICES	1,100	1,200	1,300	1,400	1,600	500	45.5%
PROGRAM/PROJECT CONTROL	300	300	400	400	500	200	66.7%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	9,200	8,000	10,600	11,800	12,100	2,900	31.5%
OTHER	0	0	0	0	0	0	0.0%
TOTAL MISSION SUPPORT as % of TOTAL	**16.8%**	**17.4%**	**17.2%**	**16.2%**	**17.2%**		
TOTAL MISSION SUPPORT	**46,500**	**48,000**	**46,700**	**48,100**	**52,300**	**5,800**	**12.5%**
ENVIRONMENTAL	3,400	5,000	4,600	5,300	5,900	2,500	73.5%
SAFETY AND HEALTH	11,300	11,300	11,000	11,200	11,600	300	2.7%
FACILITIES MANAGEMENT	5,000	5,300	2,600	4,300	5,500	500	10.0%
MAINTENANCE	12,800	11,500	12,900	10,600	12,700	-100	-0.8%
UTILITIES	2,700	3,200	2,600	3,000	2,900	200	7.4%
SAFEGUARDS AND SECURITY	5,500	6,000	7,200	8,400	8,400	2,900	52.7%
LOGISTICS SUPPORT	2,700	2,500	2,800	2,200	2,200	-500	-18.5%
QUALITY ASSURANCE	3,100	3,200	3,000	3,100	3,100	0	0.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**2.8%**	**2.0%**	**2.1%**	**1.9%**	**1.9%**		
TOTAL SITE SPECIFIC	**7,900**	**5,400**	**5,700**	**5,500**	**5,800**	**-2,100**	**-26.6%**
MANAGEMENT/INCENTIVE FEE	7,300	5,100	5,000	5,000	5,200	-2,100	-28.8%
TAXES	600	300	700	500	600	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Knolls Atomic Power Lab/Lockheed Martin



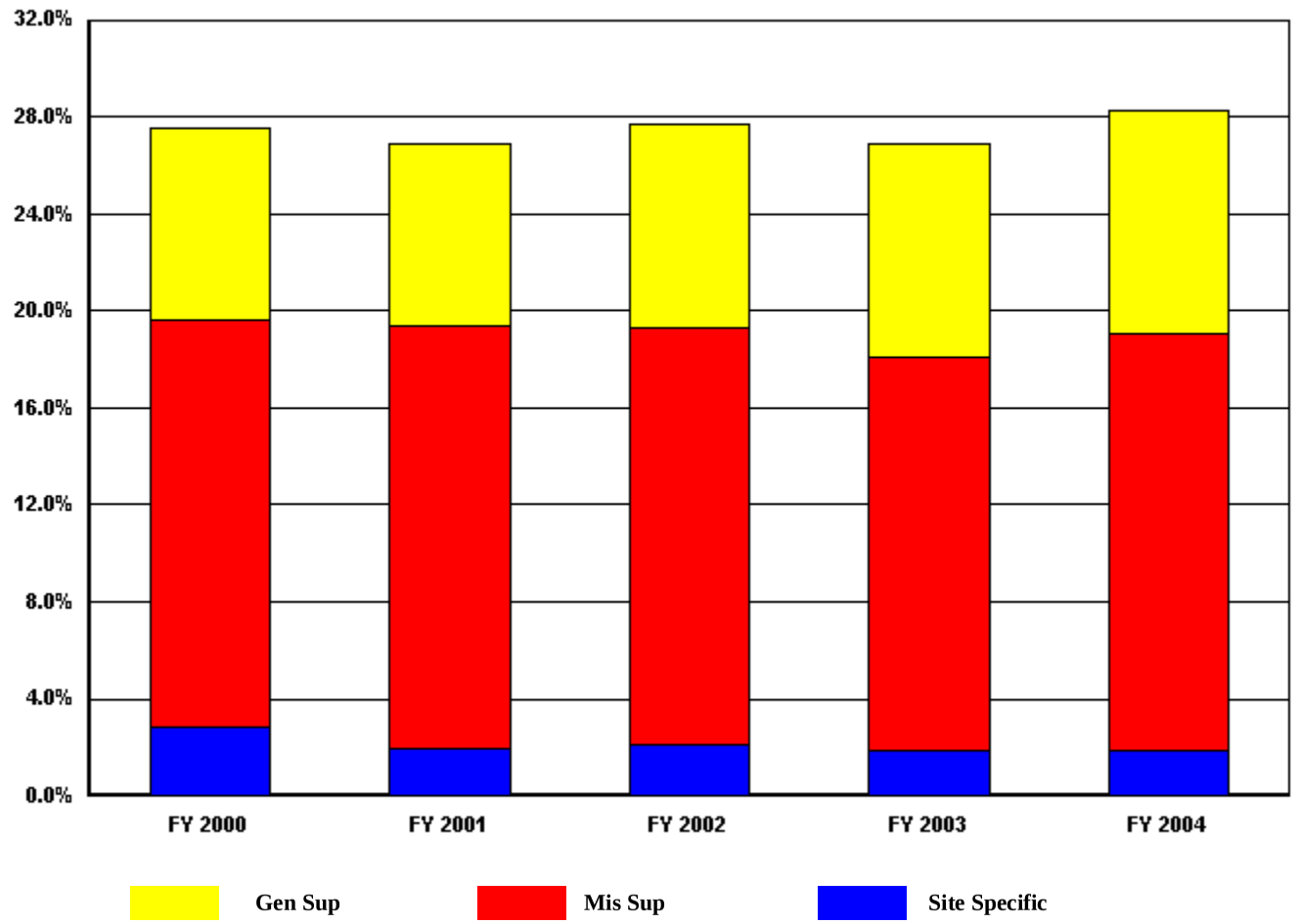
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	76,300	74,100	75,300	79,700	85,900

US Department of Energy
Total Functional Support as a % of Total Costs
Knolls Atomic Power Lab/Lockheed Martin



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	27.5%	26.9%	27.7%	26.9%	28.2%

US Department of Energy
Percent of Support Category to Total
Knolls Atomic Power Lab/Lockheed Martin



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	7.9%	7.5%	8.4%	8.8%	9.1%
Mis Sup	16.8%	17.4%	17.2%	16.2%	17.2%
Site Specific	2.8%	2.0%	2.1%	1.9%	1.9%

SITE PROFILE
Knolls Atomic Power Lab/Lockheed Martin

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 and VIRGINIA class attack 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 Naval Nuclear Propulsion Program. 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, and civilian space exploration vehicles. Some additional areas KAPL focuses on are direct energy conversion, electric drive propulsion, and advanced composite materials.

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.

KAPL operated a second prototype site in Windsor, CT. This site, which was originally constructed by Combustion Engineering in 1957, contained the single S1C prototype. Operational cognizance was transferred to KAPL (GE) in 1972. All site structures and utilities have been removed and the site is in the final stages of decommissioning for unrestricted use.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

COST SAVINGS INITIATIVES

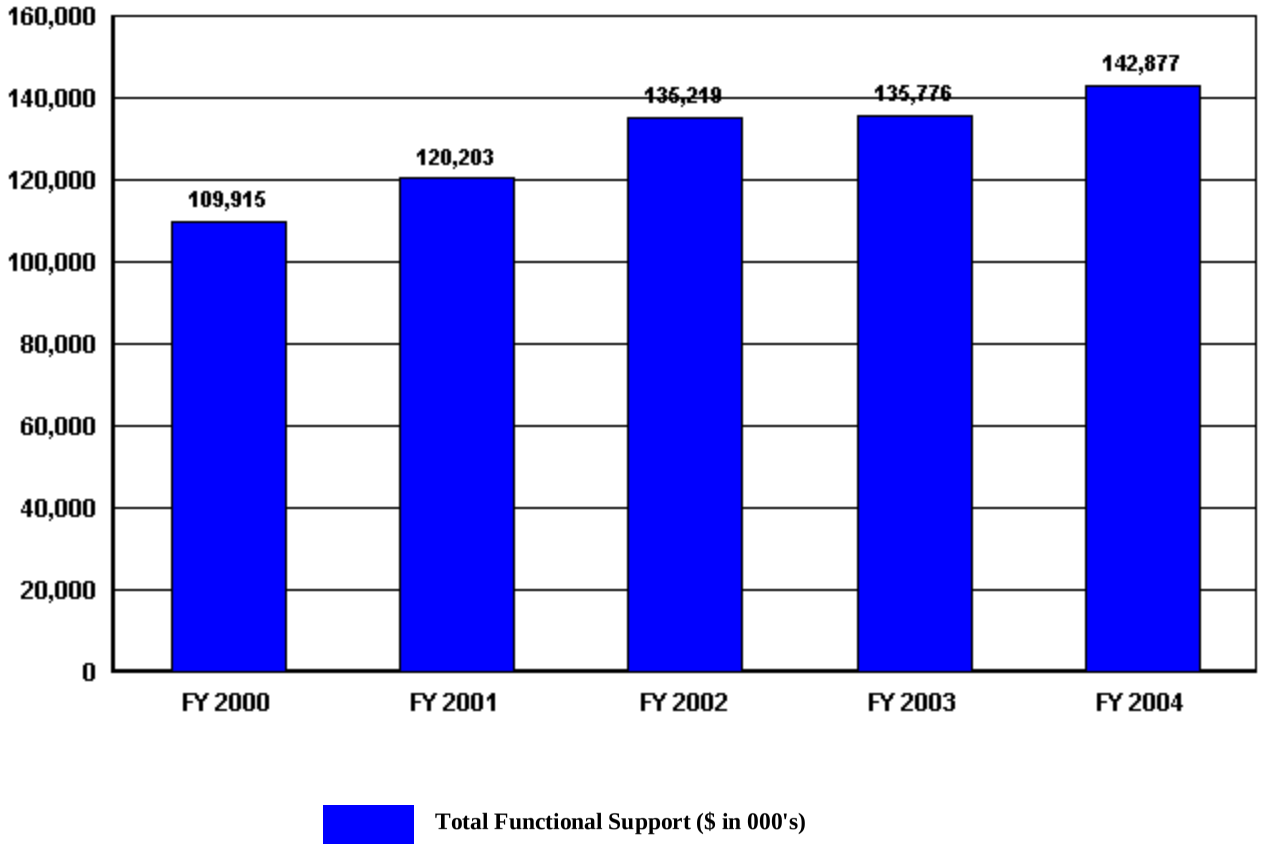
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Operations, Environment and Health	300	Electricity costs have been reduced as a result of a fixed price contract agreement implemented in FY 2004 through the Defense Energy Support Center.	
Supply Chain Management	2,191	Knolls Atomic Power Lab/Lockheed Martin and Bechtel Bettis, Inc. have worked together to place joint contracts to optimize pricing and to reduce administrative effort for procurement of materials and services needed at all sites. These efforts have helped increase the buying power of the Naval Nuclear Propulsion Program while achieving a net savings. In FY 2004, the joint procurements resulted in a material savings of $2,191,000 for Knolls Atomic Power Laboratory.	

Trends in Total Support Cost by Functional Categories
L. Berkeley National Lab/University of California ($000)
FY 2004

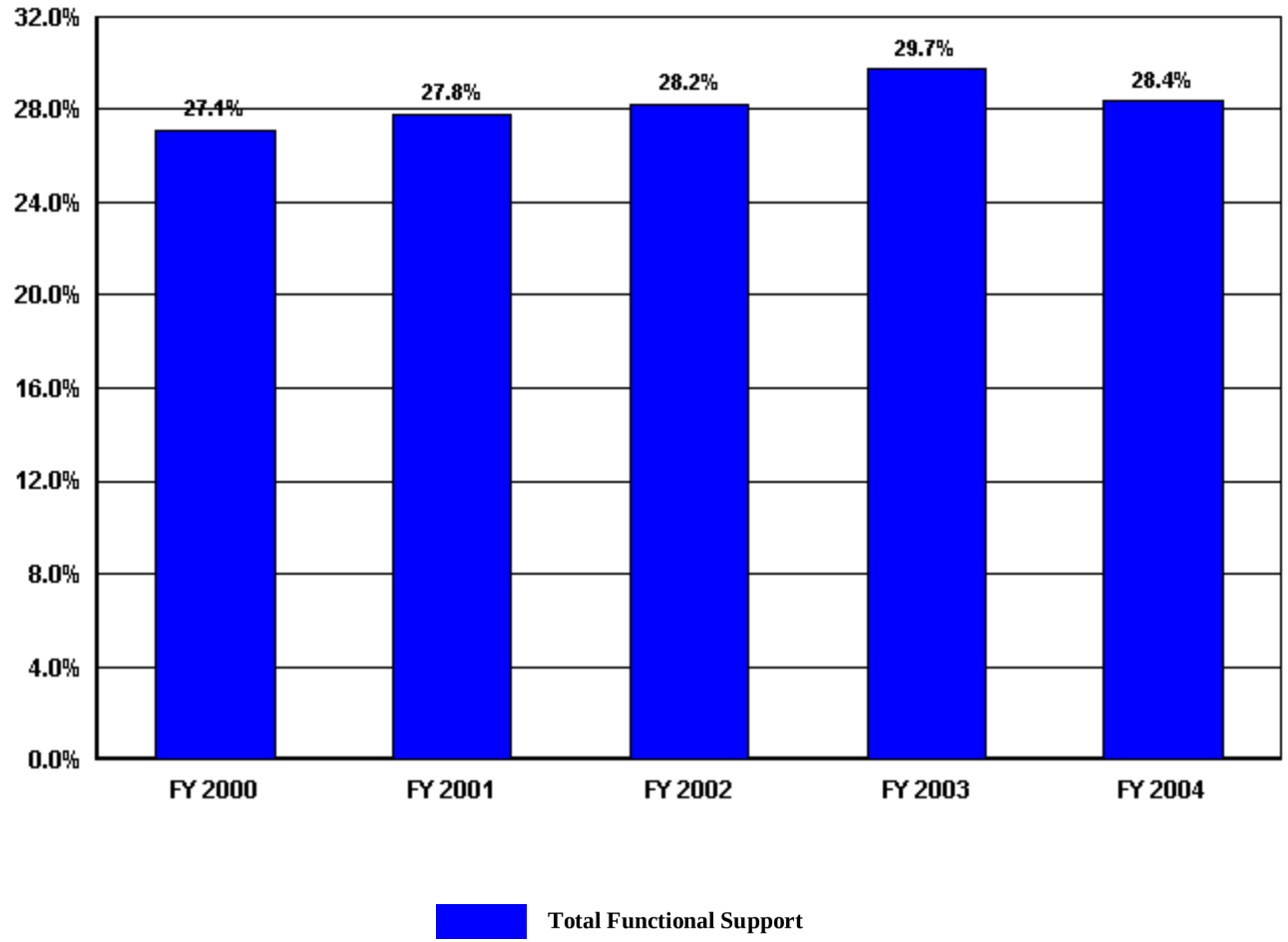
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	405,462	432,025	478,705	456,430	503,724	98,262	24.2%
Capital Construction	52,261	46,568	65,282	52,427	59,006	6,745	12.9%
Total Costs Less Construction	353,201	385,457	413,423	404,003	444,718	91,517	25.9%
Total Support Costs	**109,915**	**120,203**	**135,219**	**135,776**	**142,877**	**32,962**	**30.0%**
Mission Direct Operation	243,286	265,254	278,204	268,227	301,841	58,555	24.1%
Mission Direct Operation as % of Total Cost	**60.0%**	**61.4%**	**58.1%**	**58.8%**	**59.9%**		
Capital Construction as % of Total Cost	**12.9%**	**10.8%**	**13.6%**	**11.5%**	**11.7%**		
Total Support Cost as % of Total Cost	**27.1%**	**27.8%**	**28.2%**	**29.7%**	**28.4%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**27.1%**	**27.8%**	**28.2%**	**29.7%**	**28.4%**		
TOTAL SUPPORT COST	**109,915**	**120,203**	**135,219**	**135,776**	**142,877**	**32,962**	**30.0%**
TOTAL GENERAL SUPPORT as % of TOTAL	**9.6%**	**10.4%**	**11.4%**	**11.9%**	**11.8%**		
TOTAL GENERAL SUPPORT	**39,075**	**44,872**	**54,803**	**54,179**	**59,236**	**20,161**	**51.6%**
EXECUTIVE DIRECTION	3,701	4,199	8,192	8,613	9,409	5,708	154.2%
HUMAN RESOURCES	4,034	3,610	3,676	4,466	5,278	1,244	30.8%
CFO	4,309	4,743	4,890	4,209	6,622	2,313	53.7%
PROCUREMENT	4,033	3,506	4,284	3,745	6,035	2,002	49.6%
LEGAL	1,338	1,646	1,503	1,428	1,763	425	31.8%
CENTRAL ADMIN SERVICES	4,456	6,069	5,847	5,494	5,066	610	13.7%
PROGRAM/PROJECT CONTROL	0	0	0	0	0	0	0.0%
INFORMATION OUTREACH	3,204	3,004	3,454	3,511	3,393	189	5.9%
INFORMATION SERVICES	17,196	19,270	20,916	21,449	20,871	3,675	21.4%
OTHER	-3,196	-1,175	2,041	1,264	799	3,995	125.0%
TOTAL MISSION SUPPORT as % of TOTAL	**14.7%**	**14.8%**	**14.0%**	**15.2%**	**14.0%**		
TOTAL MISSION SUPPORT	**59,563**	**64,047**	**67,225**	**69,526**	**70,611**	**11,048**	**18.5%**
ENVIRONMENTAL	2,829	5,127	2,159	4,508	4,658	1,829	64.7%
SAFETY AND HEALTH	8,175	7,068	9,254	8,693	7,734	-441	-5.4%
FACILITIES MANAGEMENT	12,068	14,556	16,125	16,767	16,534	4,466	37.0%
MAINTENANCE	16,905	15,527	16,322	17,004	19,443	2,538	15.0%
UTILITIES	4,313	5,918	7,947	6,724	6,817	2,504	58.1%
SAFEGUARDS AND SECURITY	1,590	2,590	3,259	3,165	3,652	2,062	129.7%
LOGISTICS SUPPORT	3,695	4,228	4,006	4,288	4,304	609	16.5%
QUALITY ASSURANCE	41	25	56	81	93	52	126.8%
LABORATORY/TECHNICAL SUPPORT	9,947	9,008	8,097	8,296	7,376	-2,571	-25.8%
TOTAL SITE SPECIFIC as % of TOTAL	**2.8%**	**2.6%**	**2.8%**	**2.6%**	**2.6%**		
TOTAL SITE SPECIFIC	**11,277**	**11,284**	**13,191**	**12,071**	**13,030**	**1,753**	**15.5%**
MANAGEMENT/INCENTIVE FEE	3,070	2,950	3,107	3,071	2,947	-123	-4.0%
TAXES	234	349	271	342	484	250	106.8%
LDRD / PDRD / SDRD	7,973	7,985	9,813	8,658	9,599	1,626	20.4%

US Department of Energy
Total Functional Support
L. Berkeley National Lab/University of California



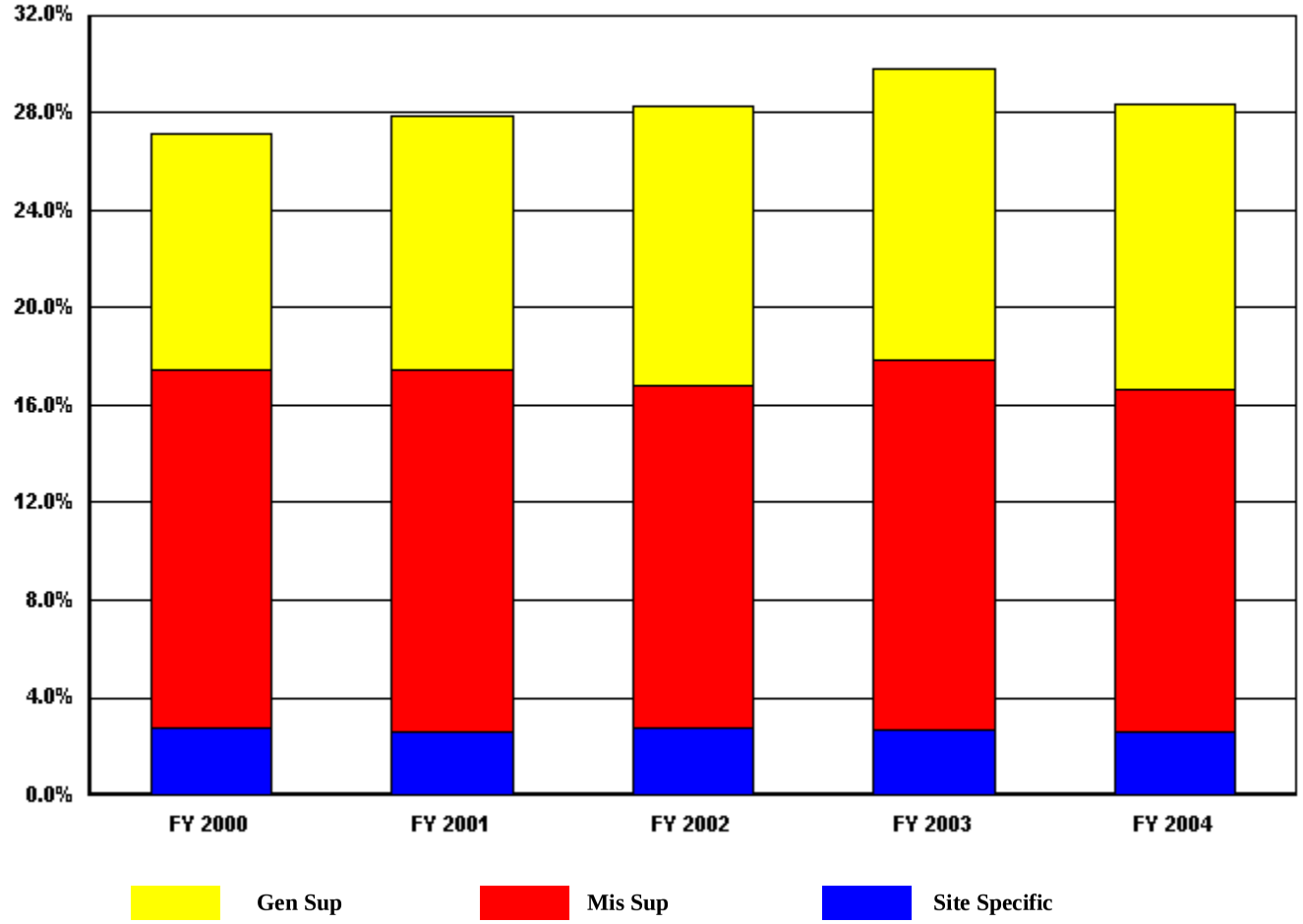
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	109,915	120,203	135,219	135,776	142,877

US Department of Energy
Total Functional Support as a % of Total Costs
L. Berkeley National Lab/University of California



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	27.1%	27.8%	28.2%	29.7%	28.4%

US Department of Energy
Percent of Support Category to Total
L. Berkeley National Lab/University of California



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	9.6%	10.4%	11.4%	11.9%	11.8%
Mis Sup	14.7%	14.8%	14.0%	15.2%	14.0%
Site Specific	2.8%	2.6%	2.8%	2.6%	2.6%

SITE PROFILE
L. Berkeley National Lab/University of California

SITE OVERVIEW AND CHARACTERISTIC

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 9 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; Bioscience and Biotechnology; the Characterization, Synthesis, and Theory of Materials; Advanced Technologies for Energy Supply and Energy Efficiency; Chemical Dynamics, Catalysis, 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); and the National Center for Electron Microscopy.

LBNL is managed by the University of California (UC) and is located in Berkeley, California. LBNL occupies 160 buildings and trailers on 200 acres. It also shares several buildings on the UC Berkeley campus. 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 2004, the workforce was approximately 3,800 people, consisting of 61% Career employees, 9% Graduate Student Research Assistants & Student Assistants, 7% Faculty, 8% Postdoctoral Fellows & Researchers, and 15% other. LBNL's major U.S. Department of Energy (DOE) customer is Office of Science (SC), which provided 58% of total direct funding, followed by work for other Agencies (Federal and Non-Federal). Other DOE programs served include Energy Efficiency (EE), Fossil Energy (FE), Electric Transmission (ET), Assistant Secretary for Environmental Management (EM), 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 cyber security program addresses the needs of all computer and networking systems and is fully appropriate to systems that contain no classified information. The Laboratory's cyber security software is a powerful system for detecting network intruders and has served as a model for other laboratories.

TRENDS

LBNL's Functional Support Costs (FSC) as a percentage of total Site Costs have been fluctuating between 27.1% and 29.7% within the average of 28.2% between FY 2000 and FY 2004. The percentages have increased slightly from 27.1% in FY 2000 to 29.7% in FY 2003. However, the

percentage was decreased to 28.4% in FY 2004.

From FY 2003 to FY 2004, total Site cost increased by 10.4% while the total Functional Support Costs increased only by 5.2%. This was due to larger increases in Mission Direct and Capital/Construction areas. Explanation for functional support cost categories with major change (increase/decrease > $\pm$ 20%) is detailed below.

Please note that the Mission Direct costs in this report reflect costs without distributed costs; therefore, it will not reconcile to the funding appropriated by DOE Programs.

In FY 2002, 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 decrease transaction costs in Procurement and Accounts Payable. These developmental costs contributed to the increase in functional support costs through FY 2003. In FY 2004, a new Business Services Division was created to provide more effective oversight management to the Office of the Chief Financial Officer, Human Resources, and Administrative Services Department.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

CFO
Major costs include the CFO, Internal Audit, Payroll, Financial Systems and Reporting, General Accounting, Disbursements, and Budget Office. The net increase in this category of $2,413K is due to the rebuilding efforts of the CFO by increasing staffing to a more appropriate level in FY 2004 to enhance financial integrity and services at LBNL. Staffing was also increased in the Internal Audit Department in response to higher demand in advisory service and costs increase related to work on outstanding audit issues in Disbursements.

PROCUREMENT
Major costs include Procurement Department, Commercial & R&D Subcontracts, Sponsored Project Office, and Distributed Procurement Unit (DPU). Cost increased by $2,290K mainly due to the centralization of procurement personnel as the DPU was established to better control the Procurement Card system as requested by DOE. The Procurement Card costs were previously spread throughout the lab. Other drivers of the increase are the raise in consulting cost for the development and implementation of procurement supply chain to increase small business services and policy assurance at LBNL as requested by DOE, and the staff increase in Sponsored Project Office due to higher demand in Sponsored Project Office service.

LEGAL
This includes activities related to the counsel/patents office and external patent attorney fees. Cost increased by $335K due to increase in external patents and legal fees.

OTHER
Major costs include legal settlements and UC shared indirect costs. This category decreased by $465K largely due to a credit adjustment for an over accrual for salary increases for representative employees, and decreases in legal settlements and expenses.

TAXES
Increased by $143K due to increase in sale tax rate by 0.5% in FY 2004 and increase in taxable equipment purchases.

COST SAVINGS INITIATIVES
($ in 000's)

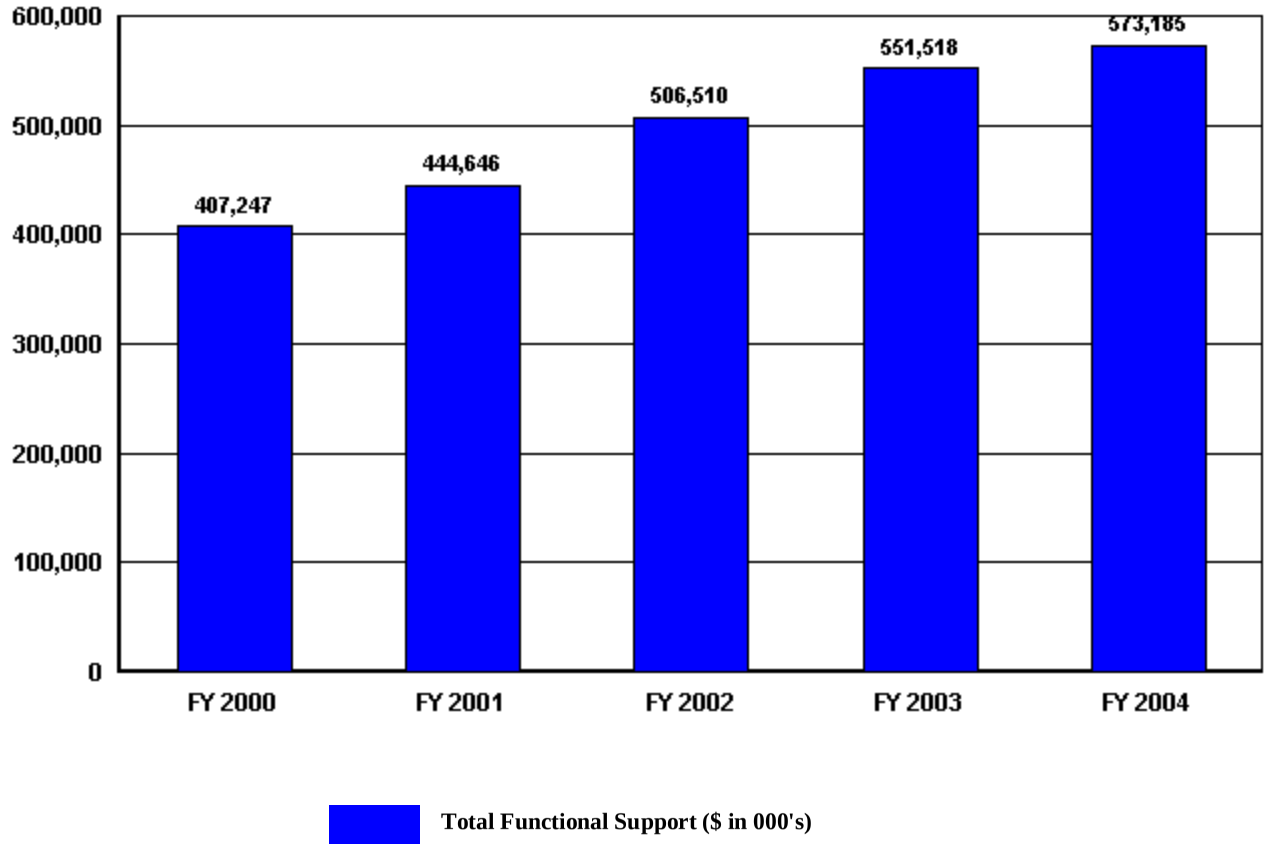
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Environmental Health and Safety Division Savings	761	In FY 2004 Environmental Health and Safety Division (EHS) consolidated its activities and underwent reorganization, which resulted in EHS staff and Business Services staff reductions throughout the EHS organization. This resulted in labor costs savings of $761K. Specific initiatives included: outsourced routine medical surveillance exams, streamlined distribution procedures and data management in the dissymmetry program, reduced information technology support as information systems matured, increased efficiencies in occupational safety and fire protection engineering, and consolidated waste generator support. Non-staff cost savings included: reduced space occupancy rate by 18% and improved the packaging efficiency of radioactive lead for treatment and disposal which resulted in saving between $90K-$130K on treatment and disposal cost for radioactive lead generated at Building 51.	

Travel Office Savings	2,338	The Travel Office has aggressively negotiated lower fees with the Carlson Travel Agency, which resulted in a cost saving approximately $34K. Similarly, the Travel Office negotiated with airline carriers for very favorable rates with substantial savings on 30 frequently traveled destinations in the US and 12 aboard (period applied 7/1/03 – 10/31/04). As a result of this effort, the Lab has saved approximately $2,000K on domestic fares and $304K on international fares during this time period.	
Engineering Division Savings	593	Engineering Division eliminated multiple phones in offices/labs, eliminated cellular phones and pagers in non-critical jobs, consolidated space, disconnected computer accounts that were not required, determined and returned idle vehicles to Facilities, eliminated management and administrative positions, and returned a leased machine. These efforts resulted in savings of $593K.	

Trends in Total Support Cost by Functional Categories
L. Livermore National Lab/University of California ($000)
FY 2004

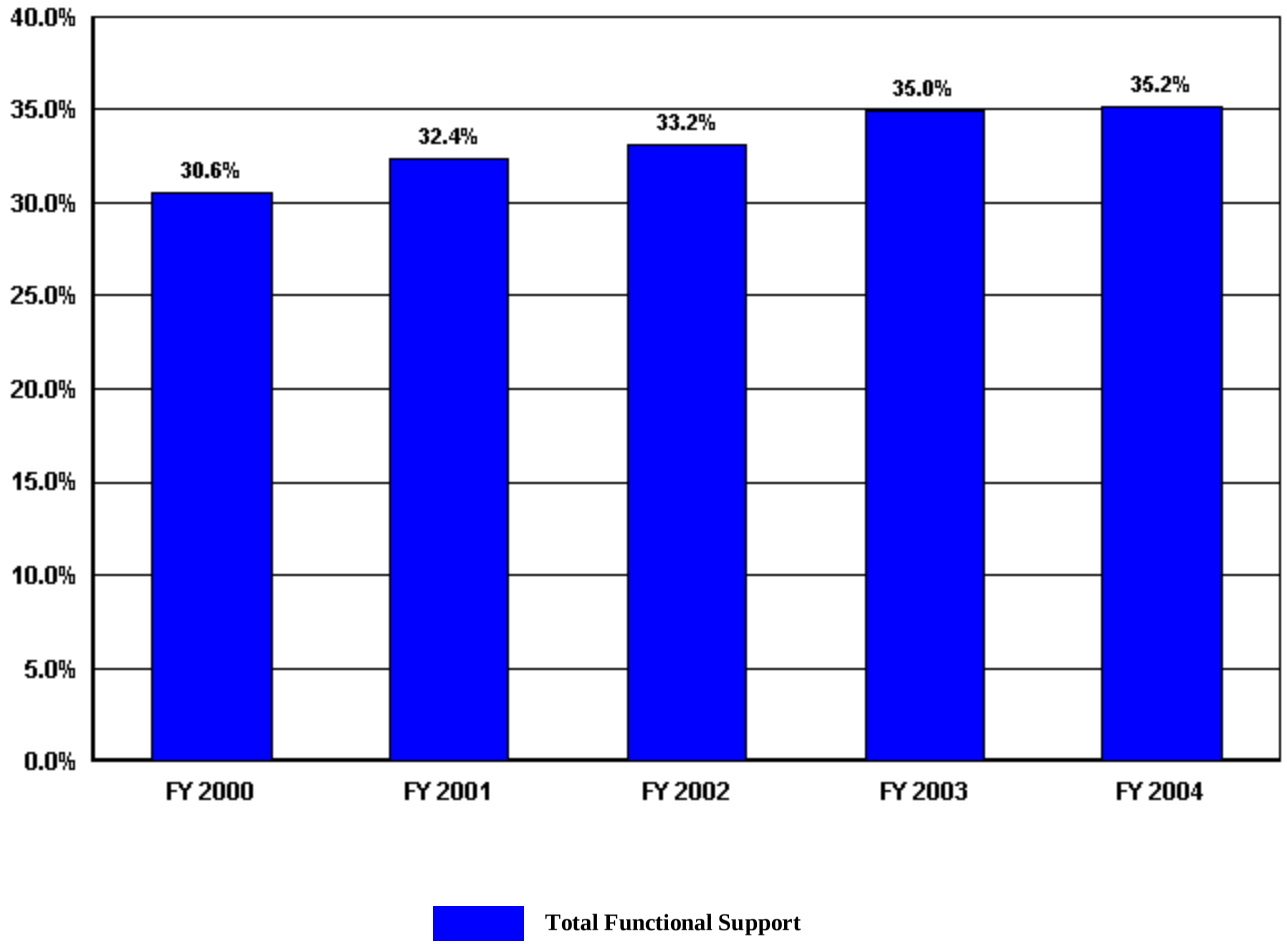
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	1,332,549	1,373,045	1,527,088	1,576,453	1,629,678	297,129	22.3%
Capital Construction	217,878	213,526	242,488	222,413	121,369	-96,509	-44.3%
Total Costs Less Construction	1,114,671	1,159,519	1,284,600	1,354,040	1,508,309	393,638	35.3%
Total Support Costs	**407,247**	**444,646**	**506,510**	**551,518**	**573,185**	**165,938**	**40.7%**
Mission Direct Operation	707,424	714,873	778,090	802,522	935,124	227,700	32.2%
Mission Direct Operation as % of Total Cost	**53.1%**	**52.1%**	**51.0%**	**50.9%**	**57.4%**		
Capital Construction as % of Total Cost	**16.4%**	**15.6%**	**15.9%**	**14.1%**	**7.4%**		
Total Support Cost as % of Total Cost	**30.6%**	**32.4%**	**33.2%**	**35.0%**	**35.2%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**30.6%**	**32.4%**	**33.2%**	**35.0%**	**35.2%**		
TOTAL SUPPORT COST	**407,247**	**444,646**	**506,510**	**551,518**	**573,185**	**165,938**	**40.7%**
TOTAL GENERAL SUPPORT as % of TOTAL	**9.4%**	**10.2%**	**11.1%**	**12.4%**	**12.3%**		
TOTAL GENERAL SUPPORT	**125,025**	**139,760**	**169,910**	**196,214**	**199,725**	**74,700**	**59.7%**
EXECUTIVE DIRECTION	14,198	15,557	19,977	20,022	19,320	5,122	36.1%
HUMAN RESOURCES	16,493	17,093	18,993	19,546	19,685	3,192	19.4%
CFO	9,388	7,030	7,231	6,920	7,315	-2,073	-22.1%
PROCUREMENT	13,137	13,015	15,850	17,045	16,145	3,008	22.9%
LEGAL	3,456	3,280	3,060	3,194	3,221	-235	-6.8%
CENTRAL ADMIN SERVICES	17,586	18,834	21,644	22,746	21,071	3,485	19.8%
PROGRAM/PROJECT CONTROL	2,287	2,064	2,506	3,207	3,254	967	42.3%
INFORMATION OUTREACH	13,681	14,433	18,400	19,697	18,912	5,231	38.2%
INFORMATION SERVICES	28,382	38,090	56,726	70,597	74,373	45,991	162.0%
OTHER	6,417	10,364	5,523	13,240	16,429	10,012	156.0%
TOTAL MISSION SUPPORT as % of TOTAL	**18.4%**	**18.1%**	**18.0%**	**18.5%**	**18.9%**		
TOTAL MISSION SUPPORT	**244,978**	**249,009**	**274,828**	**292,313**	**307,599**	**62,621**	**25.6%**
ENVIRONMENTAL	15,631	17,598	24,197	25,839	24,612	8,981	57.5%
SAFETY AND HEALTH	31,721	31,284	44,328	47,993	48,923	17,202	54.2%
FACILITIES MANAGEMENT	34,801	39,382	51,540	53,764	60,131	25,330	72.8%
MAINTENANCE	75,793	71,642	43,512	55,419	65,484	-10,309	-13.6%
UTILITIES	12,050	15,173	22,277	15,076	16,030	3,980	33.0%
SAFEGUARDS AND SECURITY	45,912	44,648	55,237	63,306	60,026	14,114	30.7%
LOGISTICS SUPPORT	9,895	10,831	12,874	10,441	9,835	-60	-0.6%
QUALITY ASSURANCE	6,097	5,866	4,613	4,675	4,930	-1,167	-19.1%
LABORATORY/TECHNICAL SUPPORT	13,078	12,585	16,250	15,800	17,628	4,550	34.8%
TOTAL SITE SPECIFIC as % of TOTAL	**2.8%**	**4.1%**	**4.0%**	**4.0%**	**4.0%**		
TOTAL SITE SPECIFIC	**37,244**	**55,877**	**61,772**	**62,991**	**65,861**	**28,617**	**76.8%**
MANAGEMENT/INCENTIVE FEE	11,578	13,929	14,632	14,925	13,419	1,841	15.9%
TAXES	743	212	310	199	314	-429	-57.7%
LDRD / PDRD / SDRD	24,923	41,736	46,830	47,867	52,128	27,205	109.2%

US Department of Energy
Total Functional Support
L. Livermore National Lab/University of California



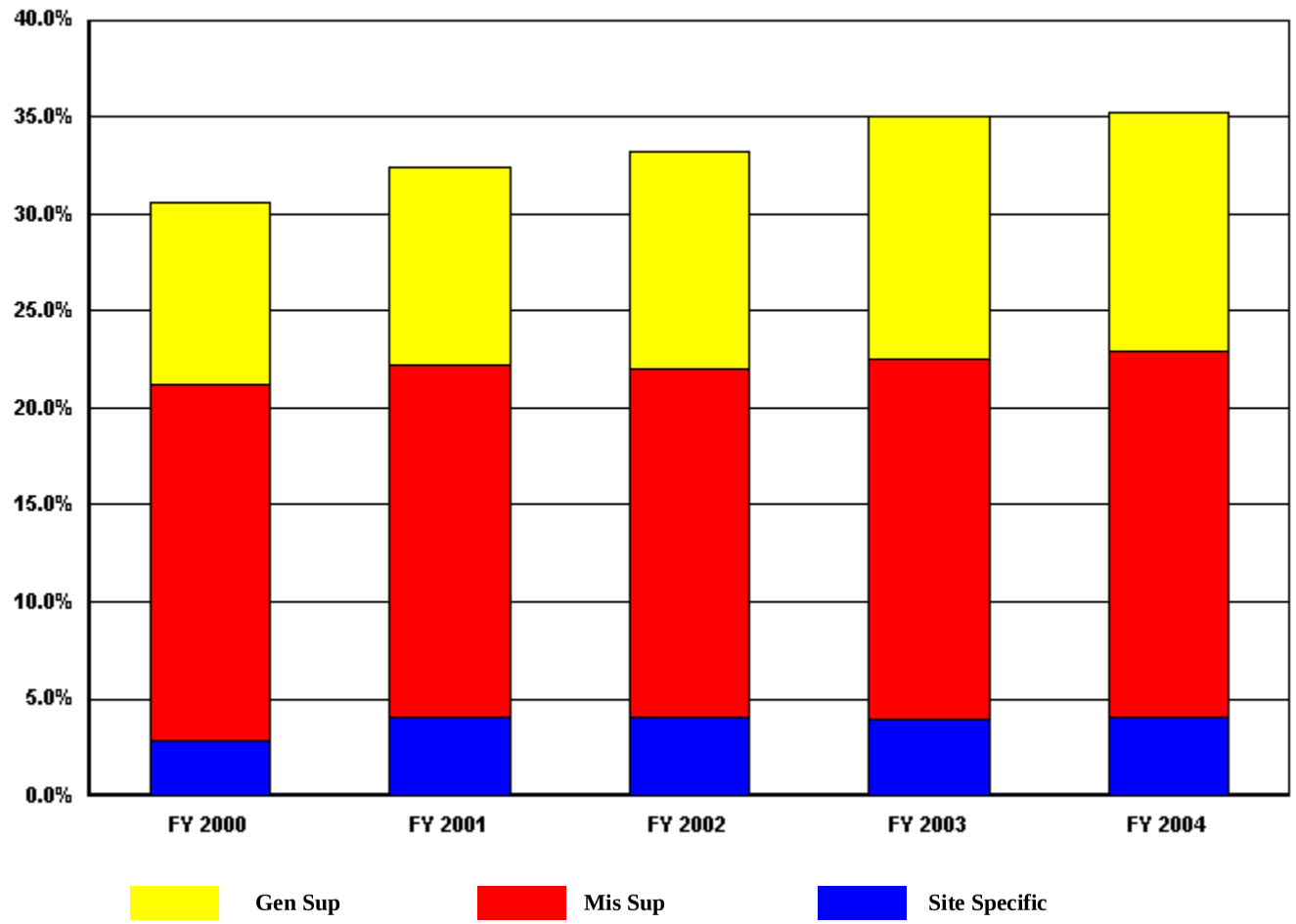
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	407,247	444,646	506,510	551,518	573,185

US Department of Energy
Total Functional Support as a % of Total Costs
L. Livermore National Lab/University of California



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	30.6%	32.4%	33.2%	35.0%	35.2%

US Department of Energy
Percent of Support Category to Total
L. Livermore National Lab/University of California



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	9.4%	10.2%	11.1%	12.4%	12.3%
Mis Sup	18.4%	18.1%	18.0%	18.5%	18.9%
Site Specific	2.8%	4.1%	4.0%	4.0%	4.0%

SITE PROFILE
L. Livermore National Lab/University of California

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

Established in 1952, Lawrence Livermore National Laboratory (LLNL) is a government-owned, 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 LLNL 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.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

INFORMATION SERVICES
Increased by $3,776K, mainly due to early payments on Institutional Computing Lease-To-Owns (LTO), which will result in cost savings due to reduced interest payments in future fiscal years. Additionally, the Administrative Information Systems (AIS) Department received increased funding to replace computer equipment and hardware. LLNL also formally established the Chief Information Officer (CIO) Organization in FY 2004 to unify oversight of all institutional information technology activities and projects. 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
The increase is primarily due to increase to self insurance reserves for litigation.

SAFETY AND HEALTH
Increased by $930K, due to an increase in matrixed Hazards Control personnel to meet programmatic demand resulting from additional compliance requirements, as well as increases in programmatic activity requiring safety support. Activities in this category consist of Hazards Control, Health Services, and the Document Manager.

FACILITIES MANAGEMENT
Increased by $6,367K, primarily due to an increase in Plant Engineering (PE) jobs resulting from increased funding for Institutional General Plant Projects (IGPP) and various facility revitalization projects such as the Building 490 Legacy Cleanup. Costs associated with the Institutional Facility Manager (IFM) and a variety of facilities-related projects are also captured in this category

MAINTENANCE
Increased by $10,065K, due mainly to an increase in maintenance-related Facilities and Infrastructure Revitalization Projects (FIRP) in FY 2004 to further reduce the maintenance backlog per the Ten Year Comprehensive Site Plan (TYCSP). This category consists primarily of the Laboratory Facility Charge (LFC) recharge and FIRP, but also includes other maintenance-related support projects.

LABORATORY/TECHNICAL SUPPORT
Increased $1,828K, due mainly to an increase in demand and funding for Materials Computation Analysis & Process (MCAP) laboratories and Multi-program Materials Technology Projects (MMTP). Other items included in this category include manufacturing technology, engineering materials, and measurement systems.

TAXES
Increased $115K, as a result of the number of taxable blanket purchase order releases doubling in FY 2004 as compared to FY 2003.

LDRD / PDRD / SDRD
Increased $4,261K, as a result of the LDRD distribution base increasing in FY 2004. The LDRD base increased because the total value of the contract increased.

CAPITAL CONSTRUCTION
changes due to the National Ignition Facility construction project nearing completion.

