

# **U.S. Department of Energy**

## **Supplemental Support Cost By Functional Activity Information**



**Fiscal Year Ended September 30, 2005**

**The Support Cost By Functional Activity report and all supplemental functional support cost details from the 28 contributing sites are available online at: <http://www.mbe.doe.gov/progliaison/scfa.htm>**

**U.S. DEPARTMENT OF ENERGY  
FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY DATA  
TABLE OF CONTENTS**

**Introduction**

**Limitations of Functional Support Cost Data**

**Departmental Results and Trends**

**Cost Saving Initiatives**

**Trends in Total Support Cost by Functional Category**

**1. Summary - All Sites**

**2. Summary – Environmental Management (EM) Sites**

(Hanford, Idaho National Lab, Oak Ridge Environmental Management and Enrichment Facility, Rocky Flats, Savannah River, Waste Isolation Pilot Plant and West Valley)

**3. Summary - National Nuclear Security Administration (NNSA) Sites**

(Bettis Atomic Power Lab, Knolls Atomic Power Lab, Kansas City Plant, Los Alamos National Lab, Lawrence Livermore National Lab, Nevada, Pantex, Sandia National Lab and Y-12)

**4. Summary - Science (SC) Sites**

(Ames Lab, Argonne National Lab, Brookhaven National Lab, Fermi Lab, Lawrence Berkeley National Lab, Oak Ridge National Lab, Pacific Northwest National Lab, Princeton Lab and Stanford Linear Accelerator Center)

**All 28 Submitting Sites & Contractors**

Ames Laboratory/Iowa State University  
Argonne National Laboratory/University of Chicago  
Bettis Atomic Power Laboratory/Bechtel  
Brookhaven National Laboratory/Brookhaven Science Associates  
Fermi National Accelerator Laboratory/University Research Associates  
Hanford/Fluor Daniel, Bechtel & CH2M Hill

Idaho National Lab/Bechtel BWXT Idaho, LLC  
Kansas City Plant/Honeywell, FM&T  
Knolls Atomic Power Laboratory/Lockheed Martin  
Lawrence Berkeley National Laboratory/University of California  
Lawrence Livermore National Laboratory/University of California  
Los Alamos National Laboratory/University of California  
National Renewable Energy Laboratory/Midwest Research Institute  
Nevada/Bechtel Nevada  
Oak Ridge National Laboratory/UT-Battelle, LLC  
Oak Ridge Environmental Management & Enrichment Facility/Bechtel Jacobs  
Pacific Northwest National Laboratory/Battelle 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  
West Valley/West Valley Nuclear Services  
WIPP/Westinghouse  
Y12/BWXT  
Yucca Mountain/Bechtel-SAIC

## **Appendix A- Definitions**

## **Appendix B – All 28 Submitting Sites and Contractors**

*This report and additional functional support cost details from the 28 contributing sites are available online at: <http://www.mbe.doe.gov/progliaison/scfa.htm>*

# **U.S. DEPARTMENT OF ENERGY FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY INFO 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 contractor support costs for the Department's sites. This report is issued in response to the House Report, 105-581, accompanying the Energy and Water Development Appropriations Act for fiscal year (FY) 1999, which commended the Department on the development of the Support Cost by Functional Activity (SCFA) System and the annual SCFA Report. 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. An example of a direct mission activity (not included in support) could be a scientist directly involved in performing research. Support costs do not include the costs of capital equipment or construction.

While support costs represent a substantial amount of money, management of these costs is the responsibility of the predominant program at each site. DOE corporate budget and accounting systems do not provide visibility for these costs. This report provides the relevant insights into support costs for the Department.

## **WHY CAPTURE SCFA?**

The functional cost concept recognizes that the classification of costs as being charged in a direct or indirect manner is not relevant to measuring the activity required to support direct mission programs in the Department. Therefore, instead of classifying costs as direct or indirect, they are classified as either mission direct, construction or support costs. These components together represent total program costs. By eliminating the focus on how costs are distributed, a better picture may be obtained as to how much is being expended to support our critical missions and whether those amounts appear reasonable.