COST SAVINGS INITIATIVES

($ in 000's)

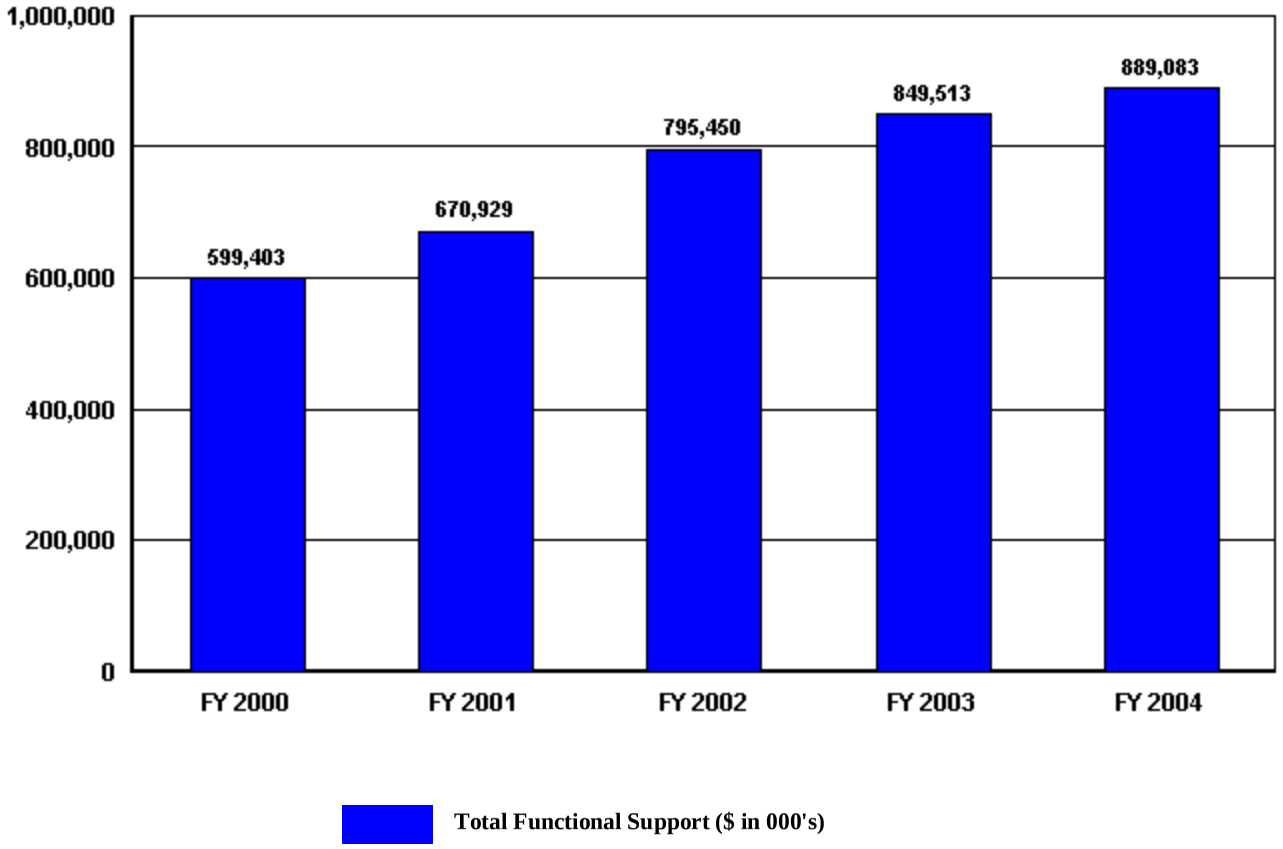
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Mixed Waste Storage	140	To minimize the generation of expensive (and problematic) mixed waste, LLNL developed a process to isolate a portion of the mixed waste into a certified low-level waste stream. This process enabled the Laboratory to divert about 27 drums in FY 2004 from the mixed waste category to low-level waste and yielded a savings of roughly $140K. In future years, LLNL expects to divert about 41 drums per year, which equals savings of about $213K annually.	Chris Brannon

Decontamination and Demolition	1,000	The Building 222 complex decontamination and demolition was completed at a cost of under $200 per sq. ft., rivaling "best in class" for industry. The project opened up four acres of valuable space, eliminated over $13M of deferred maintenance and nearly $1M per year in annual maintenance, and avoided $3M in compliance upgrades.	Chris Brannon

Trends in Total Support Cost by Functional Categories
Los Alamos National Lab/University of California ($000)
FY 2004

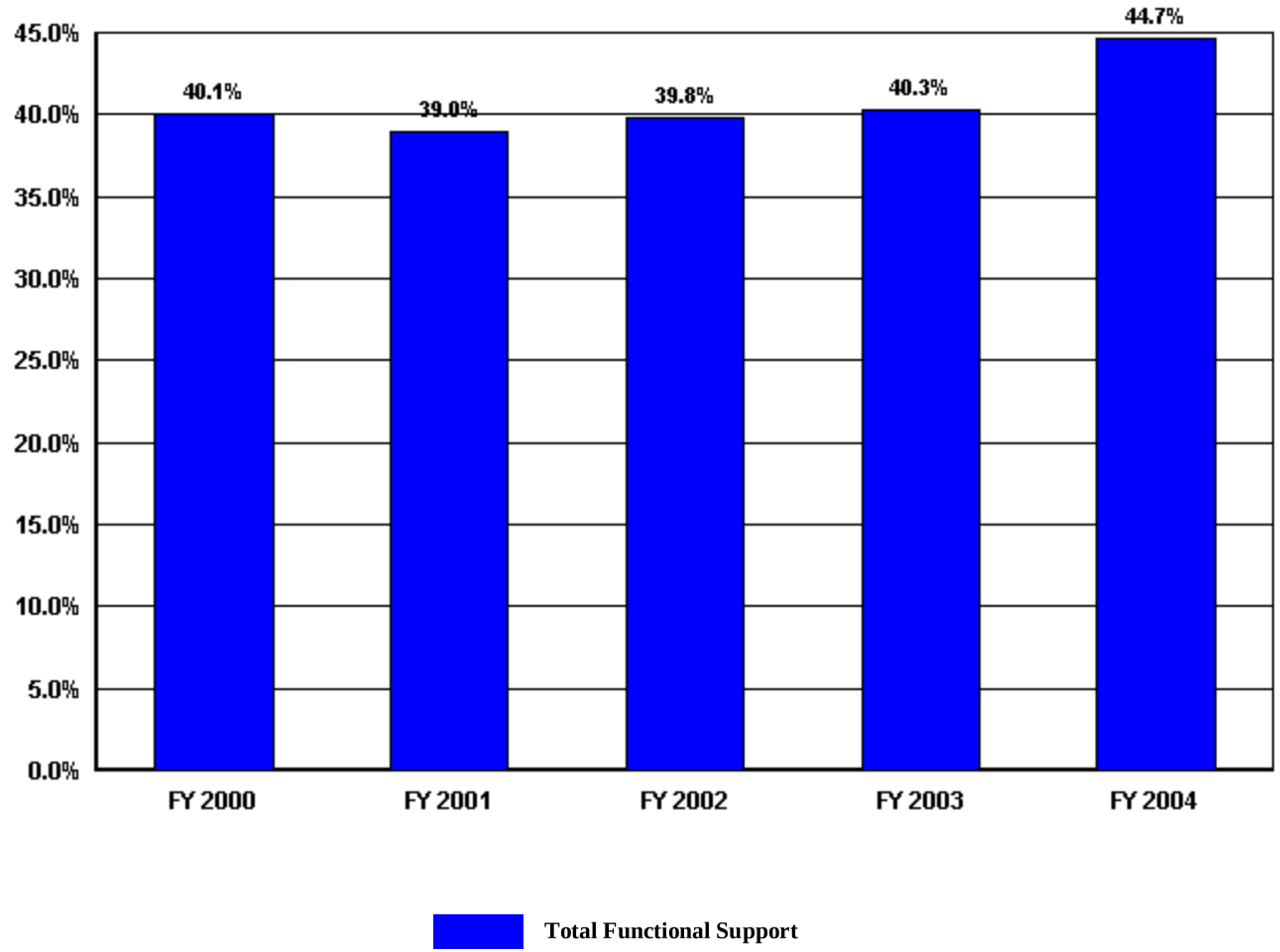
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	1,495,963	1,721,019	1,996,416	2,108,937	1,989,615	493,652	33.0%
Capital Construction	138,706	239,245	232,949	217,249	155,439	16,733	12.1%
Total Costs Less Construction	1,357,257	1,481,774	1,763,467	1,891,688	1,834,176	476,919	35.1%
Total Support Costs	**599,403**	**670,929**	**795,450**	**849,513**	**889,083**	**289,680**	**48.3%**
Mission Direct Operation	757,854	810,845	968,017	1,042,175	945,093	187,239	24.7%
Mission Direct Operation as % of Total Cost	**50.7%**	**47.1%**	**48.5%**	**49.4%**	**47.5%**		
Capital Construction as % of Total Cost	**9.3%**	**13.9%**	**11.7%**	**10.3%**	**7.8%**		
Total Support Cost as % of Total Cost	**40.1%**	**39.0%**	**39.8%**	**40.3%**	**44.7%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**40.1%**	**39.0%**	**39.8%**	**40.3%**	**44.7%**		
TOTAL SUPPORT COST	**599,403**	**670,929**	**795,450**	**849,513**	**889,083**	**289,680**	**48.3%**
TOTAL GENERAL SUPPORT as % of TOTAL	**14.4%**	**13.7%**	**12.8%**	**13.3%**	**15.1%**		
TOTAL GENERAL SUPPORT	**215,708**	**234,962**	**256,484**	**279,694**	**300,813**	**85,105**	**39.5%**
EXECUTIVE DIRECTION	12,715	14,443	22,708	24,063	26,984	14,269	112.2%
HUMAN RESOURCES	19,971	20,831	21,793	23,248	20,669	698	3.5%
CFO	9,058	8,401	9,708	11,268	11,636	2,578	28.5%
PROCUREMENT	11,315	12,501	12,935	17,438	20,831	9,516	84.1%
LEGAL	8,826	10,040	8,776	9,784	9,161	335	3.8%
CENTRAL ADMIN SERVICES	27,581	26,572	28,110	27,601	26,261	-1,320	-4.8%
PROGRAM/PROJECT CONTROL	22,049	22,810	18,872	15,043	15,627	-6,422	-29.1%
INFORMATION OUTREACH	21,480	22,890	20,607	20,620	19,653	-1,827	-8.5%
INFORMATION SERVICES	76,532	82,755	108,088	124,248	141,741	65,209	85.2%
OTHER	6,181	13,719	4,887	6,381	8,250	2,069	33.5%
TOTAL MISSION SUPPORT as % of TOTAL	**21.7%**	**20.4%**	**22.0%**	**22.0%**	**24.0%**		
TOTAL MISSION SUPPORT	**325,044**	**350,280**	**440,047**	**463,681**	**477,570**	**152,526**	**46.9%**
ENVIRONMENTAL	23,993	20,638	24,461	17,663	21,873	-2,120	-8.8%
SAFETY AND HEALTH	61,068	62,574	71,974	87,621	79,530	18,462	30.2%
FACILITIES MANAGEMENT	58,821	71,082	103,706	100,559	105,828	47,007	79.9%
MAINTENANCE	52,665	56,486	62,111	63,717	57,124	4,459	8.5%
UTILITIES	50,003	58,613	68,293	60,013	65,869	15,866	31.7%
SAFEGUARDS AND SECURITY	60,294	63,247	88,642	101,450	102,620	42,326	70.2%
LOGISTICS SUPPORT	6,478	6,934	8,823	10,872	13,476	6,998	108.0%
QUALITY ASSURANCE	9,652	8,602	9,530	17,941	26,457	16,805	174.1%
LABORATORY/TECHNICAL SUPPORT	2,070	2,104	2,507	3,845	4,793	2,723	131.5%
TOTAL SITE SPECIFIC as % of TOTAL	**3.9%**	**5.0%**	**5.0%**	**5.0%**	**5.6%**		
TOTAL SITE SPECIFIC	**58,651**	**85,687**	**98,919**	**106,138**	**110,700**	**52,049**	**88.7%**
MANAGEMENT/INCENTIVE FEE	18,122	19,356	19,455	19,031	22,790	4,668	25.8%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	40,529	66,331	79,464	87,107	87,910	47,381	116.9%

US Department of Energy
Total Functional Support
Los Alamos National Lab/University of California



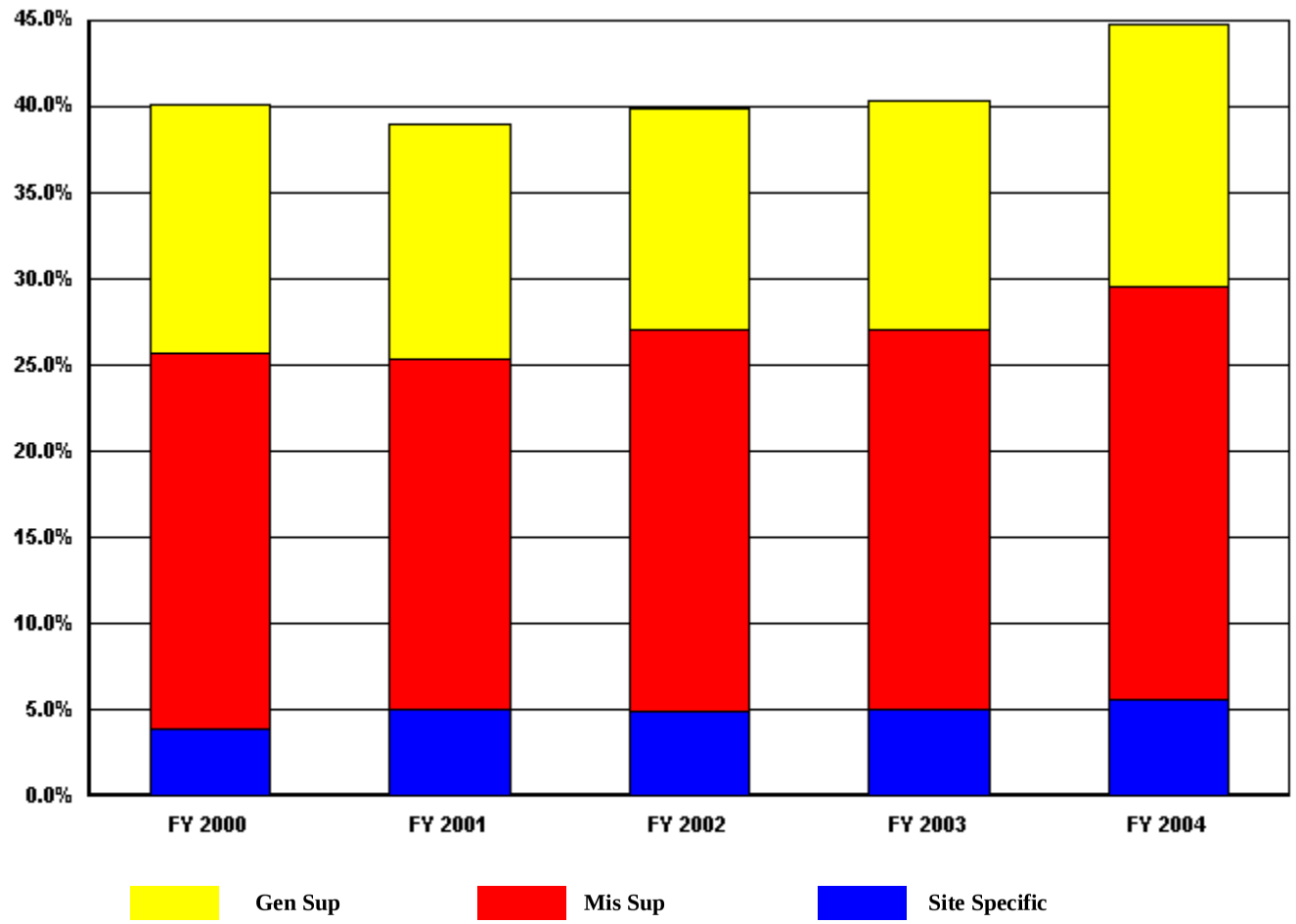
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	599,403	670,929	795,450	849,513	889,083

US Department of Energy
Total Functional Support as a % of Total Costs
Los Alamos National Lab/University of California



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	40.1%	39.0%	39.8%	40.3%	44.7%

US Department of Energy
Percent of Support Category to Total
Los Alamos National Lab/University of California



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	14.4%	13.7%	12.8%	13.3%	15.1%
Mis Sup	21.7%	20.4%	22.0%	22.0%	24.0%
Site Specific	3.9%	5.0%	5.0%	5.0%	5.6%

SITE PROFILE
Los Alamos National Lab/University of California

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 (DOE).

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 bio-detectors 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 DOE laboratory–bringing the LANL total to 89 awards since 1978.

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.

SITE PROFILE
Los Alamos National Lab/University of California

Nuclear facilities are located at 13 of the 47 technical areas. LANL maintains a total of 2,224 individual facilities.

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. LANL employs 3,385 contractor personnel in the capacity of a security force (624), a site support workforce (1,506), and technical and non-technical contractor employees employed throughout the Laboratory (1,255). 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. The Laboratory also 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.

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

The following three types of customers sponsor Laboratory activities:

- National Nuclear Security Administration (NNSA) 73%
- Department of Energy (DOE) (non-NNSA) 15%
- Non-DOE Work for Others (WFO) 12%

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

- Department of Defense 38%
- Federal Agency — Intelligence 30%
- Department of Health and Human Services. 9%
- Non-Federal Universities and Institutions 11%
- National Aeronautics and Space Admin 5%
- Other 7%

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

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

OTHER
($1,869K increase) A one-time payment was made in response to a lawsuit. However, costs were decreased for the Institutional Program Development to reduce overhead costs and redirect resources to science and technology activities.

ENVIRONMENTAL
($4,210K increase)Costs for the Packaging and Transportation Safety Code were more appropriately re-categorized from Logistics to Environmental per the FY 2003 Functional Cost Peer Review. Costs for the Risk Reduction & Environmental Stewardship (RRES) Division were increased to accommodate an increased scope of work for well-drilling projects and facility integration cleanup. A recharge was created for a Site-wide Environmental Impact Statement (SWEIS) per 10 CFR 1021.330 (d) in which DOE directs the Laboratory to prepare documentation that supports a Supplement Analysis (SA) for the SWEIS.

FACILITIES MANAGEMENT
($5,269K increase) The Laboratory consolidated all leased space and captured these costs more appropriately into Facilities Management. In addition to the increase, there was a decrease to the Material Characterization Program to more appropriately re-categorize from Facilities to Mission Direct per the FY 2003 Functional Cost Peer Review.

LOGISTICS SUPPORT
($2,640K increase) The Laboratory's contracted taxi service was more appropriately re-categorized from various functional cost categories to Logistics. Tube trailers were tested and reconfigured for the Packaging and Transportation Project. The Packaging & Transportation Safety Code was more appropriately re-categorized from Logistics to Environmental per the FY 2003 Functional Cost Peer Review.

QUALITY ASSURANCE
($8,516K increase) Costs were increased for the compliance team to meet nuclear safety requirements addressed by the Price Anderson Amendment Act. The Appraisal & Performance Analysis project was more appropriately re-categorized from Environmental to Quality Assurance/Compliance. Costs for the RRES division quality assurance team were increased. Costs for the Quality Assurance Office were increased. Costs were increased for three divisions—Audits and Assessments, the Prime Contract Office, and the Chief Financial Office—to address normal attrition from the past several years and to accommodate new DOE compliance requirements.

LABORATORY/TECHNICAL SUPPORT
This modest cost increase ($948K) reflects the increase in recharge activities for Other Laboratory/Technical Support.

CAPITAL CONSTRUCTION
($61,810K decrease) FY 2003 costs included expenditures for capital projects and one-time equipment purchases not included in FY 2004. In FY 2003, there was a final payment made on the Q Platform. In FY 2004, there were costs that offset this decrease for the new line item NNSB project.

COST SAVINGS INITIATIVES
($ in 000's)

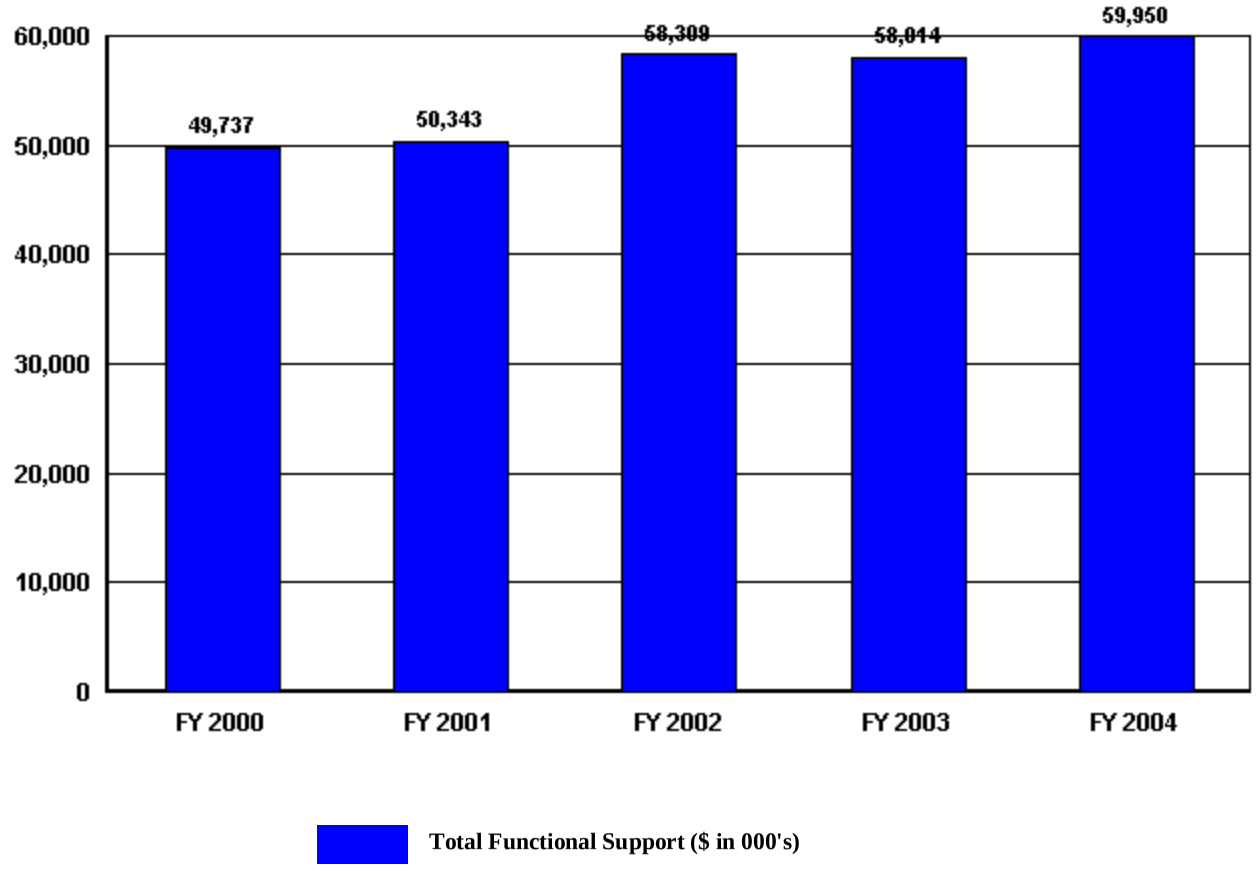
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Network Stategy to Recruit Top Management	180	A new networking strategy was developed in-house and implemented to successfully recruit several top management positions. This resulted in an estimated cost saving for this year (not annual) from the elimination of a search firm fee.	Tracy Lattin
Contingent Worker Program	200	Developed in-house and implemented a significant business process improvement strategy with the Contingent Worker Project (CWP). The CWP project will result in a number of contract employee positions being re-classified as UC staff positions. The Laboratory will recognize cost savings through reduced overhead and retirement costs being paid to vendors. There were no incremental costs incurred by staff to implement this process.	Tracy Lattin

CFO University	346	The vision behind the CFO University is to improve the performance of the CFO Division by investing in its most important resource -- our workforce. Investing in the training and development in the more than 300 employees of the CFO Division is the best, most proactive way to demonstrate the Laboratory's commitment to business excellence. In the past, obtaining meaningful training was often prohibitively expensive in terms of both time and cost. We decided to tear this barrier down in FY 2004 -- training must be more accessible to every employee in the CFO Division and less disruptive to work and personal schedules. The mission of the CFO University is to foster proficiency by helping new and current employees better understand how we do business at the Laboratory -- and how we should do business in the future. This idea was developed in-house.	Tracy Lattin

Trends in Total Support Cost by Functional Categories
National Renewable Energy Lab/Midwest Research ($000)
FY 2004

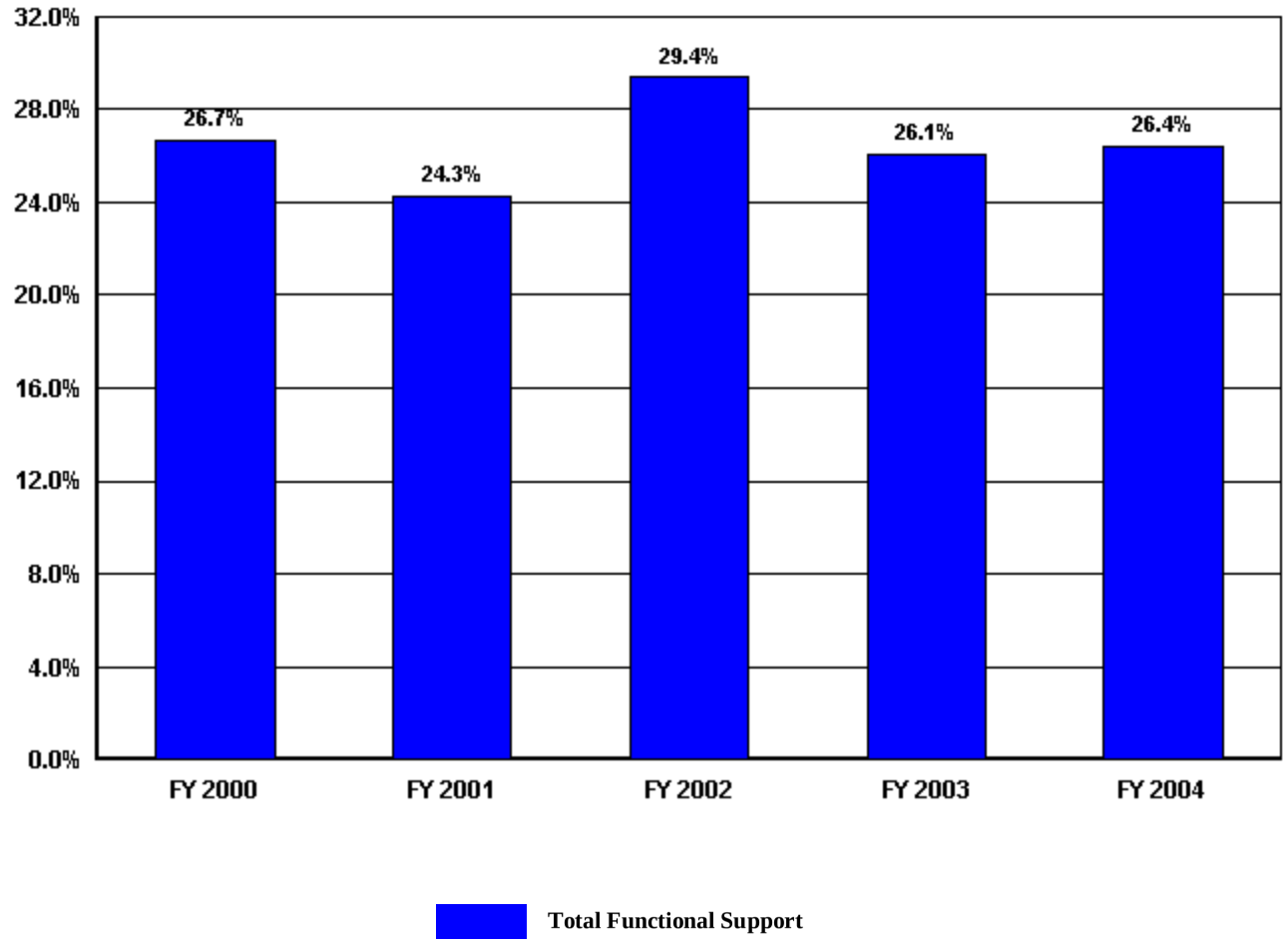
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	186,233	207,507	198,306	222,231	226,879	40,646	21.8%
Capital Construction	4,523	5,361	7,599	6,628	11,563	7,040	155.6%
Total Costs Less Construction	181,710	202,146	190,707	215,603	215,316	33,606	18.5%
Total Support Costs	**49,737**	**50,343**	**58,309**	**58,014**	**59,950**	**10,213**	**20.5%**
Mission Direct Operation	131,973	151,803	132,398	157,589	155,366	23,393	17.7%
Mission Direct Operation as % of Total Cost	**70.9%**	**73.2%**	**66.8%**	**70.9%**	**68.5%**		
Capital Construction as % of Total Cost	**2.4%**	**2.6%**	**3.8%**	**3.0%**	**5.1%**		
Total Support Cost as % of Total Cost	**26.7%**	**24.3%**	**29.4%**	**26.1%**	**26.4%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**26.7%**	**24.3%**	**29.4%**	**26.1%**	**26.4%**		
TOTAL SUPPORT COST	**49,737**	**50,343**	**58,309**	**58,014**	**59,950**	**10,213**	**20.5%**
TOTAL GENERAL SUPPORT as % of TOTAL	**17.4%**	**15.4%**	**19.6%**	**16.9%**	**17.6%**		
TOTAL GENERAL SUPPORT	**32,392**	**31,943**	**38,803**	**37,574**	**39,837**	**7,445**	**23.0%**
EXECUTIVE DIRECTION	2,362	3,051	3,667	3,896	4,055	1,693	71.7%
HUMAN RESOURCES	1,521	1,418	1,651	1,546	1,895	374	24.6%
CFO	1,732	1,659	1,962	2,171	2,225	493	28.5%
PROCUREMENT	2,169	2,166	2,381	2,499	2,754	585	27.0%
LEGAL	1,023	1,323	1,916	1,442	1,435	412	40.3%
CENTRAL ADMIN SERVICES	1,737	2,184	2,553	2,486	2,599	862	49.6%
PROGRAM/PROJECT CONTROL	791	1,840	1,061	1,198	1,455	664	83.9%
INFORMATION OUTREACH	10,307	9,589	12,834	11,644	11,656	1,349	13.1%
INFORMATION SERVICES	7,940	6,794	8,652	8,751	9,419	1,479	18.6%
OTHER	2,810	1,919	2,126	1,941	2,344	-466	-16.6%
TOTAL MISSION SUPPORT as % of TOTAL	**6.9%**	**6.6%**	**7.2%**	**6.8%**	**6.5%**		
TOTAL MISSION SUPPORT	**12,784**	**13,734**	**14,342**	**15,031**	**14,683**	**1,899**	**14.9%**
ENVIRONMENTAL	0	0	0	0	0	0	0.0%
SAFETY AND HEALTH	920	931	1,029	1,190	1,157	237	25.8%
FACILITIES MANAGEMENT	7,106	6,692	6,783	6,797	6,852	-254	-3.6%
MAINTENANCE	1,818	2,816	2,980	2,824	2,971	1,153	63.4%
UTILITIES	1,000	1,130	967	1,155	1,222	222	22.2%
SAFEGUARDS AND SECURITY	780	906	1,197	1,349	1,164	384	49.2%
LOGISTICS SUPPORT	387	408	406	789	524	137	35.4%
QUALITY ASSURANCE	535	579	719	641	508	-27	-5.0%
LABORATORY/TECHNICAL SUPPORT	238	272	261	286	285	47	19.7%
TOTAL SITE SPECIFIC as % of TOTAL	**2.4%**	**2.2%**	**2.6%**	**2.4%**	**2.4%**		
TOTAL SITE SPECIFIC	**4,561**	**4,666**	**5,164**	**5,409**	**5,430**	**869**	**19.1%**
MANAGEMENT/INCENTIVE FEE	4,561	4,666	5,164	5,409	5,430	869	19.1%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
National Renewable Energy Lab/Midwest Research



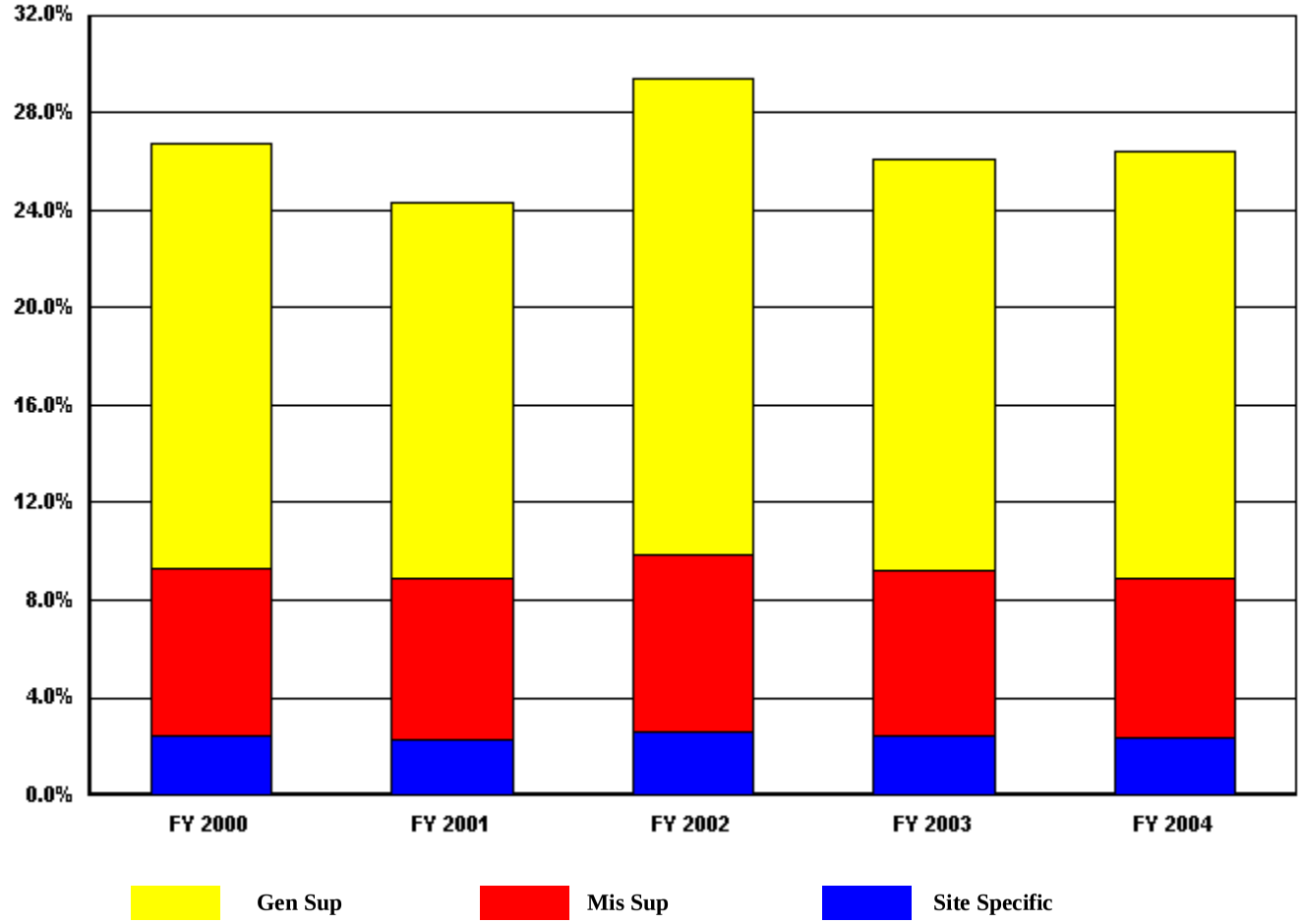
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	49,737	50,343	58,309	58,014	59,950

US Department of Energy
Total Functional Support as a % of Total Costs
National Renewable Energy Lab/Midwest Research



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	26.7%	24.3%	29.4%	26.1%	26.4%

US Department of Energy
Percent of Support Category to Total
National Renewable Energy Lab/Midwest Research



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	17.4%	15.4%	19.6%	16.9%	17.6%
Mis Sup	6.9%	6.6%	7.2%	6.8%	6.5%
Site Specific	2.4%	2.2%	2.6%	2.4%	2.4%

SITE PROFILE
National Renewable Energy Lab/Midwest Research

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

The National Renewable Energy Laboratory (NREL) 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 U. S. 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 1,132 workers 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

TRENDS

The data indicate that support costs as a percentage of total cost (excluding capital and construction) have been declining since FY 2002. When capital and construction costs are included in the base, the decline is more pronounced. This has been achieved in an environment in which the costs of pension and medical benefits have risen sharply, with these cost increases offset with cost savings in

other indirect costs.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

HUMAN RESOURCES
Increased ($349K) due to an increased emphasis on employee training programs.

PROGRAM/PROJECT CONTROL
Increased ($257K) with the addition of a new program at NREL. The Lab is performing the Systems Integration role for DOE's Hydrogen program.

INFORMATION SERVICES
Increased ($668K) costs for software licenses. The Lab is performing more electronic processing, with employees now performing work on-line that was previously done in a paper-intensive process.

OTHER
($403K increase) Includes cost associated with the Research Fellows Council, new in FY 2004

LOGISTICS SUPPORT
Reduction in the costs ($265K) of GSA fleet vehicle from FY 2003.

QUALITY ASSURANCE
($133K decrease) Reclassification of costs from Quality Assurance to Executive Direction

CAPITAL CONSTRUCTION
($4,935 increase) Spending begun on new Science and Technology Facility.

COST SAVINGS INITIATIVES

($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

Electronic Processing Initiative	125	Electronic Processing Initiative: The Laboratory realized significant cost savings with its DOE/Oracle contract. The licenses that were procured retail for $1.57 million and a DOE contract price of $628,000. NREL successfully negotiated $503,000, saving $125,000 off the DOE price and $1.067 million off the retail price. This effort poises the Lab for launching new electronic processes that will increase efficiency thereby resulting in additional cost savings.	Eric Manuel
New Bank Agreement	30	Solid bank performance is important to effectively manage federal funds. The Laboratory's recent banking recompetition resulted in a 50% reduction of banking costs while improving overall bank performance and reflecting NREL's commitment to continuous improvement.	Dick Sinning
Personal Time Off (PTO)	850	NREL's Personal Time Off (PTO) Benefit Program, implemented in FY 2004, resulted in an increase in productive labor to projects and decreased use of unplanned sick time and absences. Largely due to the new PTO Program, NREL's fringe rate dropped nearly 2%, resulting in approximately $850 thousand savings to the Laboratory. At the same time, the program provides increased flexibility to staff by giving them more control over how they use their time off.	Chris Leavitt
New Patent Strategy	18	The Laboratory continued to emphasize the quality and long-term impact of its intellectual property through its new patent strategy. This strategic approach has resulted in a $17,724 savings (77%) in maintenance, annuity, and prosecution costs from FY 2003.	

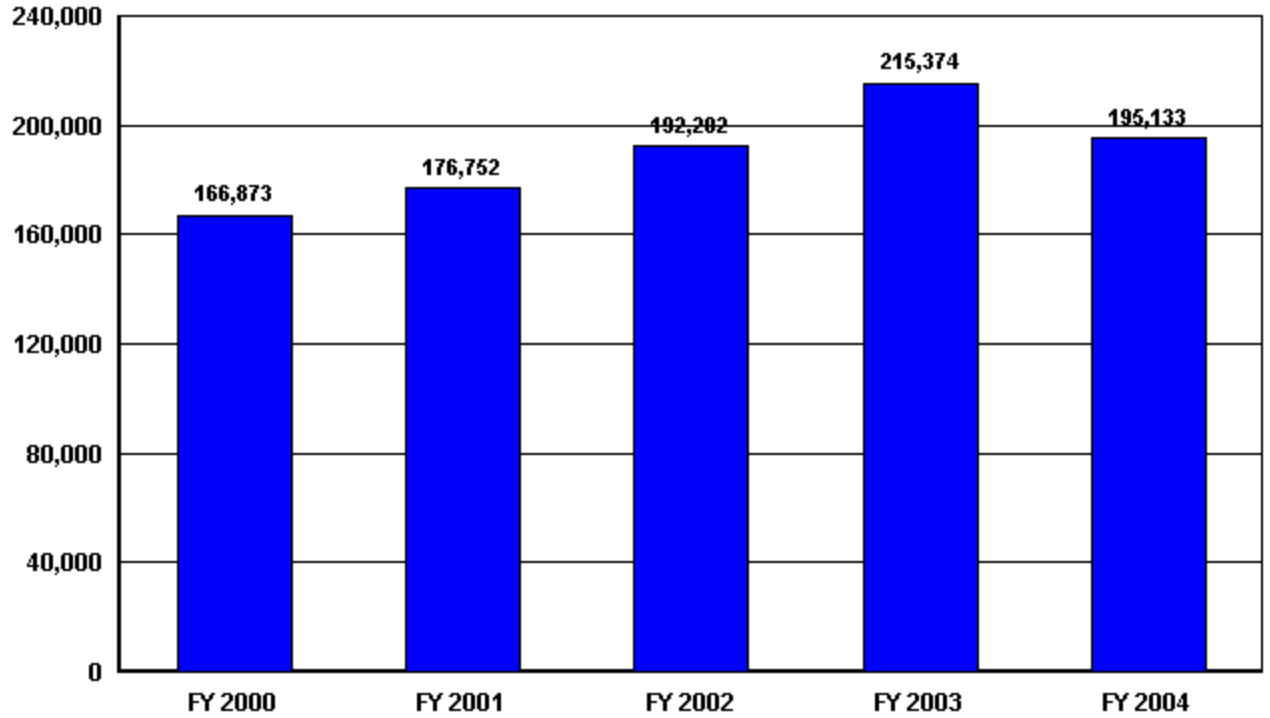
Construction Subcontracting	960	The construction subcontract was awarded for the Science and Technology Facility, the first major construction line item awarded to NREL in 10 years and the first CLI under the new OECM Project Management Manual. NREL led an integrated project team in negotiating a Best and Final Offer savings of $960,000. Efforts significantly reduced the mismatch between budget versus bids due to multi-year funding profile and market increases in building materials.	Jerome Hicks
Reduced energy and resource costs	0	The Laboratory has implemented energy and resource saving measures since its inception. In FY 2002 this effort was formalized and expanded with the launching of the Sustainable NREL program, which included developing mechanisms for measuring our energy and resource savings. Today these comprehensive efforts are a regular part of how the Lab does business and are demonstrated by results. - NREL Fleet petroleum use has been reduced from 8,500 gallons in FY 2003 to 7,691 gallons used in FY 2004 and reflects an over 30% reduction since FY 1999. - Solid waste has been reduced from 427,880 lbs in FY 2003 to 406,820 lbs in FY 2004. - Water usage as the South Table Mountain site has been reduced for 9.6 million gallons in FY 2003 to 7.0 million in FY 2004 and reflects an over 40% reduction in water use since FY 2000. - Electricity use at the permanent sites has been reduced from 16,272,561 kWh in FY 2003 to 15,600,665 kWh in FY 2004. - Natural gas use at South Table Mountain has been reduced from 448,882 Therms in FY03 to 413,811 Therms in FY 2004.	

Reduction in Subcontracts	0	NREL closed a record number of subcontracts (714), exceeding the Laboratory's goal by 19%. This achievement includes a reduction in the subcontracts backlog, surpassing the NREL goal by approximately 20%. As a result of these efforts, $4.1 million was returned to programs for other uses in FY 2004.	
Implementation of Web-based ergonomics training	0	Through a combination of performance monitoring and communication by the Safety Council, implementation of Web-based ergonomics training, prompt reporting and treatment of symptoms, and aggressive injury case management the Laboratory achieved its sixth quarter without a lost workday case and total Worker's Compensation costs of about $10,000 or 0.6 cents per hour worked. This represents one of the best levels of performance across the DOE complex and validates the Lab's emphasis on controlling injury severity rather than focusing solely on injury frequency.	

Trends in Total Support Cost by Functional Categories
Nevada/Bechtel Nevada ($000)
FY 2004

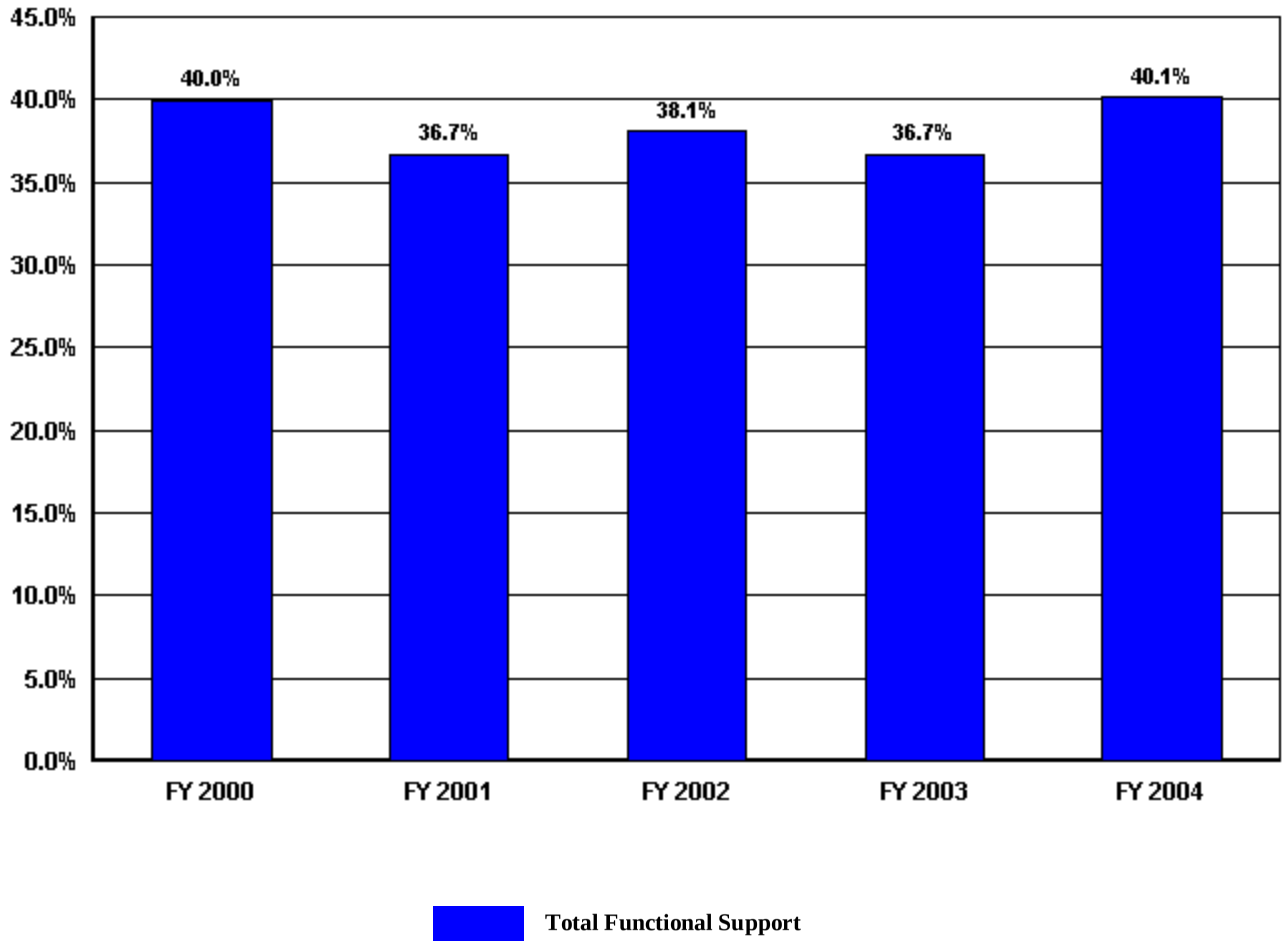
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	417,594	482,055	504,990	586,903	486,336	68,742	16.5%
Capital Construction	10,332	31,866	19,276	23,569	33,186	22,854	221.2%
Total Costs Less Construction	407,262	450,189	485,714	563,334	453,150	45,888	11.3%
Total Support Costs	**166,873**	**176,752**	**192,202**	**215,374**	**195,133**	**28,260**	**16.9%**
Mission Direct Operation	240,389	273,437	293,512	347,960	258,017	17,628	7.3%
Mission Direct Operation as % of Total Cost	**57.6%**	**56.7%**	**58.1%**	**59.3%**	**53.1%**		
Capital Construction as % of Total Cost	**2.5%**	**6.6%**	**3.8%**	**4.0%**	**6.8%**		
Total Support Cost as % of Total Cost	**40.0%**	**36.7%**	**38.1%**	**36.7%**	**40.1%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**40.0%**	**36.7%**	**38.1%**	**36.7%**	**40.1%**		
TOTAL SUPPORT COST	**166,873**	**176,752**	**192,202**	**215,374**	**195,133**	**28,260**	**16.9%**
TOTAL GENERAL SUPPORT as % of TOTAL	**10.8%**	**10.1%**	**10.7%**	**10.7%**	**12.7%**		
TOTAL GENERAL SUPPORT	**44,973**	**48,904**	**53,978**	**62,866**	**61,883**	**16,910**	**37.6%**
EXECUTIVE DIRECTION	7,066	10,409	6,607	6,359	4,489	-2,577	-36.5%
HUMAN RESOURCES	3,229	3,302	3,656	3,919	3,553	324	10.0%
CFO	3,439	3,561	3,991	4,047	4,678	1,239	36.0%
PROCUREMENT	2,014	1,863	2,306	3,094	3,331	1,317	65.4%
LEGAL	996	865	1,012	1,352	1,272	276	27.7%
CENTRAL ADMIN SERVICES	7,470	8,114	9,566	11,391	9,332	1,862	24.9%
PROGRAM/PROJECT CONTROL	1,200	1,151	1,719	2,329	5,127	3,927	327.3%
INFORMATION OUTREACH	1,676	1,240	1,920	2,353	2,667	991	59.1%
INFORMATION SERVICES	16,107	17,378	21,177	25,135	24,916	8,809	54.7%
OTHER	1,776	1,021	2,024	2,887	2,518	742	41.8%
TOTAL MISSION SUPPORT as % of TOTAL	**24.1%**	**21.9%**	**21.7%**	**20.5%**	**19.8%**		
TOTAL MISSION SUPPORT	**100,717**	**105,419**	**109,529**	**120,128**	**96,241**	**-4,476**	**-4.4%**
ENVIRONMENTAL	3,079	930	950	1,062	1,097	-1,982	-64.4%
SAFETY AND HEALTH	13,992	14,956	16,936	20,822	20,489	6,497	46.4%
FACILITIES MANAGEMENT	5,131	6,815	7,716	9,932	11,898	6,767	131.9%
MAINTENANCE	23,033	23,013	22,672	23,710	23,528	495	2.1%
UTILITIES	7,397	10,499	11,877	11,821	11,989	4,592	62.1%
SAFEGUARDS AND SECURITY	24,611	24,995	27,523	28,162	1,751	-22,860	-92.9%
LOGISTICS SUPPORT	11,920	10,408	11,174	12,153	12,359	439	3.7%
QUALITY ASSURANCE	3,763	5,576	3,548	3,737	4,879	1,116	29.7%
LABORATORY/TECHNICAL SUPPORT	7,791	8,227	7,133	8,729	8,251	460	5.9%
TOTAL SITE SPECIFIC as % of TOTAL	**5.1%**	**4.7%**	**5.7%**	**5.5%**	**7.6%**		
TOTAL SITE SPECIFIC	**21,183**	**22,429**	**28,695**	**32,380**	**37,009**	**15,826**	**74.7%**
MANAGEMENT/INCENTIVE FEE	17,794	17,530	19,613	23,213	25,539	7,745	43.5%
TAXES	3,389	4,899	5,822	5,452	6,872	3,483	102.8%
LDRD / PDRD / SDRD	0	0	3,260	3,715	4,598	4,598	100.0%

US Department of Energy
Total Functional Support
Nevada/Bechtel Nevada



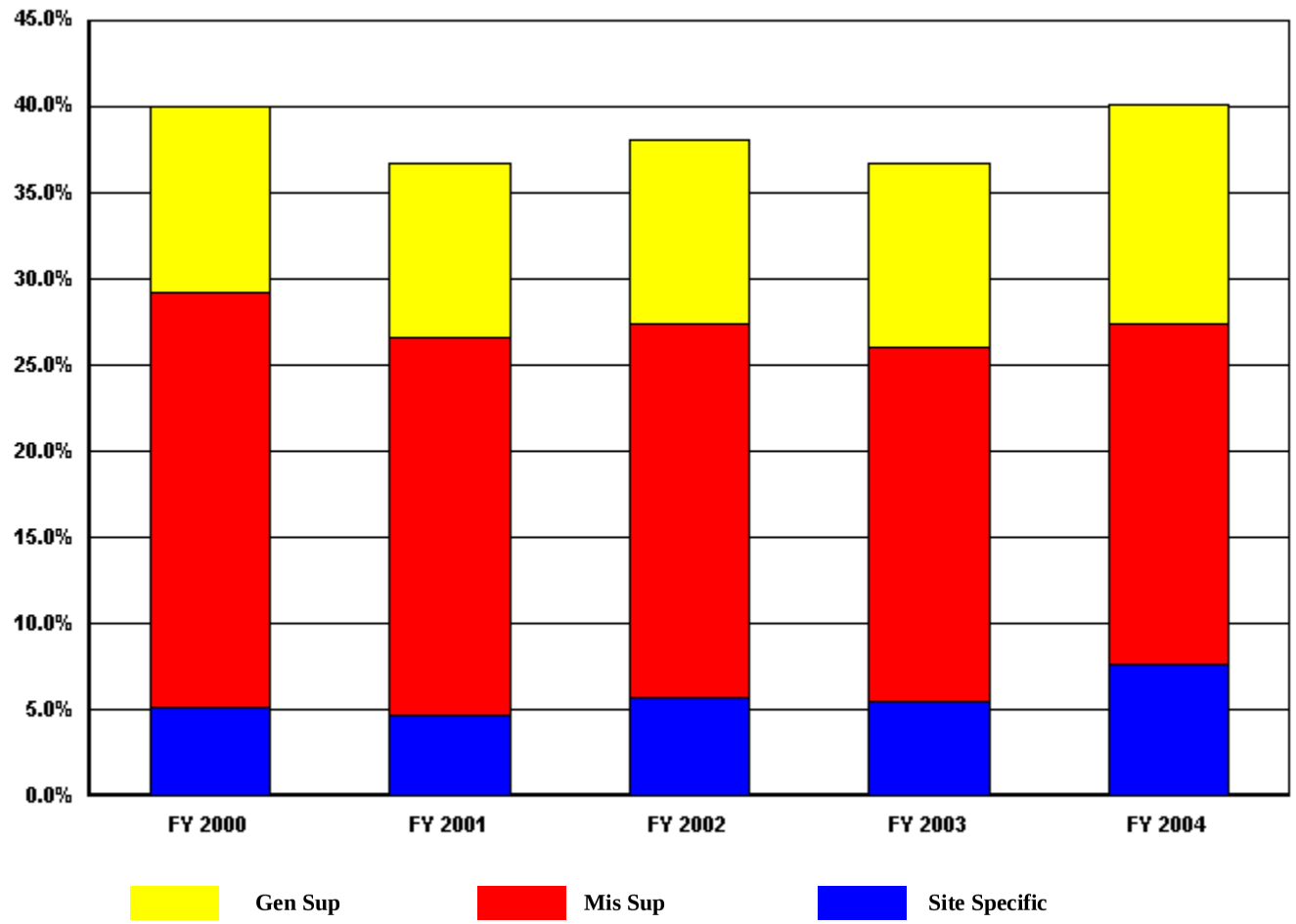
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	166,873	176,752	192,202	215,374	195,133

US Department of Energy
Total Functional Support as a % of Total Costs
Nevada/Bechtel Nevada



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	40.0%	36.7%	38.1%	36.7%	40.1%

US Department of Energy
Percent of Support Category to Total
Nevada/Bechtel Nevada



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	10.8%	10.1%	10.7%	10.7%	12.7%
Mis Sup	24.1%	21.9%	21.7%	20.5%	19.8%
Site Specific	5.1%	4.7%	5.7%	5.5%	7.6%

SITE PROFILE
Nevada/Bechtel Nevada

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 541 support buildings and laboratories with a replacement cost of $814 million. There is housing for 349; 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. U.S. Department of Energy (DOE)/NV's current mission is to strengthen United States' security through the military application of nuclear energy and by reducing the global threat from terrorism and weapons of mass destruction.

TRENDS

Bechtel is a site support contractor whose primary mission is to maintain the site for testing. Therefore, support costs may appear higher than other integrated contractors. Most of the Mission Direct work is performed by contractors who contract with the NNSA Nevada Site Office. In 2003, this work amounted to $25 million for Safeguards/Security costs under Mission Support, and $100 million for Mission Direct costs. In prior years this non-M&O work was added to Bechtel's cost in

the functional cost report. Due to the reorganization of NNSA, it is not feasible to continue this practice nor do we believe it to be the correct handling of non-integrated costs. From 2004 forward, only the integrated contractors' costs will be included in the functional cost report.

Total costs ($2,518K) included in the Other category for FY 2004 are as follows:
General Insurance - 345; Housing - 778; Legal Settlements - 233;
Elk Hills Retirement - 941; Excess Property Sale - (160); Retro Worker's Comp*- 241;
Other Adjustments - 140

***** This represents prior contractor worker's compensation claims for Johnston Atoll.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

EXECUTIVE DIRECTION
The decrease ($1,870K) 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. All of the work scope was completed in FY 2003.

CFO
($631K increase) Increased scope of work including WFO billing and invoice processing.

PROCUREMENT
The increase ($237K) is due to an increase in scope of work and increase of 5.6 FTEs.

LEGAL
The decrease ($80K) is due to the General Counsel decreasing their employee count by one for most of FY 2004.

FACILITIES MANAGEMENT
The increase ($1,966K) is due to Cheyenne Facility lease increases and perpetual relocation of organizations.

SAFEGUARDS AND SECURITY
($26,411K decrease) S & S contract costs on Field office books FY 2004.

QUALITY ASSURANCE
($1,142K increase) PAAA move from direct to support.

LABORATORY/TECHNICAL SUPPORT
The decrease ($478K) is due to a decrease in the scope of work for Radiation Sciences Section.

TAXES
($1,420K increase) New Mexico Gross receipt tax and Litigations resolved.

LDRD / PDRD / SDRD
($883K increase) SDRD program limitation based on % of NNSA spending.

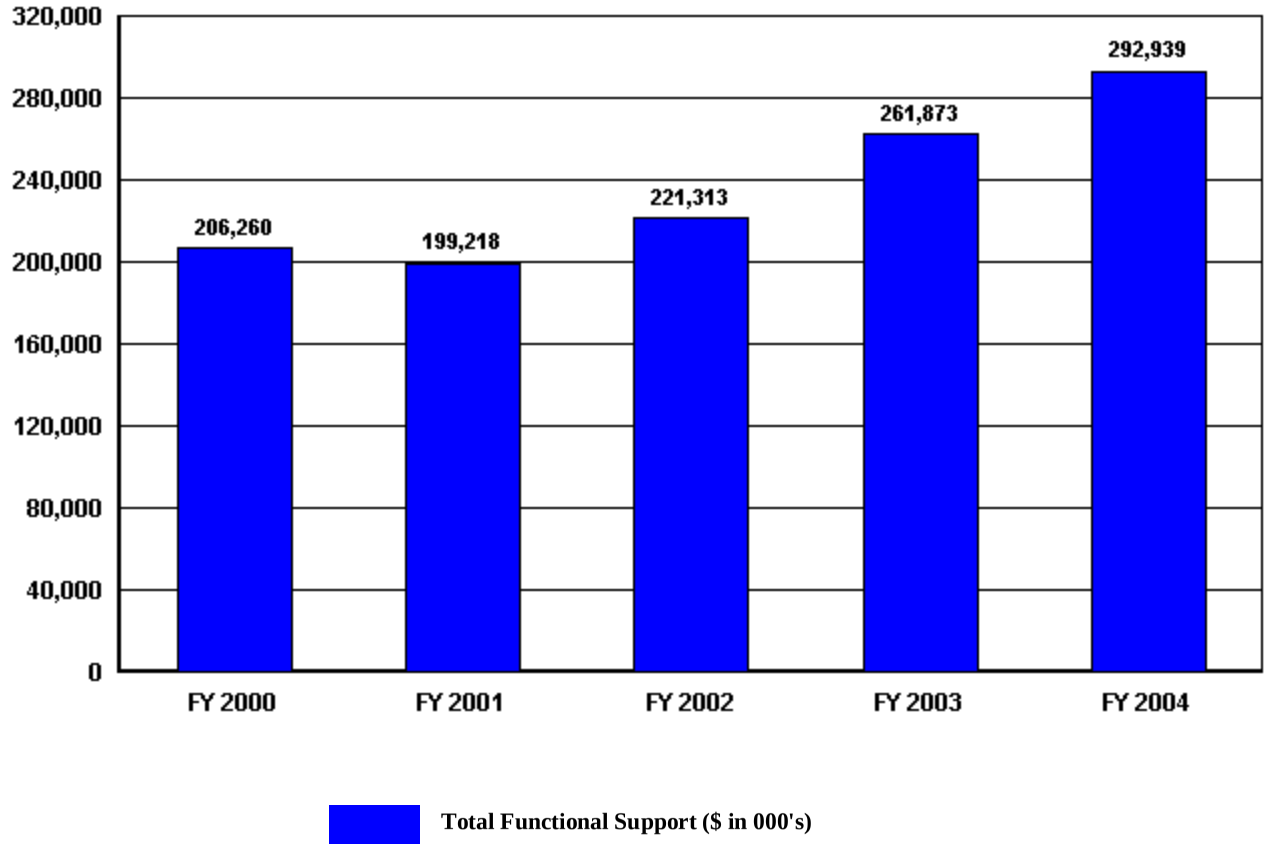
COST SAVINGS INITIATIVES
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Six Sigma Process Improvements	6,151	BN continues to submit cost savings resulting from Six Sigma program process improvements. For FY 2004, the Six Sigma program resulted in $6,151K in cost savings in the areas of property asset management system, waste disposal process, waste management lifecycle baseline, allocation of light duty vehicles, UIA preventive maintenance, and NTS commuter buses.	Casey Hulet

Trends in Total Support Cost by Functional Categories
Oak Ridge National Lab/UT-Battelle ($000)
FY 2004

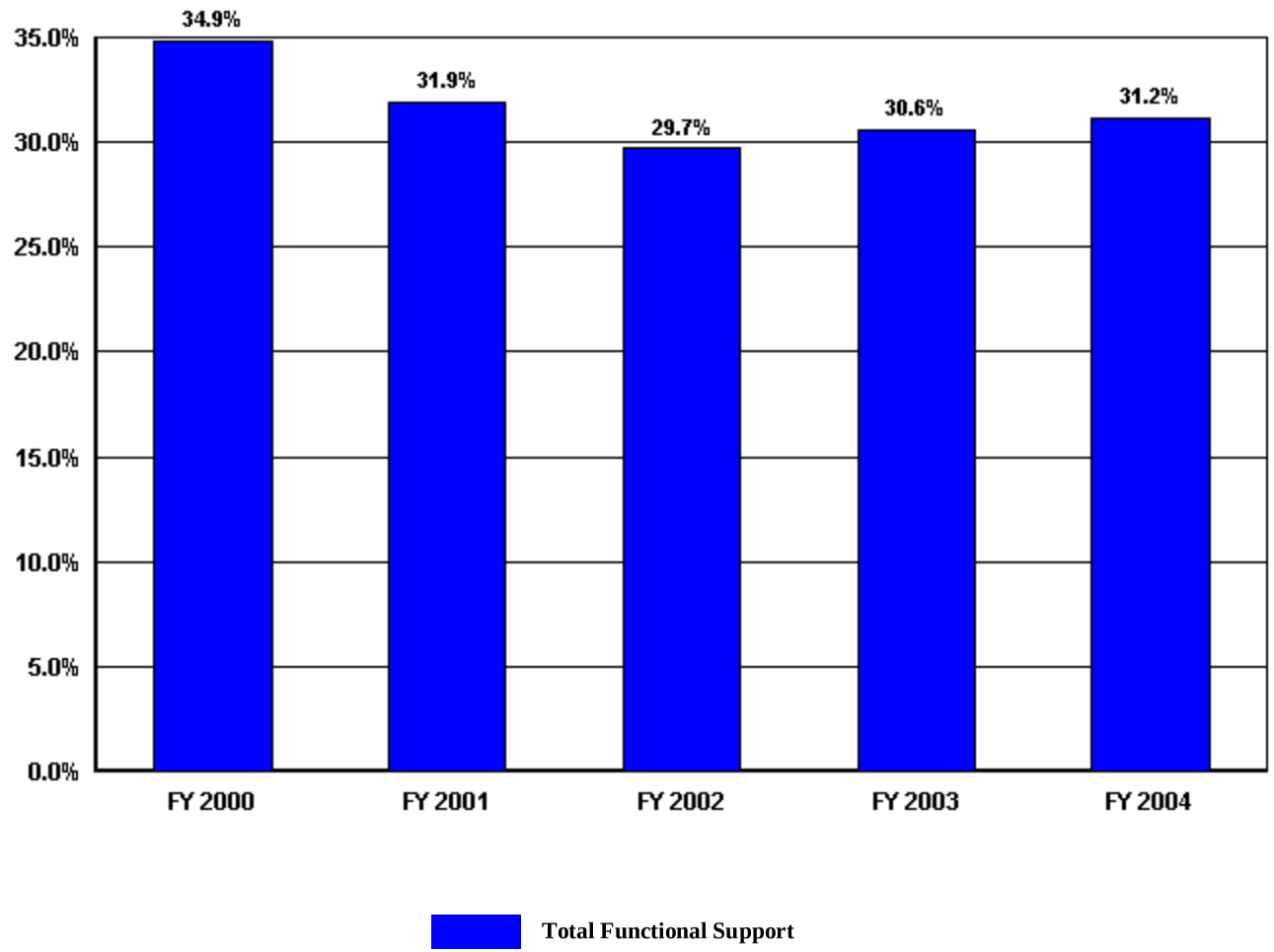
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	591,817	624,394	745,577	856,308	940,216	348,399	58.9%
Capital Construction	47,095	75,479	141,642	174,228	168,729	121,634	258.3%
Total Costs Less Construction	544,722	548,915	603,935	682,080	771,487	226,765	41.6%
Total Support Costs	**206,260**	**199,218**	**221,313**	**261,873**	**292,939**	**86,679**	**42.0%**
Mission Direct Operation	338,462	349,697	382,622	420,207	478,548	140,086	41.4%
Mission Direct Operation as % of Total Cost	**57.2%**	**56.0%**	**51.3%**	**49.1%**	**50.9%**		
Capital Construction as % of Total Cost	**8.0%**	**12.1%**	**19.0%**	**20.3%**	**17.9%**		
Total Support Cost as % of Total Cost	**34.9%**	**31.9%**	**29.7%**	**30.6%**	**31.2%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**34.9%**	**31.9%**	**29.7%**	**30.6%**	**31.2%**		
TOTAL SUPPORT COST	**206,260**	**199,218**	**221,313**	**261,873**	**292,939**	**86,679**	**42.0%**
TOTAL GENERAL SUPPORT as % of TOTAL	**10.5%**	**9.5%**	**8.4%**	**9.4%**	**9.1%**		
TOTAL GENERAL SUPPORT	**62,105**	**59,342**	**62,495**	**80,907**	**85,217**	**23,112**	**37.2%**
EXECUTIVE DIRECTION	5,512	5,681	5,537	12,581	12,801	7,289	132.2%
HUMAN RESOURCES	4,496	4,511	5,260	6,627	6,981	2,485	55.3%
CFO	5,268	5,087	5,057	11,232	10,731	5,463	103.7%
PROCUREMENT	3,157	3,078	2,752	4,853	5,320	2,163	68.5%
LEGAL	1,330	1,669	1,875	2,172	1,894	564	42.4%
CENTRAL ADMIN SERVICES	5,092	5,616	4,432	5,230	5,663	571	11.2%
PROGRAM/PROJECT CONTROL	2,348	1,084	1,057	2,192	1,354	-994	-42.3%
INFORMATION OUTREACH	5,425	7,643	7,247	8,604	9,935	4,510	83.1%
INFORMATION SERVICES	19,041	20,059	24,116	22,713	23,913	4,872	25.6%
OTHER	10,436	4,914	5,162	4,703	6,625	-3,811	-36.5%
TOTAL MISSION SUPPORT as % of TOTAL	**21.9%**	**20.2%**	**18.9%**	**19.0%**	**19.6%**		
TOTAL MISSION SUPPORT	**129,363**	**125,890**	**140,691**	**162,545**	**184,725**	**55,362**	**42.8%**
ENVIRONMENTAL	5,808	5,440	5,400	10,862	10,449	4,641	79.9%
SAFETY AND HEALTH	24,747	22,684	21,358	27,414	30,172	5,425	21.9%
FACILITIES MANAGEMENT	6,461	14,039	17,436	27,711	33,889	27,428	424.5%
MAINTENANCE	60,955	50,201	58,928	47,556	51,137	-9,818	-16.1%
UTILITIES	9,987	13,423	12,338	19,269	20,510	10,523	105.4%
SAFEGUARDS AND SECURITY	6,812	9,108	13,947	15,266	16,985	10,173	149.3%
LOGISTICS SUPPORT	6,852	4,109	5,597	6,067	7,421	569	8.3%
QUALITY ASSURANCE	4,338	4,401	3,587	5,029	4,949	611	14.1%
LABORATORY/TECHNICAL SUPPORT	3,403	2,485	2,100	3,371	9,213	5,810	170.7%
TOTAL SITE SPECIFIC as % of TOTAL	**2.5%**	**2.2%**	**2.4%**	**2.2%**	**2.4%**		
TOTAL SITE SPECIFIC	**14,792**	**13,986**	**18,127**	**18,421**	**22,997**	**8,205**	**55.5%**
MANAGEMENT/INCENTIVE FEE	7,745	6,450	6,959	7,056	7,043	-702	-9.1%
TAXES	-558	287	301	308	1,353	1,911	342.5%
LDRD / PDRD / SDRD	7,605	7,249	10,867	11,057	14,601	6,996	92.0%

US Department of Energy
Total Functional Support
Oak Ridge National Lab/UT-Battelle



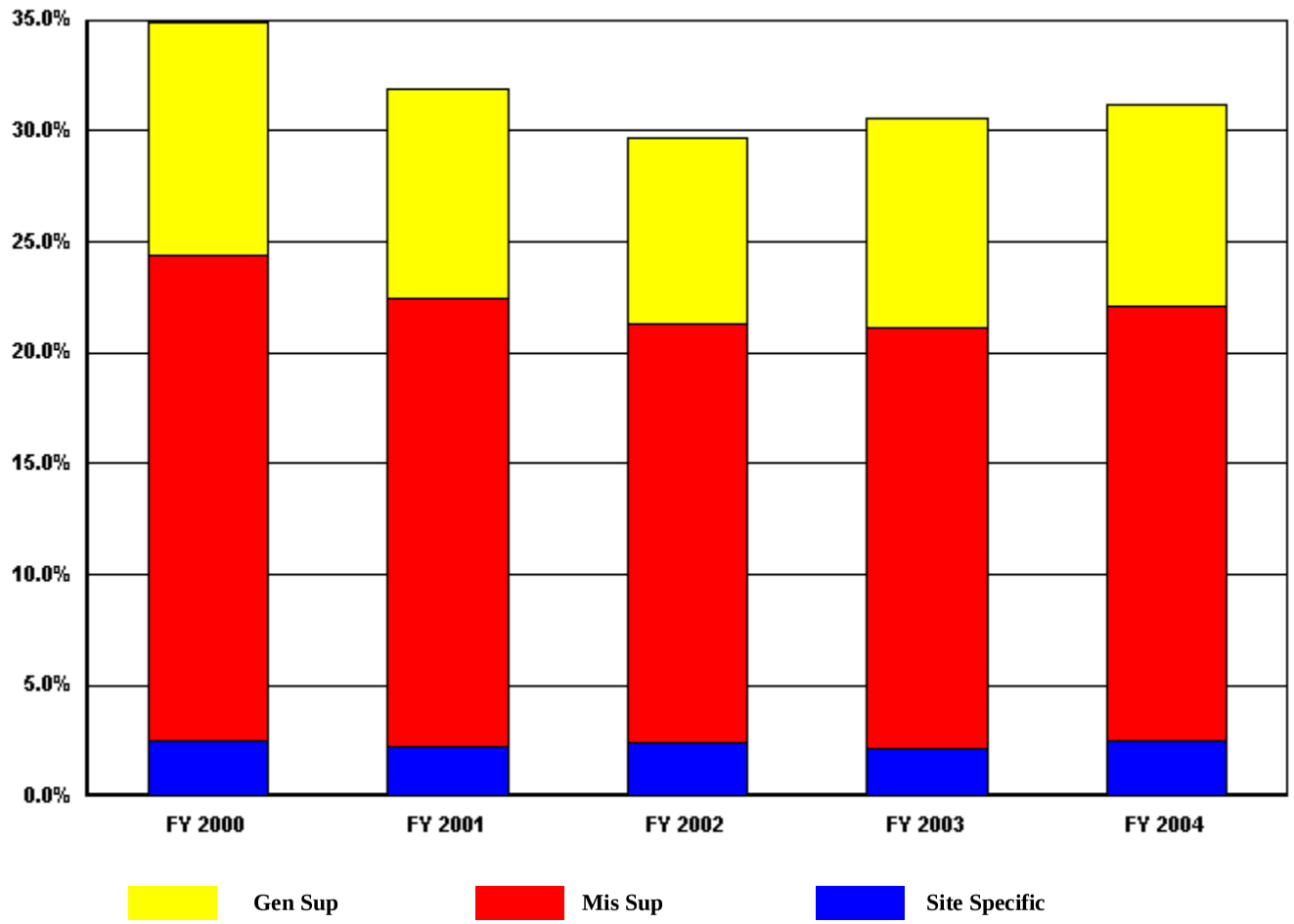
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	206,260	199,218	221,313	261,873	292,939

US Department of Energy
Total Functional Support as a % of Total Costs
Oak Ridge National Lab/UT-Battelle



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	34.9%	31.9%	29.7%	30.6%	31.2%

US Department of Energy
Percent of Support Category to Total
Oak Ridge National Lab/UT-Battelle



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	10.5%	9.5%	8.4%	9.4%	9.1%
Mis Sup	21.9%	20.2%	18.9%	19.0%	19.6%
Site Specific	2.5%	2.2%	2.4%	2.2%	2.4%

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

Oak Ridge National Laboratory (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 346 active buildings, 63 active trailers, with approximately 3.7 million square feet of building space.

TRENDS

Functional Support Costs have increased over the period from FY 1999 to FY 2004 from $192.4M in FY 1999 to $292.9M in FY 2004. 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 slightly over 31%.

FY 2004 Functional Support to total costs remains 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 another year before we see them return to a normal level.

For the FY 2004 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.

Taxes: The estimation of sales and use taxes for fiscal years 1999 - 2004 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	FY 04:	$11,583

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

INFORMATION OUTREACH
Increase of $1M due to increased emphasis on the American Museum of Science and Energy.

INFORMATION SERVICES
Increase of $1M due to hiring of staff in the Network, Computing, and Technology Division to meet the growing technical needs of the laboratory.

SAFETY AND HEALTH
Increases of $2.5M due to legacy costs, scope increases, and increased emphasis on safety and health.

FACILITIES MANAGEMENT
This cost category increased by about $6.5 million in FY 2004. The increase was due to costs associated with revitalization, third party leases, and Non-Reactor Nuclear Facility Division.

MAINTENANCE
Increase of $3.5M due to increased importance on maintenance of facilities. In addition, new facilities became operational for a full year in FY 2004.

LABORATORY/TECHNICAL SUPPORT
This cost category increased by $5.8 million in FY 2004. The increase was due to increased hiring of leased subcontractors in the Non-Reactor Nuclear Facility Division and the Environmental Safety and Health Division.

TAXES
This cost category increased by $1,045,000 in FY 2004. The increase was due to the full year operation of the third party facilities.

LDRD / PDRD / SDRD
This cost category increased by $3,544,000 in FY 2004. The increase was due to Associate Laboratory Director (ADL) support of the LDRD program. LDRD is seen as a program to help grow scientific programs, and laboratory management feels it is important to invest in this highly regarded program.

COST SAVINGS INITIATIVES

($ in 000's)

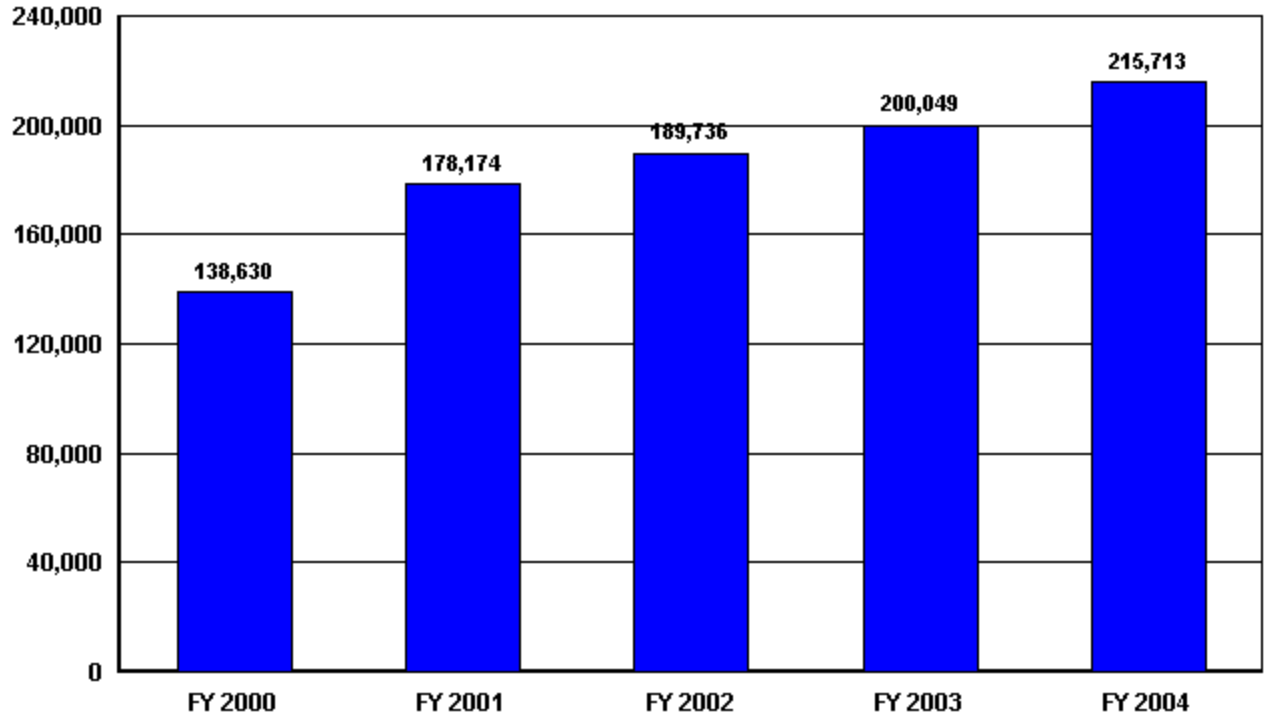
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Liquid and Gaseous Waste Treatment	0	The Liquid and Gaseous Waste Reengineering Operations Improvement Program (OIP) Project is a two-year project, with a total investment of $1M, which is designed to: • eliminate 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.	

Disposal of Special Nuclear Materials	0	The Disposal of SNM OIP Project is designed to eliminate the storage of SNM in the 3027 vault, allowing closure of a Category II nuclear facility. Operations Improvement Program Funds of $120K were provided in FY 04 to complete the de-inventory of the Special Nuclear Material Storage Vault at Building 3027 and to enable the reclassification of the building from a Hazard Category 2 nuclear facility to below the Hazard Category 3 threshold by April 30, 2004. The activity is also captured in the Performance Indicator 2.4.2, Milestone 2.	
Downgrading Building 5505	0	Evaluations of Options for Downgrading Building 5505 to a General Radiological Facility OIP Project The goal of this project is to outline the options for downgrading Building 5505 to a general radiological facility, and record descriptions and cost estimates for the tasks that would be required and to prepare a project plan and schedule for any necessary actions. The project was initially funded at $110K, but was decreased in June 2004 to $90K to allow for funding another opportunity. This activity is part of the Laboratory's Hot Cell Consolidation effort.	

Trends in Total Support Cost by Functional Categories
OREMEF/Bechtel Jacobs ($000)
FY 2004

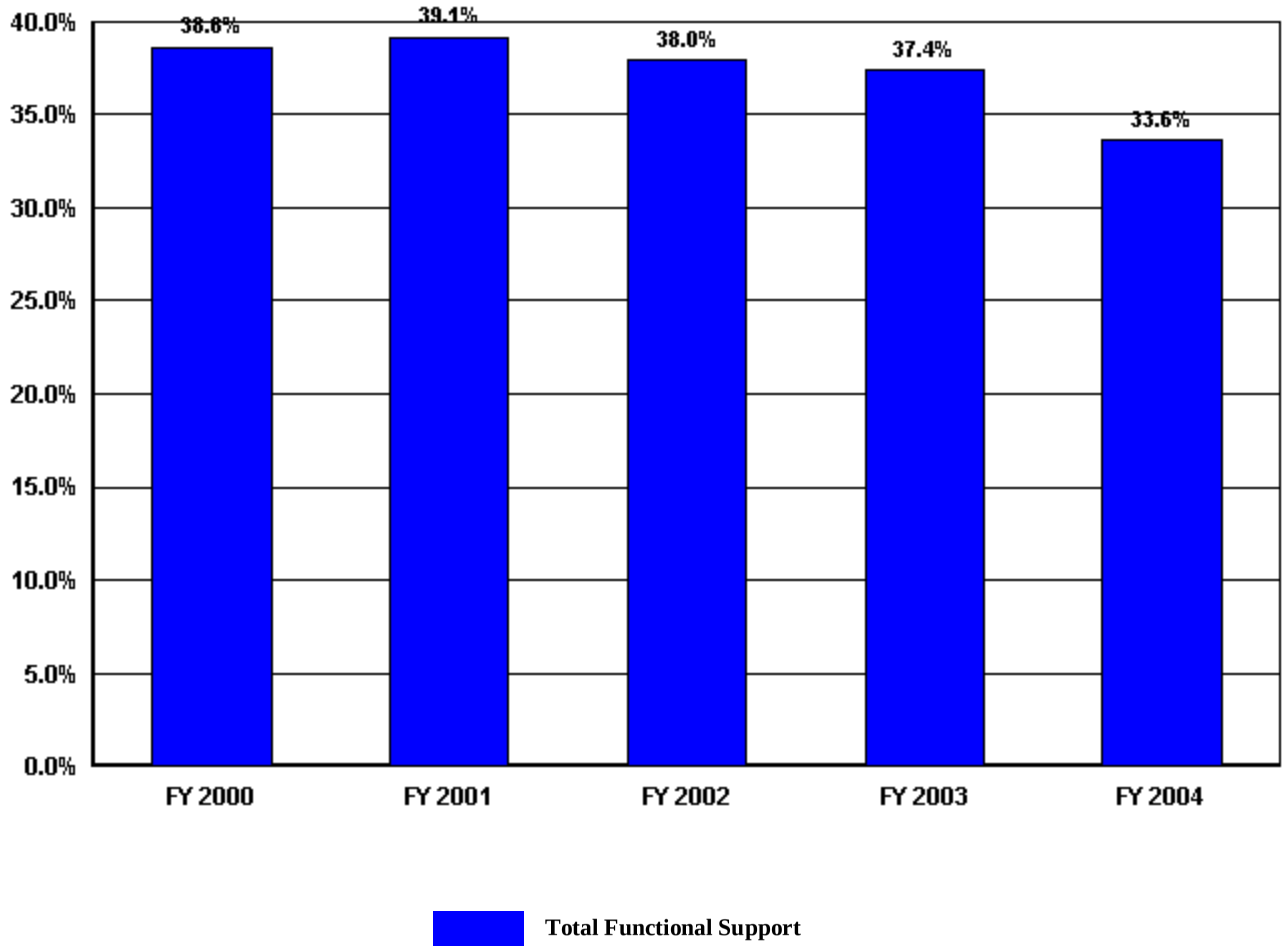
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	358,828	455,129	499,909	535,360	641,405	282,577	78.7%
Capital Construction	6,610	21,369	35,273	11,242	33,306	26,696	403.9%
Total Costs Less Construction	352,218	433,760	464,636	524,118	608,099	255,881	72.6%
Total Support Costs	**138,630**	**178,174**	**189,736**	**200,049**	**215,713**	**77,083**	**55.6%**
Mission Direct Operation	213,588	255,586	274,900	324,069	392,386	178,798	83.7%
Mission Direct Operation as % of Total Cost	**59.5%**	**56.2%**	**55.0%**	**60.5%**	**61.2%**		
Capital Construction as % of Total Cost	**1.8%**	**4.7%**	**7.1%**	**2.1%**	**5.2%**		
Total Support Cost as % of Total Cost	**38.6%**	**39.1%**	**38.0%**	**37.4%**	**33.6%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**38.6%**	**39.1%**	**38.0%**	**37.4%**	**33.6%**		
TOTAL SUPPORT COST	**138,630**	**178,174**	**189,736**	**200,049**	**215,713**	**77,083**	**55.6%**
TOTAL GENERAL SUPPORT as % of TOTAL	**12.7%**	**13.4%**	**12.7%**	**11.5%**	**8.7%**		
TOTAL GENERAL SUPPORT	**45,498**	**60,868**	**63,397**	**61,436**	**56,105**	**10,607**	**23.3%**
EXECUTIVE DIRECTION	4,021	2,502	3,626	3,366	3,971	-50	-1.2%
HUMAN RESOURCES	5,434	7,318	9,916	11,020	7,661	2,227	41.0%
CFO	5,564	4,917	4,472	4,366	4,225	-1,339	-24.1%
PROCUREMENT	4,814	5,184	5,558	6,398	6,923	2,109	43.8%
LEGAL	862	1,325	1,136	1,288	1,318	456	52.9%
CENTRAL ADMIN SERVICES	6,276	6,466	6,883	7,527	7,299	1,023	16.3%
PROGRAM/PROJECT CONTROL	8,415	11,809	11,526	9,259	8,891	476	5.7%
INFORMATION OUTREACH	1,819	2,195	1,982	1,575	1,303	-516	-28.4%
INFORMATION SERVICES	8,018	18,858	18,223	16,589	14,508	6,490	80.9%
OTHER	275	294	75	48	6	-269	-97.8%
TOTAL MISSION SUPPORT as % of TOTAL	**21.1%**	**21.3%**	**21.2%**	**22.4%**	**20.5%**		
TOTAL MISSION SUPPORT	**75,707**	**96,735**	**105,958**	**119,865**	**131,172**	**55,465**	**73.3%**
ENVIRONMENTAL	8,631	6,753	6,761	7,572	7,323	-1,308	-15.2%
SAFETY AND HEALTH	25,458	42,065	43,913	51,722	56,040	30,582	120.1%
FACILITIES MANAGEMENT	1,277	1,159	1,783	2,533	3,046	1,769	138.5%
MAINTENANCE	10,782	12,333	12,294	16,004	13,400	2,618	24.3%
UTILITIES	13,981	15,107	17,642	15,815	17,602	3,621	25.9%
SAFEGUARDS AND SECURITY	7,734	11,175	15,440	19,105	26,925	19,191	248.1%
LOGISTICS SUPPORT	2,432	3,019	3,193	1,453	1,757	-675	-27.8%
QUALITY ASSURANCE	3,932	4,723	4,513	4,911	4,770	838	21.3%
LABORATORY/TECHNICAL SUPPORT	1,480	401	419	750	309	-1,171	-79.1%
TOTAL SITE SPECIFIC as % of TOTAL	**4.9%**	**4.5%**	**4.1%**	**3.5%**	**4.4%**		
TOTAL SITE SPECIFIC	**17,425**	**20,571**	**20,381**	**18,748**	**28,436**	**11,011**	**63.2%**
MANAGEMENT/INCENTIVE FEE	17,346	19,933	19,324	17,914	27,651	10,305	59.4%
TAXES	79	638	1,057	834	785	706	893.7%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
OREMEF/Bechtel Jacobs

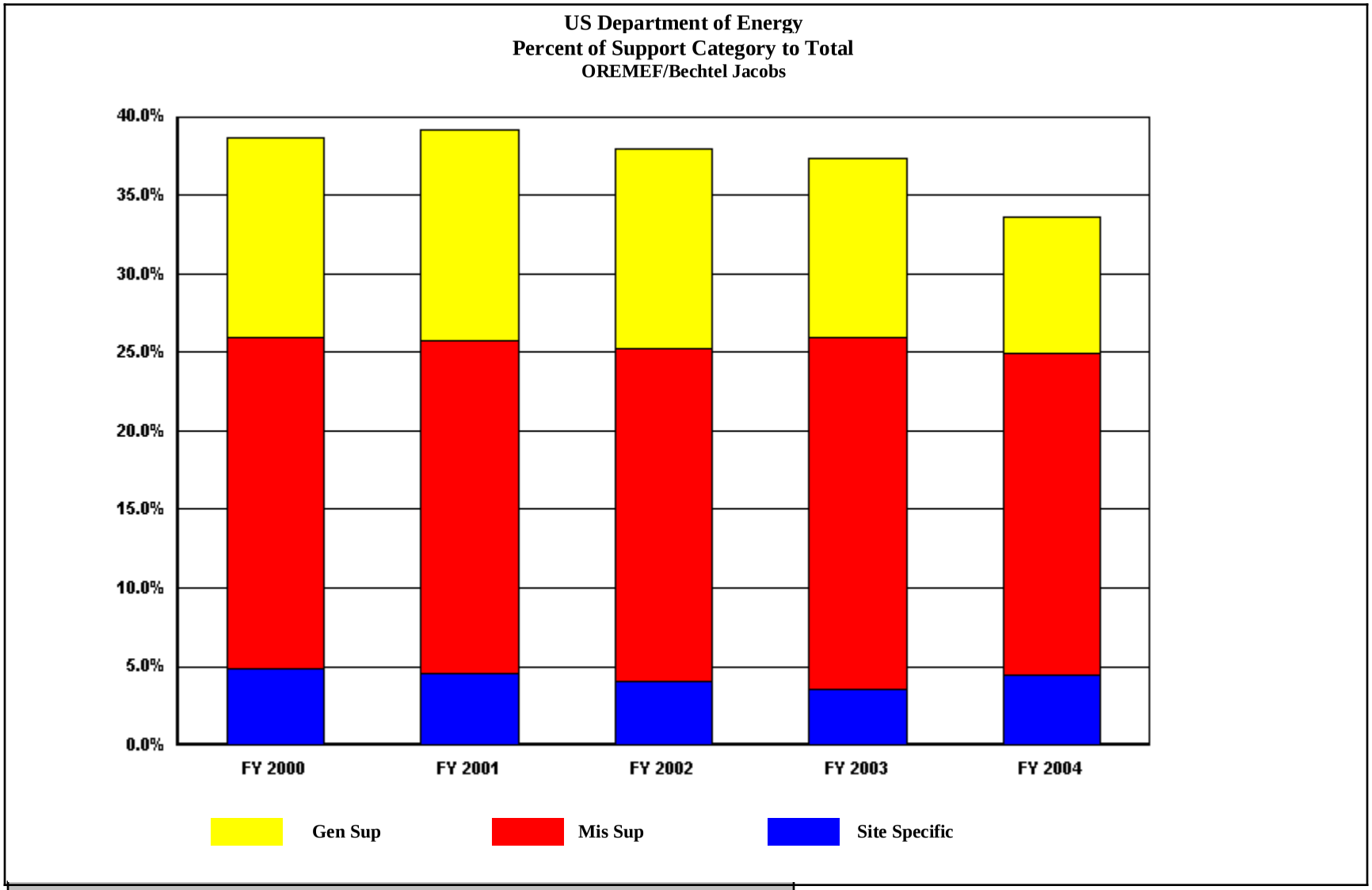


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	138,630	178,174	189,736	200,049	215,713

US Department of Energy
Total Functional Support as a % of Total Costs
OREMEF/Bechtel Jacobs



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	38.6%	39.1%	38.0%	37.4%	33.6%



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	12.7%	13.4%	12.7%	11.5%	8.7%
Mis Sup	21.1%	21.3%	21.2%	22.4%	20.5%
Site Specific	4.9%	4.5%	4.1%	3.5%	4.4%

SITE PROFILE
OREMEF/Bechtel Jacobs

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 1007 Bechtel Jacobs Company employees reside at the site with an additional 2,000 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 121 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 171 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 Systems, Inc.) and UT-Battelle (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.

Beginning October 1, 2003, the Oak Ridge contract became an Accelerated Cleanup Contract

utilizing a cost-plus-incentive fee contract structure. Performance incentives provide the motivation to achieve accelerated cleanup at the lowest cost to the DOE. Schedule incentives include disposal of legacy low level waste and legacy mixed low level waste by September 30, 2005; closure of the Melton Valley Site at ORNL by September 30, 2006; and closure of the ETTP site by September 30, 2008. Meeting these objectives will require innovative approaches to achieve these goals as well as streamlining processes and eliminating non-value-added requirements. The outcome of these efforts should be reflected in the functional cost trends over the next few years.

TRENDS

After a two-year decrease, functional support cost increased beginning in FY 2001 to FY 2004, 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. In FY 2004, the percentage of Support Costs decreased due to the change in the Oak Ridge contract to an Accelerated Cleanup contract, which requires more field work to be performed in order to meet the contract and DOE milestones.

Major year-to-year anomalies include the following:

Executive Direction: 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. The FY 2004 increase ($600K) is due to the addition of senior management positions to support the Accelerated Cleanup Plan.

Human Resources: 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). The decreases ($3.5M) in FY 2004 are a result of stabilization of Worker's Compensation Cost, decrease in training costs since most required training was developed in FY 2003, and a reduction of 10 Human Resource employees during the year.

Chief Financial Officer: Employment levels in the CFO organization decreased by 16% during FY 1999, with further cost efficiencies in FY 2000 through FY 2004.

Procurement: 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 will continue as long as Bechtel Jacobs is incrementally funded and the scope is performed extensively by subcontractors.

Legal: 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: 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. The FY 2004 decrease ($200K) is due to the reduction of 11 employees during the year.

Program/Project Planning & Control: 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. The FY 2004 decrease ($300K) is due the reduction of five employees during the year.

Information/Outreach Activities: Cost decreased in FY 2003 and FY 2004 because the Site Specific Activity Board became a programmatic responsibility and the staff was reduced by 4 employees.

Information Services: 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: 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: 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 re-validation in FY 2003. The FY 2004 increase ($800K) is due to the accelerated work in the field and the requirement for Radcon

support.

Facilities Management: 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: 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). With the emphasis on accelerated closure in FY 2004, maintenance costs began to decrease as buildings tagged for D&D or demolition are no longer being maintained and the site is in a "run to failure" mode.

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 2004 increases are due to higher utility costs and the increased cost to maintain and manage the utility systems.

Safeguards/Security: 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. The increases in FY 2004 are due to a retroactive rate adjustment back to 2002 charged to Bechtel Jacobs at Paducah ($4.5M) and Portsmouth ($1.7) by the United States Enrichment Corporation (USEC), as well as increased rates for FY 2004. The guard force at Paducah and Portsmouth is purchased from USEC.

Logistics Support: 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: Increase in FY 2001 through FY 2003 is due to emphasis placed on procedures and assessments.

Laboratory/Technical Support: 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. With the change to a cost-plus-incentive-fee contract on 10/1/03, the fee to be earned increased. Bechtel Jacobs accrues this fee on a percentage of target fee basis as approved by DOE.

Taxes: Includes franchise and excise taxes. 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 above- mentioned 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 and reduced in FY 2004.

Major Cost Saving Initiatives — Six Sigma

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. Attached are brief descriptions of the results and cost savings associated with PIPs that generated cost savings in 2004. Cost savings are unburdened and are net of any implementation (investment) cost.

Other

The Other functional category (Total $6K) includes the following for FY 2004:
Inclement Weather/Meetings $5K and Site Office Support $1K

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

HUMAN RESOURCES
The decrease in Human Resources ($3,359K) is a result of stabilization of Workers' Compensation Cost, decrease in training costs since most required training was developed in FY 2003, and a reduction of 10 Human Resource employees during the year

PROCUREMENT
With over 170 subcontracts to manage, incremental funding required additional procurement efforts in FY 2001. This trend will continue as long as Bechtel Jacobs is incrementally funded and the scope is performed exclusively by subcontractors. Trend continued in FY 2004 ($525K increase).

FACILITIES MANAGEMENT
Increase was due to increased building rental/lease and increased construction management. FY 2004 increase ($513K) was a result of increased engineering management.

SAFEGUARDS AND SECURITY
The increase in FY 2004 ($7,820K) was due to a retroactive rate adjustment back to 2002 charged to Bechtel Jacobs at Paducah ($4.5M) and Portsmouth ($1.7M) by the United States Enrichment Corporation (USEC), as well as increased rates for FY 2004. The guard force at Paducah and Portsmouth is purchased from USEC.

MANAGEMENT/INCENTIVE FEE
($9,737K increase) Fluctuations in fee over the 5-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. With the change to a cost-plus-incentive fee contract on 10/1/03, the fee to be earned increased. Bechtel Jacobs accrues this fee on a percentage of target fee basis as approved by DOE.

COST SAVINGS INITIATIVES

($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Improving the Request for Offsite Services (ROS)	42	To achieve its Accelerated Closure objectives, BJC requires the timely availability of qualified persons to execute its work scope. The ROS process is used to procure temporarily needed technical skills from other Bechtel or Jacobs corporate entities when that expertise is not available internally or through existing subcontractors. Each fiscal year, BJC processes an average of 125 ROSs with a combined annual value of $2.9M at a cost to process of approximately $170K. The current process was cumbersome and resulted in a great deal of rework. The process was redesigned to a more streamlined process that reduced the operations cost by 25%.	

Reducing the Cost of Holiday Pay	142	Bechtel Jacobs Company offered a 9/80 work schedule for employees who wish to participate. To ensure that the continuity of work is maintained, employees were either on the "A" or "B" schedule. When a scheduled day off (SDO) fell on a Friday that is an observed Holiday, the employee received 4 hours of additional pay (In-Lieu) for the "week of" and the "week following" the observed holiday, thus receiving 44 hours of pay for each of these two weeks. This additional pay represents an increased cost to the company which is not the intent of the 9/80 schedule and is also an additional effort for the PALS administration. The question of how to pay holiday pay on an SDO arose late in the process of conversion to the 9/80 schedule and other options were not considered at that time. After administering this policy for some time, it became apparent that creating a work week of more than 40 hours generates additional cost to the company as well as additional work for the PALS administrative staff. Four other options were considered and the team selected the option where employees on the 9/80 shift having a holiday which fell on their SDO were given an additional day off prior to the holiday, thus eliminating the increase in the regular weekly payroll cost.	

Reducing Non-Labor Cost Corrections	6	It is sometimes necessary to revise the cost accounting of a transaction that has already been posed in the financial system and reported to DOE in the MARS file. A form is available which details the background of the transaction, the justification for the change, the original cost accounting entries as well as the desired new cost accounting entries and several preparation and approval signatures. The initiation of a non-labor cost correction is designed to be difficult, this reducing the amount of trivial cost corrections. After analyzing data from FY 2003 for non-labor cost corrections relating to cause/effects and dollar values, a proposal was made and implemented to eliminate corrections less than $10K as well as cost corrections which do not result in a change to the financial attributes.	
Improve Subcontract Initiation to Payment Process	117	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.	

Improve the Analytical and Data Management Process	223	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 sample-equivalents 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.	
Reduce Banking Costs	192	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.	

Subcontractor Benefits and Payments Process	117	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.	
Improve Health Physics Survey Process	128	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 web-based reporting of survey results and ongoing, regularly scheduled reviews of survey results.	

Managing the Waste Information Management System	1,780	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.	
Optimizing Staffing Levels	1,057	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 be 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.	
Improving Craft Support	273	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.	

Improve the Process for Benefit Transmittals	118	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.	
Improve the Inspection Process	216	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.	
Reduction of Groundwater Sampling	137	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 analytes 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.	