## **BACKGROUND**

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 the 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.

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 in response to requests from Congress and the Government Accountability Office (GAO), the Department’s Chief Financial Officer implemented the SCFA System. Site contractors input cost data into the SCFA System and DOE Field CFO’s review and certify each submission for accuracy. In implementing SCFA to track support-related costs, 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 were developed. These 22 specific categories fall into three broad categories: general support, mission support and site specific support. The remaining cost incurred by the Department represents direct mission activity, as well as capital equipment and construction costs. Definitions of support cost categories were developed jointly by the program offices, the Office of the Chief Financial Officer and FMSIC to ensure that contractors conform to uniform standards in reporting their support-related costs.

The SCFA Report is only one of several tools to help improve support cost management. 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.

## **FMSIC**

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 also established the SCFA Peer Reviews Program designed to ensure consistency and data integrity in support cost reporting. The Council meets periodically to discuss contractor financial management issues, including support costs and the results of peer reviews.

## **EXTERNAL AUDITS AND REVIEWS**

GAO recommended in its September 2002 report, *“DOE Contractor Management: Opportunities to Promote Initiatives That Could Reduce Support-Related Costs”* (GAO-02-1000) (<http://www.gao.gov/new.items/d021000.pdf>), 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 September 2005, the GAO issued its report, "*Department of Energy: Additional Opportunities Exist for Reducing Laboratory Contractors' Support Costs*", (GAO-05-897) (<http://www.gao.gov/new.items/d05897.pdf>). GAO concurs with the Department that indirect cost rates cannot be compared across sites and DOE can utilize support costs as a basis for assessing internal cost management.

In the report, GAO presented five recommendations for executive action:

- 1) Work with the Financial Management Systems Improvement Council (FMSIC) to clarify definitions of functional support cost categories.  
Action: Concur: The CFO is working with FMSIC to clarify functional support cost definitions.
- 2) Evaluate the effectiveness of the pilot award-term program at Sandia National Laboratories (SNL) prior to extending the program to other laboratories.  
Action: Concur: Evaluation of the SNL pilot has been completed and supported program extension.
- 3) Complete revisions to DOE Order 350.1 which will (1) extend the requirement to benchmark the value of employee benefits to all contractors, (2) require prompt corrective action if the value of benefits exceeds the allowable range, and (3) extend the benchmarking requirements to include the costs, as well as the values, of the benefits.  
Action: Concur: The Order is being revised and is targeted for issuance in FY 2006.
- 4) Develop a long-term sustainable maintenance approach for contractor facilities that meets day-to-day maintenance requirements, reduces the maintenance backlog and minimizes its reaccumulation.  
Action: Concur: The Department is developing long-term maintenance plans including estimated costs and milestones.
- 5) Require that each DOE management and operating contractor implement a process improvement program that routinely assesses the efficiency and effectiveness of business practices and other operations.  
Action: Concur: The FY 2006 SCFA reporting process will require contractors to define their formal process improvement program.

The Department has begun addressing the recommendations and is currently on track to complete corrective actions by September 2006.

**U.S. DEPARTMENT OF ENERGY**  
**FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY INFO**  
**LIMITATIONS OF FUNCTIONAL SUPPORT COST DATA**

This report is a cost management tool and cannot be used for making site-to-site comparisons due to the numerous site specific factors that influence supports costs. In addition, support cost alone should not be used to make broad program funding decisions. The report may be used in conjunction with other tools (e.g. budget reports, planning documents, etc.) to promote stronger program management and planning. By eliminating the focus on how costs are distributed, a better picture may be obtained as to how much is being expended for support activities and whether those amounts are reasonable.