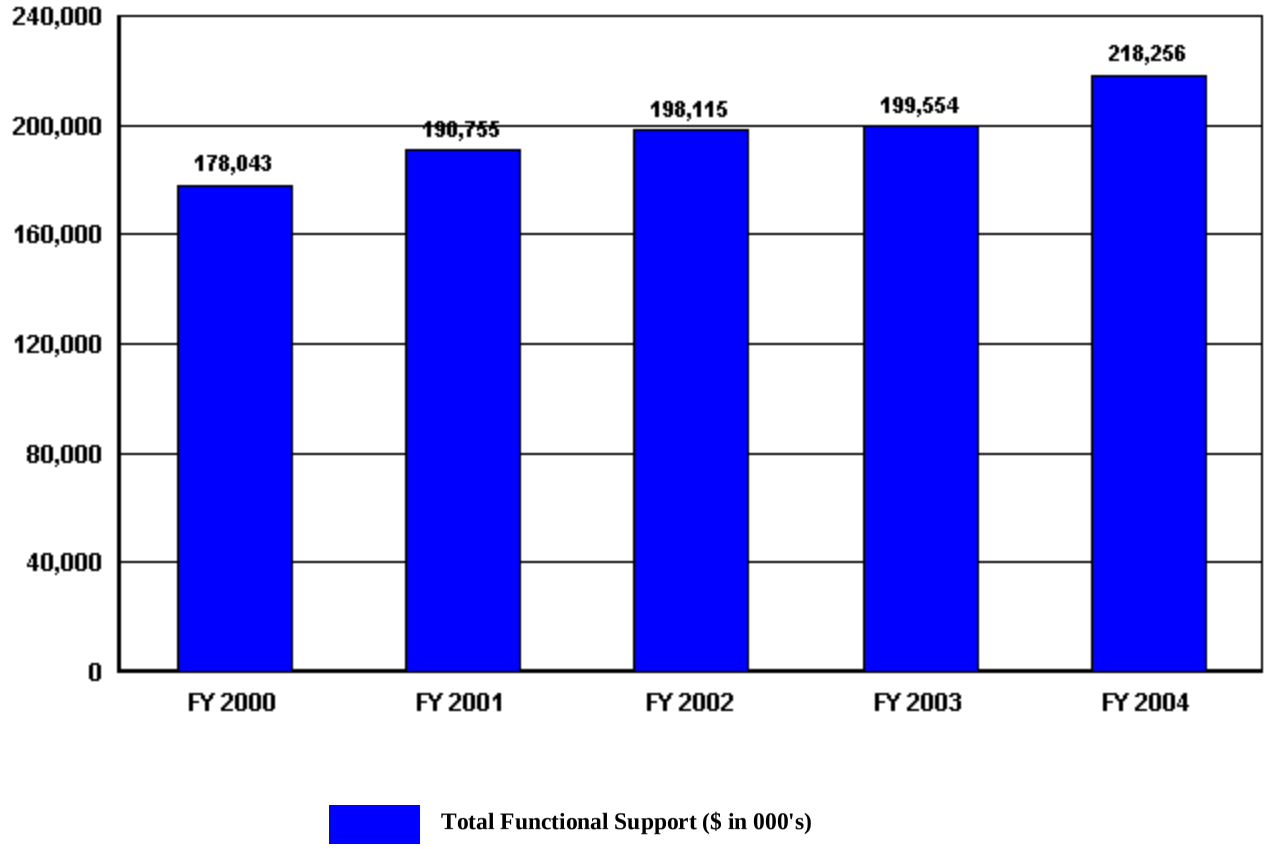
Melton Valley Hydrologic Isolation Project	1,325	This project involves the operation of borrow areas to provide contour fill for the capping of approximately 100 acres in Melton Valley. The purpose of this PIP was to evaluate and improve the proposed borrow area operation to meet aggressive cost and 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.	
Improve the Incremental Funding Process	139	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 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.	

Improving the Process for Shipping UF6 Cylinders	1,098	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.	

Trends in Total Support Cost by Functional Categories
Pacific Northwest National Lab/Batelle Memorial ($000)
FY 2004

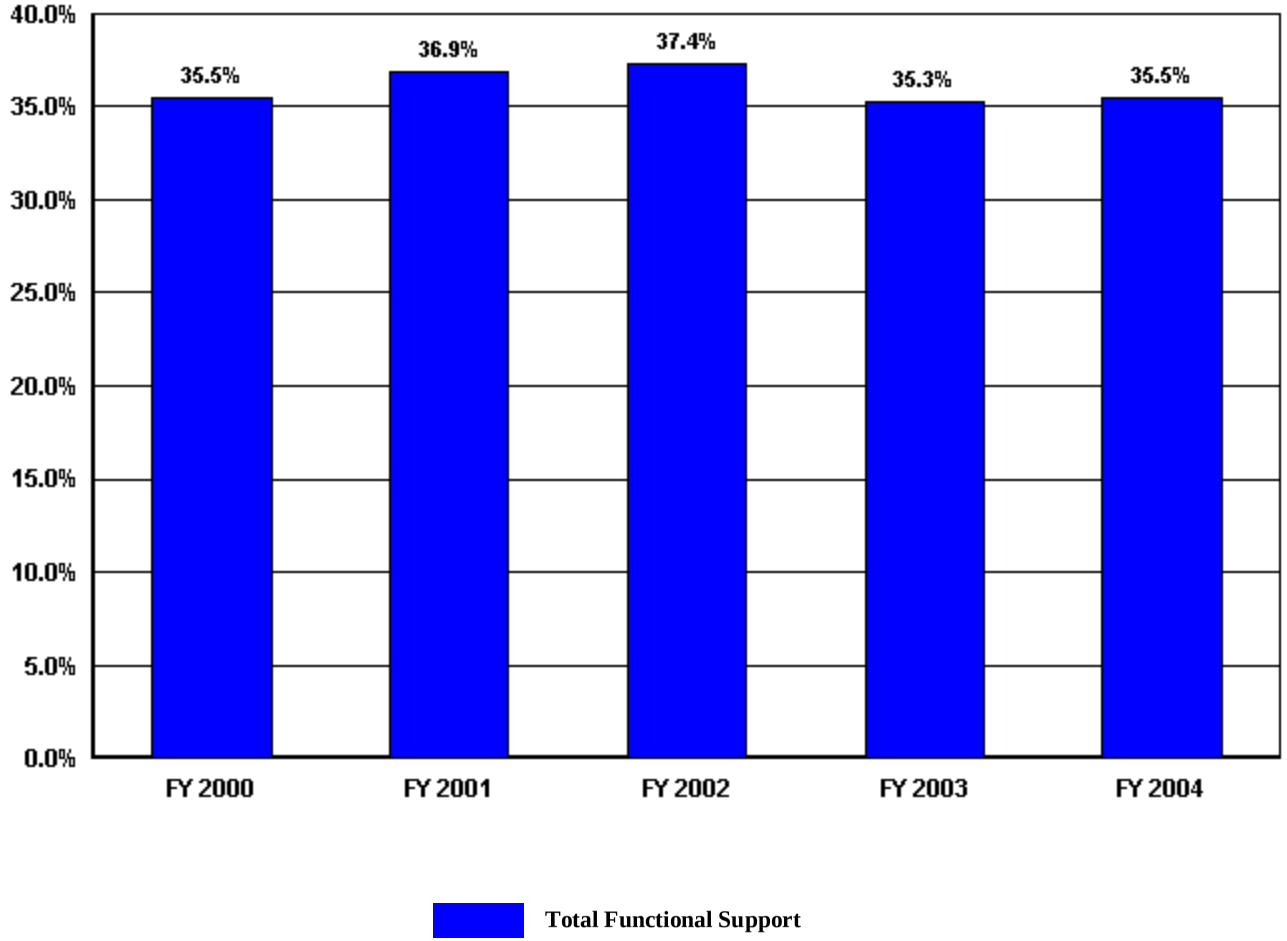
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	501,076	517,078	530,413	564,955	614,443	113,367	22.6%
Capital Construction	7,218	12,715	10,066	12,843	11,563	4,345	60.2%
Total Costs Less Construction	493,858	504,363	520,347	552,112	602,880	109,022	22.1%
Total Support Costs	**178,043**	**190,755**	**198,115**	**199,554**	**218,256**	**40,213**	**22.6%**
Mission Direct Operation	315,815	313,608	322,232	352,558	384,624	68,809	21.8%
Mission Direct Operation as % of Total Cost	**63.0%**	**60.7%**	**60.8%**	**62.4%**	**62.6%**		
Capital Construction as % of Total Cost	**1.4%**	**2.5%**	**1.9%**	**2.3%**	**1.9%**		
Total Support Cost as % of Total Cost	**35.5%**	**36.9%**	**37.4%**	**35.3%**	**35.5%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**35.5%**	**36.9%**	**37.4%**	**35.3%**	**35.5%**		
TOTAL SUPPORT COST	**178,043**	**190,755**	**198,115**	**199,554**	**218,256**	**40,213**	**22.6%**
TOTAL GENERAL SUPPORT as % of TOTAL	**16.6%**	**16.6%**	**16.8%**	**16.4%**	**15.3%**		
TOTAL GENERAL SUPPORT	**82,948**	**85,802**	**89,026**	**92,896**	**93,904**	**10,956**	**13.2%**
EXECUTIVE DIRECTION	3,818	2,803	3,905	3,887	4,697	879	23.0%
HUMAN RESOURCES	4,622	4,815	4,740	4,935	4,887	265	5.7%
CFO	9,280	10,417	11,814	11,452	11,510	2,230	24.0%
PROCUREMENT	6,992	6,056	5,639	5,713	6,194	-798	-11.4%
LEGAL	1,805	1,843	1,393	941	890	-915	-50.7%
CENTRAL ADMIN SERVICES	3,666	3,553	3,919	4,808	6,193	2,527	68.9%
PROGRAM/PROJECT CONTROL	3,457	3,012	3,798	2,976	3,096	-361	-10.4%
INFORMATION OUTREACH	7,380	9,597	11,132	12,762	36,777	29,397	398.3%
INFORMATION SERVICES	21,339	23,215	21,524	22,765	19,660	-1,679	-7.9%
OTHER	20,589	20,491	21,162	22,657	0	-20,589	-100.0%
TOTAL MISSION SUPPORT as % of TOTAL	**14.2%**	**15.9%**	**15.7%**	**14.4%**	**15.6%**		
TOTAL MISSION SUPPORT	**71,321**	**82,041**	**83,422**	**81,113**	**95,827**	**24,506**	**34.4%**
ENVIRONMENTAL	1,858	2,970	3,245	4,161	4,176	2,318	124.8%
SAFETY AND HEALTH	16,725	20,718	18,710	16,497	19,385	2,660	15.9%
FACILITIES MANAGEMENT	15,063	18,116	19,882	20,273	26,851	11,788	78.3%
MAINTENANCE	8,300	7,313	9,020	9,801	11,842	3,542	42.7%
UTILITIES	8,600	9,027	9,939	8,527	6,986	-1,614	-18.8%
SAFEGUARDS AND SECURITY	7,800	9,583	8,938	10,061	11,108	3,308	42.4%
LOGISTICS SUPPORT	1,075	1,287	1,558	1,538	2,056	981	91.3%
QUALITY ASSURANCE	6,153	6,638	3,969	4,319	4,128	-2,025	-32.9%
LABORATORY/TECHNICAL SUPPORT	5,747	6,389	8,161	5,936	9,295	3,548	61.7%
TOTAL SITE SPECIFIC as % of TOTAL	**4.7%**	**4.4%**	**4.8%**	**4.5%**	**4.6%**		
TOTAL SITE SPECIFIC	**23,774**	**22,912**	**25,667**	**25,545**	**28,525**	**4,751**	**20.0%**
MANAGEMENT/INCENTIVE FEE	10,517	11,756	11,186	10,648	12,492	1,975	18.8%
TAXES	3,448	669	2,192	928	2,630	-818	-23.7%
LDRD / PDRD / SDRD	9,809	10,487	12,289	13,969	13,403	3,594	36.6%

US Department of Energy
Total Functional Support
Pacific Northwest National Lab/Batelle Memorial



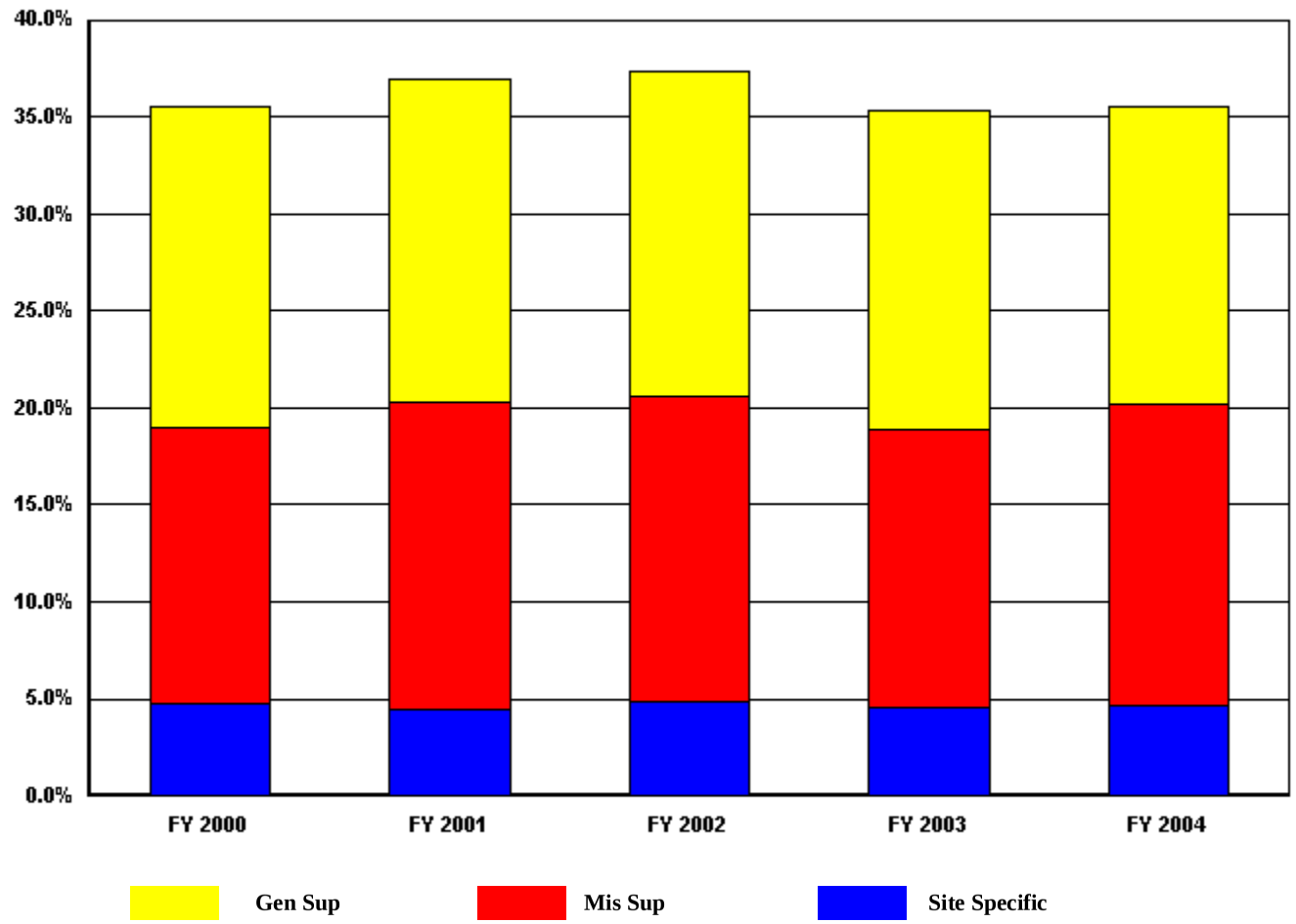
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	178,043	190,755	198,115	199,554	218,256

US Department of Energy
Total Functional Support as a % of Total Costs
Pacific Northwest National Lab/Batelle Memorial



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	35.5%	36.9%	37.4%	35.3%	35.5%

US Department of Energy
Percent of Support Category to Total
Pacific Northwest National Lab/Batelle Memorial



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	16.6%	16.6%	16.8%	16.4%	15.3%
Mis Sup	14.2%	15.9%	15.7%	14.4%	15.6%
Site Specific	4.7%	4.4%	4.8%	4.5%	4.6%

SITE PROFILE
Pacific Northwest National Lab/Batelle Memorial

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 greater than $115M in private research facilities and equipment adjacent to the government laboratory.

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 our 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. We operate the Environmental Molecular Sciences Laboratory, a national scientific user facility with advanced resources for fundamental research on the physical, chemical and biological processes. Our biological science research focuses on the bio-molecular basis of health effects from environmental pollutants. We solve legacy environmental problems with cost-effective cleanup solutions and technologies that prevent pollution and minimize waste. Our scientists identify technology to characterize and mitigate the consequences of pollution, climate change, and other environmental impacts as the basis for sound policy decisions. We develop clean energy and industrial processes, lightweight materials and advanced power systems for transportation, and efficient building technologies for DOE's energy mission. We provide 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. Our staff is broadly engaged in local economic development, education, and other community programs.

Consistent with our mission, a significant portion of the Laboratory's work is in environmental science, environmental technology, or for the Department of Homeland Security. Further, our

projects in support of DOE's national security and energy missions often draw heavily upon capabilities we have developed in support of our 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: Energy Efficiency and Renewable Energy (EE), Environment, Safety and Health (EH), Environmental Management (EM), Fossil Energy (FE), Nuclear Energy, Science and Technology (NE), Civilian Radioactive Waste Management (RW), and Work For Others.

2). Also, 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. 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). FY2004 year-end headcount was 3,727.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

EXECUTIVE DIRECTION
This category increased about $810,000 in FY 2004. Specifically: -$300,000 Based on Peer review recommendations and changing costs between categories.
-$300,000 increased cost in Strategic planning.
-$200,000 increased labor cost within Associate Lab Director's function.

PROCUREMENT
The increase of $481K is mainly related to labor cost from contracting activities and other associated procurement and subcontract costs.

CENTRAL ADMIN SERVICES
This category increased $1,385,000 in FY 2004. About $800,000 is related to a transfer in costs between categories stemming from a recommendation by the Peer Review. The other big increase was about $485,000 as a result of strategic buy downs (investments that will increase efficiencies/reduce out-year costs) associated with the Hanford Technical Library Service Center.

INFORMATION OUTREACH
This category increased $24,015,000 in FY 2004. About $23.3 million was required because of a cost transfer recommended by the Peer Review. The remaining $700,000 is related to the increased activities associated within the Economic Development Group supporting technology commercialization.

INFORMATION SERVICES
The decrease in cost is a result of a transfer in cost between categories per a recommendation by the Peer Review. The transfer is related to Cyber Security activities that previously were coded under Information Services and are now coded under Safeguards and Security.

SAFETY AND HEALTH
Cost in this category is up $2,888K or 17.5% from FY 2003. The increase is a combination of several factors: 1.) Radiation & Health Technology service center 2.) Waste Disposal service centers 3.) Worker Safety & Health function due to an increase on safety awareness at the Lab and 4.) an increase in cost associated with the Hazardous Waste activities.

FACILITIES MANAGEMENT
This cost category increased $6,578,000 in FY 2004. About $4.3 million is related to the addition of the LSB and temporary duplication of effort in buildings replaced by the LSB. The remaining significant increase of about $2.2 million is a result of costs that were previously coded to Mission Direct and are now coded to Facilities Management.

MAINTENANCE
This cost category increased $2,041,000 in FY 2004 as a result of costs previously coded to Mission Direct and are now coded to Maintenance.

UTILITIES
Utilities cost is down $1,541K or 18.1% mainly due to a B&U cost reductions going into FY 2004 and cost savings from buy downs related to the ESPC (Energy Savings Performance Contract).

SAFEGUARDS AND SECURITY
Cost in Safeguards and Security is up $1,047K or 10.4%. The increase is mainly attributed to the transfer of cost related to cyber security activities from Mission Direct to the Safeguards & Security category per the Peer Review team.

LOGISTICS SUPPORT
This cost category increased $518,000 in FY 2004 because of an increase in the property management activities and increased labor cost within the receiving/warehouse function due to a high volume of packages received.

LABORATORY/TECHNICAL SUPPORT
This cost category increased $3,359,000 in FY 2004. The two primary reasons for the increase were an increase of $1.1 million in the fabrication shop service center and the RPL Service Center cost of $2.1 million which was a new service center in FY 2004. Previous costs related to RPL were captured in a Laboratory organizational pool.

TAXES
This cost category increased $1,702,000 in FY 2004. This increase is a combination of B&O tax, B&O tax for state tax appeal, and an increase in property taxes from FY 2003. The estimated sales and use tax for FY 2004 was $670,000.

COST SAVINGS INITIATIVES
($ in 000's)

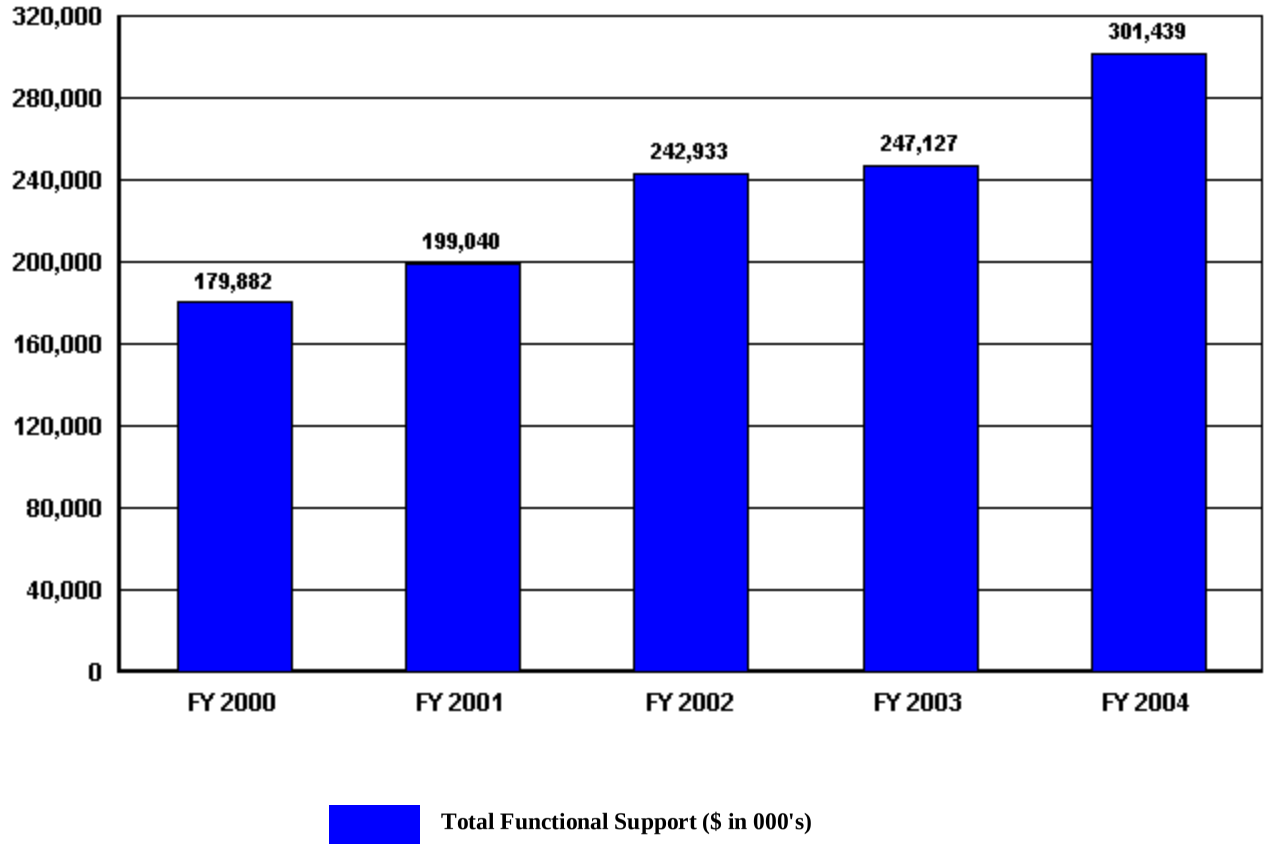
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Alternative Facility Financing	1,800	Alternative facility financing continues to be one of several methods PNNL has employed to reduce facility costs. These efforts have resulted in identification and use of best commercial practices, outcome-oriented performance measures, and elimination of low-value-added activities. For example, in the past 9 years at PNNL, the number of buildings has dropped from ~200 to ~100 and the GSF 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 approximately $5M from FY 1995. In FY 2004 the F&O Directorate realized approximately $1.8M in cost savings related to construction management and the F&O savings and improvement program.	

ESPCs and ECPs	0	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 4 ESPCs/ECPs since FY 1996, and over $9M has already been repaid from facility operations savings.	
Cost Productivity Review Team	2,800	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 with the following guidelines: Escalation only will be the default guidance to budget managers; Create a special team to identify and act on specific cost opportunities based on strategy, priorities, risk and vulnerabilities; Identify what we're going to stop doing; All overhead costs should be considered; Specific reduction target should be established (amount and timing). Approximately $2.8M of cost savings was identified in FY 2004 by the CPR team, related to management systems reductions and a reengineered business planning process.	
Growth Agenda	0	In addition, a primary focus of the Lab is growth. The growth agenda is to grow our overhead recovery base while constraining indirect costs, thereby spreading indirect costs over a larger base. In FY04 we established an aggressive direct FTE growth target of 51 for a total of 1,747 direct FTE's. We exceeded this goal by 15 ending the year with 1,762 direct FTE's. This growth of 66 direct FTE's was achieved with no increase in indirect FTE's.	

Trends in Total Support Cost by Functional Categories
Pantex/BWXT ($000)
FY 2004

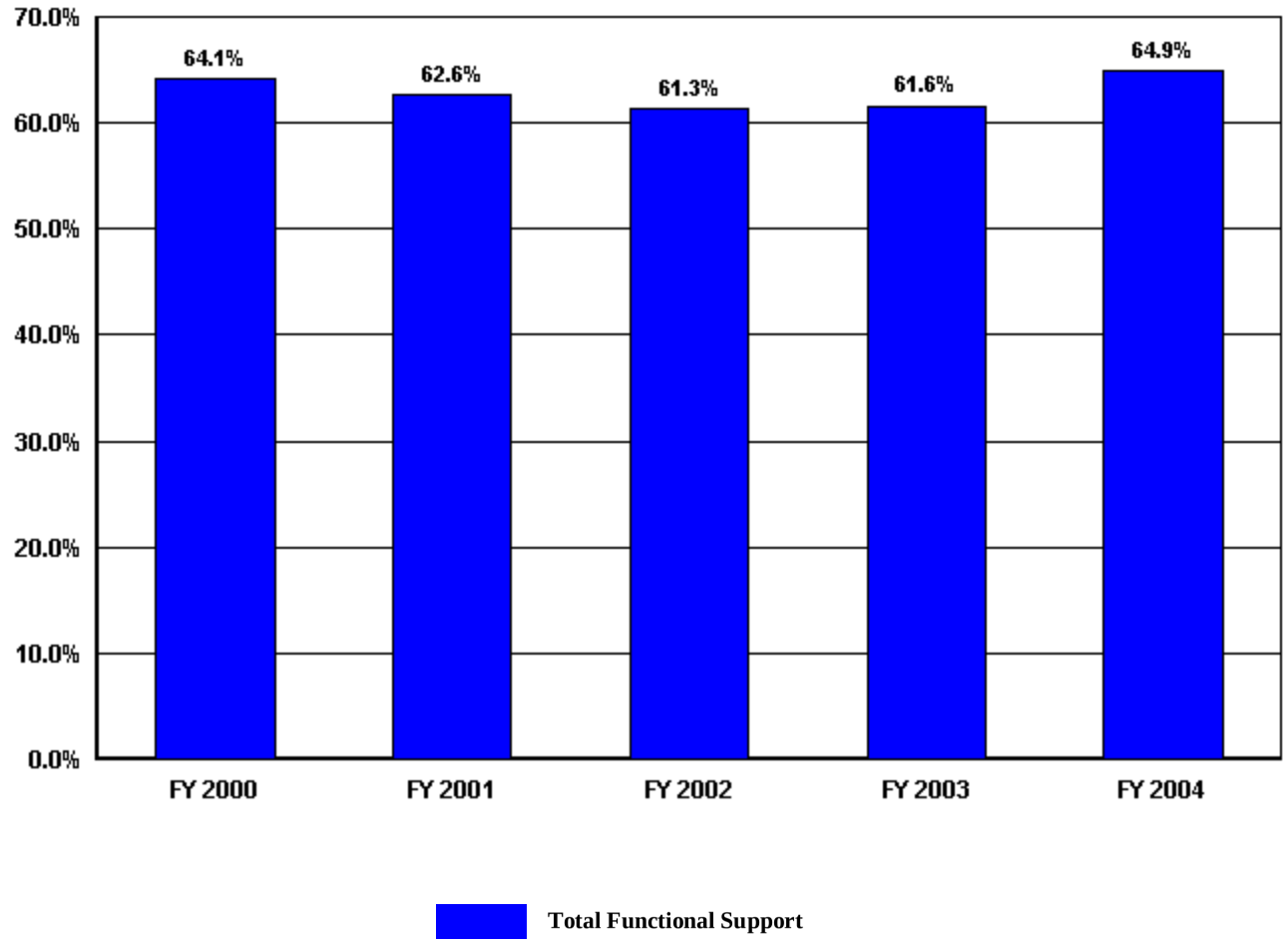
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	280,434	317,858	396,586	401,110	464,429	183,995	65.6%
Capital Construction	7,950	14,021	23,355	17,008	25,635	17,685	222.5%
Total Costs Less Construction	272,484	303,837	373,231	384,102	438,794	166,310	61.0%
Total Support Costs	**179,882**	**199,040**	**242,933**	**247,127**	**301,439**	**121,557**	**67.6%**
Mission Direct Operation	92,602	104,797	130,298	136,975	137,355	44,753	48.3%
Mission Direct Operation as % of Total Cost	**33.0%**	**33.0%**	**32.9%**	**34.1%**	**29.6%**		
Capital Construction as % of Total Cost	**2.8%**	**4.4%**	**5.9%**	**4.2%**	**5.5%**		
Total Support Cost as % of Total Cost	**64.1%**	**62.6%**	**61.3%**	**61.6%**	**64.9%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**64.1%**	**62.6%**	**61.3%**	**61.6%**	**64.9%**		
TOTAL SUPPORT COST	**179,882**	**199,040**	**242,933**	**247,127**	**301,439**	**121,557**	**67.6%**
TOTAL GENERAL SUPPORT as % of TOTAL	**8.8%**	**9.8%**	**9.4%**	**9.1%**	**10.7%**		
TOTAL GENERAL SUPPORT	**24,559**	**31,287**	**37,166**	**36,560**	**49,619**	**25,060**	**102.0%**
EXECUTIVE DIRECTION	1,232	1,015	1,186	1,163	1,259	27	2.2%
HUMAN RESOURCES	4,863	4,525	5,847	6,034	6,251	1,388	28.5%
CFO	2,835	2,763	3,342	4,061	5,276	2,441	86.1%
PROCUREMENT	2,296	2,745	3,432	3,014	4,682	2,386	103.9%
LEGAL	1,342	1,014	1,033	1,120	1,194	-148	-11.0%
CENTRAL ADMIN SERVICES	2,767	2,848	3,452	3,136	7,963	5,196	187.8%
PROGRAM/PROJECT CONTROL	988	1,521	3,986	4,003	5,911	4,923	498.3%
INFORMATION OUTREACH	421	444	468	542	1,632	1,211	287.6%
INFORMATION SERVICES	7,621	8,819	13,080	12,609	15,336	7,715	101.2%
OTHER	194	5,593	1,340	878	115	-79	-40.7%
TOTAL MISSION SUPPORT as % of TOTAL	**50.4%**	**48.2%**	**45.2%**	**45.8%**	**48.5%**		
TOTAL MISSION SUPPORT	**141,316**	**153,248**	**179,125**	**183,552**	**225,266**	**83,950**	**59.4%**
ENVIRONMENTAL	9,299	9,576	9,976	9,799	9,517	218	2.3%
SAFETY AND HEALTH	29,638	30,681	41,234	40,776	42,388	12,750	43.0%
FACILITIES MANAGEMENT	10,259	12,206	16,313	17,227	35,700	25,441	248.0%
MAINTENANCE	37,649	37,621	39,355	38,894	43,554	5,905	15.7%
UTILITIES	7,173	9,516	7,724	8,538	9,227	2,054	28.6%
SAFEGUARDS AND SECURITY	42,143	43,940	54,738	58,922	67,571	25,428	60.3%
LOGISTICS SUPPORT	3,953	7,188	6,591	5,934	7,151	3,198	80.9%
QUALITY ASSURANCE	1,202	2,520	3,194	3,462	6,235	5,033	418.7%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	3,923	3,923	100.0%
TOTAL SITE SPECIFIC as % of TOTAL	**5.0%**	**4.6%**	**6.7%**	**6.7%**	**5.7%**		
TOTAL SITE SPECIFIC	**14,007**	**14,505**	**26,642**	**27,015**	**26,554**	**12,547**	**89.6%**
MANAGEMENT/INCENTIVE FEE	13,438	13,898	21,674	21,250	23,940	10,502	78.2%
TAXES	569	607	961	621	391	-178	-31.3%
LDRD / PDRD / SDRD	0	0	4,007	5,144	2,223	2,223	100.0%

US Department of Energy
Total Functional Support
Pantex/BWXT



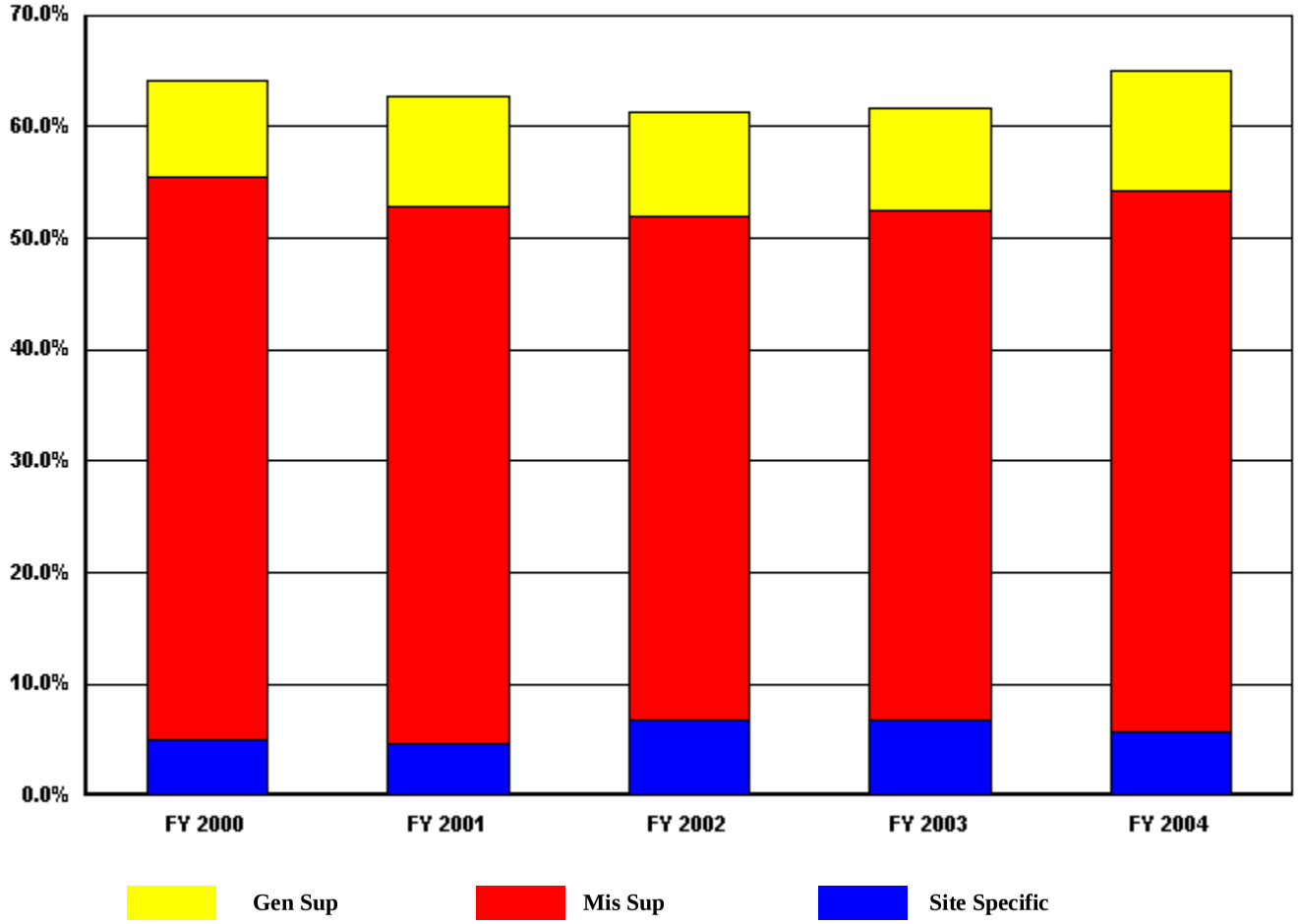
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	179,882	199,040	242,933	247,127	301,439

US Department of Energy
Total Functional Support as a % of Total Costs
Pantex/BWXT



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	64.1%	62.6%	61.3%	61.6%	64.9%

US Department of Energy
Percent of Support Category to Total
Pantex/BWXT



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	8.8%	9.8%	9.4%	9.1%	10.7%
Mis Sup	50.4%	48.2%	45.2%	45.8%	48.5%
Site Specific	5.0%	4.6%	6.7%	6.7%	5.7%

SITE PROFILE
Pantex/BWXT

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

EXECUTIVE DIRECTION
Slight decrease of $96K reflects the decision to categorize Six Sigma efforts under Quality beginning in FY 2004. Quality program is run out of the General Manager's area, aimed at improving customer satisfaction through increased performance standards.

CFO
Increase ($1,215K) due to technology and process upgrades to better support the plant through improved analysis utilizing Cost Manager and Primavera software systems (recently purchased).

PROCUREMENT
Increase ($1,668K) due to technology upgrades to better support the plant including the purchase of upgrades to the FMI procurement module and the hiring/relocation of 10 additional buyers to support the increasing contract/purchase order load.

LEGAL
Small increase of $74K reflects a judgement rendered against Mason & Hanger, the predecessor contractor at the Pantex Site by the DOE Office of Hearings and Appeals. The final judgement amount was deemed an allowable cost by DOE and paid by BWXT out of the legal counsel budget.

CENTRAL ADMIN SERVICES
Increase ($4,827K) is a direct result of the Peer Review conducted in FY 2003. It was recommended to capture all Documents Control effort under this category. Previously the effort directly tied to BWXT Weapons effort was captured under Mission for DP.

PROGRAM/PROJECT CONTROL
A project controls department was established within the CFO division in FY 2004 making this support cost easier to identify. Previously this effort would have been captured with the project being supported since the charges were coded directly to the sponsor organization. ($1,908K increase)

INFORMATION OUTREACH
Costs in this area are higher ($1,090K) as a direct result of the Peer Review conducted in FY 2003. The team recommended that efforts to expand the WFO program be captured under Information Outreach versus Mission (WFO). It may be important to note that although there was an overall increase over the FY 2003 official submission for this category, when the FY03 submission is adjusted to account for the recommendations, only a small decrease is apparent. This is due to personnel in the Business Development division spending less effort on general WFO development activities. The reduction in WFO Mission work also reflects this FY04 trend.

INFORMATION SERVICES
The increase ($2,727K) in this area was primarily due to technology upgrades to better support the plant including the purchase of parametric Technology, Computer Associates and Mathsoft software applications. Effort in IT Service contracts increased as a result of hiring contract labor to meet FY04 workload requirements.

OTHER
This reduction ($763K) is primarily a change in how the Labor pool was captured in FY 2004. Charges were captured against the efforts being supported versus a central area that wasn't easily categorized.

SAFETY AND HEALTH
Net increase in FY 2004 ($1,612K) costs reflects increased support in Authorization Basis Integrated Implementation Plan for Technical Safety Requirements along with Unreviewed Safety Questions and associated requirements.

FACILITIES MANAGEMENT
Additional scope was added for facility improvements funded by Facilities and Infrastructure Recapitalization Program (FIRP) dollars, causing increased costs for facilities management ($18,473K) and maintenance.

MAINTENANCE
Additional scope was added for facility improvements funded by Facilities and Infrastructure Recapitalization Program (FIRP) dollars, causing increased costs for facilities management and maintenance ($4,660K).

UTILITIES
The increase in utilities cost experienced around the country increased utility costs by $689K.

SAFEGUARDS AND SECURITY
Increase ($8,649K) due to increased security requirements due to 9/11, 03 Design Basis Threat (DBT) and changes to how this functional area is defined based on recommendations made during the Peer Review from FY 2003. Note: Functional costs are not indicative of the S&S Program. Peer review conducted in 2003 determined that Non-Proliferation and Counterintelligence costs should be included in the S&S functional area. Other areas, such as construction support, are also included in security costs for this report, but are not in the S&S Program. Additionally, capital costs directly tied to the S&S Program are not included in the Security costs for this functional cost report. These examples must be taken into consideration when analyzing the Security program.

LOGISTICS SUPPORT
The increase ($1,217K) is primarily a reflection of additional material handlers to better support LEP and SS-21 efforts.

QUALITY ASSURANCE
Increase ($2,773K) reflects the purchase of a new ESTARS software system that allows for computerizing routing of data and the increased effort surrounding the acquisition and acceptance process to assure material accepted for use in production applications conforms to specifications and requirements.

LABORATORY/TECHNICAL SUPPORT
This is a new category for Pantex ($3,923 increase). The Peer Review Team recommended a portion of BWXT Metrology efforts and Analysis efforts be broken out from the Mission category and reported here.

MANAGEMENT/INCENTIVE FEE
Increase in Award fee ($2,690K) is a reflection of the increased work scope assigned to the Pantex plant for FY2004.

TAXES
The reduction between FY2003 and FY2004 ($230K) was due to a refund BWXT received in FY04 of taxes that were overpaid by a previous contractor, Mason and Hangar.

LDRD / PDRD / SDRD
LDRD is funded by a tax applied to Defense Program efforts. Support was intentionally reduced ($2,921K) during FY2004 in an effort to support funding shortfalls within the DP program areas.

CAPITAL CONSTRUCTION
Additional scope was added for facility improvements in FY2004.