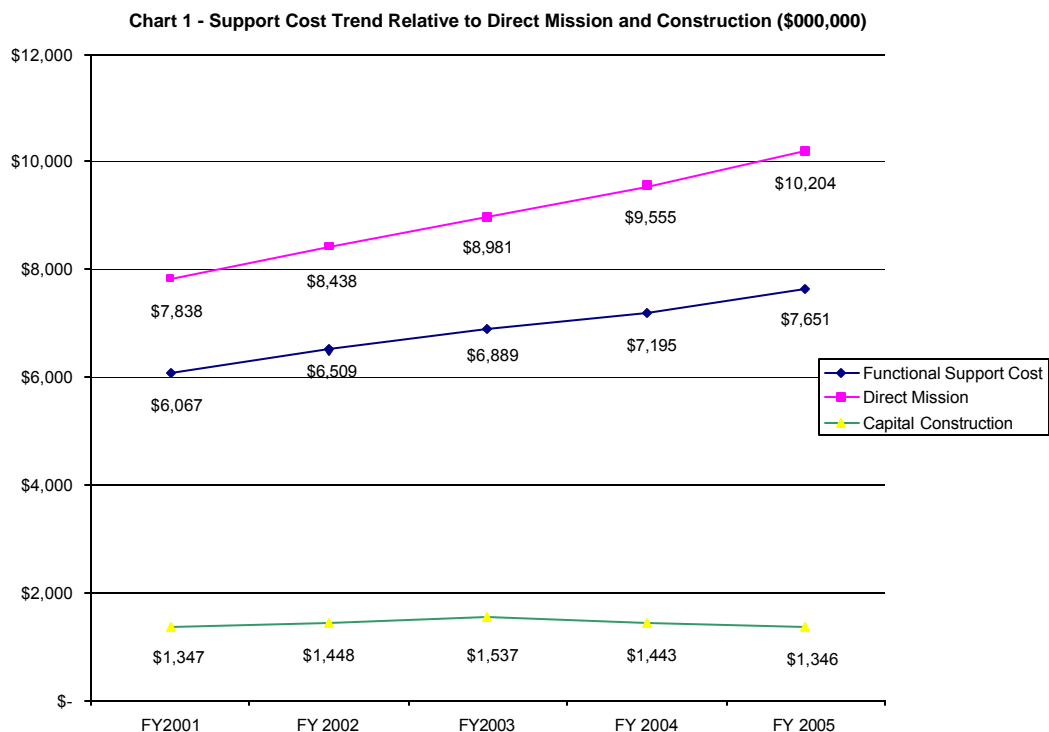
Functional support cost is not determined based on fully allocated cost and cannot automatically be interpreted as indirect/overhead costs as this term is defined by the Cost Accounting Standards (CAS) included in the Federal Acquisition Regulations. The contractors are subject to CAS and do not budget, accumulate or distribute costs in their formal accounting systems 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 requires 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 variances 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. DOE Field CFO's review and certify each submission for accuracy. 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 due to professional judgment involved in categorizing cost at each site. However, the current level of accuracy is sufficient for comparison of a given site over time, but not across sites.

## U.S. DEPARTMENT OF ENERGY FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY INFO DEPARTMENTAL RESULTS AND TRENDS

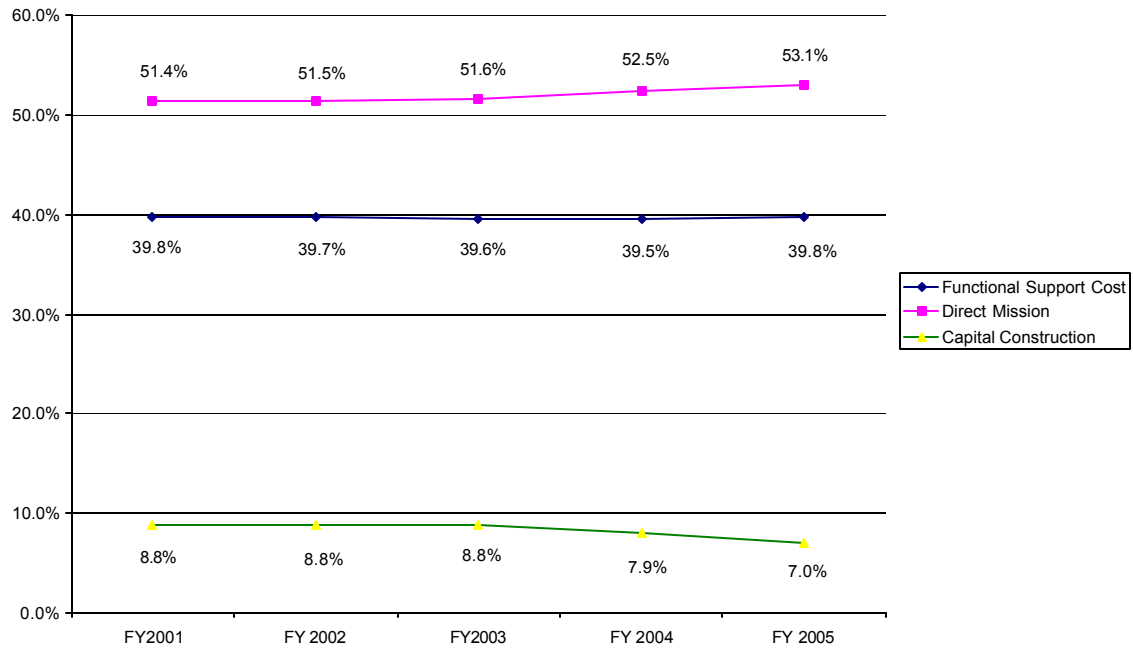
The Department’s 28 submitting contractors reported FY 2005 costs of \$19.2 billion; \$7.7 billion total functional support cost, \$10.2 billion direct mission and \$1.3 billion for construction. Refer to the tables titled “Trends in Total Support Cost by Functional Categories,” in this report for a detailed analysis of functional support cost for the Department and its major mission areas. The chart below reflects the five year trend in total functional support cost, direct mission and construction. Functional support cost and direct mission has increased \$1.6 billion and \$2.4 billion respectively for the period FY 2001 to FY 2005. Construction has remained relatively stable.



As the Department’s direct mission increases, the support must also increase. However, the percentage of support cost to the total Department expenditures remained stable while the percentage of direct mission cost to total cost increased. As Chart 2 shows, the FY 2005 percentage of functional support cost to total cost is 39.8 percent, the same as FY 2001, and the percentage ranged only .3 percent over the five years. The percentage of cost applied to direct mission increased from 51.4 percent to 53.1 percent.



**Chart 2 - % Of Total Cost for Each Component of Cost <sup>1/</sup>**



As reflected in the table below, the Department has been increasing the percentage of its budget spent on direct mission since the inception of functional support cost in FY 1995. Currently the Department is spending the largest percent of its budget on mission direct activities since 1995.

	Functional Support as a % of Total Cost	Mission Direct as a % of Total Cost
FY 1995	43.6	45.3
FY 2000	40.4	51.9
FY 2005	39.8	53.1

\* Less Capital Equipment and Construction

1/ The FY 2004 Functional Support Cost percentage was adjusted by .1% from the FY 2004 Support Cost Report due to an \$8 million restatement recommended by an SCFA peer review.

## I. Largest Support Cost Categories

<b>SUBCATEGORY</b>	<b>FY 2005 (\$000,000)</b>	<b>FY 2005 % of TOTAL COST</b>	<b>FY 2005 % OF TOTAL FUNCTIONAL SUPPORT COST</b>
<b>Maintenance</b>	896.9	4.7%	11.7%
<b>Safety and Health</b>	813.4	4.2%	10.6%
<b>Information Services</b>	790.7	4.1%	10.3%
<b>Total</b>	2,501.0	13.0%	32.6%

In FY 2005, the three largest functional support cost categories accounted for approximately 33 percent of the total functional support costs at the 28 contributing sites. Over past years, these three categories have traditionally accounted for the highest percentage of total cost. Trend data for these and all other categories can be found on page 16. The following is a brief description of each of the subcategories identified in Table 2.