COST SAVINGS INITIATIVES
($ in 000's)

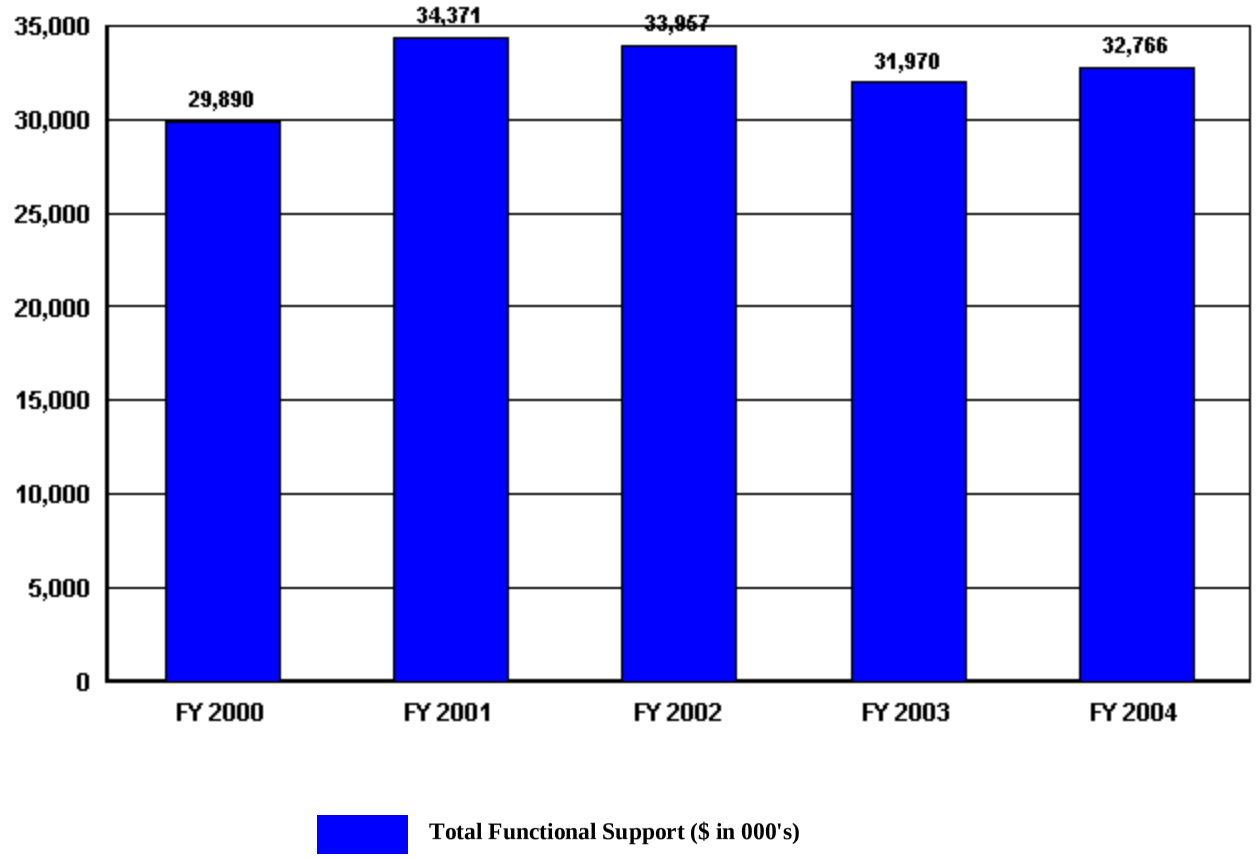
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Cathodic Protection System	5,060	Cathodic protection process was employed to protect a large area of pipe with a single system versus protecting each joint individually.	Angie Viner

Reduced Argus Passage Failures	1,460	Alarm verification Technicians clean card readers and HGU units during alarm verification activities; timeout parameters were lengthened; and RAP/HGU PM's.	Angie Viner
Reduction in ITM Labor Hours	551	Reduction in ITM labor hours due to Anti-Virus Software implementation. Implementing Tumbleweed Secure Mail enhanced the communications security by providing the following functionalities: anti-virus scanning and cleaning; content filtering of messages and attachments.	Angie Viner

Trends in Total Support Cost by Functional Categories
Princeton Plasma Physics Lab/Princeton University ($000)
FY 2004

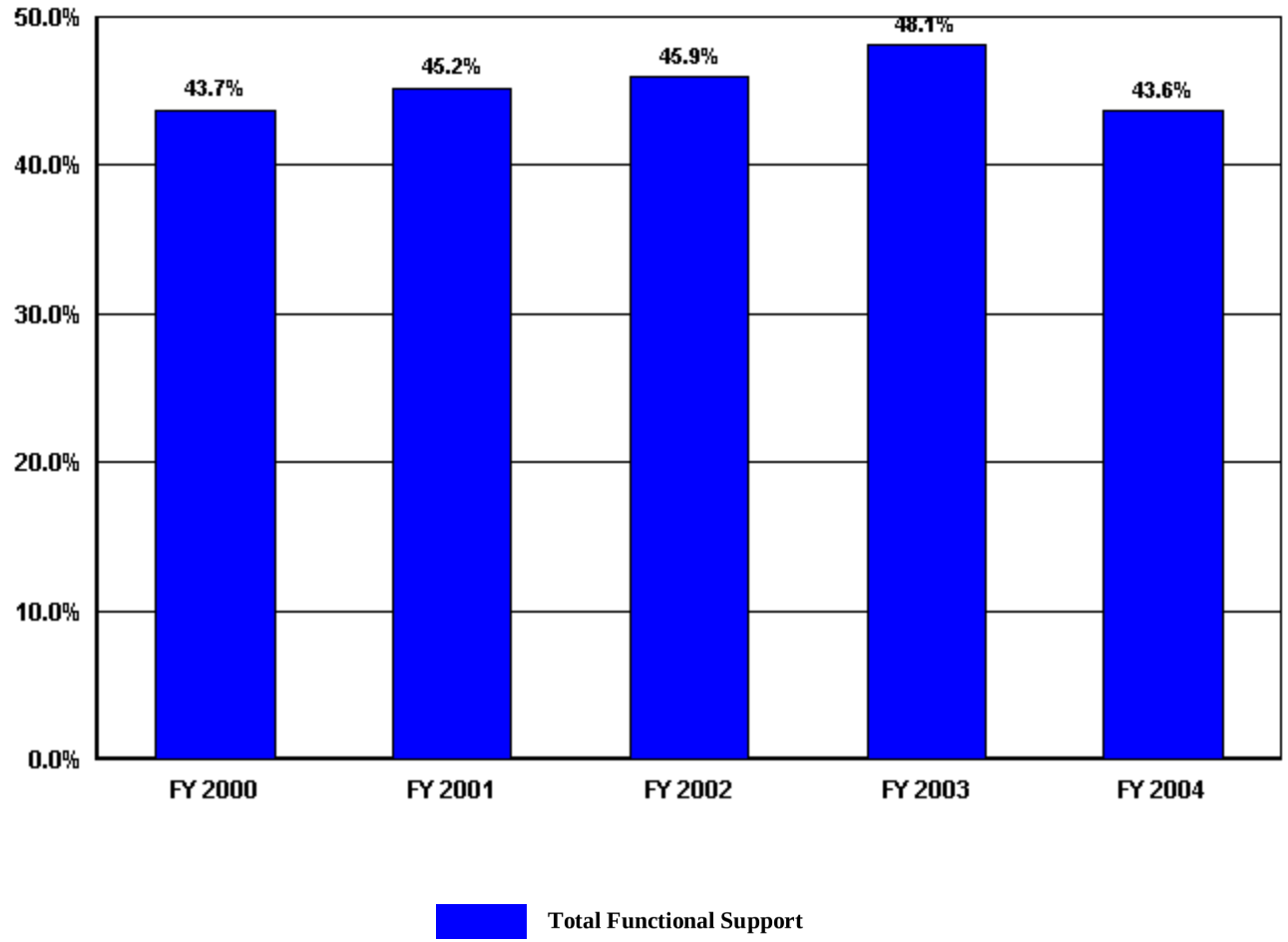
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	68,345	76,097	73,904	66,456	75,117	6,772	9.9%
Capital Construction	7,008	5,729	5,220	5,398	12,297	5,289	75.5%
Total Costs Less Construction	61,337	70,368	68,684	61,058	62,820	1,483	2.4%
Total Support Costs	**29,890**	**34,371**	**33,957**	**31,970**	**32,766**	**2,876**	**9.6%**
Mission Direct Operation	31,447	35,997	34,727	29,088	30,054	-1,393	-4.4%
Mission Direct Operation as % of Total Cost	**46.0%**	**47.3%**	**47.0%**	**43.8%**	**40.0%**		
Capital Construction as % of Total Cost	**10.3%**	**7.5%**	**7.1%**	**8.1%**	**16.4%**		
Total Support Cost as % of Total Cost	**43.7%**	**45.2%**	**45.9%**	**48.1%**	**43.6%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**43.7%**	**45.2%**	**45.9%**	**48.1%**	**43.6%**		
TOTAL SUPPORT COST	**29,890**	**34,371**	**33,957**	**31,970**	**32,766**	**2,876**	**9.6%**
TOTAL GENERAL SUPPORT as % of TOTAL	**14.0%**	**14.3%**	**14.9%**	**16.9%**	**14.1%**		
TOTAL GENERAL SUPPORT	**9,541**	**10,866**	**11,016**	**11,205**	**10,595**	**1,054**	**11.0%**
EXECUTIVE DIRECTION	814	757	786	817	809	-5	-0.6%
HUMAN RESOURCES	989	1,037	958	1,036	960	-29	-2.9%
CFO	1,176	1,225	1,294	1,333	1,405	229	19.5%
PROCUREMENT	551	601	655	555	635	84	15.2%
LEGAL	0	35	-78	0	0	0	0.0%
CENTRAL ADMIN SERVICES	193	232	173	214	203	10	5.2%
PROGRAM/PROJECT CONTROL	663	692	677	739	705	42	6.3%
INFORMATION OUTREACH	2,843	2,908	3,142	3,125	2,925	82	2.9%
INFORMATION SERVICES	2,695	3,155	3,322	2,981	2,890	195	7.2%
OTHER	-383	224	87	405	63	446	116.4%
TOTAL MISSION SUPPORT as % of TOTAL	**26.2%**	**27.7%**	**27.5%**	**27.2%**	**25.7%**		
TOTAL MISSION SUPPORT	**17,939**	**21,095**	**20,331**	**18,065**	**19,271**	**1,332**	**7.4%**
ENVIRONMENTAL	433	1,214	1,107	0	0	-433	-100.0%
SAFETY AND HEALTH	2,275	2,711	2,580	1,555	1,852	-423	-18.6%
FACILITIES MANAGEMENT	2,522	2,580	3,280	3,334	3,387	865	34.3%
MAINTENANCE	6,117	7,100	6,215	7,144	6,461	344	5.6%
UTILITIES	3,335	3,899	3,273	2,348	3,554	219	6.6%
SAFEGUARDS AND SECURITY	957	1,055	1,409	1,346	1,598	641	67.0%
LOGISTICS SUPPORT	772	760	844	872	797	25	3.2%
QUALITY ASSURANCE	445	518	497	454	626	181	40.7%
LABORATORY/TECHNICAL SUPPORT	1,083	1,258	1,126	1,012	996	-87	-8.0%
TOTAL SITE SPECIFIC as % of TOTAL	**3.5%**	**3.2%**	**3.5%**	**4.1%**	**3.9%**		
TOTAL SITE SPECIFIC	**2,410**	**2,410**	**2,610**	**2,700**	**2,900**	**490**	**20.3%**
MANAGEMENT/INCENTIVE FEE	2,410	2,410	2,610	2,700	2,900	490	20.3%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Princeton Plasma Physics Lab/Princeton University



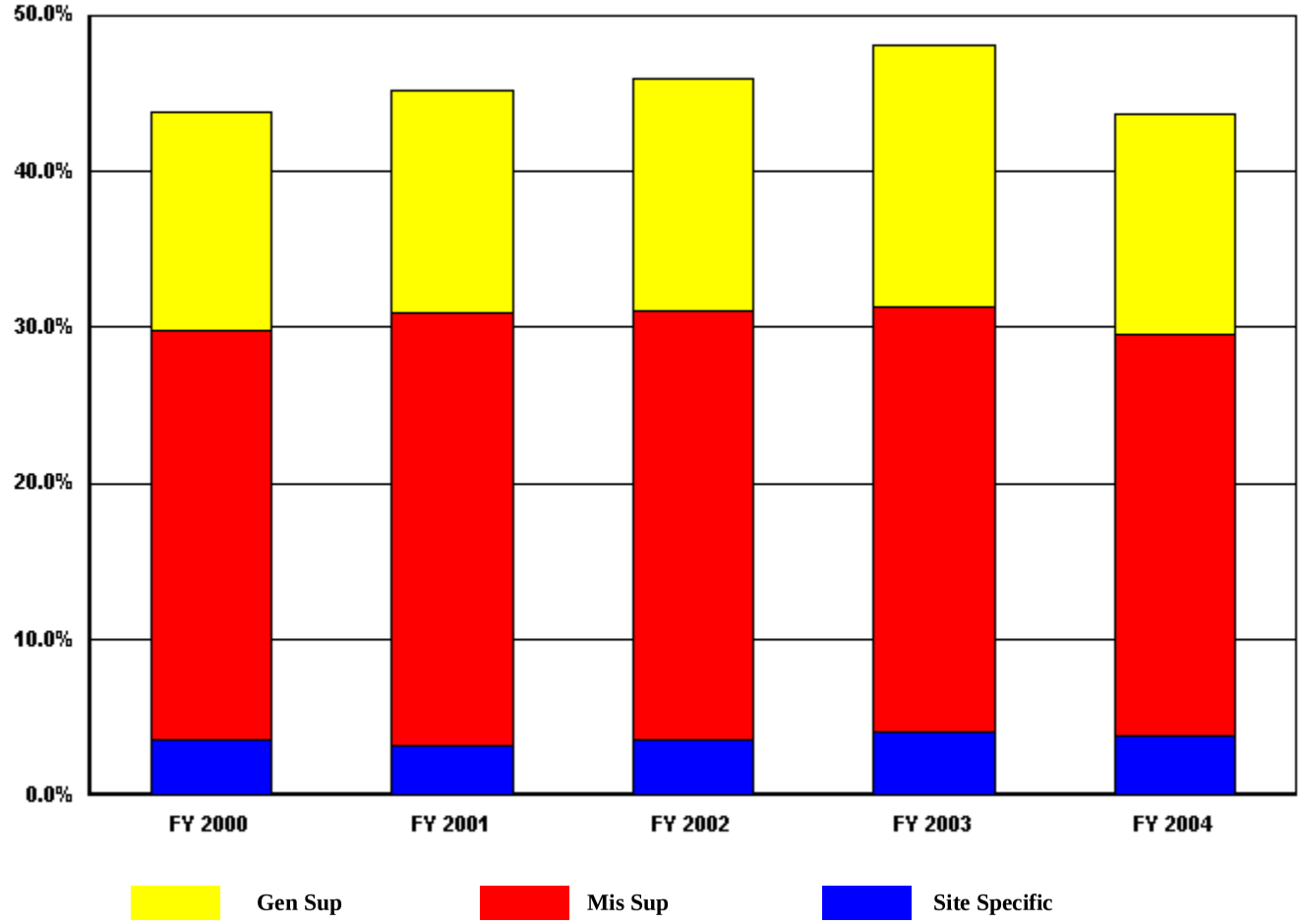
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	29,890	34,371	33,957	31,970	32,766

US Department of Energy
Total Functional Support as a % of Total Costs
Princeton Plasma Physics Lab/Princeton University



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	43.7%	45.2%	45.9%	48.1%	43.6%

US Department of Energy
Percent of Support Category to Total
Princeton Plasma Physics Lab/Princeton University



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	14.0%	14.3%	14.9%	16.9%	14.1%
Mis Sup	26.2%	27.7%	27.5%	27.2%	25.7%
Site Specific	3.5%	3.2%	3.5%	4.1%	3.9%

SITE PROFILE
Princeton Plasma Physics Lab/Princeton University

SITE OVERVIEW AND CHARACTERISTIC

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. Design and fabrication of a new fusion device, the National Compact Stellarator Experiment, commenced in FY 2003 with first plasma planned for FY 2008.

PPPL's FY 2004 funding was approximately $78 million, of which approximately $72 million was provided from the Office of Fusion Energy Sciences, approximately $4 million from other DOE programs, and approximately $2 million from other federal agencies, non-federal sponsors and other DOE laboratories. The Laboratory costed approximately $75 million during FY 2004. As of September 30, 2004, the number of regular employees at PPPL was approximately 407, not including approximately 30 subcontractors and limited duration employees, 35 graduate students, and visiting research staff.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

OTHER
Other cost decrease from 2003 to 2004 is due primarily to severance costs of $362,000 in FY 2003. There were no severance costs in FY 2004.

UTILITIES
The NSTX project had a longer run-time in FY 2004, due to the repair completion in FY 2003. Thus, utility costs for this project increased by $0.6 million in FY 2004. Additionally, higher utility rates increased the Laboratory's "house" utility costs by approximately $0.6 million in FY 2004.

QUALITY ASSURANCE
The increase in Quality Assurance is due principally to additional QA support for the NCSX MIE project. This included approximately $0.1 million for additional QA staff and $0.1 million for the services of DCMA inspectors.

CAPITAL CONSTRUCTION
Capital Construction increase in 2004 over 2003 is due primarily to the increased project activity on the NCSX Project.

COST SAVINGS INITIATIVES

($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

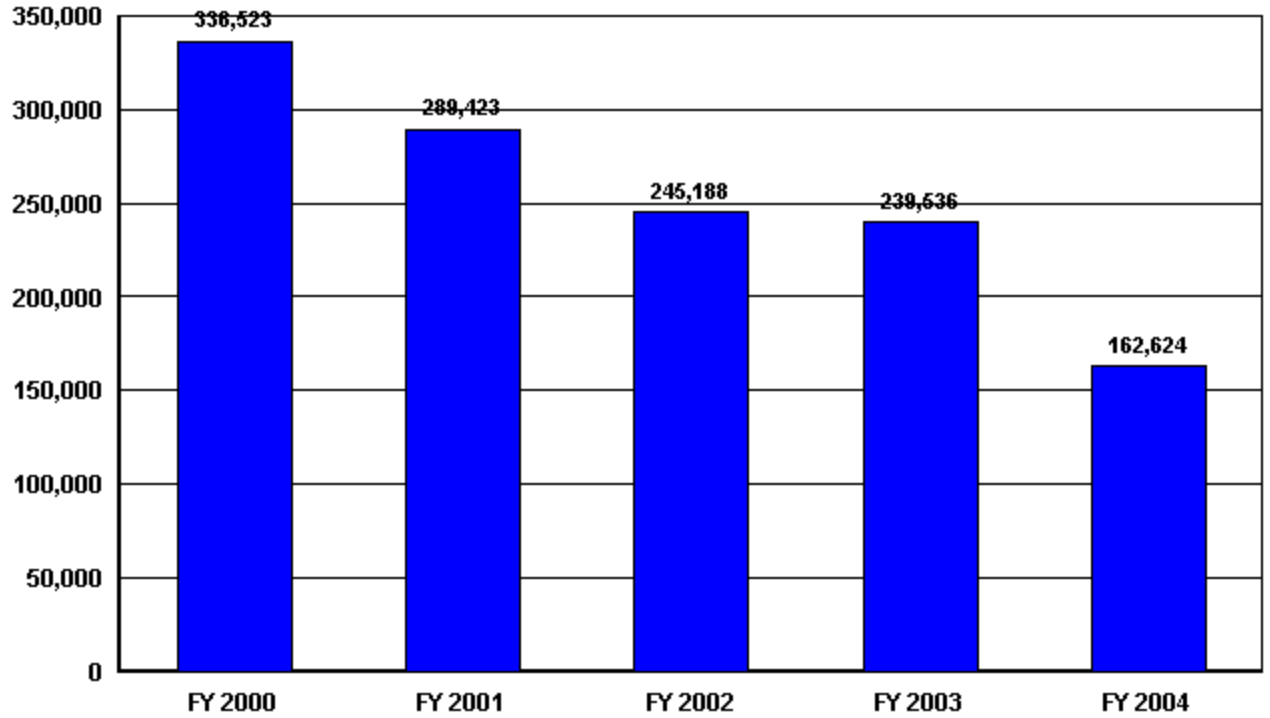
Installation of Great Plains ERP System	210	PPPL cut-over to its new Great Plains ERP system on 1 May 2004. The system included all procurement, business, and financial modules, with the exception of the Human Resources module. The 1 May 2004 cut-over included all major modules, except for the Travel Management module, which is still being developed. The system effectively replaced the Laboratory's legacy system, which was mostly developed in the late-1970's, and operated on an IBM mainframe. Implementation of our new Great Plains ERP system, in addition to having more functionality than our previous legacy system, also generated some cost savings for the Laboratory. We were able to reduce our Business Operations Department support staff by two (1.5 of this reduction has already been achieved, the remaining .5 reduction is prospective), which equates to an annualized saving of approximately $100 thousand. In addition, we were able to save approximately $110 thousand (annualized value) due to lower maintenance costs and licensing fees required to support our Great Plains ERP compared to supporting our legacy system and its mainframe environment.	

Petty Cash Office-Efficiency Initiatives	10	Petty cash reimbursement procedures were streamlined to reduce the staff support required to operate this office and to reduce the amount of cash inventory required. Specific actions undertaken include, but are not limited to the following: -elimination of travel advances for most business travel -electronic reimbursements to staff for expense reimbursements -transferring other transactions through accounts payable operations The above mentioned efficiency initiatives resulted in a staff saving of approximately .25 FTE and a reduction of the cash inventory by $10 thousand.	
Travel Office Cost Savings Initiatives	3	The Travel Office continued to pursue incremental initiatives to reduce the Laboratory's business travel costs. Initiatives undertaken during the past fiscal year include use of a Continental Airlines corporate credit card, which resulted in rebates totaling approximately $2.5 thousand, and participation in the Continental Airlines Rewards One program, which earned the Laboratory free airline tickets.	
Recruitment Cost Savings Initiatives	15	The Human Resources Department has worked diligently to reduce recruitment costs. Web based advertising has been used more efficiently. In addition, combining advertisements has resulted in reduced recruiting costs. The cost savings for these efforts are dependant upon the number and the type of positions that are being recruited. In FY 2004, the savings were approximately $15K.	

Trends in Total Support Cost by Functional Categories
Rocky Flats/Kaiser-Hill ($000)
FY 2004

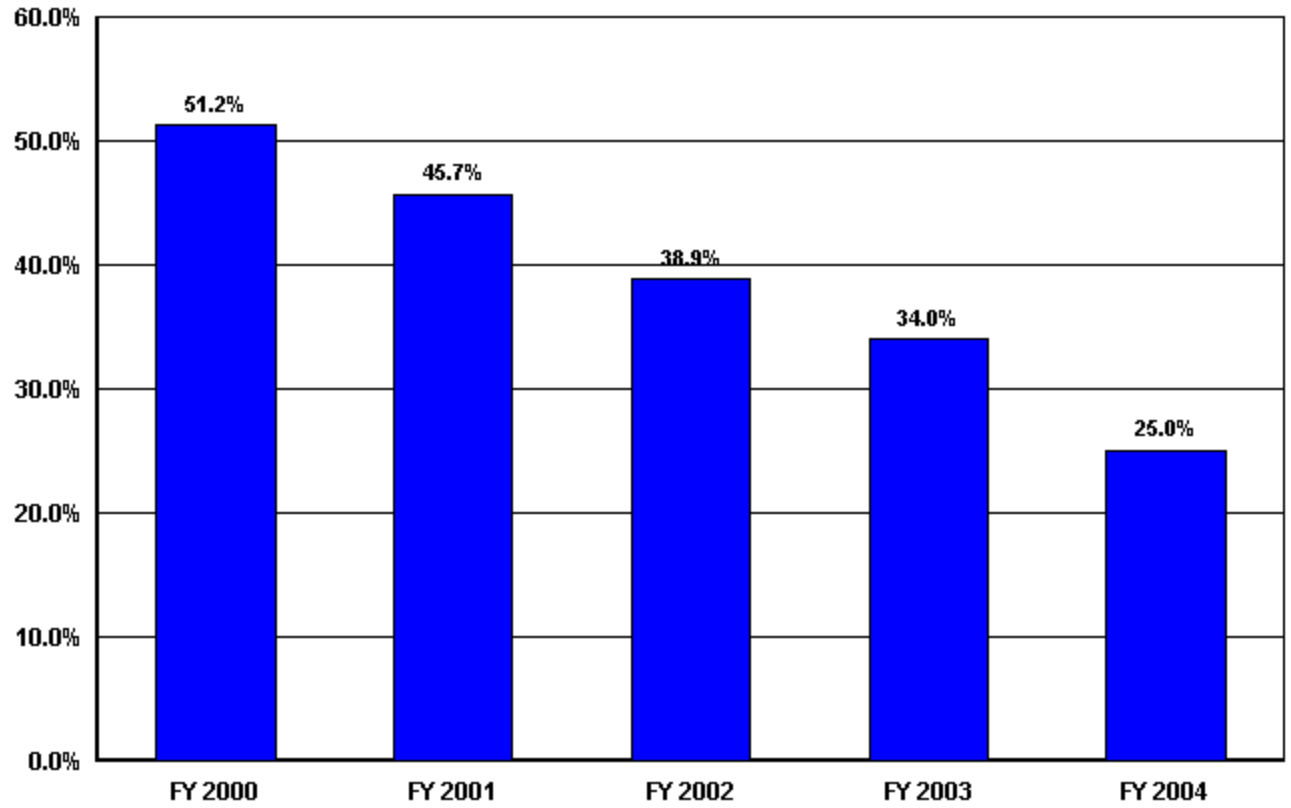
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	656,814	633,337	631,083	703,999	649,696	-7,118	-1.1%
Capital Construction	10,279	2,173	2,214	0	0	-10,279	-100.0%
Total Costs Less Construction	646,535	631,164	628,869	703,999	649,696	3,161	0.5%
Total Support Costs	**336,523**	**289,423**	**245,188**	**239,536**	**162,624**	**-173,899**	**-51.7%**
Mission Direct Operation	310,012	341,741	383,681	464,463	487,072	177,060	57.1%
Mission Direct Operation as % of Total Cost	**47.2%**	**54.0%**	**60.8%**	**66.0%**	**75.0%**		
Capital Construction as % of Total Cost	**1.6%**	**0.3%**	**0.4%**	**0.0%**	**0.0%**		
Total Support Cost as % of Total Cost	**51.2%**	**45.7%**	**38.9%**	**34.0%**	**25.0%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**51.2%**	**45.7%**	**38.9%**	**34.0%**	**25.0%**		
TOTAL SUPPORT COST	**336,523**	**289,423**	**245,188**	**239,536**	**162,624**	**-173,899**	**-51.7%**
TOTAL GENERAL SUPPORT as % of TOTAL	**11.9%**	**9.4%**	**7.4%**	**6.8%**	**7.4%**		
TOTAL GENERAL SUPPORT	**77,982**	**59,513**	**46,497**	**47,792**	**48,050**	**-29,932**	**-38.4%**
EXECUTIVE DIRECTION	8,554	3,910	915	520	1,472	-7,082	-82.8%
HUMAN RESOURCES	7,988	3,493	1,674	1,697	3,531	-4,457	-55.8%
CFO	6,033	9,935	4,474	4,130	3,498	-2,535	-42.0%
PROCUREMENT	2,375	3,291	2,372	2,279	2,674	299	12.6%
LEGAL	875	1,160	1,336	1,795	1,110	235	26.9%
CENTRAL ADMIN SERVICES	3,970	3,397	5,277	5,010	2,641	-1,329	-33.5%
PROGRAM/PROJECT CONTROL	6,569	6,562	4,329	4,092	6,334	-235	-3.6%
INFORMATION OUTREACH	1,549	1,618	2,189	2,108	888	-661	-42.7%
INFORMATION SERVICES	17,920	15,830	13,785	11,563	10,259	-7,661	-42.8%
OTHER	22,149	10,317	10,146	14,598	15,643	-6,506	-29.4%
TOTAL MISSION SUPPORT as % of TOTAL	**30.1%**	**32.5%**	**27.5%**	**20.6%**	**14.4%**		
TOTAL MISSION SUPPORT	**197,565**	**205,944**	**173,834**	**144,744**	**93,677**	**-103,888**	**-52.6%**
ENVIRONMENTAL	13,181	14,902	13,740	12,786	9,671	-3,510	-26.6%
SAFETY AND HEALTH	38,735	47,149	42,207	33,350	16,566	-22,169	-57.2%
FACILITIES MANAGEMENT	32,496	32,462	15,420	9,979	15,927	-16,569	-51.0%
MAINTENANCE	31,257	33,587	32,712	22,092	9,762	-21,495	-68.8%
UTILITIES	10,902	9,840	10,289	8,846	1,615	-9,287	-85.2%
SAFEGUARDS AND SECURITY	39,217	44,055	42,845	43,835	29,621	-9,596	-24.5%
LOGISTICS SUPPORT	9,645	9,118	5,043	3,167	3,607	-6,038	-62.6%
QUALITY ASSURANCE	2,942	1,455	2,035	1,998	665	-2,277	-77.4%
LABORATORY/TECHNICAL SUPPORT	19,190	13,376	9,543	8,691	6,243	-12,947	-67.5%
TOTAL SITE SPECIFIC as % of TOTAL	**9.3%**	**3.8%**	**3.9%**	**6.7%**	**3.2%**		
TOTAL SITE SPECIFIC	**60,976**	**23,966**	**24,857**	**47,000**	**20,897**	**-40,079**	**-65.7%**
MANAGEMENT/INCENTIVE FEE	60,934	23,966	24,857	47,000	20,897	-40,037	-65.7%
TAXES	42	0	0	0	0	-42	-100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Rocky Flats/Kaiser-Hill

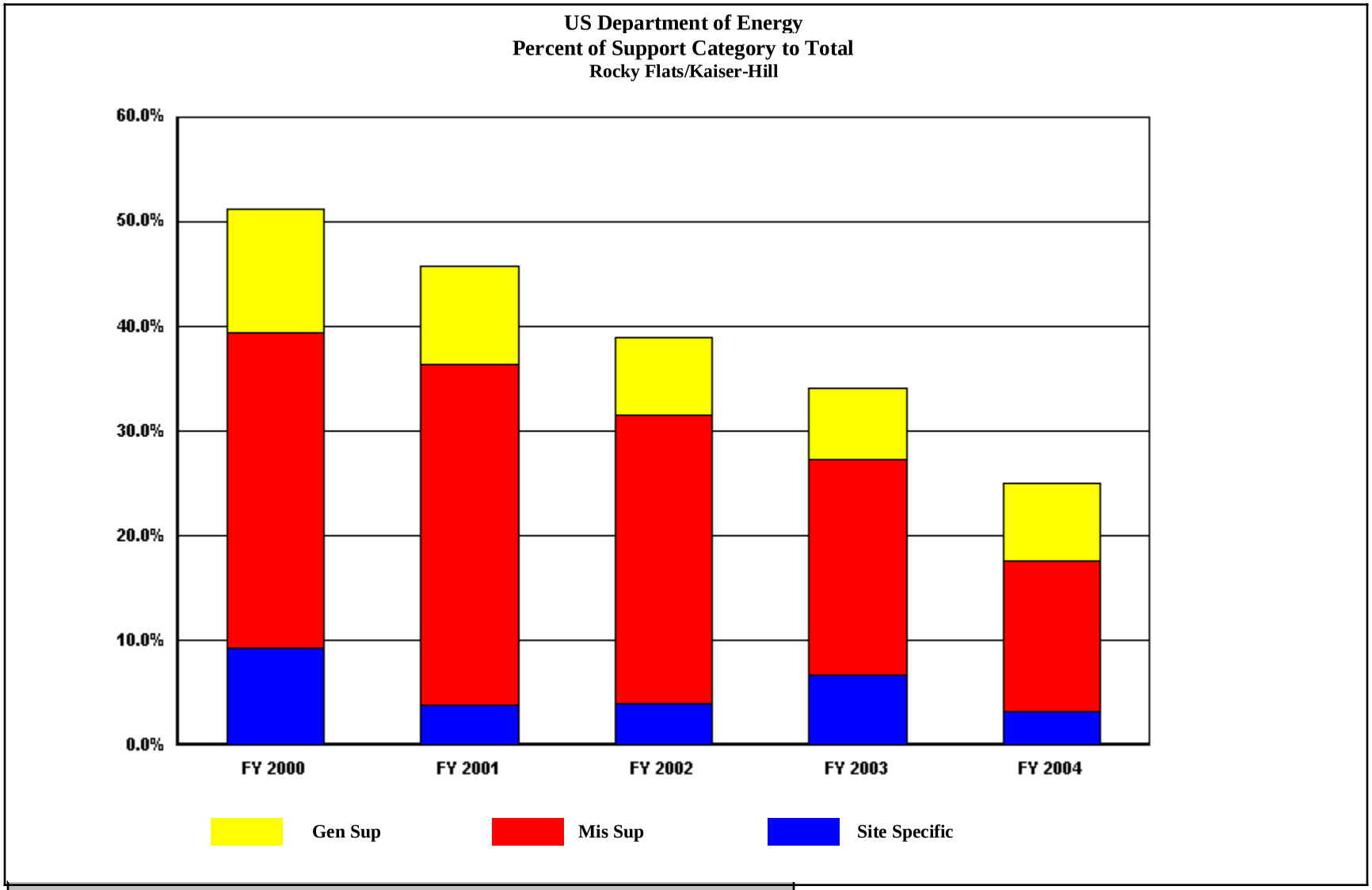


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	336,523	289,423	245,188	239,536	162,624

US Department of Energy
Total Functional Support as a % of Total Costs
Rocky Flats/Kaiser-Hill



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	51.2%	45.7%	38.9%	34.0%	25.0%



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	11.9%	9.4%	7.4%	6.8%	7.4%
Mis Sup	30.1%	32.5%	27.5%	20.6%	14.4%
Site Specific	9.3%	3.8%	3.9%	6.7%	3.2%

SITE PROFILE
Rocky Flats/Kaiser-Hill

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 Site continued to accelerate site closure in FY 2004. 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 2004, the Site continued the reduction of Safeguards and Security costs as well as practically eliminating on-site utilities support. 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. By the end of FY 2005, the Site closure will be approximately 95% complete.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

COST SAVINGS INITIATIVES

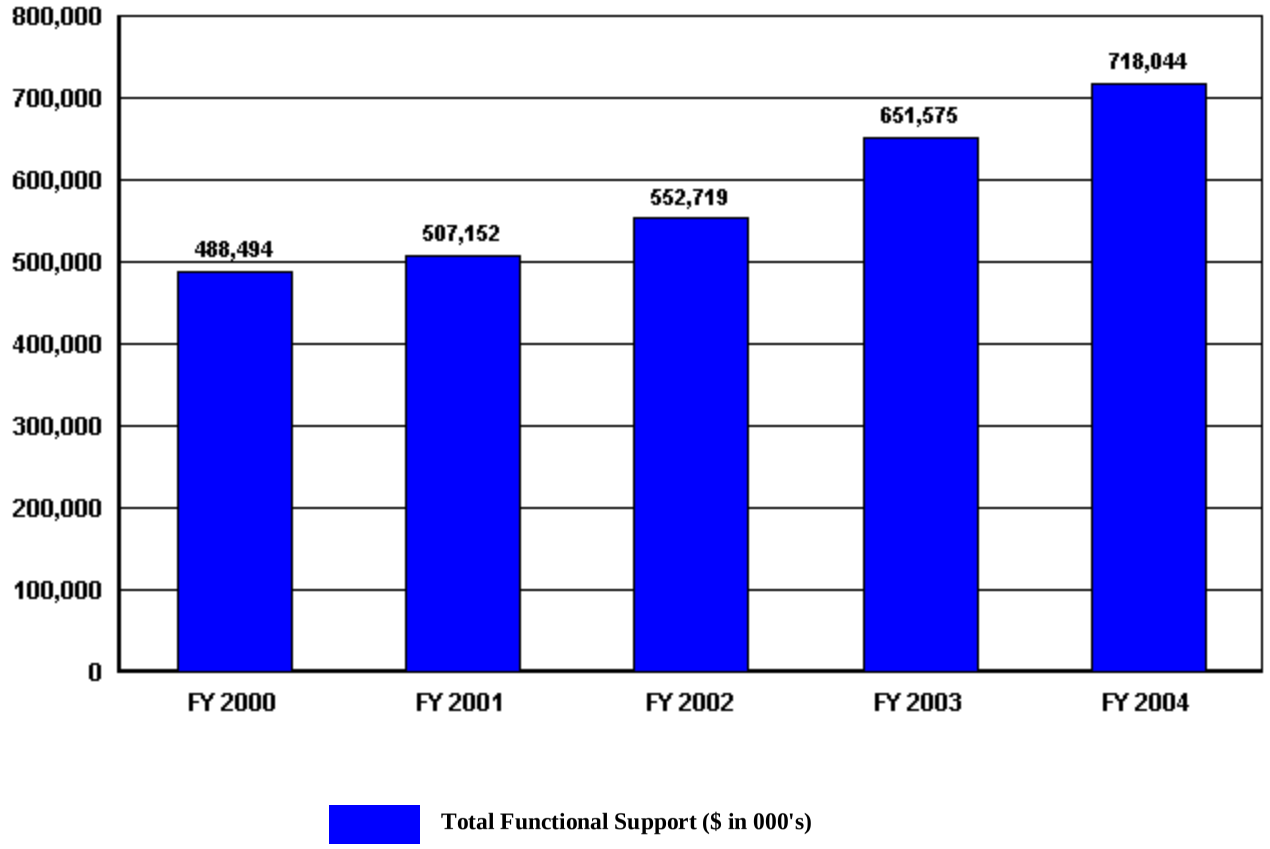
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

Trends in Total Support Cost by Functional Categories
Sandia National Lab/Lockheed Martin ($000)
FY 2004

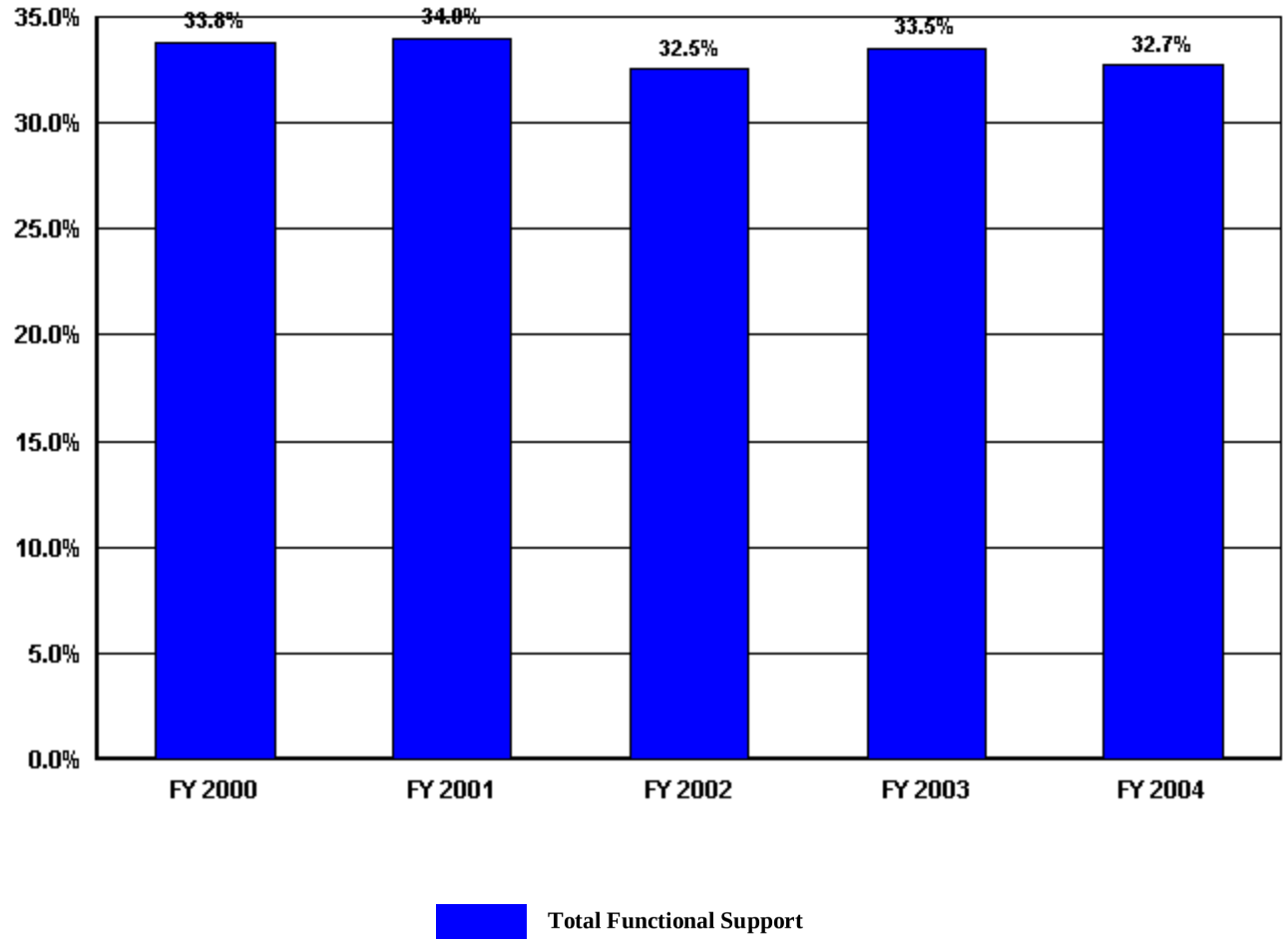
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	1,445,586	1,492,505	1,698,646	1,944,556	2,193,341	747,755	51.7%
Capital Construction	84,943	75,723	94,291	192,109	264,797	179,854	211.7%
Total Costs Less Construction	1,360,643	1,416,782	1,604,355	1,752,447	1,928,544	567,901	41.7%
Total Support Costs	**488,494**	**507,152**	**552,719**	**651,575**	**718,044**	**229,550**	**47.0%**
Mission Direct Operation	872,149	909,630	1,051,636	1,100,872	1,210,500	338,351	38.8%
Mission Direct Operation as % of Total Cost	**60.3%**	**60.9%**	**61.9%**	**56.6%**	**55.2%**		
Capital Construction as % of Total Cost	**5.9%**	**5.1%**	**5.6%**	**9.9%**	**12.1%**		
Total Support Cost as % of Total Cost	**33.8%**	**34.0%**	**32.5%**	**33.5%**	**32.7%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**33.8%**	**34.0%**	**32.5%**	**33.5%**	**32.7%**		
TOTAL SUPPORT COST	**488,494**	**507,152**	**552,719**	**651,575**	**718,044**	**229,550**	**47.0%**
TOTAL GENERAL SUPPORT as % of TOTAL	**14.5%**	**12.7%**	**12.1%**	**13.0%**	**12.4%**		
TOTAL GENERAL SUPPORT	**209,004**	**189,621**	**205,004**	**253,663**	**272,516**	**63,512**	**30.4%**
EXECUTIVE DIRECTION	18,071	19,759	24,464	25,817	23,574	5,503	30.5%
HUMAN RESOURCES	21,044	24,356	27,061	28,780	28,412	7,368	35.0%
CFO	9,785	10,384	12,388	9,223	10,431	646	6.6%
PROCUREMENT	12,099	11,650	10,096	14,223	14,728	2,629	21.7%
LEGAL	5,557	5,385	5,640	5,501	5,315	-242	-4.4%
CENTRAL ADMIN SERVICES	14,211	13,997	14,208	14,942	15,745	1,534	10.8%
PROGRAM/PROJECT CONTROL	14,902	6,788	2,320	35,904	46,087	31,185	209.3%
INFORMATION OUTREACH	12,590	13,359	13,209	14,762	15,215	2,625	20.8%
INFORMATION SERVICES	94,440	81,025	94,905	103,679	113,066	18,626	19.7%
OTHER	6,305	2,918	713	832	-57	-6,362	-100.9%
TOTAL MISSION SUPPORT as % of TOTAL	**11.9%**	**12.7%**	**12.0%**	**11.9%**	**12.1%**		
TOTAL MISSION SUPPORT	**172,228**	**189,055**	**203,969**	**230,616**	**266,071**	**93,843**	**54.5%**
ENVIRONMENTAL	1,928	1,014	1,362	1,022	1,585	-343	-17.8%
SAFETY AND HEALTH	32,427	29,772	32,040	33,805	32,944	517	1.6%
FACILITIES MANAGEMENT	46,143	60,077	71,259	88,261	95,093	48,950	106.1%
MAINTENANCE	29,540	30,605	32,406	30,530	37,278	7,738	26.2%
UTILITIES	18,422	21,793	21,157	20,875	19,036	614	3.3%
SAFEGUARDS AND SECURITY	32,363	33,111	31,564	43,143	67,242	34,879	107.8%
LOGISTICS SUPPORT	11,405	12,683	14,181	12,342	12,063	658	5.8%
QUALITY ASSURANCE	0	0	0	638	830	830	100.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**7.4%**	**8.6%**	**8.5%**	**8.6%**	**8.2%**		
TOTAL SITE SPECIFIC	**107,262**	**128,476**	**143,746**	**167,296**	**179,457**	**72,195**	**67.3%**
MANAGEMENT/INCENTIVE FEE	17,078	16,788	18,367	23,143	24,288	7,210	42.2%
TAXES	47,442	51,168	53,958	57,128	63,575	16,133	34.0%
LDRD / PDRD / SDRD	42,742	60,520	71,421	87,025	91,594	48,852	114.3%

US Department of Energy
Total Functional Support
Sandia National Lab/Lockheed Martin



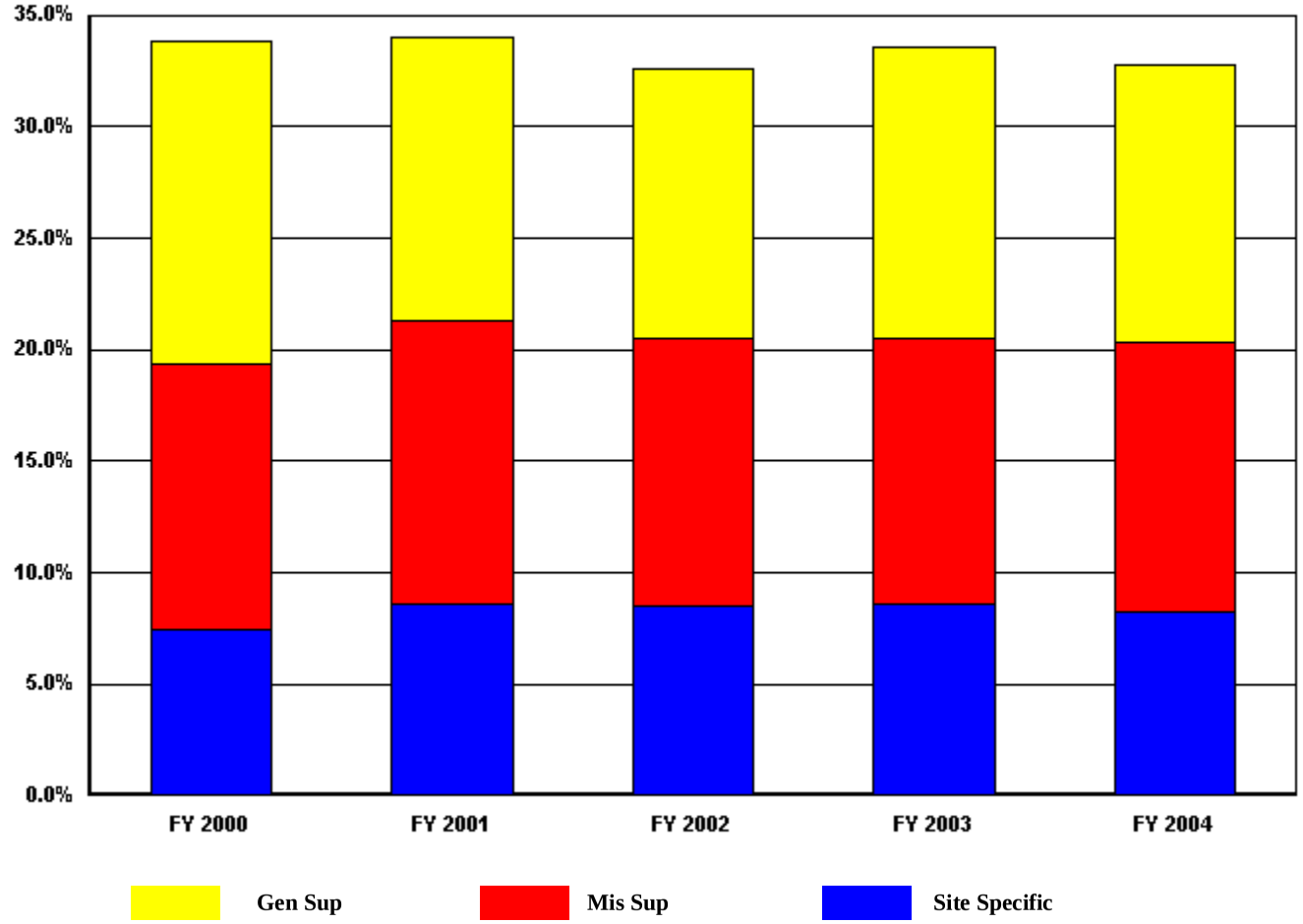
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	488,494	507,152	552,719	651,575	718,044

US Department of Energy
Total Functional Support as a % of Total Costs
Sandia National Lab/Lockheed Martin



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	33.8%	34.0%	32.5%	33.5%	32.7%

US Department of Energy
Percent of Support Category to Total
Sandia National Lab/Lockheed Martin



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	14.5%	12.7%	12.1%	13.0%	12.4%
Mis Sup	11.9%	12.7%	12.0%	11.9%	12.1%
Site Specific	7.4%	8.6%	8.5%	8.6%	8.2%

SITE PROFILE
Sandia National Lab/Lockheed Martin

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 — FY 2004 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

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

PROGRAM/PROJECT CONTROL
The $10,183,000 increase in Program/Project Planning & Control is primarily due to increased costs associated with Sandia National Laboratories' goal of being more responsive to corporate and customer requirements and for new management initiatives to bolster outreach to the industrial community.

OTHER
The $899,000 decrease in Other is primarily due to the significantly reduced Sandia National Laboratories' contract variance.

ENVIRONMENTAL
The $563K increase in Environmental is primarily due to a remediation of a site due to a concern of potential contamination.

MAINTENANCE
The $6,748 increase in Maintenance is primarily due to increased costs associated with maintenance and restoration of Sandia National Laboratories' aging facilities.

SAFEGUARDS AND SECURITY
The $24,099K increase in Safeguards/Security is primarily due to Sandia National Laboratories ramp-up of costs to meet NNSA requirements under the Designed Basis Threat.

QUALITY ASSURANCE
The $192K increase in Quality Assurance is primarily due to an increased focus on quality assurance within the center support processes.