- **Maintenance** - A significant number of the Department's facilities are aging and obsolete. The Department has begun to require contractors to address the backlog of maintenance projects while they also manage current maintenance needs. Although this effort will involve significant costs in the near term, it could reduce functional support costs in the long term.
- **Safety and Health** - 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. In FY 2005, the Secretary approved a new DOE oversight policy to ensure DOE line management and contractor assurance processes are established to further enhance the protection of the public and the Department's workers. The Office of Security and Safety Performance Assurance conducted inspections to evaluate the effectiveness of selected institutional safety and health processes.
- **Information Services** – 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 reflect an increased customer demand for software and associated licenses, desktop services and integrated computing network services.

## II. Three Support Cost Categories with the Largest Percent Increase

SUBCATEGORY	FY 2001 (\$000,000)	FY 2005 (\$000,000)	% Increase	% of Total Cost FY 2001	% of Total Cost FY 2005
<b>Safeguards and Security</b>	508.7	783.9	54.1%	3.3%	4.1%
<b>Management/Incentive Fee</b>	406.4	594.2	46.2%	2.7%	3.1%
<b>LDRD/PDRD/SDRD</b>	234.6	337.9	44.0%	1.5%	1.8%
<b>Total</b>	1,149.7	1,716.0	49.3%	7.5%	8.9%

Overall, from FY 2001 to FY 2005, functional support costs increased by approximately \$1.58 billion. The following provides a description of the three categories with the largest percentage increases in functional support costs from FY 2001 to FY 2005:

- **Safeguards and Security** - 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 2001 to FY 2005. NNSA implemented corrective action plans to address the recommendations provided by special study groups in security operations. The Secretary approved a DOE oversight policy to ensure DOE line management and contractor assurance processes are established to further enhance the protection of national security assets.
- **Management/Incentive Fee** - The increase in this category results mainly from the Department's implementation of incentive award contracts used for cleanup and site closure. The objective was to significantly decrease the amount of time projected to clean up the Department's sites. Reducing the timeline resulted in significant reductions in the cost and risks associated with the contaminated sites. In the mid 1990's, cleanup at Rocky Flats was expected to take at least 30 years. The contractor (Kaiser-Hill) achieved incentives for the accelerated cleanup, which was accomplished in 2006, significantly ahead of schedule. More recent applications of incentive contracts are also placing more price risk upon the contractors which in turn results in higher fees expected by the contractors. As an example, the most recent changes involving the Savannah River (Westinghouse) contract resulted in increased fee opportunities as a result of the contractor accepting significantly increased risk associated with cleanup activities.

- Laboratory Directed Research and Development (LDRD), Plant Directed Research, Development and Demonstration Program (PDRD), and Site Directed Research, Development and Demonstration Program (SDRD) - Overall, from FY 2001 to FY 2005, the percentage of cost expended on LDRD/PDRD/SDRD for the National Nuclear Security Administration and the Office of Science increased by 52 percent and 44 percent respectively. Sandia National Laboratory increased by \$41.5 million, the largest increase among submitting sites. Three sites that had PDRD activity in FY 2005 and had no cost in FY 2001; Kansas City (\$1.683 million), Pantex (\$1.388 million) and Y-12 (\$5.104 million). Also, Nevada had zero SDRD activity in FY 2001 and \$4.881 million in FY 2005. Within the overall context of maintaining the vitality of the laboratories, the specific purpose of these three programs is to provide the DOE laboratories with funds to undertake creative and innovative research and development. All three components reflect costs incurred in accordance with legislative authority.

### III. Trends

The following table presents comparative FY 2005 and FY 2001 data for each category.

**Table 4 – Trends in Functional Support Cost Sub-Categories  
(All dollars are in thousands)**

	FY 2005 As a % of Functional support cost	FY 2001 As a % of Support Cost	FY 2005 Functional support cost \$	FY 2001 Functional support cost \$	Change As a % of Functional support cost FY 2001 - FY 2005	\$ Change FY 2001 - FY 2005
Safeguards and Sec.	10.24%	8.38%	783,865	508,706	1.86%	275,159
Management Fee	7.77%	6.70%	594,222	406,432	1.07%	187,790
Facilities Mgmt	7.69%	7.02%	588,117	425,807	0.67%	162,310
Information Services	10.33%	10.39%	790,677	630,405	-0.06%	160,272
Safety and Health	10.63%	11.26%	813,392	683,442	-0.63%	129,950
LDRD/PDRD/SDRD	4.42%	3.87%	337,910	234,606	0.55%	103,304
Maintenance	11.72%	13.48%	896,906	817,884	-1.76%	79,022
Utilities	5.61%	6.04%	429,268	366,729	-0.43%	62,539
Program/Proj Control	3.21%	3.05%	245,568	184,874	0.16%	60,694
Human Resources	2.92%	2.95%	223,110	178,723	-0.03%	44,387
Executive Direction	2.57%	2.52%	196,503	152,803	0.05%	43,700
Lab/Tech Support	2.59%	2.56%	197,979	155,510	0.03%	42,469
Other	1.75%	1.55%	133,953	93,907	0.20%	40,046
Information Outreach	2.29%	2.24%	175,162	136,092	0.05%	39,070
Procurement	2.14%	2.07%	164,051	125,446	0.07%	38,605
Central Admin Serv.	2.80%	3.06%	214,079	185,916	-0.26%	28,163
Taxes	1.45%	1.38%	111,238	83,852	0.07%	27,386
Quality Assurance	1.92%	2.11%	146,639	127,844	-0.19%	18,795
CFO	2.11%	2.42%	161,850	146,687	-0.31%	15,163
Logistics Support	2.28%	2.66%	174,414	161,145	-0.38%	13,269
Environmental	2.72%	3.33%	208,245	201,760	-0.61%	6,485
Legal	0.84%	0.96%	64,046	58,404	-0.12%	5,642
Total Functional support cost	100.00%	100.00%	7,651,194	6,066,974	0.00%	1,584,220

## IV. Long-Term Analysis

The following table presents summarized actual data and projected costs that have been redirected to mission direct activities as a result of efficiencies displayed by the Support Cost Report.

**Table 5 – Support Cost Analysis**  
(All dollars are in thousands)

<b>Fiscal Year</b>	<b>(Mission Direct + Construction + Support Cost)= Total Cost</b>	<b>Support Cost As A Percentage of Total Cost</b>	<b>Percent Change From FY 1995 Baseline</b>	<b>Support Cost \$ Change From the FY 1995 Baseline</b>
1995	\$13,992,966	43.6		
1996	\$13,298,807	42.6	1.0%	\$132,988
1997	\$12,771,135	42.8	0.8%	\$102,169
1998	\$12,905,644	42.3	1.3%	\$167,773
1999	\$13,312,461	41.7	1.9%	\$252,937
2000	\$14,394,608	40.4	3.2%	\$460,627
2001	\$15,252,034	39.8	3.8%	\$579,577
2002	\$16,394,699	39.7	3.9%	\$639,393
2003	\$17,407,027	39.6	4.0%	\$696,281
2004	\$18,192,510	39.5	4.1%	\$745,893
2005	\$19,200,927	39.8	3.8%	\$729,635
<b>Total</b>				<b>\$4,507,275</b>

If you consider FY 1995 data as a baseline, we can estimate how many additional dollars would have been consumed as support cost from FY 1996 through FY 2005. If the FY 1995 support cost rate remained at 43.6% in the 10 subsequent years, mission direct funding would have decreased by over \$4.5 billion. In FY 2005 alone, over \$700 million extra dollars would have been spent on support costs had we maintained the same rate as in FY 1995. Due to our documented results, more dollars have been invested in mission direct activities and less in support cost.

**U.S. DEPARTMENT OF ENERGY  
FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY INFO  
COST SAVING INITIATIVES**

Many of the Department's major contractors provided information related to initiatives implemented to manage and reduce functional support costs at their sites. Several of these initiatives may have broader applicability and may provide opportunities that could be used by other 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.