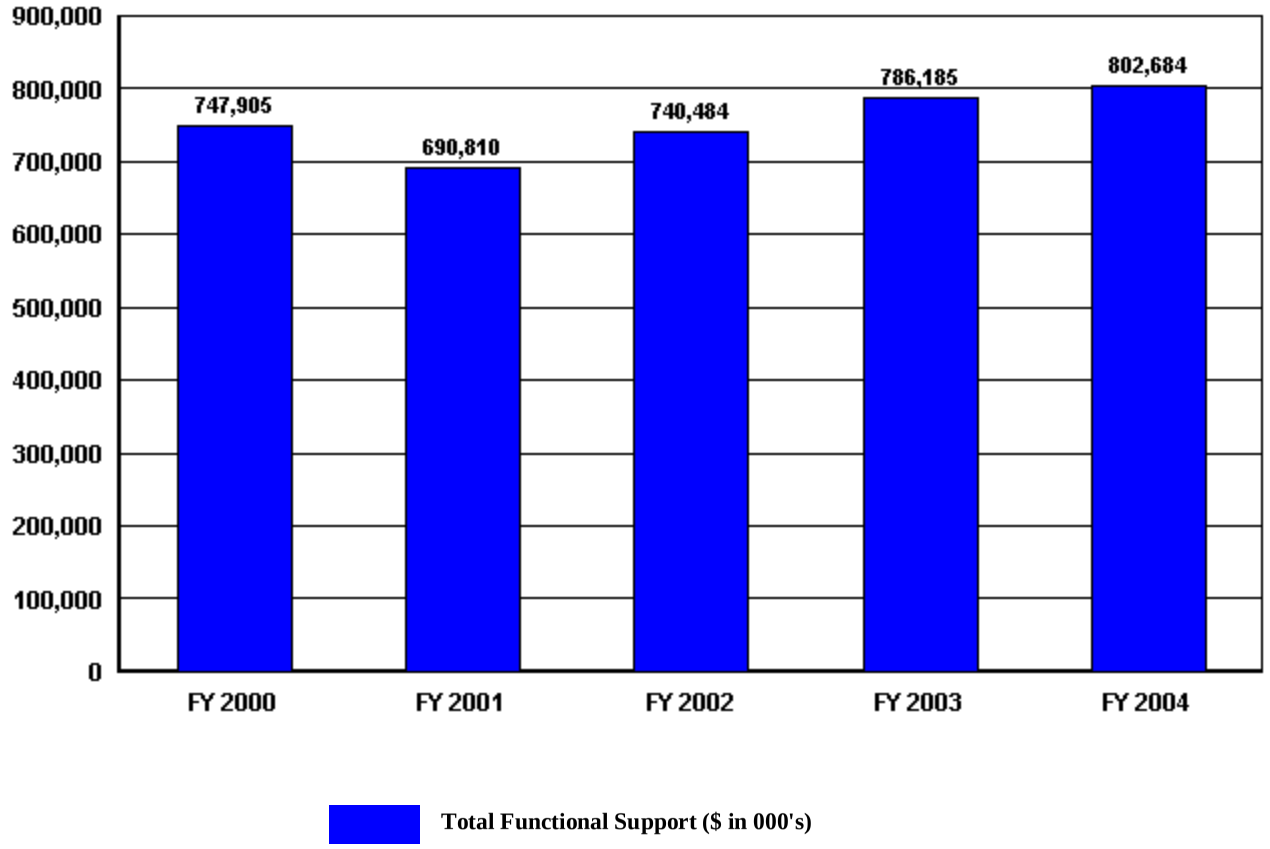
COST SAVINGS INITIATIVES
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Tax Credits with the State of New Mexico	2,100	During FY 2004, Sandia's tax accounting professionals made significant progress in identifying and realizing tax credits with the State of New Mexico. Sandia received $2.1 Million refund in FY 2004 and anticipate an additional $3 Million in FY 2005.	Tyler Wharton
Outsourcing of CA logistics	160	During FY 2004 Sandia outsourced its California Logistics packaging, receiving, and distribution activities resulting in $160K savings in FY 2004.	Tyler Wharton
Closure of Coronado Club	0	The Sandia National Laboratory will close the Coronado and Sandia claims that they will save $900K in future years.	Tyler Wharton

Trends in Total Support Cost by Functional Categories
Savannah River/Westinghouse & Wackenhut ($000)
FY 2004

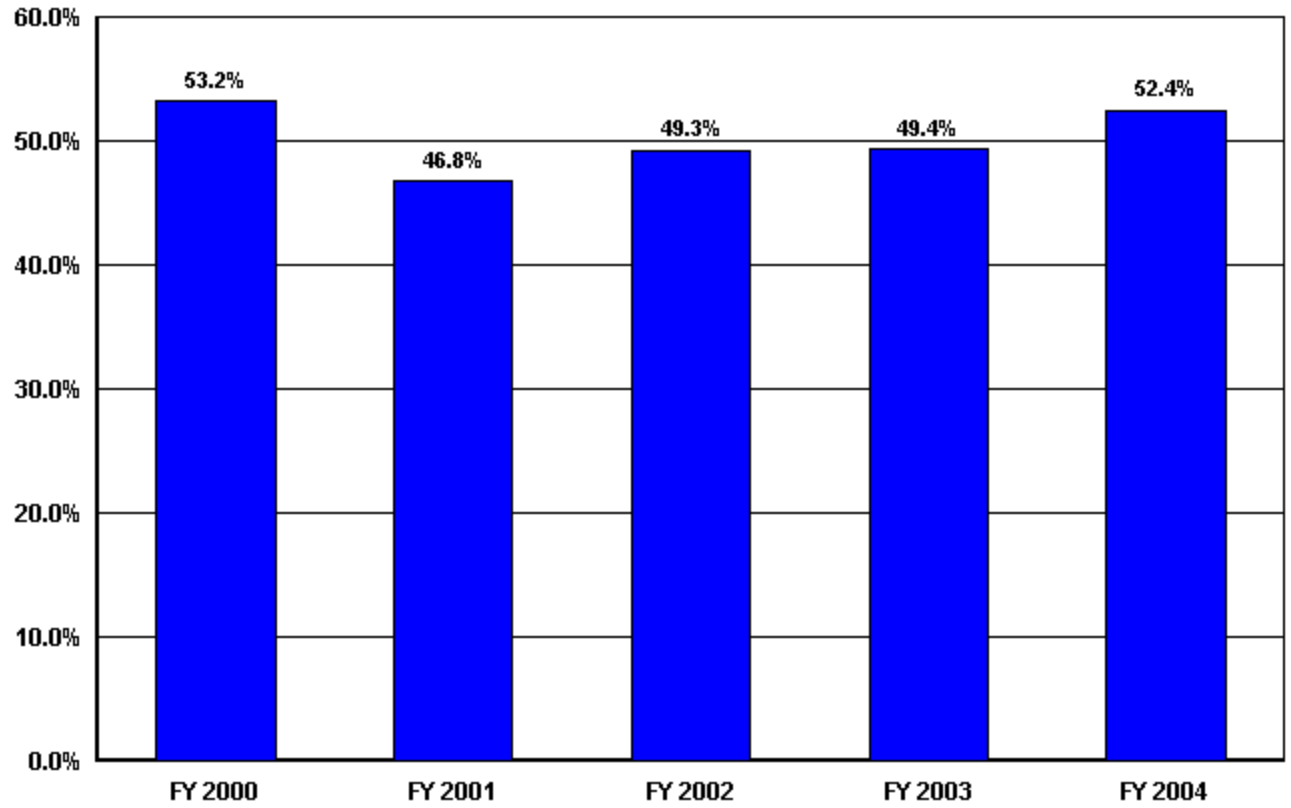
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	1,406,326	1,477,045	1,503,323	1,593,028	1,531,255	124,929	8.9%
Capital Construction	152,395	196,684	183,300	161,509	104,796	-47,599	-31.2%
Total Costs Less Construction	1,253,931	1,280,361	1,320,023	1,431,519	1,426,459	172,528	13.8%
Total Support Costs	**747,905**	**690,810**	**740,484**	**786,185**	**802,684**	**54,779**	**7.3%**
Mission Direct Operation	506,026	589,551	579,539	645,334	623,775	117,749	23.3%
Mission Direct Operation as % of Total Cost	**36.0%**	**39.9%**	**38.6%**	**40.5%**	**40.7%**		
Capital Construction as % of Total Cost	**10.8%**	**13.3%**	**12.2%**	**10.1%**	**6.8%**		
Total Support Cost as % of Total Cost	**53.2%**	**46.8%**	**49.3%**	**49.4%**	**52.4%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**53.2%**	**46.8%**	**49.3%**	**49.4%**	**52.4%**		
TOTAL SUPPORT COST	**747,905**	**690,810**	**740,484**	**786,185**	**802,684**	**54,779**	**7.3%**
TOTAL GENERAL SUPPORT as % of TOTAL	**13.5%**	**11.3%**	**11.5%**	**11.4%**	**11.0%**		
TOTAL GENERAL SUPPORT	**190,275**	**167,112**	**172,990**	**181,502**	**168,899**	**-21,376**	**-11.2%**
EXECUTIVE DIRECTION	6,473	7,039	8,186	7,133	7,095	622	9.6%
HUMAN RESOURCES	13,942	13,096	13,051	13,462	13,778	-164	-1.2%
CFO	13,648	13,306	13,379	14,180	13,205	-443	-3.2%
PROCUREMENT	12,501	13,299	13,719	14,861	11,711	-790	-6.3%
LEGAL	8,470	5,742	4,205	6,089	4,222	-4,248	-50.2%
CENTRAL ADMIN SERVICES	18,058	17,793	18,334	20,417	18,799	741	4.1%
PROGRAM/PROJECT CONTROL	32,563	35,743	37,681	37,366	37,819	5,256	16.1%
INFORMATION OUTREACH	5,094	5,344	5,381	4,072	5,073	-21	-0.4%
INFORMATION SERVICES	74,037	55,758	56,040	59,190	48,312	-25,725	-34.7%
OTHER	5,489	-8	3,014	4,732	8,885	3,396	61.9%
TOTAL MISSION SUPPORT as % of TOTAL	**34.9%**	**31.3%**	**32.5%**	**32.0%**	**33.2%**		
TOTAL MISSION SUPPORT	**491,068**	**461,833**	**489,303**	**509,105**	**508,494**	**17,426**	**3.5%**
ENVIRONMENTAL	25,477	26,126	26,430	27,340	24,972	-505	-2.0%
SAFETY AND HEALTH	107,777	116,805	125,613	114,215	110,972	3,195	3.0%
FACILITIES MANAGEMENT	37,276	33,894	35,288	45,227	41,137	3,861	10.4%
MAINTENANCE	148,882	105,434	109,168	120,135	123,801	-25,081	-16.8%
UTILITIES	41,799	42,828	43,359	45,700	45,437	3,638	8.7%
SAFEGUARDS AND SECURITY	60,495	64,791	74,830	81,536	86,495	26,000	43.0%
LOGISTICS SUPPORT	17,240	19,665	21,957	23,602	21,828	4,588	26.6%
QUALITY ASSURANCE	28,544	27,658	25,788	21,719	24,552	-3,992	-14.0%
LABORATORY/TECHNICAL SUPPORT	23,578	24,632	26,870	29,631	29,300	5,722	24.3%
TOTAL SITE SPECIFIC as % of TOTAL	**4.7%**	**4.2%**	**5.2%**	**6.0%**	**8.2%**		
TOTAL SITE SPECIFIC	**66,562**	**61,865**	**78,191**	**95,578**	**125,291**	**58,729**	**88.2%**
MANAGEMENT/INCENTIVE FEE	64,819	61,894	78,191	95,505	124,870	60,051	92.6%
TAXES	1,743	-29	0	73	421	-1,322	-75.8%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Savannah River/Westinghouse & Wackenhut



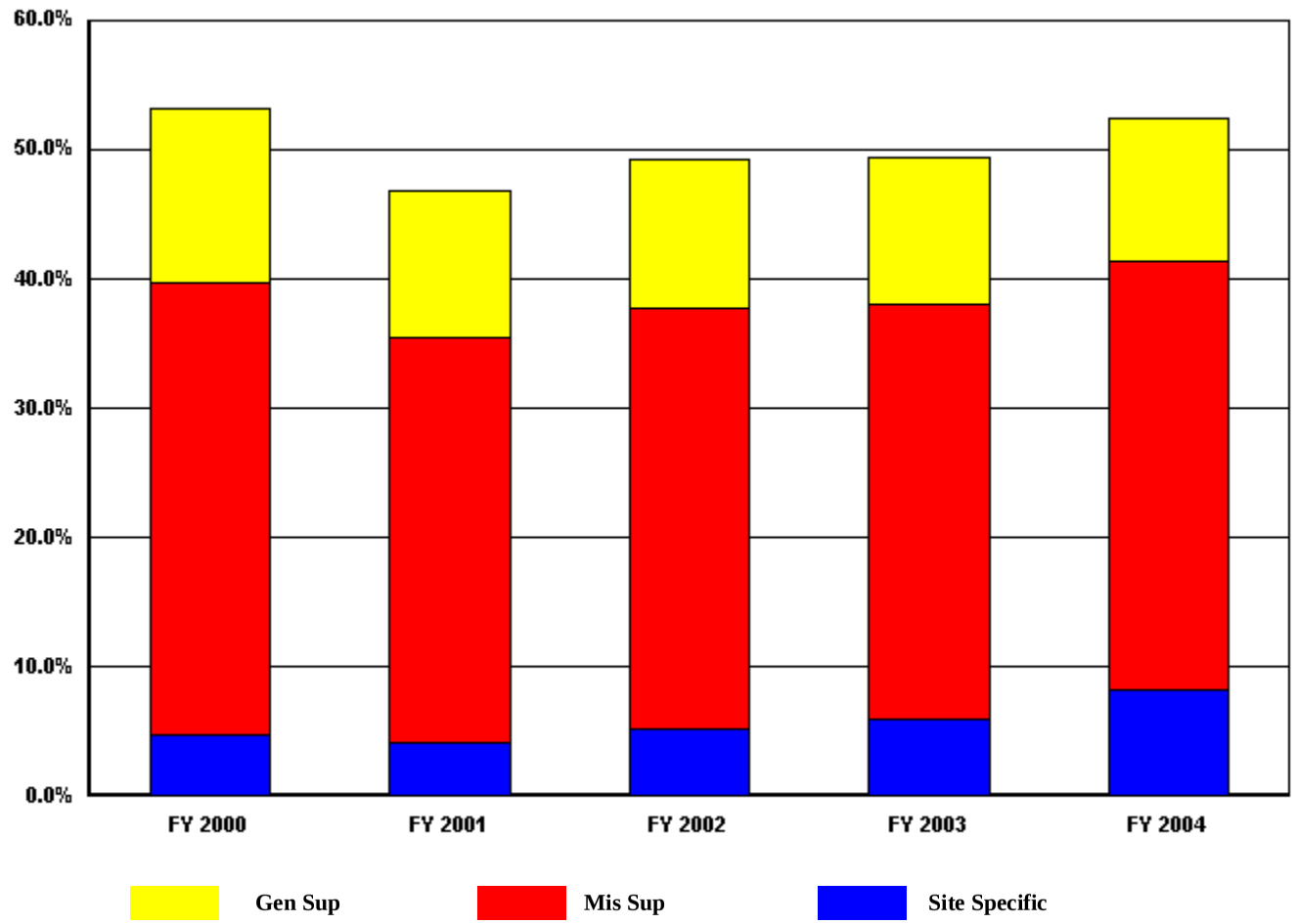
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	747,905	690,810	740,484	786,185	802,684

US Department of Energy
Total Functional Support as a % of Total Costs
Savannah River/Westinghouse & Wackenhut



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	53.2%	46.8%	49.3%	49.4%	52.4%

US Department of Energy
Percent of Support Category to Total
Savannah River/Westinghouse & Wackenhut



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	13.5%	11.3%	11.5%	11.4%	11.0%
Mis Sup	34.9%	31.3%	32.5%	32.0%	33.2%
Site Specific	4.7%	4.2%	5.2%	6.0%	8.2%

SITE PROFILE
Savannah River/Westinghouse & Wackenhut

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

The Savannah River Site (SRS) is a unique site comprised of blended and interdependent missions critically linked to both Department of Energy (DOE) and National Nuclear Security Administration (NNSA) strategic goals. The office of Environmental Management (EM) missions currently comprise approximately 80% of the site's efforts and involve:

- Stabilization and consolidation of legacy nuclear materials
- Long term stewardship and protection of stabilized and packaged nuclear materials
- Closure and cleanup of all remaining EM facilities

Several EM facilities, such as the H Canyon Complex and site waste treatment facilities, are also processing NNSA legacy nuclear materials including highly enriched uranium and waste from the tritium facilities. Other NNSA missions are being evaluated or planned such as the Mixed Oxide Fuel (MOX) and Pit Manufacturing Facilities. Additional EM materials, consolidation from other sites, and alternate disposition methods, such as plutonium vitrification, are also being considered for non-Moxable materials.

Common infrastructure and waste handling and treatment facilities serve these and other smaller entities such as the United States Forestry Service and the University of Georgia Ecology Laboratory, also located at SRS. At present, the landlord infrastructure of the site is provided by the Office of Environmental Management.

In the past two years, the DOE Office of Environmental Management has prioritized mission activities and incentivized contractors to accelerate closure and cleanup goals. Emphasis is placed on:

1 consolidation of materials and operations,
2 elimination of hazards with high control costs,
3 reduction of "hotel loads" associated with maintaining the operational status of nuclear facilities with redundant capabilities, and
4 reduction of landlord infrastructure needed to support the site in future years.

The complex covers 198,344 acres, or 310 square miles in three counties in South Carolina, bordering the Savannah River. The site was constructed during the early 1950's to produce basic materials used in nuclear weapons, primarily tritium and plutonium-239.

At FY 2004 year-end, 11,833 full time equivalent (FTEs) personnel were employed on site. This included 10,958 FTEs for Westinghouse Savannah River Company (WSRC) (includes the four major

contractors) and 875 Wackenhut Services, Incorporated (WSI) FTEs.

Current Line Item activity includes the following:

1 Tritium Extraction Facility (TEF) — will provide for extraction capabilities for both the Commercial Light Water Reactor and Accelerated Production of Tritium concepts.

2 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.

3 Mixed Oxide Fuel Fabrication Facility (MOXFFF) will mix surplus weapons grade plutonium oxide from the pit disassembly and conversion process with depleted uranium oxide, form MOX fuel pellets, fabricate MOX fuel assemblies (MOX fuel), and ship completed fuel assemblies to existing domestic commercial nuclear reactors for irradiation.

4 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.

II. HIGHLIGHTS OF TRENDS

The SRS Functional Support Cost Report combines costs for WSRC and WSI into an integrated report. Total Functional Support Costs for WSRC from FY 2000 to FY 2004 increased by $32.5M or 4.8%. This compares to a consumer price index increase over the same period of 12.9%. Since FY 2000 WSRC required pension contribution has risen steadily. FY 2000 and FY 2001 required no contribution, FY 2002, FY 2003 and FY 2004 contributions were $16M, $68M, and $84M respectively and FY 2005 pension contributions will be comparable to FY 2004. With WSI included, the Total Functional Support Costs reflected an increase of $54.8M or 7.3%.

A new contract, negotiated in FY 2003, has resulted in WSRC taking on significant risk with accelerated cleanup activities which is reflected in the revised fee structure. The increase in fee in FY 2004 negatively impacts our functional support cost to total cost ratio. However, in reviewing both General Support and Mission Support one can see the downward trend.

During FY 2003 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 which increased by $117.8M (23.3%).

Overall, the FY 2004 actual cost are slightly better than planned when fee is excluded (5.0% favorable), and closer to target when fee is included (4.1% favorable). The trend analysis follows:

General Support

The overall change from FY 2000 to FY 2004 was a $21.4M decrease or 11.2 % 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 (-$4.2M) FY 2000-FY 2004 trend shows a significant reduction of 50.2% in subcontract litigation support as a result of the near completion of a class action lawsuit.

2. Information Services (-$25.7M) FY 2000-FY 2004 trend shows a significant reduction of 34.8%. The Replacement Telephone System (RTS) lease term ended in FY 2000, thereby reflecting lower costs for FY 2001 and beyond. 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 service agreements were initiated and projected to continue to produce cost savings. A number of activities were completed in FY 2003 such as: 1) the R16 Telecom upgrade, 2) Passport version upgrade, 3) mainframe lease payments, 4) network refresh, 5) purchase of telecommunication equipment, and 6) stopped maintenance on selected software items. As a result of the decision to disengage a number of modules from PeopleSoft, the related maintenance agreements were cancelled. WSRC negotiated significant reductions in the telecommunications service agreements. Also, staffing (~12% G&A) and other Non-labor reductions were implemented in FY 2004 due to budget constraints.

3. Other ($3.4M) FY 2000-FY 2004 trends shows a significant increase of 61.9%. This is the result of an increase in cost associated with workforce restructuring and inventory write-off.

Mission Support

Reflected an upward trend of $17.4M or 3.6%. 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. In total Safeguards & Security (+$26.0M) reflected a 43.0% increase. The WSI increase was $20.2M and the WSRC increase was $5.8M. These increases are 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 FY 2002.

2. Logistics (+$4.6M) reflected an increase of 26.6%. The primary driver for the increase in logistics support is related to WSRC's efforts to implement the contract modification which emphasizes reduction of the site footprint and accelerated clean up. Costs for this category include transportation costs for onsite relocation of displaced workers and support space. As F-Area and other site areas prepare for deactivation and demolition, equipment excess activities have also increased significantly.

3. Laboratory/Technical Support (+$5.7M) reflected a significant increase of 24.3% due to increases in analytical services, sampling analyses and technical support services for accelerated cleanup and mission activities.

Site Specific

Management/Award/Incentive Fee (+$60.1M) increased 92.6%. WSRC's contract has gone through two significant evolutions since FY 1999. The most recent, completed in FY 2003, resulted in increased fee opportunities as a result of contractor accepting significantly increased risk associated with clean up activities.

I) III. ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR

General Support

The overall change from the prior year resulted in a $12.6M or 6.9% decrease. Because of the FY 2003 site wide reorganization, an in-depth analysis was conducted on the FY 2004 General Support functional activities. As a result, some categories were changed compared to FY 2003 due to redefined roles and responsibilities within the functions. Since the overall impact to the total Functional Support Cost Report is relatively minor, we do not intend to recast. The following information explains the significant changes from the prior year's costs:

1. Procurement (-$3.2M) decrease of 21.2% is primarily the result of the increased focus on the categorization process as defined above. The FY 2003 reorganization resulted in several items being categorized as "Procurement" based on organization titles. The FY 2003

procurement functional category has approximately $2.5M of additional cost compared to FY 2004. In addition, approximately 10 employees were reduced out of this category.

2. Legal (-$1.9M) decrease of 30.7% is due to subcontract litigation support reductions.

3. Information/Outreach Activities ($1.0M) increase of 24.6% is due to reclassifying the Technology Transfer organization cost from Mission Direct to Information/Outreach.–

4. Other ($4.2M) increase of 87.8%. This is primarily the result of an increase in cost associated with inventory write-off.

Mission Support

Reflects a $.6M decrease or .1% with small changes in the various functional categories.

Site Specific

Management/Award Incentive Fee (+$29.7M) increased 31.1%. Contract changes implemented in FY 2003 resulted in an increased fee due to accomplishment of significantly higher amounts of work along with the assumption of increased risk. The contract change was approved late in FY 2003, therefore the primary effects of this change are reflected beginning in FY 2004.

V) IV. COST SAVINGS INITIATIVES

In FY 2001, Westinghouse Savannah River Company (WSRC) began implementing a Six Sigma initiative. Six Sigma is a problem-solving methodology that uses a systematic approach enabling an organization to improve business performance. It utilizes statistical tools, process management and data analysis to eliminate waste, improve quality, productivity, and customer satisfaction.

WSRC calculates and tracks the cost savings derived from the Six Sigma Process Improvement Projects on a fiscal year basis. Cost savings are unburdened. All savings are validated by Finance and accounted as hard dollar or productivity savings. The ratio of hard dollar to productivity savings varies from year to year, but it averages near 50%. The savings accounted during FY 2004 was over $46M. In addition to the savings from projects completed in FY 2004 there was also $25M in ongoing savings from previous year projects for a total exceeding $71M. WSRC currently has 12 certified Black Belts supporting the program. Our savings target for FY 2005 is $107M.

V. Other

FY 2004
Workforce Restructuring - 5,476
Insurance (WSRC) - 42
Legal Settlements - (194)
Overhead Costs - (34)
Procurement Card Rebates - (72)
Inventory Write-off - 3,635
Insurance (WSI) - 32

Total OTHER - 8,885

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

PROCUREMENT
Decrease is primarily the result of the increased focus on the categorization process as defined above. The FY03 reorganization resulted in several items being categorized as "Procurement" based on organization titles. The FY03 procurement functional category has approximately $2.5M of additional cost compared to FY04. In addition, approximately 10 employees were reduced out of this category.

LEGAL
Decrease due to subcontract litigation support reductions.

INFORMATION OUTREACH
Increase due to reclassifying the Technology Transfer organization cost from Mission Direct to Information/Outreach.

OTHER
This is primarily the result of an increase in cost associated with inventory write-off.

MANAGEMENT/INCENTIVE FEE
Management/Award/Incentive Fee (+$60.1M) increased 92.6%. WSRC's contract has gone through two significant evolutions since FY 1999. The most recent, completed in FY 2003, resulted in increased fee opportunities as a result of contractor accepting significantly increased risk associated with clean up activities.

TAXES

CAPITAL CONSTRUCTION

The reduction in cost is attributable to the near completion of two large DP construction projects, the re- classification of some capital projects to operating, and the decision to have DOE manage two large EM line item construction projects in lieu of the M&O contractor.

COST SAVINGS INITIATIVES
($ in 000's)

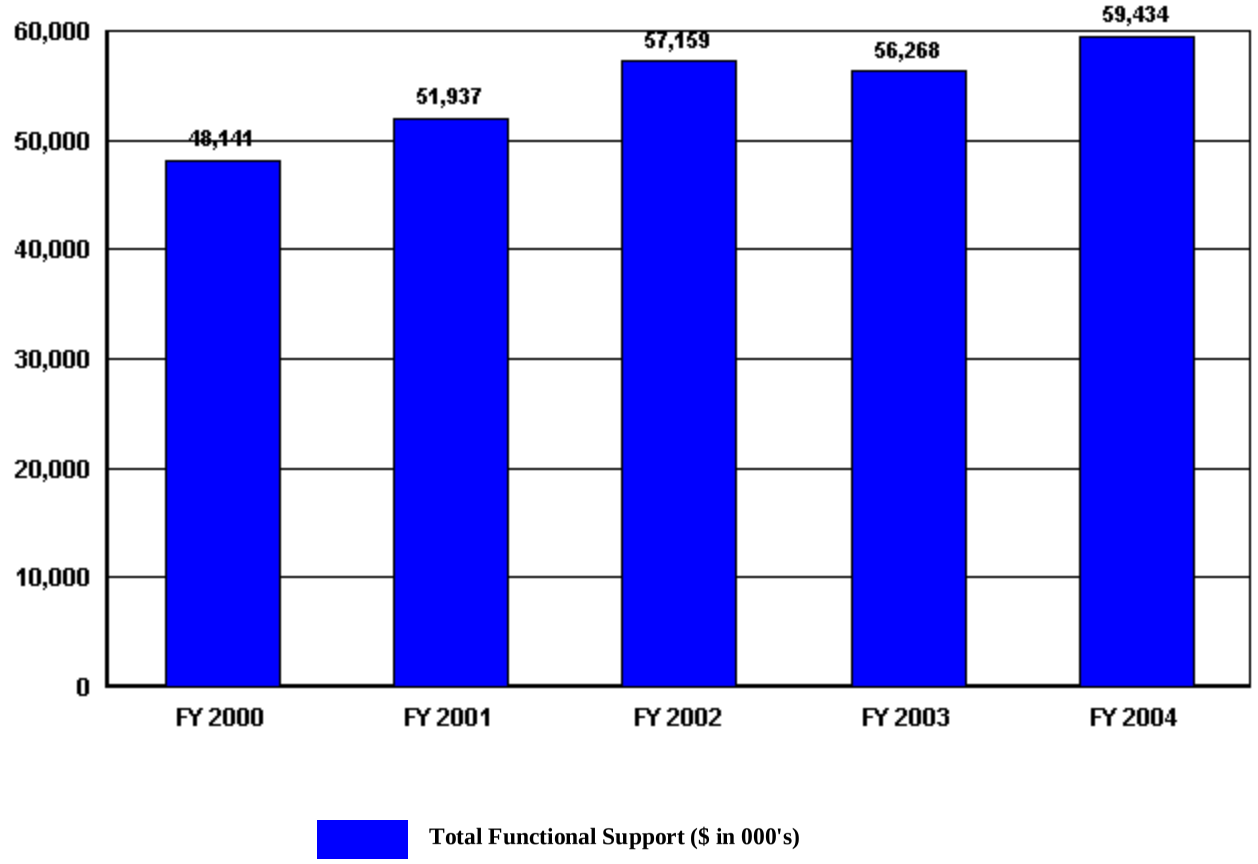
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Test and Sampling Reduction	5,600	Cost reduction by reducing number of samples, analytes, tests, testing methods, and process cycle time. $5.6M • Canyon Process Sampling • Melter Feed Tank Sampling • Environmental Surveillance and Sampling • Radiological Control Surveys • F/B Line Process Destructive Analysis • Soil Cover Testing • Sample bottle reduction	
Waste Handling	2,300	Cost reduction incident to reducing volume, cycle time, and requirements for controlling hazardous or radioactive waste. • Waste Handling • LLW Transport to Burial Ground • Packaging and Transporting Contaminated Soil	
Design Processes	6,500	Cost reduction associated with reducing cycle time and labor related to engineering processes. • As Built Drawing Backlog • Design Change Packages • Pipe Joint Configuration • Design Deliverables – Waste Removal	

Operations	3,300	Cost reduction addressing a broad cross section of program and process efficiencies. • Material transportation • Facility Support • Inventory Management • Site Mail • Fuel Cask Receipt / Initial Processing • Determining Risk Based End States (Environmental Remediation)	
Administrative Processes	13,800	Cost reduction associated with reducing time intensive documentation processes. • Safety Documentation • Remediation planning • Procurement of Specialty Containers • Training Administration • Encumbrance Reduction	
Construction	13,400	Cost reduction associated with reducing Construction cycle time, material and labor costs • Construction Hiring • Time accounting • Construction Work Productivity • Cable Installation • TNX accelerated decommissioning schedule • Material transportation • Construction / Design Review Integration	

Trends in Total Support Cost by Functional Categories
Stanford Linear Accelerator Center/Stanford Univ. ($000)
FY 2004

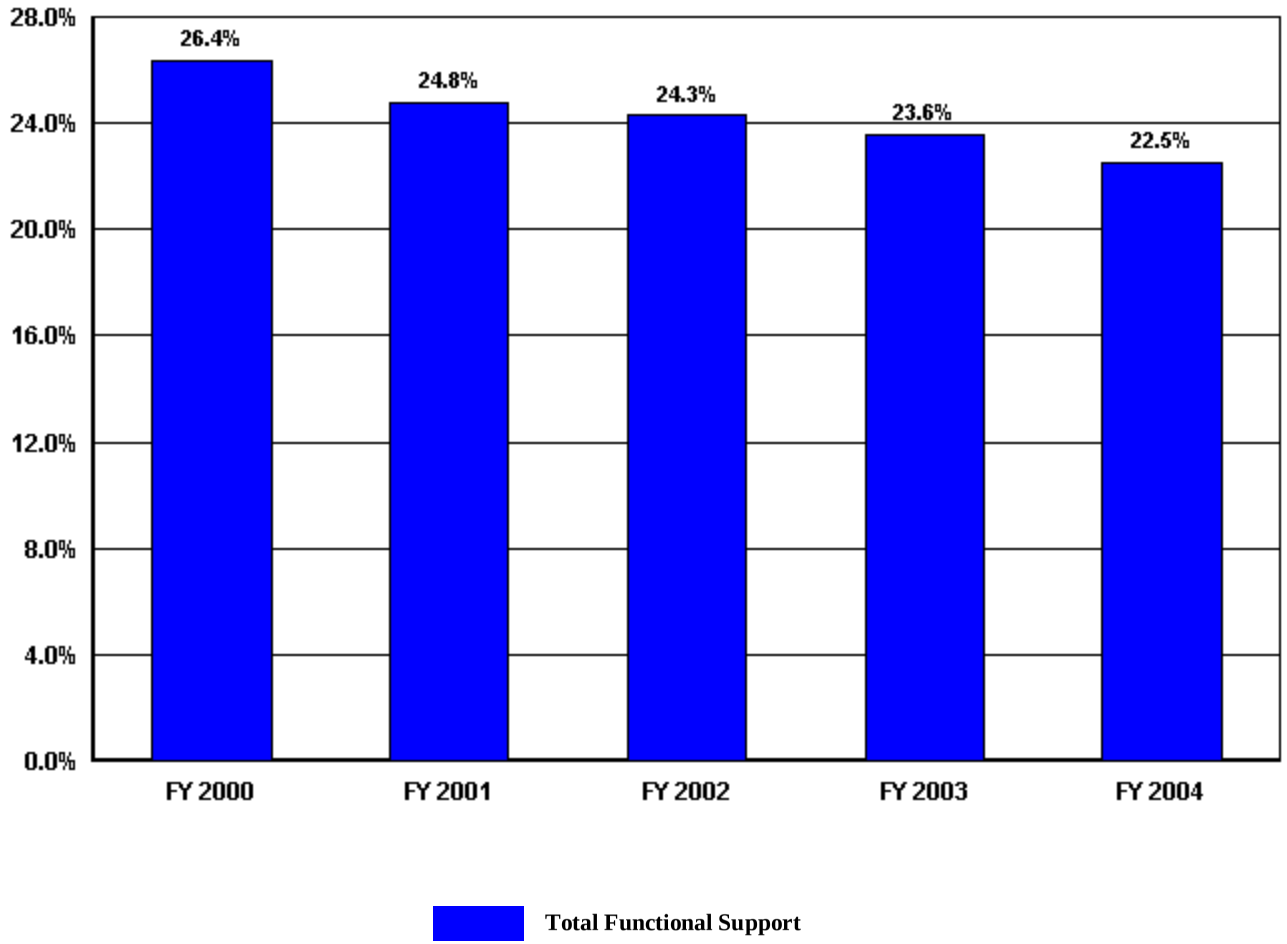
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	182,660	209,673	235,352	238,531	263,766	81,106	44.4%
Capital Construction	26,814	41,414	46,418	55,195	63,028	36,214	135.1%
Total Costs Less Construction	155,846	168,259	188,934	183,336	200,738	44,892	28.8%
Total Support Costs	**48,141**	**51,937**	**57,159**	**56,268**	**59,434**	**11,293**	**23.5%**
Mission Direct Operation	107,705	116,322	131,775	127,068	141,304	33,599	31.2%
Mission Direct Operation as % of Total Cost	**59.0%**	**55.5%**	**56.0%**	**53.3%**	**53.6%**		
Capital Construction as % of Total Cost	**14.7%**	**19.8%**	**19.7%**	**23.1%**	**23.9%**		
Total Support Cost as % of Total Cost	**26.4%**	**24.8%**	**24.3%**	**23.6%**	**22.5%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**26.4%**	**24.8%**	**24.3%**	**23.6%**	**22.5%**		
TOTAL SUPPORT COST	**48,141**	**51,937**	**57,159**	**56,268**	**59,434**	**11,293**	**23.5%**
TOTAL GENERAL SUPPORT as % of TOTAL	**12.5%**	**11.4%**	**10.9%**	**10.7%**	**10.1%**		
TOTAL GENERAL SUPPORT	**22,879**	**23,968**	**25,735**	**25,590**	**26,693**	**3,814**	**16.7%**
EXECUTIVE DIRECTION	2,678	2,955	2,910	2,759	2,898	220	8.2%
HUMAN RESOURCES	1,809	1,982	2,330	2,168	2,455	646	35.7%
CFO	3,693	3,503	3,555	4,205	4,565	872	23.6%
PROCUREMENT	2,041	1,918	2,053	1,974	1,802	-239	-11.7%
LEGAL	90	94	98	99	102	12	13.3%
CENTRAL ADMIN SERVICES	817	736	927	619	730	-87	-10.6%
PROGRAM/PROJECT CONTROL	1,133	1,171	1,293	1,284	1,259	126	11.1%
INFORMATION OUTREACH	2,011	2,082	2,841	2,793	3,123	1,112	55.3%
INFORMATION SERVICES	5,861	6,702	6,773	6,414	6,404	543	9.3%
OTHER	2,746	2,825	2,955	3,275	3,355	609	22.2%
TOTAL MISSION SUPPORT as % of TOTAL	**13.8%**	**13.3%**	**13.4%**	**12.9%**	**12.4%**		
TOTAL MISSION SUPPORT	**25,262**	**27,969**	**31,424**	**30,678**	**32,741**	**7,479**	**29.6%**
ENVIRONMENTAL	2,333	2,718	2,163	2,235	3,559	1,226	52.6%
SAFETY AND HEALTH	5,088	5,205	5,802	5,330	5,775	687	13.5%
FACILITIES MANAGEMENT	1,531	2,134	2,312	1,980	2,182	651	42.5%
MAINTENANCE	6,099	5,976	6,374	6,346	7,040	941	15.4%
UTILITIES	6,925	8,189	10,619	10,533	8,964	2,039	29.4%
SAFEGUARDS AND SECURITY	1,437	1,690	1,859	1,922	2,023	586	40.8%
LOGISTICS SUPPORT	1,726	1,895	2,086	2,153	3,005	1,279	74.1%
QUALITY ASSURANCE	123	162	209	179	193	70	56.9%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**		
TOTAL SITE SPECIFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
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%

US Department of Energy
Total Functional Support
Stanford Linear Accelerator Center/Stanford Univ.



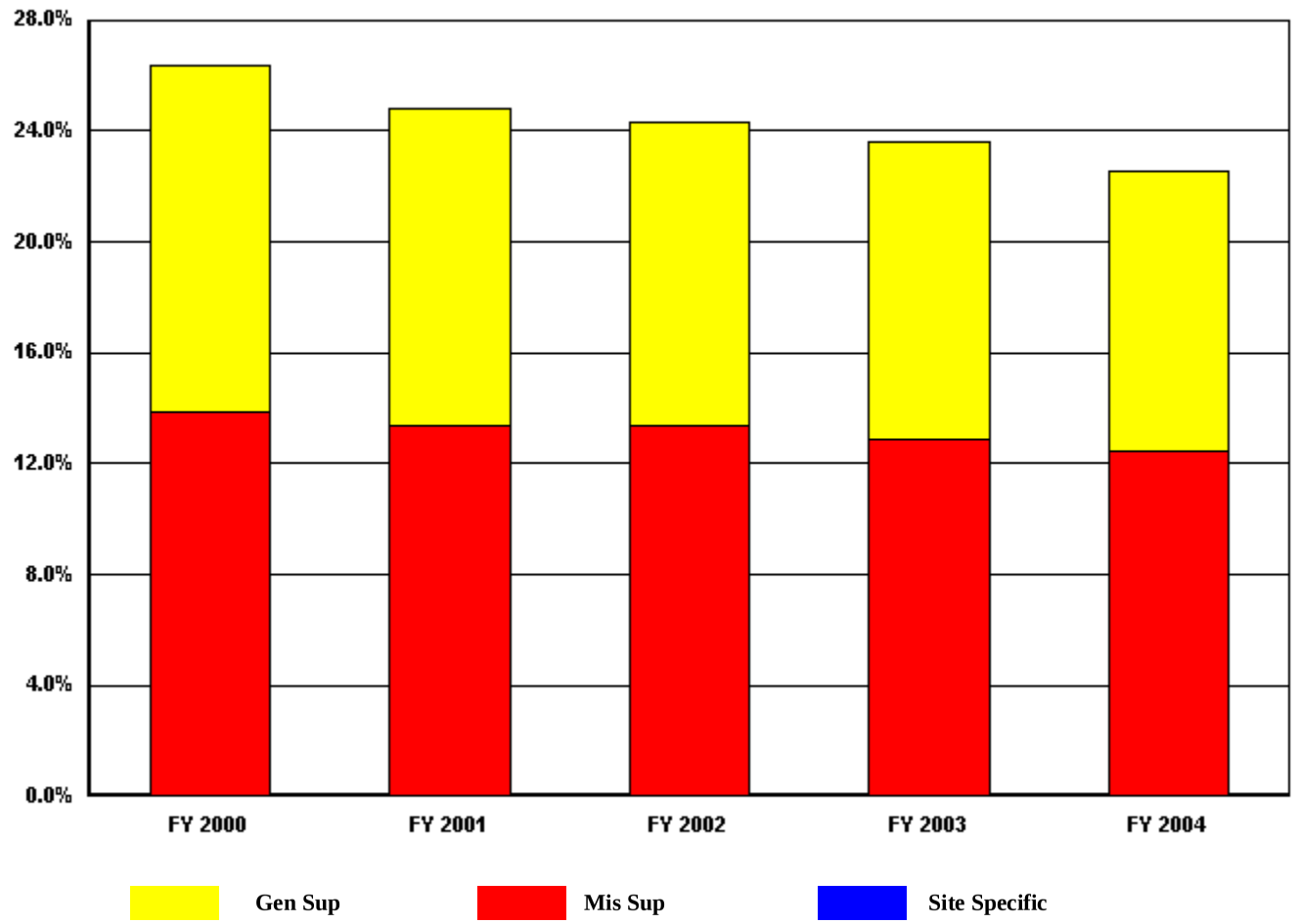
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	48,141	51,937	57,159	56,268	59,434

US Department of Energy
Total Functional Support as a % of Total Costs
Stanford Linear Accelerator Center/Stanford Univ.



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	26.4%	24.8%	24.3%	23.6%	22.5%

US Department of Energy
Percent of Support Category to Total
Stanford Linear Accelerator Center/Stanford Univ.



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	12.5%	11.4%	10.9%	10.7%	10.1%
Mis Sup	13.8%	13.3%	13.4%	12.9%	12.4%
Site Specific	0.0%	0.0%	0.0%	0.0%	0.0%

SITE PROFILE
Stanford Linear Accelerator Center/Stanford Univ.

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

The Stanford Linear Accelerator Center (SLAC) 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. 1,300 users from around the world participate in the high energy physics program. 1,700 scientists from universities, industry, and other research institutions are active in the synchrotron radiation program. SLAC is operated for the Department of Energy (DOE) by Stanford University under a Management and Operating Contract. The DOE Office of Science provides almost all of SLAC's funding.

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 at no fee. There are about 150 buildings and structures on site. At the end of FY 2004, staffing level at SLAC was about 1,650.

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

- The world's largest linear accelerator, delivering 50 billion volts (50 Ge V) 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 Ge V electron storage ring (SPEAR), recently upgraded to a third-generation light source, for the production of ultraviolet and x-ray for use in synchrotron radiation research;
- A large concrete shielded building for experiments with stationary targets; and
- Two major accelerator physics R&D facilities testing subsystems and features for future accelerators.

The Stanford Linear Accelerator Center is the lead DOE laboratory for electron-based high energy physics. It is dedicated to research in elementary particle physics, accelerator physics and in allied fields that can make use of its synchrotron radiation facilities–including biology, chemistry, geology, materials science and environmental engineering. SLAC is a national user facility serving universities, industry and other research institutions throughout the world. Its mission can be summarized as follows:

- Perform world-class research in high energy physics, particle astrophysics and cosmology, and in

the use of synchrotron radiation

- Provide accelerators, detectors, instrumentation and support for national and international research programs in elementary particle physics and allied fields that use synchrotron radiation
- Advance the art of accelerators and related devices through development of sources of high energy particles and synchrotron radiation, plus new techniques for their scientific utilization
- Advance the critical technologies necessary to maintain its leadership and excellence in particle physics, accelerator physics, particle astrophysics and cosmology, and synchrotron radiation
- 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
- Achieve and maintain excellence in matters of environmental concern and provide for the safety and health of its staff and the general public

TRENDS

Functional Support Cost increased 23 % between FY 2000 and FY 2004 and 6 % between FY 2003 and FY 2004. The ratio of Functional Support Cost to Total Site Cost has decreased annually since FY 2000. SLAC has aggressively managed its Functional Support Cost, successfully keeping its growth below that of the Direct Costs. The Mission Direct Operating Cost has grown 31% over the five-year period. The Capital/Construction Direct Cost has been increasing since FY 2000 as a result of several projects: the Research Office Building construction (FY 2000-2002), the SPEAR3 (FY 2000-2004), and GLAST (active since FY 2000) capital equipment projects, and beginning in FY 2003, the design phase of the Linac Coherent Light Source (LCLS) line-item construction project.

In FY 2004, about 47% of the Functional Support Cost comes from four functions: Utilities (15%), Maintenance (12%), Information Services (11%), and Safety & Health (10%). The year-to-year fluctuations in Information Services and Maintenance are mostly related to one-time activities, such as desk-top computing support and local area networks (Information Services), and specific maintenance and infrastructure projects (Maintenance). Utilities costs are primarily electrical power used to run the accelerators and the associated facilities for SLAC's experimental programs. Although the power rates have been steadily increasing over the years, the annual electrical power costs are also heavily dependent on the experimental facilities that were operated and the duration of experimental runs in the fiscal year. As a result of the SPEAR3 upgrade and the PEP-II luminosity upgrade, the electrical consumption will increase in the next few years. Beginning in calendar year 2005, there will also be a doubling in electrical power rates because of the expiration of long-term electrical power contracts. Therefore, a significant increase in the Utilities category is expected. The increases in safety and health costs in FY 2004 will continue through FY 2006 as a result of SLAC's committed goal to complete the responses to the February 2004 OSHA Audit by April 2006.

In FY 2003, 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 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 FY 2003.

A continued decrease in functional support costs is not sustainable. Although there was a salary freeze for all SLAC staff in FY 2004 as a budget-saving measure, the restoration of the work days lost in FY2003, the reduced use of vacation, and the increases in the costs for staff benefits (primarily driven by increased costs for medical coverage) resulted in a 9% increase in staffing cost in FY 2004. This affected every functional cost except Utilities. M&S budgets in certain critical support areas were also restored.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

ENVIRONMENTAL

This category includes the cost of radioactive and hazardous waste storage and disposal, waste minimization, effluent and environmental monitoring and surveillance. Costs increased 59% or $1,324K in FY04 from FY03. This was primarily due to the costs ($900K) to sample, analyze, and investigate areas in question following the detection of PCB impacted sediments in a drainage channel. Additional work will be conducted in FY05 and future years in an effort to eliminate PCBs in storm water run-off from SLAC. Other increases were related to recategorization of Safety and Health costs under Environment as part of the radioactive waste disposal program, and costs associated with a chemical information system ($60K).

LOGISTICS SUPPORT

Costs increased 40% or $852K. Beginning with FY04, shipping and receiving costs, which in previous years had been included under Procurement, were reclassified under Logistics Support as a result of the Peer Review recommendation in FY 2004. Other increases were related to recategorization of site support activities, such as traffic control and other logistics support from Safeguard and Security.

COST SAVINGS INITIATIVES

($ in 000's)

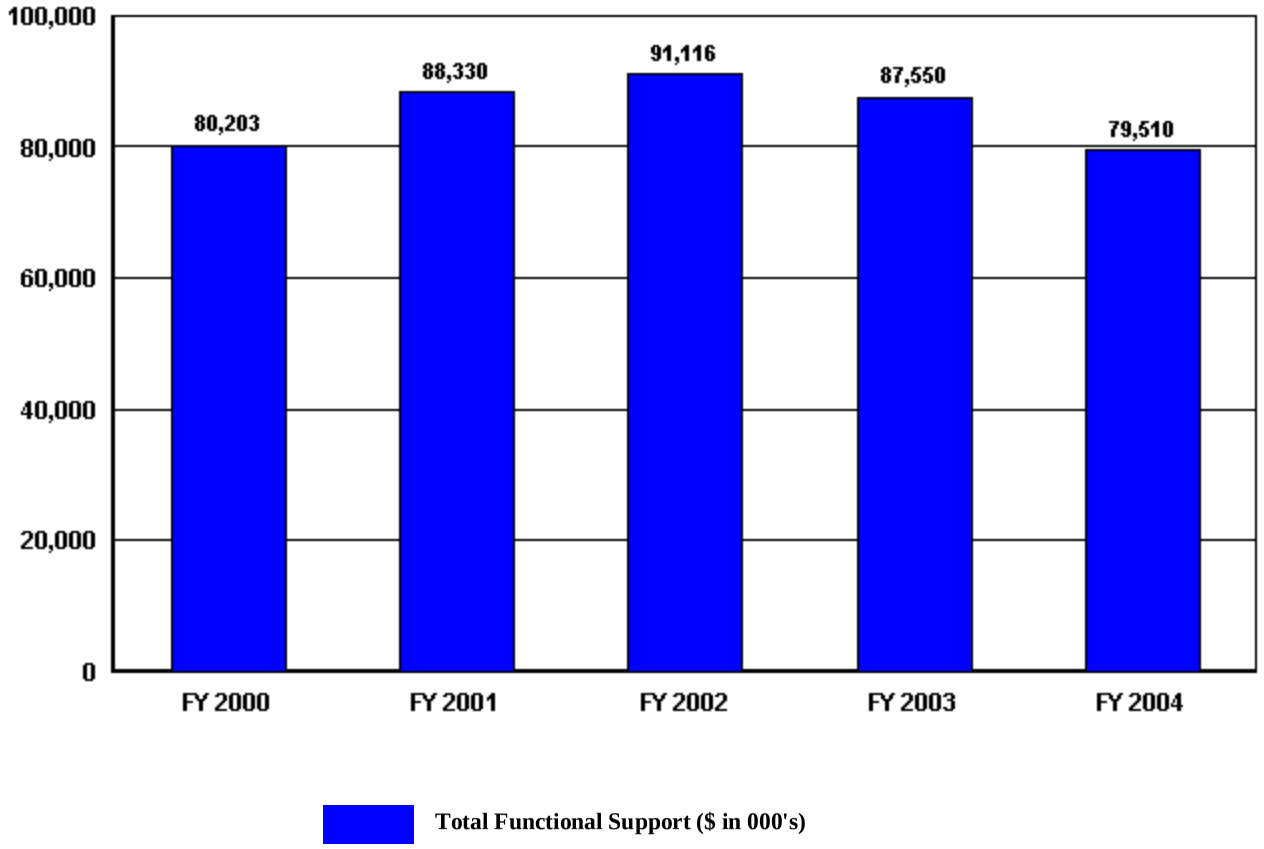
SITE PROFILE
Stanford Linear Accelerator Center/Stanford Univ.