Below are several cost saving initiatives, identified by the Department's contractors with claimed savings of \$6.7 million in FY 2005. These savings, reductions or cost avoidances have been realized and reinvested at each site.

**WASTE INFORMATION MANAGEMENT SYSTEM**

**Reported by Oak Ridge Environmental Mgmt. Enrichment Facility (\$2.3 M).**

- This Process Improvement Project was undertaken to help reduce the 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.

**LEVERAGING COST SAVINGS AGREEMENTS**

**Reported by Pacific Northwest National Lab (\$2.0 M).**

- Battelle continues to leverage cost savings by negotiating broad agreements that benefit all of the labs managed by Battelle. This results in an estimated annual savings to PNNL in excess of \$2M for airline agreements, travel services contracts, purchase agreements, rental car agreements, joint systems and joint software purchases.

### **ELIMINATION OF SUPPLEMENTAL INSTITUTIONS**

**Reported by Argonne National Lab and Sandia National Lab (\$1.3 M).**

- The on-site Argonne service station and swimming pool were closed, which resulted in cost avoidance of \$353K for needed facility repairs and upgrades, plus an estimated \$22K in annual maintenance costs. Also, Sandia closed the Coronado Club (an eating facility) in FY 2005 resulting in a cost savings of \$900K.

### **REDUCTION OF PROTECTED AREA VEHICLE TRAFFIC**

**Reported by Y-12 (\$671K).**

- A Six Sigma Black Belt Process Improvement Project was initiated to reduce the number of vehicle entries into the Protected Area by 50% to meet a business imperative. A ticket process was implemented with an assigned number of tickets allocated to each division. The reduction in entries also served to reduce the amount of non-productive time people spend waiting in line for access.

### **RELOCATION TIERED AGREEMENTS**

**Reported by Kansas City (\$459K).**

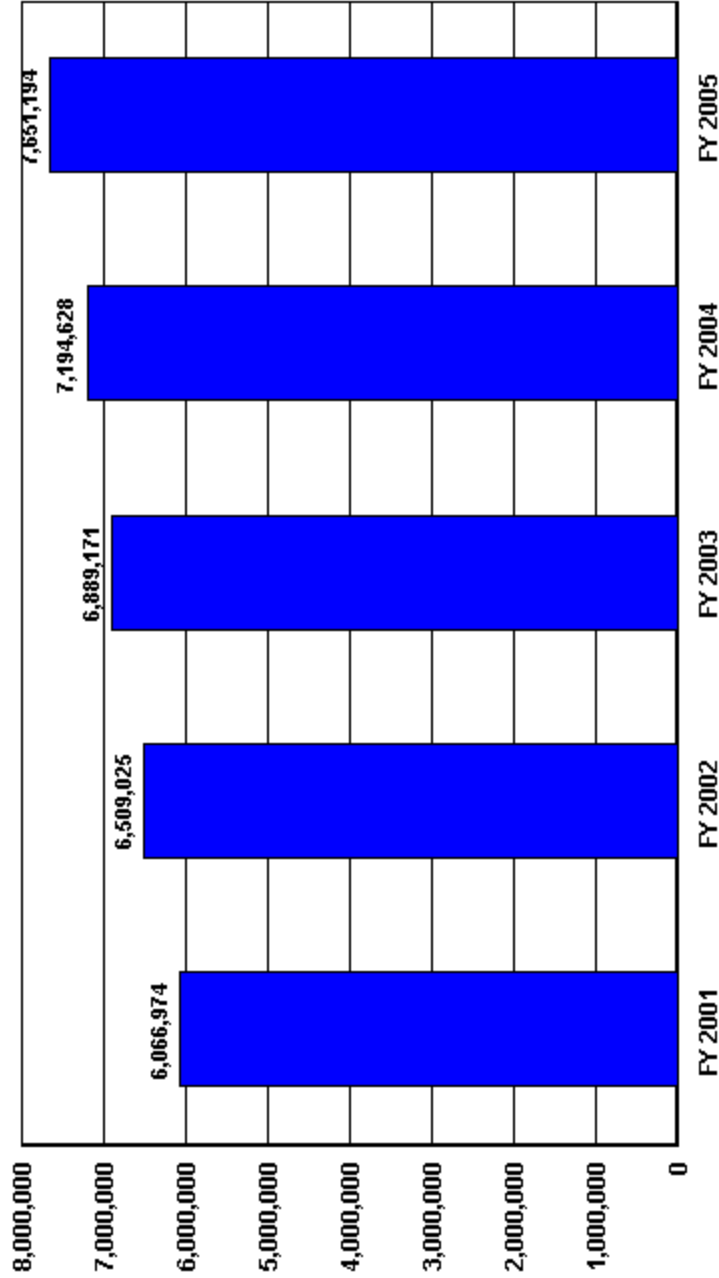
- Depending on the type of hire, three options are available that will set limits on cost allowances for relocation expenses. This will make it easier to estimate and control costs. Previously, there was only one relocation agreement with maximum benefits for all new hires and transfers, resulting in high costs to Departmental overhead and expenses that were difficult to manage or predict.