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

Trends in Total Support Cost by Functional Categories
Strategic Petroleum Reserve/DynMcDermott Petroleum ($000)
FY 2004

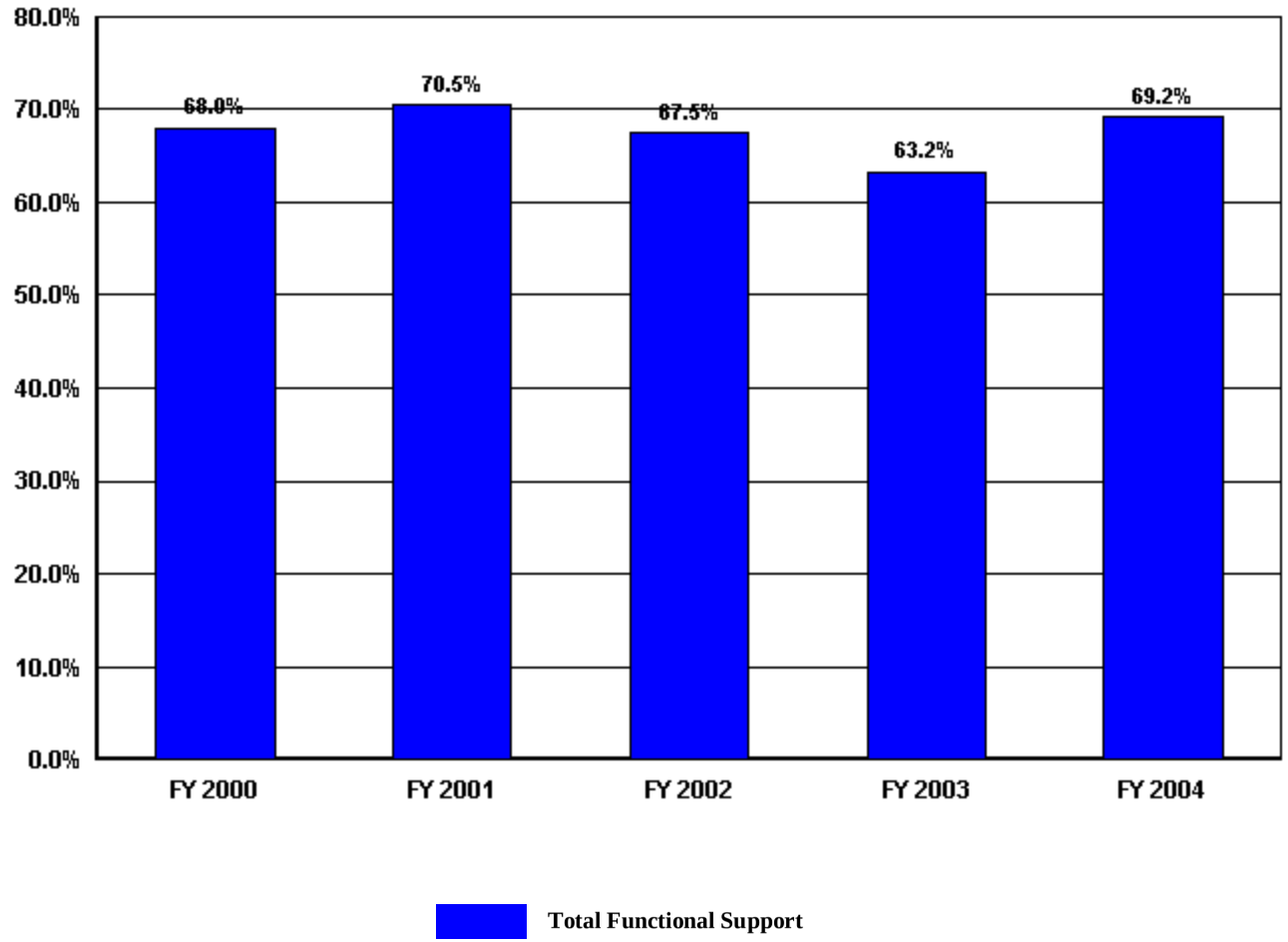
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	117,994	125,370	135,079	138,423	114,956	-3,038	-2.6%
Capital Construction	0	0	0	0	0	0	0.0%
Total Costs Less Construction	117,994	125,370	135,079	138,423	114,956	-3,038	-2.6%
Total Support Costs	**80,203**	**88,330**	**91,116**	**87,550**	**79,510**	**-693**	**-0.9%**
Mission Direct Operation	37,791	37,040	43,963	50,873	35,446	-2,345	-6.2%
Mission Direct Operation as % of Total Cost	**32.0%**	**29.5%**	**32.5%**	**36.8%**	**30.8%**		
Capital Construction as % of Total Cost	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**		
Total Support Cost as % of Total Cost	**68.0%**	**70.5%**	**67.5%**	**63.2%**	**69.2%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**68.0%**	**70.5%**	**67.5%**	**63.2%**	**69.2%**		
TOTAL SUPPORT COST	**80,203**	**88,330**	**91,116**	**87,550**	**79,510**	**-693**	**-0.9%**
TOTAL GENERAL SUPPORT as % of TOTAL	**21.6%**	**20.5%**	**17.1%**	**16.9%**	**19.6%**		
TOTAL GENERAL SUPPORT	**25,518**	**25,731**	**23,113**	**23,372**	**22,496**	**-3,022**	**-11.8%**
EXECUTIVE DIRECTION	560	294	260	434	357	-203	-36.3%
HUMAN RESOURCES	2,030	1,336	1,259	1,196	1,159	-871	-42.9%
CFO	1,823	1,969	1,797	1,922	1,737	-86	-4.7%
PROCUREMENT	1,780	1,918	1,957	1,945	1,495	-285	-16.0%
LEGAL	1,485	754	532	611	657	-828	-55.8%
CENTRAL ADMIN SERVICES	1,474	993	698	760	610	-864	-58.6%
PROGRAM/PROJECT CONTROL	5,468	4,748	4,930	5,072	4,516	-952	-17.4%
INFORMATION OUTREACH	1,790	2,362	1,852	2,467	1,927	137	7.7%
INFORMATION SERVICES	9,108	11,357	9,828	8,965	10,038	930	10.2%
OTHER	0	0	0	0	0	0	0.0%
TOTAL MISSION SUPPORT as % of TOTAL	**41.2%**	**44.3%**	**44.8%**	**40.5%**	**43.1%**		
TOTAL MISSION SUPPORT	**48,645**	**55,596**	**60,539**	**55,998**	**49,516**	**871**	**1.8%**
ENVIRONMENTAL	2,078	2,213	2,350	2,410	2,203	125	6.0%
SAFETY AND HEALTH	2,545	3,138	2,500	2,694	2,499	-46	-1.8%
FACILITIES MANAGEMENT	809	716	1,015	1,437	1,158	349	43.1%
MAINTENANCE	25,835	29,464	27,410	25,106	20,473	-5,362	-20.8%
UTILITIES	2,036	2,903	2,600	2,159	2,975	939	46.1%
SAFEGUARDS AND SECURITY	10,742	11,824	19,988	18,288	16,904	6,162	57.4%
LOGISTICS SUPPORT	2,856	3,679	2,955	2,294	2,197	-659	-23.1%
QUALITY ASSURANCE	1,744	1,659	1,721	1,610	1,107	-637	-36.5%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**5.1%**	**5.6%**	**5.5%**	**5.9%**	**6.5%**		
TOTAL SITE SPECIFIC	**6,040**	**7,003**	**7,464**	**8,180**	**7,498**	**1,458**	**24.1%**
MANAGEMENT/INCENTIVE FEE	6,040	7,003	7,316	7,970	7,295	1,255	20.8%
TAXES	0	0	148	210	203	203	100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Strategic Petroleum Reserve/DynMcDermott Petroleum



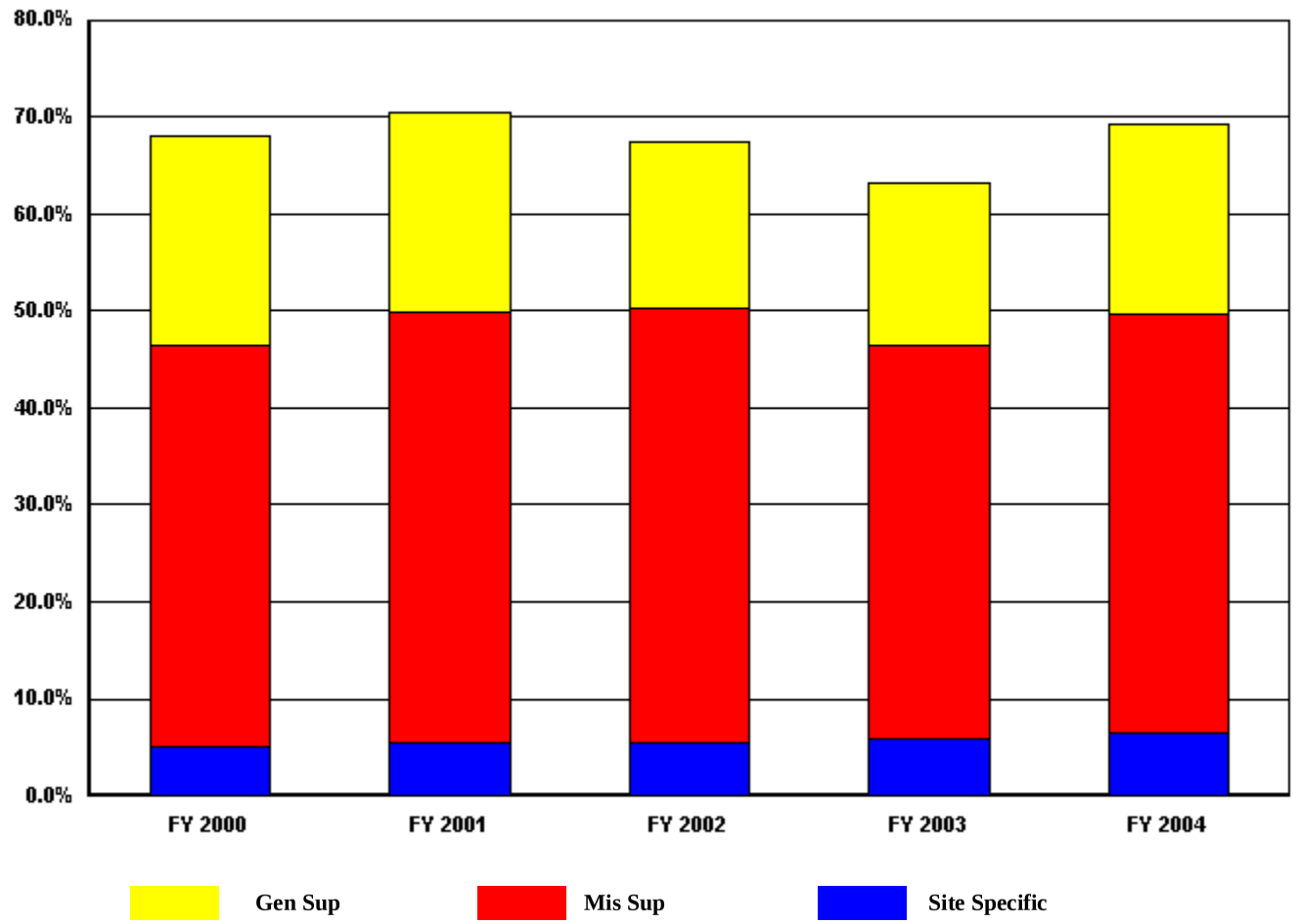
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	80,203	88,330	91,116	87,550	79,510

US Department of Energy
Total Functional Support as a % of Total Costs
Strategic Petroleum Reserve/DynMcDermott Petroleum



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	68.0%	70.5%	67.5%	63.2%	69.2%

US Department of Energy
Percent of Support Category to Total
Strategic Petroleum Reserve/DynMcDermott Petroleum



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	21.6%	20.5%	17.1%	16.9%	19.6%
Mis Sup	41.2%	44.3%	44.8%	40.5%	43.1%
Site Specific	5.1%	5.6%	5.5%	5.9%	6.5%

SITE PROFILE
Strategic Petroleum Reserve/DynMcDermott Petroleum

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 13 days of notification. The SPR has stockpiled 670.3 million barrels of oil and is currently filling the SPR with Royalty-in-Kind oil, which is being diverted to increase the inventory.

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.
232.5 million barrels of crude oil can be stored in the site's 20 caverns.
75 people are employed at the site as of September 2004.
The site contains 232.5 million barrels of oil in storage as September 30, 2004.
The site consists of 54 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.
90 people are employed at the site as of September 2004.
The site contains 150.4 million barrels of oil in storage as September 30, 2004.
The site consists of 44 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.
51 people are employed at the site as of September 2004.
The site contains 75.2 million barrels of oil in storage as September 30, 2004.
The site consists of 29 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.
87 people are employed at the site as of September 2004 including a traveling workover crew.
The site contains 212.2 million barrels of oil in storage as September 30, 2004.
The site consists of 31 buildings.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

EXECUTIVE DIRECTION
($55K) decrease to Labor and ($30K) decrease to Fringe Benefits are attributed to headcount reduction in FY 2003.

PROCUREMENT
($215K) decrease to Labor, ($103K) decrease to Fringe and ($125K) decrease to Separation Plan are attributed to headcount reduction in FY 2003.

CENTRAL ADMIN SERVICES
($32K) decrease to Labor and ($16K) decrease to Fringe Benefits are attributed to headcount reduction in FY 2003. ($94K) decrease is attributed to reduction in DCMP Technical Editing Support.

INFORMATION OUTREACH
($108K) decrease to Labor, ($50K) decrease to Fringe Benefits, and ($123K) decrease to Separation Plan are attributed to headcount reduction in FY 2003. ($125K) decrease is attributed to Video Equipment Upgrade in FY 2003. ($113K) decrease is attributed to a reduction in Travel.

FACILITIES MANAGEMENT
($100K) decrease to Labor, ($50K) decrease to Fringe Benefits, and ($21K) decrease to Separation Plan are attributed to headcount reduction in FY 2003. ($96K) decrease is attributed to reduction in Building Maintenance in FY 2004.

MAINTENANCE
($482K)decrease to labor, ($207K) decrease to Fringe, and ($486K) decrease to Separation Plan are attributed to headcount reduction in FY 2003. ($1,185K) decrease occurred in Change in Inventory account in FY 2004. ($932K) decrease to Subcontract Construction projects in FY 2004. ($324K) decrease in the purchase of I&C Electrical Materials. ($348K) decrease to Pump/Motor/Valve/Actuator Services. ($364K) decrease to Services Other.

UTILITIES
$700K increase in power cost is attributed to receipt of Royalty-in-Kind Oil in FY 2004.

QUALITY ASSURANCE
($274K) decrease to Labor, ($132K) decrease to Fringe, and ($98K) decrease to Separation are attributed to headcount reduction in FY 2003.

COST SAVINGS INITIATIVES

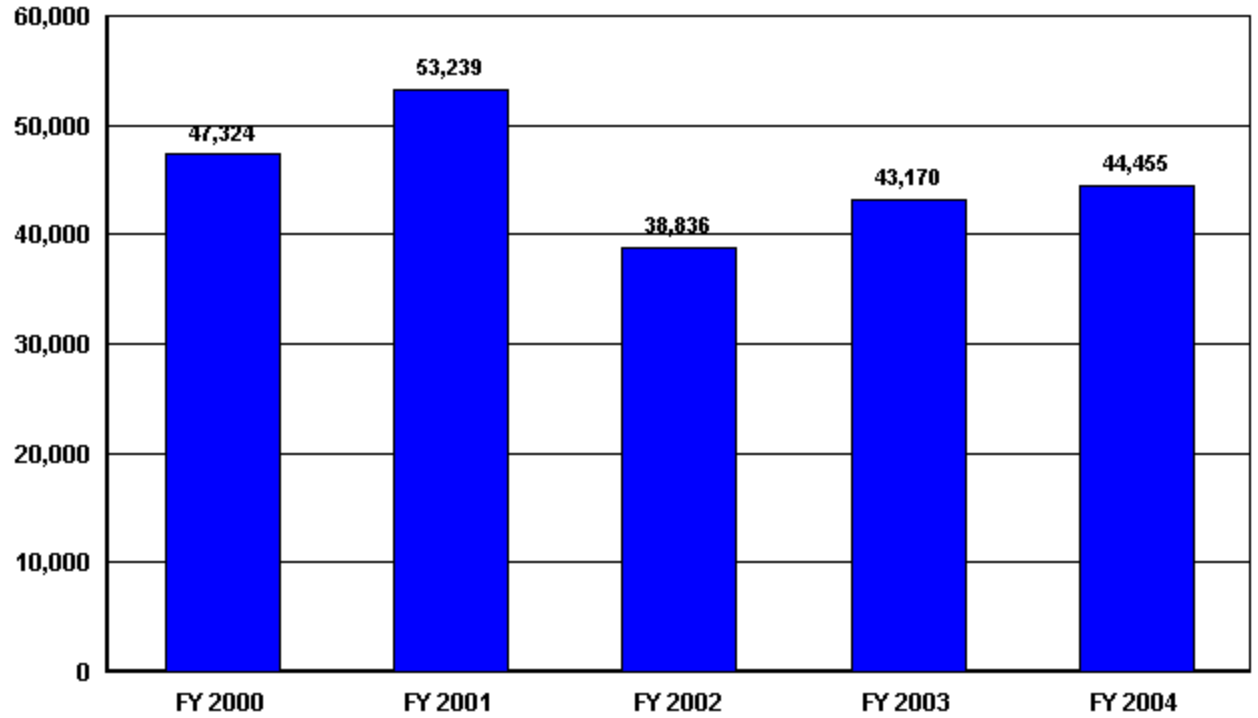
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Reduction of DM headcount	2,120		Sharon Weiss
Reduction of subcontracted manpower	1,096		Sharon Weiss
Quarterly vs. Monthly Project Reviews	41		Sharon Weiss
Moved warehouse to government owned facility	343		Sharon Weiss
Reduce Pinkerton Government Services OT	105		Sharon Weiss
National Guard replaced a bridge	238		Sharon Weiss
Re-write the PMCC Upgrade.	323		Sharon Weiss

Trends in Total Support Cost by Functional Categories
West Valley/West Valley Nuclear Services ($000)
FY 2004

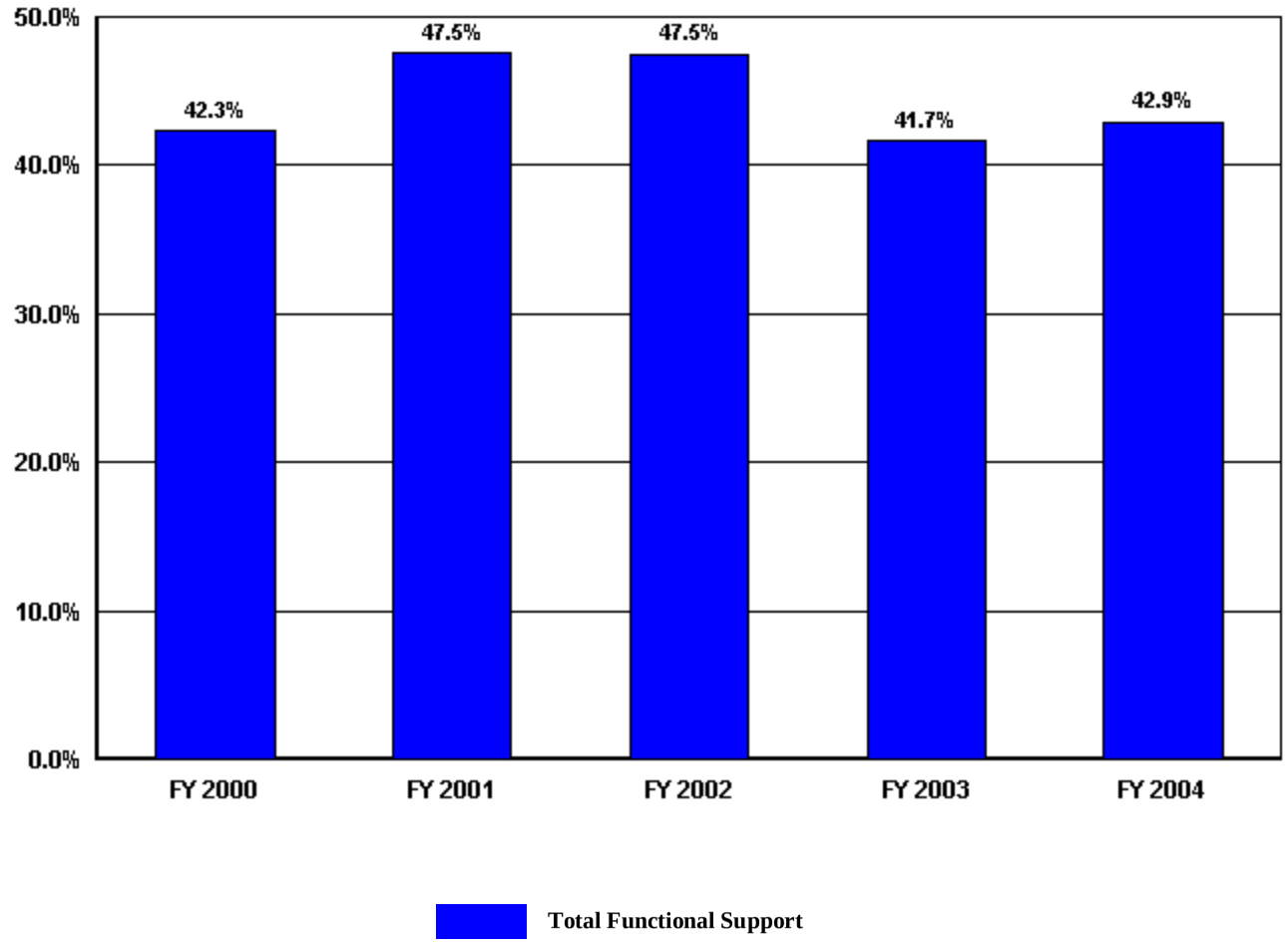
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	111,861	112,039	81,817	103,616	103,586	-8,275	-7.4%
Capital Construction	0	0	0	0	0	0	0.0%
Total Costs Less Construction	111,861	112,039	81,817	103,616	103,586	-8,275	-7.4%
Total Support Costs	**47,324**	**53,239**	**38,836**	**43,170**	**44,455**	**-2,869**	**-6.1%**
Mission Direct Operation	64,537	58,800	42,981	60,446	59,131	-5,406	-8.4%
Mission Direct Operation as % of Total Cost	**57.7%**	**52.5%**	**52.5%**	**58.3%**	**57.1%**		
Capital Construction as % of Total Cost	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**		
Total Support Cost as % of Total Cost	**42.3%**	**47.5%**	**47.5%**	**41.7%**	**42.9%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**42.3%**	**47.5%**	**47.5%**	**41.7%**	**42.9%**		
TOTAL SUPPORT COST	**47,324**	**53,239**	**38,836**	**43,170**	**44,455**	**-2,869**	**-6.1%**
TOTAL GENERAL SUPPORT as % of TOTAL	**13.3%**	**17.1%**	**13.9%**	**11.4%**	**9.7%**		
TOTAL GENERAL SUPPORT	**14,860**	**19,198**	**11,352**	**11,809**	**10,060**	**-4,800**	**-32.3%**
EXECUTIVE DIRECTION	601	723	536	497	468	-133	-22.1%
HUMAN RESOURCES	2,028	2,029	1,867	2,035	1,538	-490	-24.2%
CFO	1,029	1,274	1,290	1,436	1,193	164	15.9%
PROCUREMENT	1,373	1,276	1,167	1,009	1,002	-371	-27.0%
LEGAL	346	328	192	299	244	-102	-29.5%
CENTRAL ADMIN SERVICES	1,464	1,189	628	624	653	-811	-55.4%
PROGRAM/PROJECT CONTROL	1,104	1,157	1,388	1,678	1,237	133	12.0%
INFORMATION OUTREACH	879	1,143	1,221	1,563	1,453	574	65.3%
INFORMATION SERVICES	6,036	4,683	3,063	2,668	2,272	-3,764	-62.4%
OTHER	0	5,396	0	0	0	0	0.0%
TOTAL MISSION SUPPORT as % of TOTAL	**20.6%**	**21.2%**	**25.0%**	**22.9%**	**22.1%**		
TOTAL MISSION SUPPORT	**23,075**	**23,796**	**20,493**	**23,677**	**22,903**	**-172**	**-0.7%**
ENVIRONMENTAL	1,931	1,851	1,679	1,328	1,485	-446	-23.1%
SAFETY AND HEALTH	7,559	7,181	6,490	7,552	7,621	62	0.8%
FACILITIES MANAGEMENT	2,262	1,786	1,605	2,260	1,353	-909	-40.2%
MAINTENANCE	3,890	4,025	4,011	4,773	4,717	827	21.3%
UTILITIES	1,995	3,037	2,011	2,340	2,074	79	4.0%
SAFEGUARDS AND SECURITY	1,138	1,484	1,293	1,666	1,591	453	39.8%
LOGISTICS SUPPORT	817	1,031	942	952	1,177	360	44.1%
QUALITY ASSURANCE	1,659	1,646	916	936	895	-764	-46.1%
LABORATORY/TECHNICAL SUPPORT	1,824	1,755	1,546	1,870	1,990	166	9.1%
TOTAL SITE SPECIFIC as % of TOTAL	**8.4%**	**9.1%**	**8.5%**	**7.4%**	**11.1%**		
TOTAL SITE SPECIFIC	**9,389**	**10,245**	**6,991**	**7,684**	**11,492**	**2,103**	**22.4%**
MANAGEMENT/INCENTIVE FEE	9,389	10,026	6,780	7,571	11,478	2,089	22.2%
TAXES	0	219	211	113	14	14	100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
West Valley/West Valley Nuclear Services



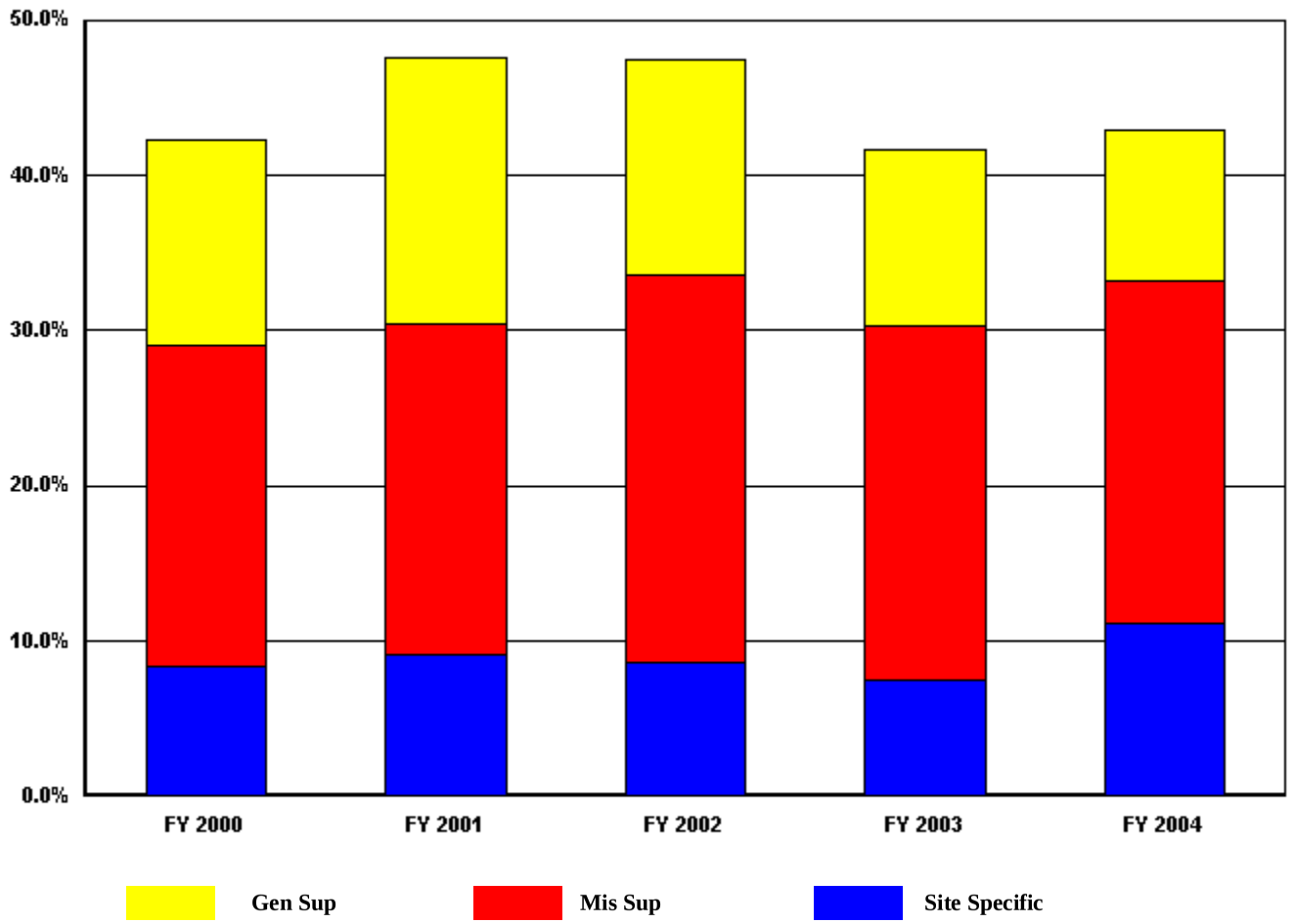
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	47,324	53,239	38,836	43,170	44,455

US Department of Energy
Total Functional Support as a % of Total Costs
West Valley/West Valley Nuclear Services



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	42.3%	47.5%	47.5%	41.7%	42.9%

US Department of Energy
Percent of Support Category to Total
West Valley/West Valley Nuclear Services



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	13.3%	17.1%	13.9%	11.4%	9.7%
Mis Sup	20.6%	21.2%	25.0%	22.9%	22.1%
Site Specific	8.4%	9.1%	8.5%	7.4%	11.1%

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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, the 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, interim solidified waste storage and ultimate disposal.

In 1980, the United States Congress passed the West Valley Demonstration Project Act (Public Law 96368), 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, the DOE also had responsibility for 125 spent nuclear fuel (SNF) assemblies stored at the site. These assemblies 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. NYSERDA holds title to the WNYNSC and the NRC license to operate the site. The NRC license was placed in abeyance while DOE conducts 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. Per the WVDP Act, NYSERDA is responsible for ten percent of WVDP costs.

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 (FY 2000 to FY 2004), the Project will have evolved from HLW waste processing engineering and final HLW treatment/vitrification processing, through system deactivation, 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.

TRENDS

The actual current year dollars spent for functional costs decreased by approximately 6% from $47,300K in FY 2000 to $44,500K in FY 2004. The functional cost data are not adjusted for the impacts of inflation over the reporting period (FY 2000-FY 2004). When the functional cost trend totals are adjusted to FY 2004 dollars, the overall cost trend decreases more significantly by approximately 16%, from $53,000K "adjusted" FY 2004 base year ($47,300K FY 2000 dollars escalated to FY 2004 basis) to $44,500K. As the work scope has evolved during the functional cost reporting period from HLW processing to post-processing decontamination and waste management scopes, the site has experienced significant fluctuations in non-labor Mission related expenditures. In addition, direct employment levels have decreased from 787 full time equivalents (FTEs) in FY 2000 to the current level of 469 FTEs as labor resource requirements have evolved with the changing mission. Total Project expenditures decreased from $111,900K in FY 2000 to $103,600K in FY 2004. This decrease reflects the overall trend and the evolution to the Project's current facility decontamination and waste management mission.

During FY 2004 the Project continued the evolution to a decontamination / waste management oriented mission as evidenced by the startup of the Remote Handled Waste Facility and the removal of the contaminated equipment from the vitrification facilty and contaminated cells in the former spent fuel process building.

In FY 2004, $2,300K of New York State Sales and Use tax was included as a part of the respective functional cost categories, an increase of $1,800K from the FY 2003 total. The settlement of the New York State Department of Taxation and Finance tax audit finding regarding the Remote Handled Waste Facility construction contract was the reason for the significant increase ($700K).

The FY 2004 WVDP total functional cost increase from $43,200K in FY 2003 to $44,500K was attributed to one-time equipment upgrades for the Laboratory Information Management System (LIMS), environmental and analytical laboratory monitoring equipment.

WVNSCO management has focused on safety during the transition of the Project's mission, maintaining Voluntary Protection Program status throughout. From a functional cost reporting perspective, WVNSCO compares favorably to Total DOE EM functional cost data. The DOE EM mission direct expenditure percentage is 49.5% as compared to 57.1% for WVDP Mission direct expenditures, while the General support and Mission Support Categories are 2.2% lower and 5.7% lower than the DOE EM average respectively.

The reduced annual pension contribution differential affected all functional categories when compared to the FY 2003 level, which explains the small decrease in the categories for Executive Direction, Public Outreach, Maintenance, Security and Quality Assurance. There were other factors which impacted other category costs to a greater extent. As the work-scope resource requirements have evolved, WVNSCO has proactively been able to significantly reduce costs through re-organization and consolidation, while maintaining safe compliance with DOE Orders and operational parameters.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

HUMAN RESOURCES
Costs were reduced ($497k) due to re-organization and consolidation of functions.

PROGRAM/PROJECT CONTROL
Costs were reduced ($441k) due to re-organization and consolidation of functions.

ENVIRONMENTAL
Increased equipment costs ($157K) for replacement of continuous radiation monitoring and counting equipment.

SAFETY AND HEALTH
Increased equipment costs ($69K) for the Laboratory Information Management System.

FACILITIES MANAGEMENT
Costs decreased ($907K) due to re-organization and consolidation of functions and logistics.

LOGISTICS SUPPORT
Increased costs ($225K) are due to additional freight charges incurred for specialized transportation of heavy haul equipment utilized for decontamination and waste disposition operations.

LABORATORY/TECHNICAL SUPPORT
Increased equipment costs ($120K) for replacement of inductive coupled plasma (ICP) spectrometer equipment.

MANAGEMENT/INCENTIVE FEE
Increased fee ($3,907K) earned for contractual acceptance of high risk work performed for vitrification facility dismantlment, process building equipment removal and decontamination, as well as radiological waste processing and disposal operations.

TAXES
Taxes decreased ($99K)due to elimination of payment in lieu of taxes associated with off-site rental space.

COST SAVINGS INITIATIVES
($ in 000's)

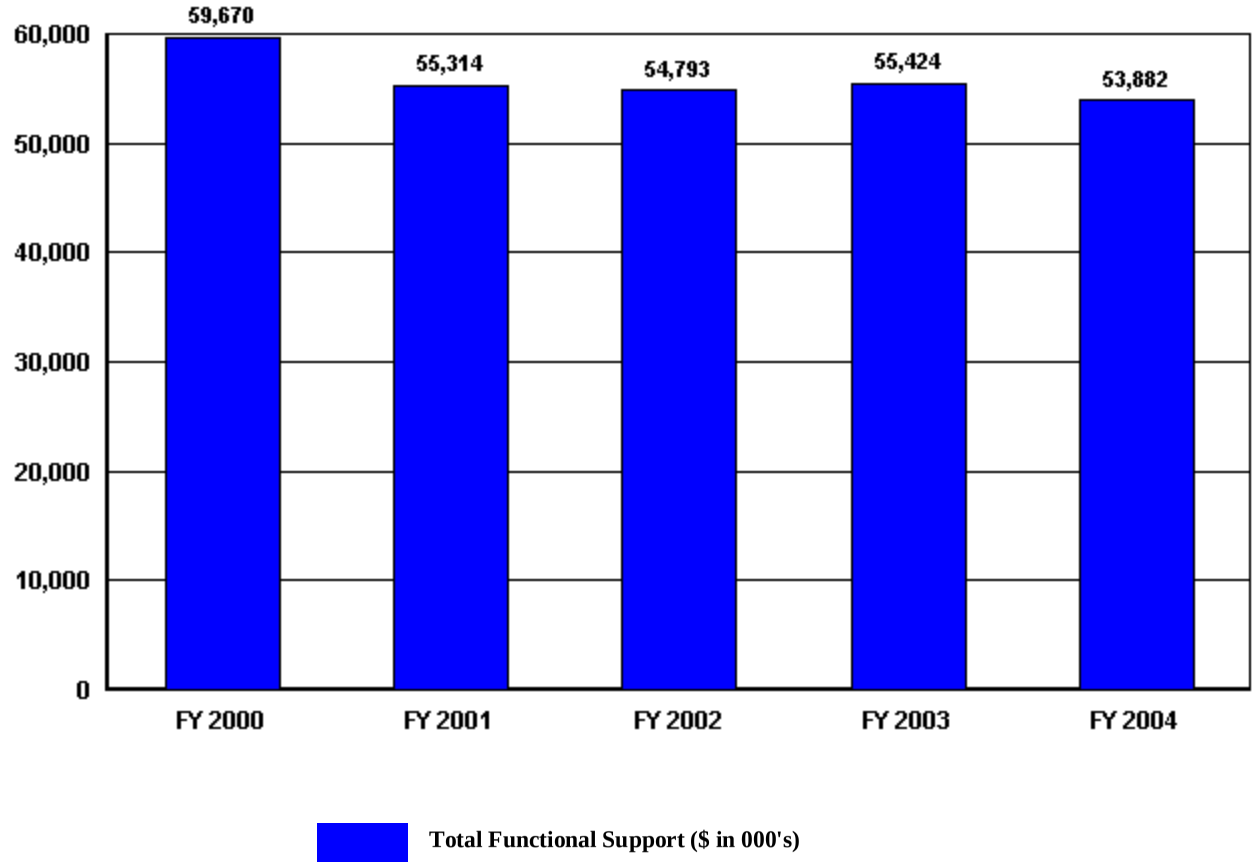
INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Project Control System	5,600	In FY2004, the WVNSCO Project Control system recognized approximately $5,600K of cost savings through budget management documentation. The cost savings were primarily associated with planned activities related to the following:	
Laboratory Information Management System Upgrade	0	WVNSCO proposed and acquired a Laboratory Information Management System (LIMS) to support WVNSCO Analytical & Process Chemistry and Environmental Monitoring laboratory (ELAB) related activities at the West Valley Demonstration Project (WVDP) which were using systems and software that were no longer supported by the original vendors.	
LIMS Procurement Effort	0	Specifically, capitalizing on the LIMS procurement effort, previously expended by the Savannah River Site (SRS), resulted in an estimated procurement cost savings/avoidance of $500K for the Project. This savings/cost avoidance is based on the elimination of the extensive, costly preparation for a large competitive bid which had been previously incurred during the procurement of the SRS LIMS.	

Subcontracted Technical Support	0	WVNSCO was able to acquire from SRS the subcontracted technical support which had expertise in working in a government site environment and LIMS implementation experience, at a rate which was lower than the more expensive vendor technical support. The configuration timeline was drastically reduced as well, since SRS expertise was used to reduce the learning curve of WVDP IT personnel through a knowledge transfer and on-site assistance. This was vital to initiating the LIMS software configuration effort at the WVDP and resulted in an additional savings of approximately $800K.	
Scheduling	0	The Project realized significant cost savings in the approach to the decontamination effort planned in the Extraction Cells area of the former spent fuel reprocessing facility. The favorable cost variance of approximately $3,600K is due to working a "split shift" schedule in lieu of the two shift operations that was the initial plan.	
TRU Waste Program	0	The WVDP effort to verify its ability to comply with waste acceptance criteria for TRU waste streams was performed with significantly less subcontracted waste expertise. In-house TRU waste expertise, combined with in-house expertise that transitioned from the high level waste qualification effort, developed the program documents (The WVDP TRU Waste Program) for the DOE without the need for the outside consultants that were originally envisioned. The net savings for the year was $719K.	

Trends in Total Support Cost by Functional Categories
WIPP/Westinghouse ($000)
FY 2004

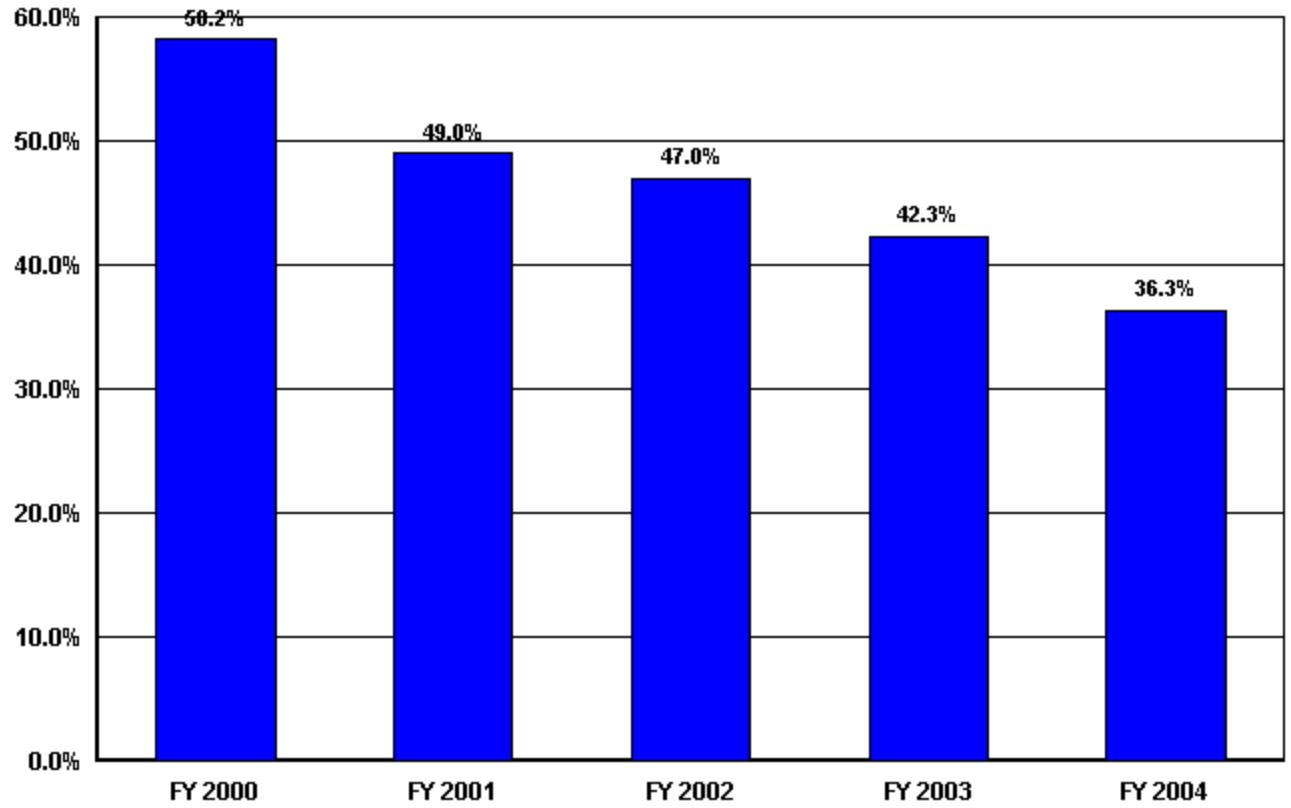
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	102,589	112,935	116,634	130,941	148,344	45,755	44.6%
Capital Construction	6,806	7,018	2,366	918	419	-6,387	-93.8%
Total Costs Less Construction	95,783	105,917	114,268	130,023	147,925	52,142	54.4%
Total Support Costs	**59,670**	**55,314**	**54,793**	**55,424**	**53,882**	**-5,788**	**-9.7%**
Mission Direct Operation	36,113	50,603	59,475	74,599	94,043	57,930	160.4%
Mission Direct Operation as % of Total Cost	**35.2%**	**44.8%**	**51.0%**	**57.0%**	**63.4%**		
Capital Construction as % of Total Cost	**6.6%**	**6.2%**	**2.0%**	**0.7%**	**0.3%**		
Total Support Cost as % of Total Cost	**58.2%**	**49.0%**	**47.0%**	**42.3%**	**36.3%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**58.2%**	**49.0%**	**47.0%**	**42.3%**	**36.3%**		
TOTAL SUPPORT COST	**59,670**	**55,314**	**54,793**	**55,424**	**53,882**	**-5,788**	**-9.7%**
TOTAL GENERAL SUPPORT as % of TOTAL	**20.8%**	**20.1%**	**19.6%**	**16.7%**	**11.5%**		
TOTAL GENERAL SUPPORT	**21,340**	**22,672**	**22,845**	**21,871**	**17,102**	**-4,238**	**-19.9%**
EXECUTIVE DIRECTION	694	939	1,340	531	679	-15	-2.2%
HUMAN RESOURCES	3,523	4,121	3,661	3,666	2,940	-583	-16.5%
CFO	1,992	2,648	1,747	1,886	1,970	-22	-1.1%
PROCUREMENT	1,210	1,421	1,289	1,376	1,005	-205	-16.9%
LEGAL	395	1,084	1,137	1,002	909	514	130.1%
CENTRAL ADMIN SERVICES	4,345	3,303	3,211	3,113	2,561	-1,784	-41.1%
PROGRAM/PROJECT CONTROL	1,930	2,118	1,829	1,828	2,149	219	11.3%
INFORMATION OUTREACH	2,806	2,911	2,593	2,036	1,271	-1,535	-54.7%
INFORMATION SERVICES	4,445	4,127	6,038	6,433	3,398	-1,047	-23.6%
OTHER	0	0	0	0	220	220	100.0%
TOTAL MISSION SUPPORT as % of TOTAL	**24.2%**	**18.1%**	**18.4%**	**17.8%**	**15.1%**		
TOTAL MISSION SUPPORT	**24,833**	**20,417**	**21,471**	**23,334**	**22,357**	**-2,476**	**-10.0%**
ENVIRONMENTAL	2,436	2,075	2,201	1,883	1,645	-791	-32.5%
SAFETY AND HEALTH	5,426	3,711	3,442	5,177	5,363	-63	-1.2%
FACILITIES MANAGEMENT	3,035	1,487	1,637	1,792	1,245	-1,790	-59.0%
MAINTENANCE	7,132	6,457	7,260	7,543	6,612	-520	-7.3%
UTILITIES	1,000	195	11	-21	730	-270	-27.0%
SAFEGUARDS AND SECURITY	2,036	2,571	2,892	3,150	3,007	971	47.7%
LOGISTICS SUPPORT	1,272	1,413	1,443	1,312	1,046	-226	-17.8%
QUALITY ASSURANCE	2,057	1,990	1,770	2,498	2,709	652	31.7%
LABORATORY/TECHNICAL SUPPORT	439	518	815	0	0	-439	-100.0%
TOTAL SITE SPECIFIC as % of TOTAL	**13.2%**	**10.8%**	**9.0%**	**7.8%**	**9.7%**		
TOTAL SITE SPECIFIC	**13,497**	**12,225**	**10,477**	**10,219**	**14,423**	**926**	**6.9%**
MANAGEMENT/INCENTIVE FEE	7,862	6,679	5,256	6,215	8,871	1,009	12.8%
TAXES	5,635	5,546	5,221	4,004	5,552	-83	-1.5%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
WIPP/Westinghouse

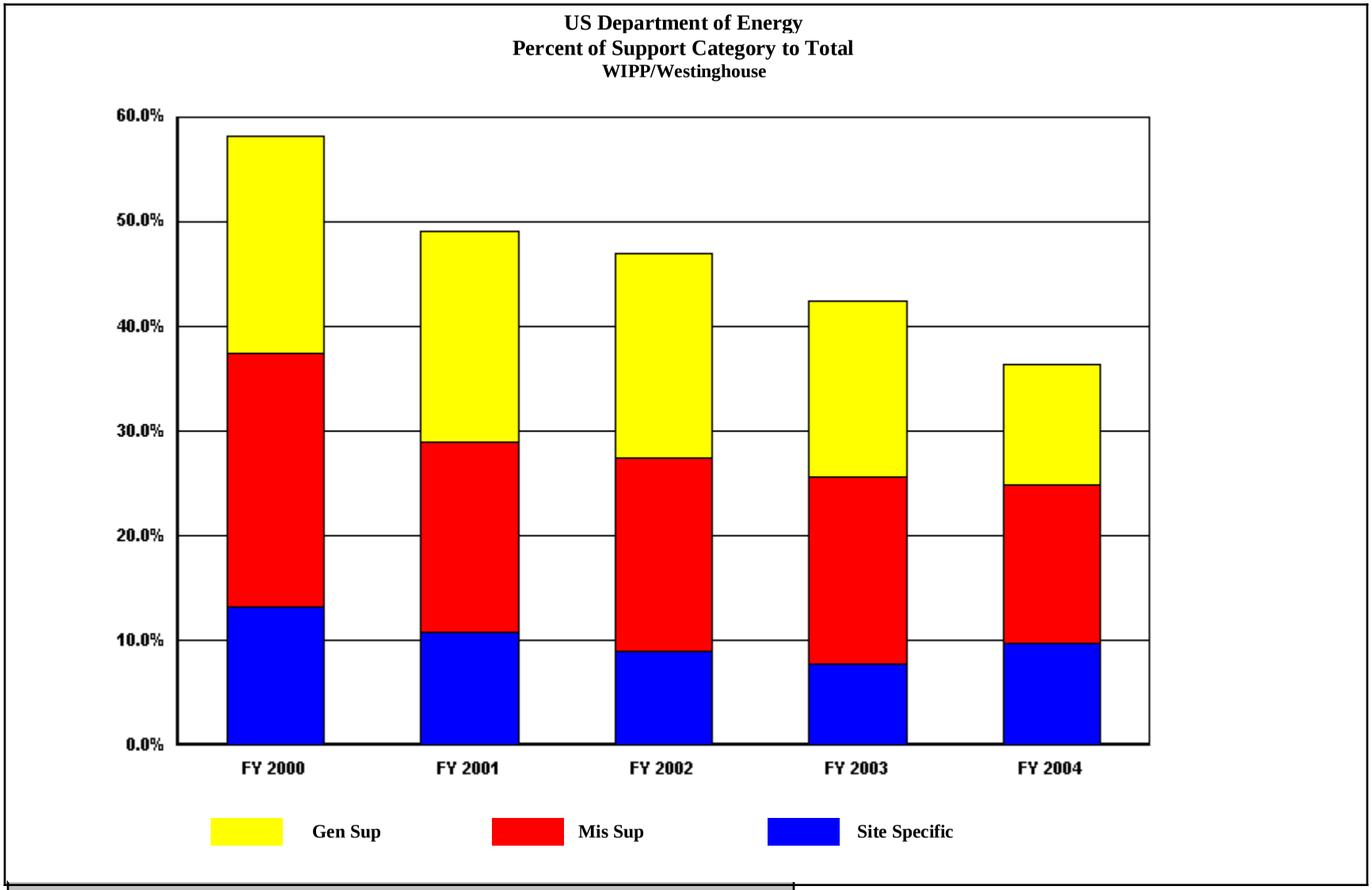


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	59,670	55,314	54,793	55,424	53,882

US Department of Energy
Total Functional Support as a % of Total Costs
WIPP/Westinghouse



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	58.2%	49.0%	47.0%	42.3%	36.3%



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	20.8%	20.1%	19.6%	16.7%	11.5%
Mis Sup	24.2%	18.1%	18.4%	17.8%	15.1%
Site Specific	13.2%	10.8%	9.0%	7.8%	9.7%

SITE PROFILE
WIPP/Westinghouse

SITE OVERVIEW AND CHARACTERISTIC

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. WTS opened and began receiving waste March 26, 1999. At the end of FY 2004, WIPP had emplaced 24,048 cubic meters of TRU Waste, which was a result of 3,024 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 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 in the fields of 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.

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. Processes were designed, procedures developed, personnel hired and trained, mobile vendors selected, equipment deployed, and start-up activities initiated.

During FY 2004, CCP had characterization operations at five locations: SRS, LLNL, NTS, Richland Hanford, and LANL. FY 2004 highlights include:

- 13,248 drums characterized at 5 sites.

- 257 TRUPACT-II shipments to WIPP.
- 5 CCP characterization location operations in FY 2004.
- 6 successful certification/recertification audits.
- 2 CCP characterization projects completed (ANL-E and LLNL).
- 1 DOE site cleaned up of Legacy TRU waste (LBNL).
- 0 Recordable or Lost Work Day injuries in CCP in FY 2004.

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.

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 FY 2004 Functional Support Cost percentage is 6.1% less than FY 2003, and shows a five year reduction of 21.93%.

The FY 2004 FSCR includes recommendations by the FMSIC Peer Review Team as agreed to in the FMSIC Peer Review Team letter dated May12, 2004.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

COST SAVINGS INITIATIVES

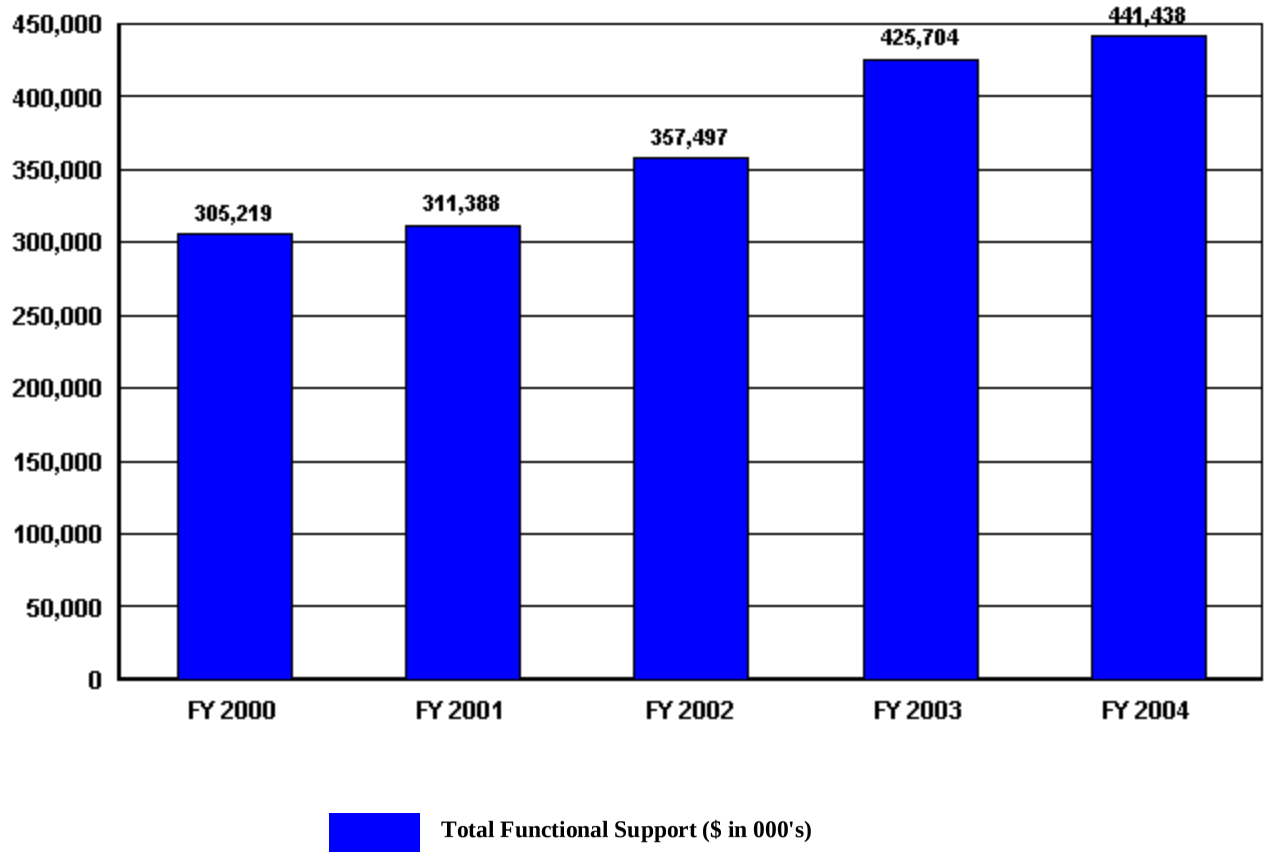
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Voluntary Separation Program	0	A voluntary separation program was offered during FY 2004. This program targeted support functions and resulted in significant savings in support areas.	

Trends in Total Support Cost by Functional Categories
Y-12/BWXT ($000)
FY 2004

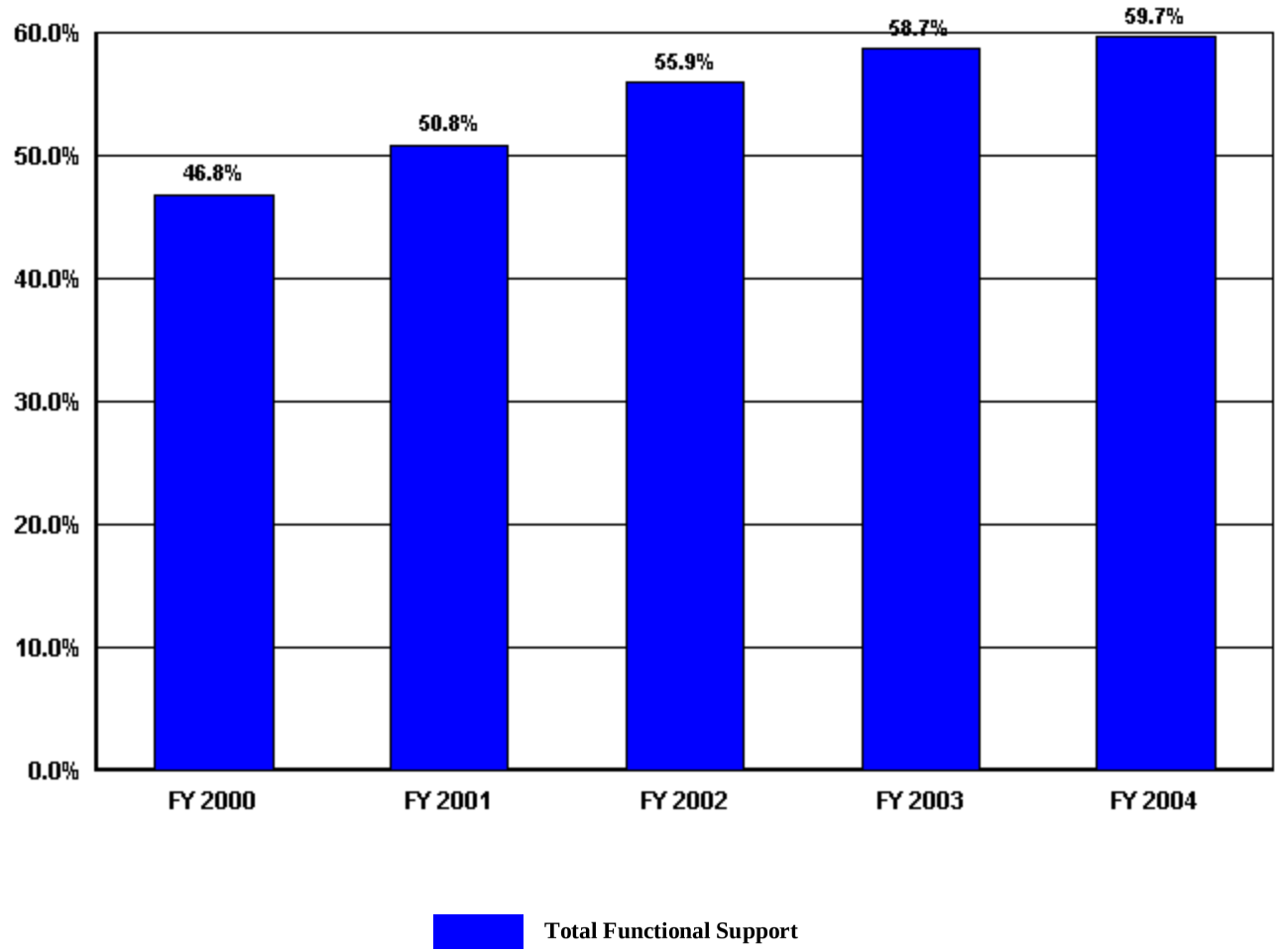
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	651,597	612,775	639,618	725,690	739,880	88,283	13.5%
Capital Construction	16,093	9,945	22,194	83,199	75,863	59,770	371.4%
Total Costs Less Construction	635,504	602,830	617,424	642,491	664,017	28,513	4.5%
Total Support Costs	**305,219**	**311,388**	**357,497**	**425,704**	**441,438**	**136,219**	**44.6%**
Mission Direct Operation	330,285	291,442	259,927	216,787	222,579	-107,706	-32.6%
Mission Direct Operation as % of Total Cost	**50.7%**	**47.6%**	**40.6%**	**29.9%**	**30.1%**		
Capital Construction as % of Total Cost	**2.5%**	**1.6%**	**3.5%**	**11.5%**	**10.3%**		
Total Support Cost as % of Total Cost	**46.8%**	**50.8%**	**55.9%**	**58.7%**	**59.7%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**46.8%**	**50.8%**	**55.9%**	**58.7%**	**59.7%**		
TOTAL SUPPORT COST	**305,219**	**311,388**	**357,497**	**425,704**	**441,438**	**136,219**	**44.6%**
TOTAL GENERAL SUPPORT as % of TOTAL	**11.2%**	**11.9%**	**12.0%**	**12.4%**	**13.1%**		
TOTAL GENERAL SUPPORT	**72,890**	**72,655**	**76,904**	**89,909**	**96,766**	**23,876**	**32.8%**
EXECUTIVE DIRECTION	5,108	4,636	1,950	2,424	2,437	-2,671	-52.3%
HUMAN RESOURCES	6,595	6,784	5,772	13,503	16,787	10,192	154.5%
CFO	9,736	10,152	9,530	9,704	9,543	-193	-2.0%
PROCUREMENT	3,244	3,146	3,524	4,550	5,613	2,369	73.0%
LEGAL	1,889	1,982	2,489	3,393	2,901	1,012	53.6%
CENTRAL ADMIN SERVICES	7,064	7,299	8,724	12,661	12,977	5,913	83.7%
PROGRAM/PROJECT CONTROL	2,214	5,996	12,389	16,538	19,657	17,443	787.9%
INFORMATION OUTREACH	1,447	1,461	1,717	2,223	2,463	1,016	70.2%
INFORMATION SERVICES	29,819	29,092	28,747	23,727	24,752	-5,067	-17.0%
OTHER	5,774	2,107	2,062	1,186	-364	-6,138	-106.3%
TOTAL MISSION SUPPORT as % of TOTAL	**32.4%**	**36.1%**	**40.1%**	**42.3%**	**43.2%**		
TOTAL MISSION SUPPORT	**211,408**	**221,164**	**256,386**	**307,095**	**319,970**	**108,562**	**51.4%**
ENVIRONMENTAL	9,027	8,547	6,072	8,381	7,191	-1,836	-20.3%
SAFETY AND HEALTH	41,294	42,543	43,139	49,487	52,232	10,938	26.5%
FACILITIES MANAGEMENT	7,576	6,140	8,759	14,367	16,963	9,387	123.9%
MAINTENANCE	50,456	49,797	62,211	85,061	83,915	33,459	66.3%
UTILITIES	34,215	38,129	39,654	40,321	41,918	7,703	22.5%
SAFEGUARDS AND SECURITY	42,220	48,981	64,945	75,049	85,050	42,830	101.4%
LOGISTICS SUPPORT	3,470	3,064	4,211	7,340	5,562	2,092	60.3%
QUALITY ASSURANCE	9,432	10,263	14,040	12,334	12,227	2,795	29.6%
LABORATORY/TECHNICAL SUPPORT	13,718	13,700	13,355	14,755	14,912	1,194	8.7%
TOTAL SITE SPECIFIC as % of TOTAL	**3.2%**	**2.9%**	**3.8%**	**4.0%**	**3.3%**		
TOTAL SITE SPECIFIC	**20,921**	**17,569**	**24,207**	**28,700**	**24,702**	**3,781**	**18.1%**
MANAGEMENT/INCENTIVE FEE	18,958	16,346	18,102	24,000	20,691	1,733	9.1%
TAXES	1,963	1,223	4,690	2,069	10	-1,953	-99.5%
LDRD / PDRD / SDRD	0	0	1,415	2,631	4,001	4,001	100.0%

US Department of Energy
Total Functional Support
Y-12/BWXT

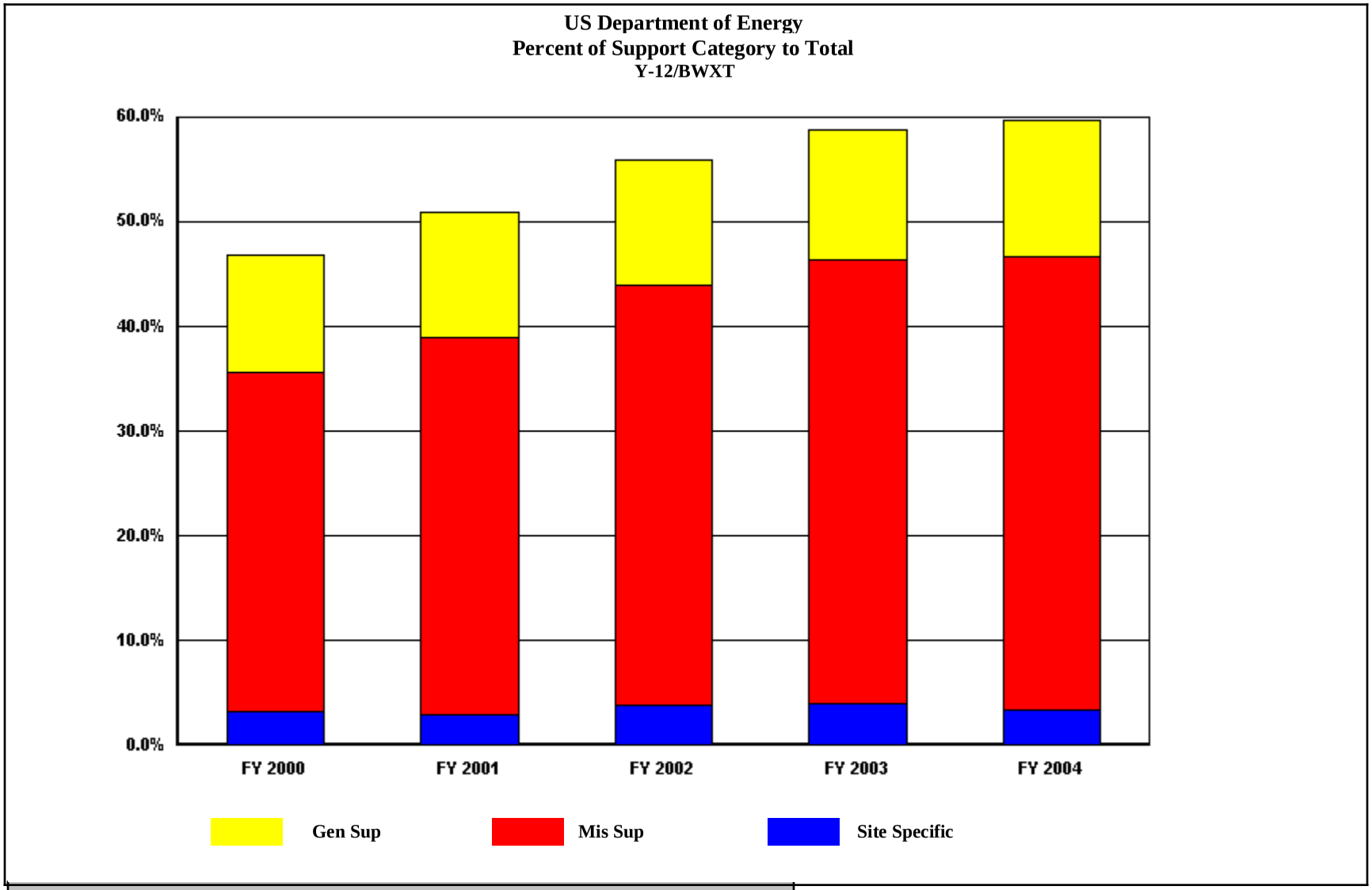


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	305,219	311,388	357,497	425,704	441,438

US Department of Energy
Total Functional Support as a % of Total Costs
Y-12/BWXT



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	46.8%	50.8%	55.9%	58.7%	59.7%



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	11.2%	11.9%	12.0%	12.4%	13.1%
Mis Sup	32.4%	36.1%	40.1%	42.3%	43.2%
Site Specific	3.2%	2.9%	3.8%	4.0%	3.3%

SITE PROFILE
Y-12/BWXT

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

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 811 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 approximately 700 buildings and other structures with floor area of approximately 7.6 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. The majority of the floor space at Y-12 was constructed prior to 1950 as part of the Manhattan Project.

TRENDS

The trend from FY 2003 to FY 2004 shows a slight increase in the value of functional costs as percent of total costs from 58.7% to 59.7%. If the increase in Safeguards and Security, after accounting for escalation, were eliminated then the value of functional costs as a percent of total cost would have remained at the 58.7% level. The following is an analysis of change in support costs from the prior year.

In looking at raw data, it appears that the functional cost at the Y-12 plant has increased by approximately $136.2 million since 2000. Consequently, functional costs as a percentage of total costs have increased from 46.8% in 2000 to 59.7% in FY 2004. An escalation of 4% over this time period would account for $66.1 million of this cost increase. The remaining $70.1 million in cost increases are primarily driven by external events, evolving requirements and ongoing efforts to provide a modern, recapitalized and efficient operation at Y-12. The most significant of these changes are:

- Fiscal Years 2000 through 2004 have seen significant changes in the area of Safeguards and Security. The unfortunate events of September 11, 2001 and the country's response to these events continue to drive Safeguards and Security costs higher than in previous years. Safeguards and Security requirements have taken on a new dimension, increased focus and are consuming greater resources. The Safeguards and Security costs have increased, after accounting for escalation, by $33.9 million from FY 2000 to FY 2004 or approximately 50% of the total increase.

- Consistent with the NNSA overall goals, efforts are underway at Y-12 to stabilize the deferred maintenance backlog by the end of FY 2005. Increases over the last four years in maintenance and facility management have been consistent with this NNSA and Y-12 deferred maintenance backlog stabilization goal. The increase in maintenance and facility management expenditures has grown by $30.2 million, after accounting for escalation, or approximately 40% of the total increase.

- In order to provide for efficient management of the Y-12 site operations and a growing capital construction program BWXT Y-12 has created a strong planning and integration function. Over the last four years the capital construction program alone has increased almost fivefold as part of the Y-12 modernization efforts. At the beginning of FY 2001, prior to BWXT Y-12 assuming the operation of the Y-12 complex for the NNSA the Program/Project Planning & Control (PPPC) function was virtually non-existent. The increase in the PPPC function has contributed to the successful revitalization of the Y-12 complex over the last four years. The PPPC functional category has increased by $17.0 million, after accounting for escalation.

These significant increases in expenditures over the past four years are partially offset by a net reduction in other functional categories of $11.0 million, after accounting for escalation.

Taxes — Total Sales and Use taxes paid for FY 2004 were $7.2 M. These costs are incurred as a part of material costs and are spread across the functional categories as a part of material cost.

COST SAVINGS INITIATIVES

In FY 2004, BWXT Y-12 leveraged a team of certified Six Sigma Black Belts in the Productivity and Process Improvement (PPI) Organization — Engineering Division. The mission of the team was to promote, enable, and sustain an environment of continuous improvement that demonstrates safe, effective, and efficient stewardship of NNSA property, products, and resources. This was to be accomplished through use of a variety of productivity and process improvement tools to define, measure, analyze, improve, and sustain improvements in Y12 operations.

Three categories of improvement projects were executed and tracked during the year. The projects included Black Belt Productivity Improvement Projects (PIPs), Yellow Belt PIPs, and other Management Initiatives. Results are as follows:

- Twenty-four Black Belt PIPs were executed during FY2004 for a forecasted benefit of $8.2 million in FY 2004 with a projected total benefit of $15.6 million through FY 2005.
- Sixty-nine Yellow Belt PIPs were reported complete in Calendar Year 2004. PIP benefits reported include areas of cost, business, safety, and/or security imperative benefit. Reported cost benefits were forecasted to be $5.3 million in FY 2004 with a projected total benefit of $7.2 million through FY 2005.
- Two management initiatives were reported by Financial Management for a forecasted benefit of $16.4 million in FY 2004 with a projected total benefit of $25.6 million through FY 2005.

Forecasted benefits are calculated at implementation of PIP improvements. Actual benefits are determined upon sustained execution. Replication by other sites is dependent upon existing processes and requirements.

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

HUMAN RESOURCES
This cost category increased by about $3.3 million in FY 2004. This increase was the direct result of a reclassification of the benefit management cost. The reclassifcation was made to more closely align with the functional category definitions. In prior years, this cost was spread throughout the functional support and mission direct categories as part of the labor cost.

PROCUREMENT
This cost category increased by $1.1 million in FY 2004. The increase was the result of additional effort required to support the capital/construction subcontract requirements as well as to support Y-12 modernization efforts in the area of alternate financing.

PROGRAM/PROJECT CONTROL
Efforts to provide effective cost, scheduling and planning efforts required to support BWXT Y-12's ongoing efforts to provide a modern, recapitalized and efficient operation at Y-12.

OTHER
This decrease is primarily the result of favorable legal settlements and termination allowance costs compared to the original accrual estimates.

SAFETY AND HEALTH
The majority of this increase is associated with escalation. The remainder of the increase is due to the activities related to implementing a Behavior Based Safety Initiative.

FACILITIES MANAGEMENT
Increased cost assoiated with the Infrastructure Reduction Program. This program reduces the footprint of the Y-12 plant and is expected to lower future operating costs.

MAINTENANCE
Less planned maintenance material was bought in FY 2004.

SAFEGUARDS AND SECURITY
This increase is the direct result of the increasing focus and requirements within the Safeguards and Security area.

LOGISTICS SUPPORT
This change is the direct result of a lower inventory write-off in FY 2004 than FY 2003.

COST SAVINGS INITIATIVES
($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
BCP Approval Process	534	A Six Sigma Black Belt PIP was executed to reduce cycle time for Baseline Change Proposals (BCP) through reduction of handling, defects, and redundancy. Improvements included a new Web-based program to circulate BCP information and a common log for Y-12 and YSO use.	
Capital Projects Requirements	509	A Six Sigma Black Belt PIP was executed to reduce the total cycle time for Capital Projects Functional and Operational Requirements documentation beginning with initiation through to completion. The project goal was to reduce cycle time by a factor of 5 from an average of 51 days to an average of 10 days. Improvements were obtained by establishing a process that better defines, communicates, and meets Functional and Operational Requirements requirements.	

Part Reduction	77	A Six Sigma Black Belt PIP was executed to reduce storage of legacy parts and materials to increase area available for Y-12 programmatic use. Items were characterized and dispositioned. Unclassified parts were identified and transferred to a Landfill. 150,000 kgs of excess depleted uranium alloyed metal was identified and transferred to Nevada Test. The off-site disposition of this unclassified material—metal leftover from Y-12's production era—allowed Y-12 to meet a performance-based incentive for additional work that was achieved through operational efficiencies.	
Cycle Time Reduction for Classified Desktop Setup	236	A Six Sigma Black Belt PIP was executed for Cycle Time Reduction for Classified Desktop Setup Process. The project goal was to decrease the average cycle time from request to functionality of a terminal control box that required a maintenance job request from 54 days to 20 days. Improvements included changes to planning, priority, equipment availability and location.	
Materials Management: Reduce Late Deliveries (Rec	122	A Six Sigma Black Belt PIP was executed to reduce the number of late deliveries by BWXT Y-12 Receiving and Delivery of AVID vendor, Non-AVID vendor, and FedEx/UPS items. The target of the project was to reduce late deliveries from 13% to 5%.	
Test Hardware Responsiveness	416	A Black Belt PIP was executed to reduce cycle time for response and delivery of test hardware for testing and evaluation as requested by Weapon Design Laboratories. Emphasis was placed on reduction of production schedule "peaks and valleys" for more continuous operation and response.	
Dismantlement	224	A Six Sigma Black Belt PIP was executed to eliminate inefficiencies in three specific areas of the dismantlement process. Detailed information is on file.	

Handheld Radio Reduction	1,120	A Six Sigma Black Belt PIP was executed to significantly reduce the number of portable, handheld radios at Y-12. The PIP was completed to identify reductions in an effort to minimize replacements required in response to upcoming federal regulation changes for portable radio frequencies. Over 300 radios were identified for reduction through review of utilization and specification of applicable response requirements for radio assignment.	
Part Disposition	57	The Part Disposition Cycle Time Process Improvement Project (PIP) was executed for Stockpile Surveillance activities in response to a NNSA-Headquarters request for Nuclear Weapons Complex sites to evaluate and reduce surveillance cycle times. The PIP is designed to reduce the cycle time to disposition parts from the Manufacturing disassembly areas to component testing areas from an average of 53 workdays to a target average of 20 workdays. Detailed information is on file.	
Equipment Calibration Cycle Time Reduction	136	A Six Sigma Black Belt PIP was executed for Equipment Calibration Cycle Time Reduction for Pressure and Temperature. Process changes included implementation of a system to utilize a priority ranking system if equipment is requested for rush completion, otherwise the equipment will be worked in First-in-First-Out order. This new process has reduced the cycle time to meet the goal of calibrating equipment from an average of 66 to within 35 business days.	
Optimize the Number of Rad Worker II Trained	879	A Six Sigma Black Belt PIP was executed for Radiological Worker II (RWII) Training Reduction to implement an alternative utilizing the 10 CFR 835 training option for non-hands on activities. An alternative (4 hour) RWII was implemented allowing the training hours of personnel attending Radiological Training to be reduced by approximately 30%.	

Reduce Inventory Cycle Time	1,647	Six Sigma Black Belt PIPs executed to improve inventory efficiency for material control in several Y-12 production areas. The PIP was executed by teams from Productivity and Process Improvement (PPI), Nuclear Materials Control and Accountability, Manufacturing, Applied Technologies, and Engineering. Results of the PIP yielded an approximate 46% reduction in production downtime in four areas as a result of inventory of nuclear materials. Resulting recommendations are to be deployed in other production areas in the plant.	
Stack Monitoring Analysis - Cycle Time Reduction	29	A Six Sigma Black Belt PIP was executed for Stack Monitoring Analysis for Cycle Time Reduction. Modifications to the process resulted in a reduction of the cycle time for pump performance data analysis from an initial average of 67 days to a new average of 4 days. Requirements for maintenance of the pumps were procedurally modified to reflect data collected and recommendations from the manufacturer.	
Rejection Reduction for Graphite Parts	194	A Six Sigma Black Belt PIP was executed for Rejection Reduction for Graphite Parts Manufacturing. Process modifications targeted reduction of rejects realized during quality assurance inspections by Dimensional Inspection (DI). Improvements include changes to shop inspection processes and to change control actions. Implementation of identified improvements is to result in a 65% reduction of defects.	
Reduction of Errors in Development Work Forms	19	A Six Sigma Black Belt PIP was executed for The Reduction of Errors in Development Work Authorization Forms. The goal of the project was to reduce the rework items/defects from an average of 5 to a target of 2. Solutions were implemented to achieve knowledge base improvement for personnel submitting Work Authorization Form packages.	

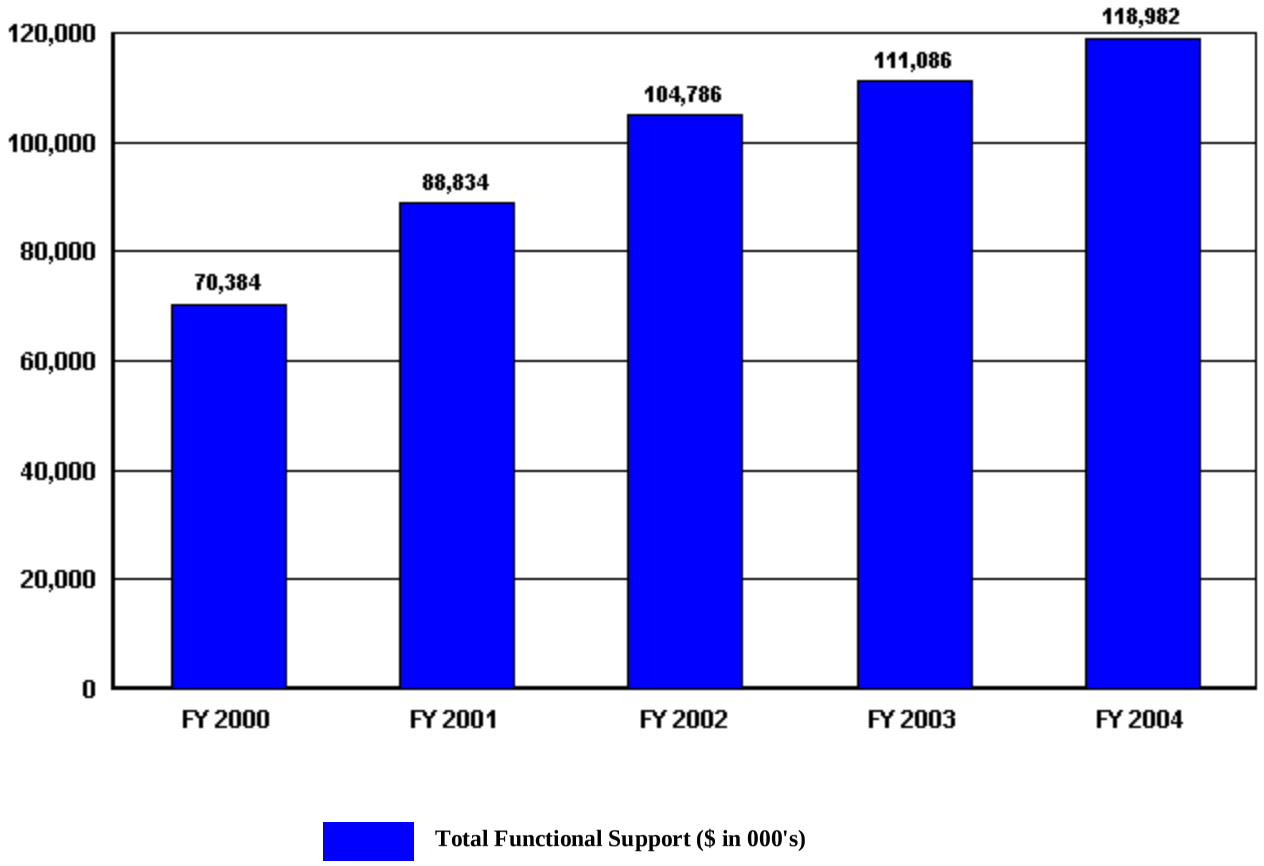
TVA Production Increase	204	A Six Sigma Black Belt PIP was executed to Increase Production rates experienced through the Warehouse Glove Box (WGB). The goal represented an increase that doubled the average baseline. Improvements included changes to process planning and execution as well as worker recommendations for modification to area conditions.	
Beryllium Surface Smears	188	A Six Sigma Black Belt PIP was executed to evaluate the number and frequency of beryllium surface smears taken in targeted areas of Y-12. Tailoring sampling frequency to level of risk for contamination was implemented while continuing to reassure workers of the safety of their workplace. The overall results are a significant reduction in the number and frequency of smears required in housekeeping areas.	
Reduction of Licensed Vehicles	130	A Six Sigma Black Belt PIP was executed for Reduction of Licensed Vehicles at Y-12 based upon utilization. The Y-12 fleet manager established guidelines for the minimum usage for each category of vehicle with a goal to bring 90% of vehicles in all categories into compliance with established minimum mileage requirements. Monitoring and dispositioning systems/processes were established.	
PSAP/HRP Process (Incumbents)	816	A Six Sigma Black Belt PIP was executed to reduce temporary reassignment of PSAP/HRP incumbents resulting from failure to maintain PSAP/HRP qualifications. The objective is to drive required temporary reassignments toward a target of zero and to evaluate overall program enrollment for reduction.	

9204-2E Throughput Improvements	660	A Six Sigma Black Belt PIP was executed for Disassembly Throughput Improvement. Upon implementation of PIP identified improvements, the average monthly disassembly capability for the impacted Program is expected to approximately double. This will allow the Y-12 National Security Complex to meet its annual disassembly goals and will result in a significant reduction in the disassembly cost per unit.	

Trends in Total Support Cost by Functional Categories
Yucca Mountain/Bechtel-SAIC ($000)
FY 2004

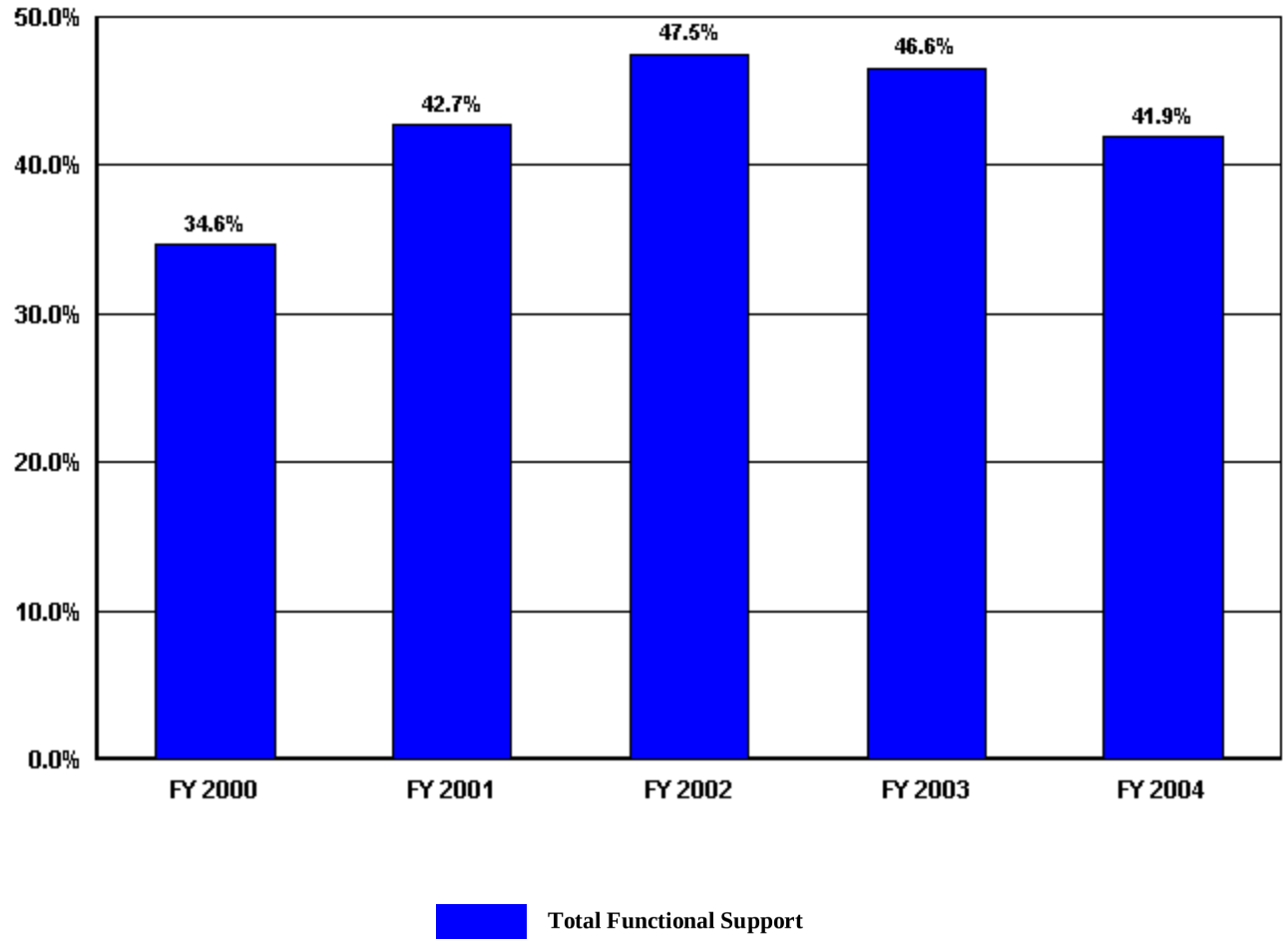
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	$ Change 2000 To FY 2004	% Change 2000 To FY 2004
Total Costs	203,275	208,091	220,588	238,599	283,928	80,653	39.7%
Capital Construction	0	861	2,800	2,015	2,022	2,022	100.0%
Total Costs Less Construction	203,275	207,230	217,788	236,584	281,906	78,631	38.7%
Total Support Costs	**70,384**	**88,834**	**104,786**	**111,086**	**118,982**	**48,598**	**69.0%**
Mission Direct Operation	132,891	118,396	113,002	125,498	162,924	30,033	22.6%
Mission Direct Operation as % of Total Cost	**65.4%**	**56.9%**	**51.2%**	**52.6%**	**57.4%**		
Capital Construction as % of Total Cost	**0.0%**	**0.4%**	**1.3%**	**0.8%**	**0.7%**		
Total Support Cost as % of Total Cost	**34.6%**	**42.7%**	**47.5%**	**46.6%**	**41.9%**		
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**		
TOTAL SUPPORT COST as % of TOTAL COST	**34.6%**	**42.7%**	**47.5%**	**46.6%**	**41.9%**		
TOTAL SUPPORT COST	**70,384**	**88,834**	**104,786**	**111,086**	**118,982**	**48,598**	**69.0%**
TOTAL GENERAL SUPPORT as % of TOTAL	**19.8%**	**22.9%**	**22.9%**	**25.3%**	**22.3%**		
TOTAL GENERAL SUPPORT	**40,350**	**47,706**	**50,581**	**60,271**	**63,290**	**22,940**	**56.9%**
EXECUTIVE DIRECTION	2,560	2,440	2,963	5,241	7,069	4,509	176.1%
HUMAN RESOURCES	1,835	4,494	5,105	6,549	5,784	3,949	215.2%
CFO	2,060	3,392	3,619	3,102	3,138	1,078	52.3%
PROCUREMENT	2,228	2,305	2,515	2,715	2,789	561	25.2%
LEGAL	394	192	248	361	1,592	1,198	304.1%
CENTRAL ADMIN SERVICES	4,267	7,976	11,866	10,859	12,445	8,178	191.7%
PROGRAM/PROJECT CONTROL	8,738	4,818	6,016	5,741	5,284	-3,454	-39.5%
INFORMATION OUTREACH	3,932	2,181	3,788	2,442	3,586	-346	-8.8%
INFORMATION SERVICES	14,336	11,453	14,841	21,146	20,651	6,315	44.0%
OTHER	0	8,455	-380	2,115	952	952	100.0%
TOTAL MISSION SUPPORT as % of TOTAL	**9.4%**	**12.5%**	**13.0%**	**14.6%**	**13.5%**		
TOTAL MISSION SUPPORT	**19,152**	**25,931**	**28,642**	**34,894**	**38,444**	**19,292**	**100.7%**
ENVIRONMENTAL	6,621	4,738	4,769	3,697	3,900	-2,721	-41.1%
SAFETY AND HEALTH	3,064	3,180	2,160	4,387	4,903	1,839	60.0%
FACILITIES MANAGEMENT	7,459	8,372	9,250	9,822	11,456	3,997	53.6%
MAINTENANCE	609	2,314	2,353	5,393	5,281	4,672	767.2%
UTILITIES	0	17	407	399	690	690	100.0%
SAFEGUARDS AND SECURITY	450	217	689	1,375	694	244	54.2%
LOGISTICS SUPPORT	949	2,451	2,525	1,991	2,210	1,261	132.9%
QUALITY ASSURANCE	0	4,642	6,489	7,830	9,310	9,310	100.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
TOTAL SITE SPECIFIC as % of TOTAL	**5.4%**	**7.3%**	**11.6%**	**6.7%**	**6.1%**		
TOTAL SITE SPECIFIC	**10,882**	**15,197**	**25,563**	**15,921**	**17,248**	**6,366**	**58.5%**
MANAGEMENT/INCENTIVE FEE	10,867	15,068	25,381	15,681	17,102	6,235	57.4%
TAXES	15	129	182	240	146	131	873.3%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy
Total Functional Support
Yucca Mountain/Bechtel-SAIC

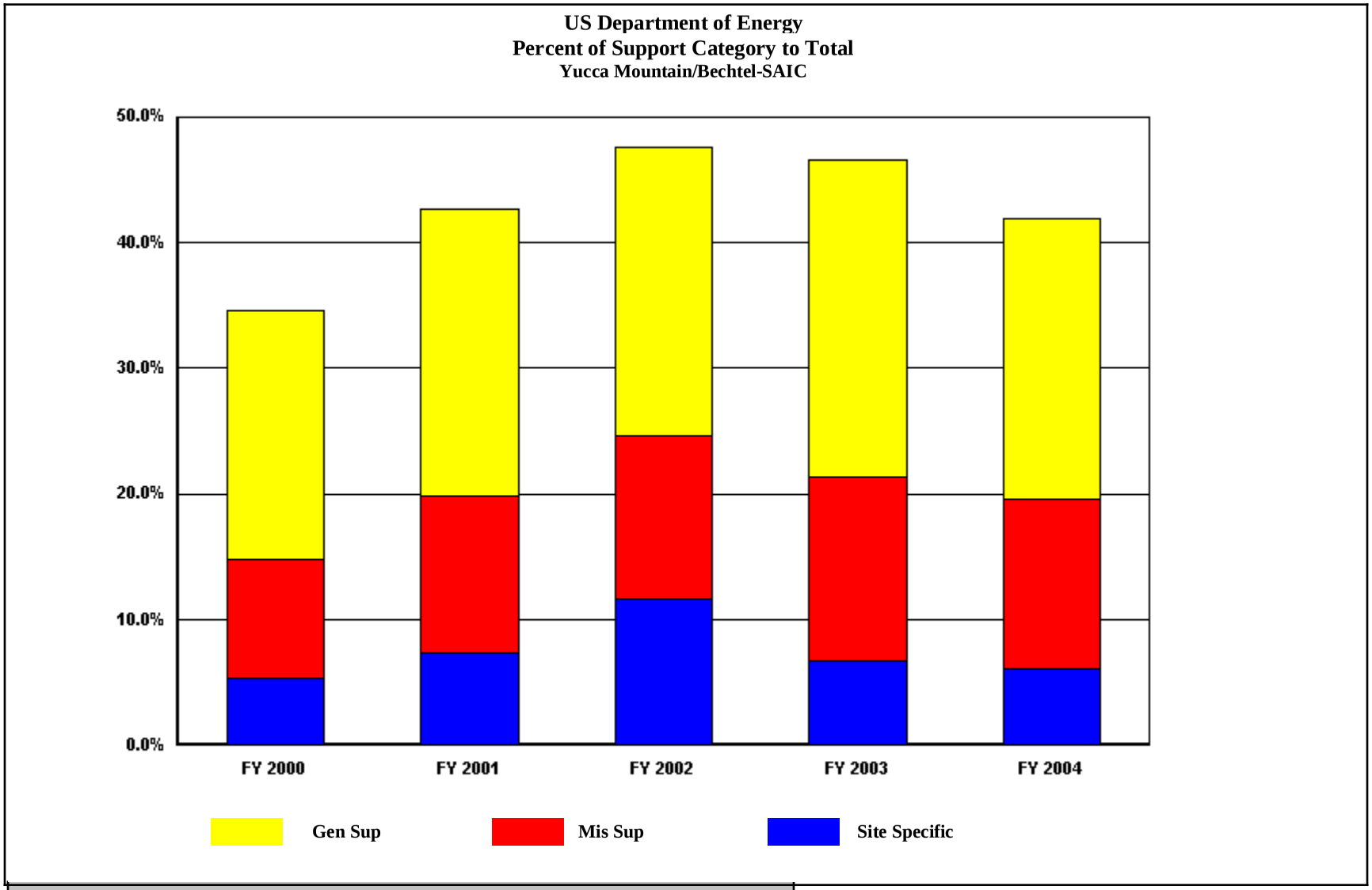


	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	70,384	88,834	104,786	111,086	118,982

US Department of Energy
Total Functional Support as a % of Total Costs
Yucca Mountain/Bechtel-SAIC



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Total Functional Support	34.6%	42.7%	47.5%	46.6%	41.9%



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gen Sup	19.8%	22.9%	22.9%	25.3%	22.3%
Mis Sup	9.4%	12.5%	13.0%	14.6%	13.5%
Site Specific	5.4%	7.3%	11.6%	6.7%	6.1%

SITE OVERVIEW AND CHARACTERISTIC

BACKGROUND

In 2002, the Department of Energy (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 OCRWM and its Office of Repository Development (ORD) has been Bechtel SAIC Company, LLC, (BSC). During FY 2003 and FY 2004, OCRWM and BSC have focused on repository design and licensing activities.

On July 26, 2004, BSC submitted a draft License Application for DOE acceptance review. The draft was comprised of nearly 5,000 pages of scientific and technical information collected over a period of years. This document is a consolidation of the enormous and high-quality scientific efforts of the program, which has been translated into the safety basis of the geologic repository. Refinements to the draft License Application are continuing.

The draft License Application did not address the D.C. Circuit Court of Appeals July 9, 2004, decision regarding the U.S. Environmental Protection Agency (EPA) standard. The Court vacated the 10,000 year compliance period portion of the EPA standard because it found that period to not be based upon and consistent with the findings and recommendation of the National Academy of Sciences. The DOE is evaluating what approach to take to address the lack of a compliance period in submitting the License Application to the NRC.

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 nuclear-generated 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 co-disposal of high-level radioactive waste generated by Department of Defense programs.

Additional information about OCRWM, ORD, and the Yucca Mountain Project can be found on OCRWM's Web site: ocrwm.doe.gov

DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

EXECUTIVE DIRECTION
The increase in costs for the Executive Direction is primarily due to the addition of the Organizational Assurance scope that develops management strategies and policies, and leads the implementation of business management processes to improve organizational and human performance.

LEGAL
The increase in legal costs reflects the addition of two employees plus services of outside counsel working on the silicosis litigation defense.

INFORMATION OUTREACH
The increase in Information/Outreach Activities is mainly due to pre-corridor selection scoping meetings for the Transportation Project.

OTHER
The decrease in the Other category is primarily due to fewer rate adjustment and credit invoices received from subcontractors of the former management and operation (M&O) contractor.

UTILITIES
The increase in Utilities is due to the costs associated with additional buildings and space that was acquired in FY 2004 and an overall increase in utility rates.

SAFEGUARDS AND SECURITY
The decrease in Safeguards and Security is due to the decrease in support that was previously required in FY 2003 for implementation of the Foreign Access Central Tracking System (FACTS).

TAXES
The decrease in Taxes is primarily due to the cessation of the Nevada Business Tax at the end of FY 2003. In FY 2004, the Nevada Business Tax was replaced with the Nevada Gross Payroll Tax, which is allocated as part of the fringe benefit rate applied to labor dollars.

COST SAVINGS INITIATIVES

($ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR ($ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Benefits Plan Savings	893	In response to a projected twenty percent increase in medical benefits costs, and to less than satisfactory ratings of the medical benefits plans, a careful review of the company's existing health and welfare benefits plans was conducted. As a result of the review, a competitive rebid of these plans was completed and a new health care plan provider was selected that offers more competitive rates in the areas of medical, life and disability benefits. The resulting cost savings is reflected in decreased medical, life and disability benefits costs. Cost savings for FY 2004 totaled $892,751. Life and Disability Benefits Savings $210,008 Medical Benefits Savings $682,743 Total Benefit Plans Savings $892,751	

SUPPORT COST BY FUNCTIONAL ACTIVITY REPORT

DEFINITIONS

A. General Support:

1. **Executive Direction** - 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. **Human Resources** - 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. **Chief Financial Officer** - 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. **Procurement** - 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. **Legal** - Includes costs associated with legal counsel support and litigation support. Includes outside legal support and ethics functions.

6. **Central Administrative Services** - 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. **Program/Project Planning & Control** - 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. **Information/Outreach Activities** - 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

   Public Relations/Information - 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.
   Technology Transfer - 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.
   Technical Information Management - Includes all costs associated with activities to develop and make available technical information.
   Employee Outreach Programs - Includes all costs associated with activities by employees utilizing their technical expertise for the benefit of external stakeholders.
   Other Information Outreach Activities - 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. **Information Services** - 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. **Other** - 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. Mission Support:

11. **Environmental** 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. **Safety & Health** - 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.

    Industrial Hygiene - 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).

Industrial Safety - 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.

Occupational Medical Services - Occupational Medical Services includes all those activities that are intended to provide a comprehensive occupational medical program, including employee health examinations such as pre-placement 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.

Nuclear Safety - 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.

Radiation Protection - 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 radiation-generating 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.

Transportation Safety - 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.

Management and Oversight - 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. **Facilities Management** - 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.

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

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

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

14. **Maintenance** - 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:

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

Predictive Maintenance - 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.

Corrective Maintenance - 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.

Maintenance - 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.

General Maintenance - 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. Utilities - 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:

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

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

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

Sanitary Waste Disposal System - 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. Safeguards and Security - 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.

Protective Forces - 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.

Physical Security Protection Systems - 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.

Transportation - 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.

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.

Material Control and Accountability (MC&A) - 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.

Research & Development - 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.

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

Cyber Security - 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.

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. **Quality Assurance** - 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.

19. **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. **Management/Award Fee/Incentive Fee** - 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. **Taxes** - Includes state and municipal taxes, as well as "payments in lieu of taxes." Does not include taxes that are payroll related.

22. **Laboratory Directed Research and Development (LDRD), Plant Directed Research, Development and Demonstration Program (PDRD), and Site Directed Research, Development and Demonstration Program (SDRD)** – 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. **Mission Direct** - 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. **Capital/construction** - 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.

FISCAL YEAR 2004
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
WIPP/Westinghouse
West Valley/West Valley Nuclear Services
Yucca Mountain/Bechtel-SAIC
Y12/BWXT

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http://www.mbe.doe.gov/progliaison/scfa.htm