**Trends in Total Support Cost by Functional Categories**  
**TOTAL FOR ALL 28 SITES (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	15,252,034	16,394,699	17,407,027	18,192,510	19,200,927	3,948,893	25.9%
<b>Capital Construction</b>	1,347,050	1,447,954	1,536,512	1,443,083	1,345,977	-1,073	-0.1%
<b>Total Costs Less Construction</b>	13,904,984	14,946,745	15,870,515	16,749,427	17,854,950	3,949,966	28.4%
<b>Total Support Costs</b>	6,066,974	6,509,025	6,889,171	7,194,628	7,651,194	1,584,220	26.1%
<b>Mission Direct Operation</b>	7,838,010	8,437,720	8,981,344	9,554,799	10,203,756	2,365,746	30.2%
<b>Mission Direct Operation as % of Total Cost</b>	51.4%	51.5%	51.6%	52.5%	53.1%		
<b>Capital Construction as % of Total Cost</b>	8.8%	8.8%	8.8%	7.9%	7.0%		
<b>Total Support Cost as % of Total Cost</b>	39.8%	39.7%	39.6%	39.5%	39.8%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	39.8%	39.7%	39.6%	39.5%	39.8%		
<b>TOTAL SUPPORT COST</b>	6,066,974	6,509,025	6,889,171	7,194,628	7,651,194	1,584,220	26.1%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	12.4%	12.2%	12.4%	12.2%	12.3%		
<b>TOTAL GENERAL SUPPORT</b>	1,893,257	1,992,833	2,164,569	2,214,117	2,368,999	475,742	25.1%
EXECUTIVE DIRECTION	152,803	172,997	186,601	191,424	196,503	43,700	28.6%
HUMAN RESOURCES	178,723	185,541	203,197	205,081	223,110	44,387	24.8%
CFO	146,687	139,671	146,118	153,405	161,850	15,163	10.3%
PROCUREMENT	125,446	128,259	144,617	154,464	164,051	38,605	30.8%
LEGAL	58,404	59,034	65,104	56,405	64,046	5,642	9.7%
CENTRAL ADMIN SERVICES	185,916	198,764	211,307	207,018	214,079	28,163	15.1%
PROGRAM/PROJECT CONTROL	184,874	187,146	221,984	225,678	245,568	60,694	32.8%
INFORMATION OUTREACH	136,092	144,341	146,407	170,152	175,162	39,070	28.7%
INFORMATION SERVICES	630,405	702,730	750,954	774,594	790,677	160,272	25.4%
OTHER	93,907	74,350	88,280	75,896	133,953	40,046	42.6%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	22.6%	22.5%	22.2%	22.2%	22.1%		
<b>TOTAL MISSION SUPPORT</b>	3,448,827	3,686,724	3,859,710	4,046,425	4,238,825	789,998	22.9%
ENVIRONMENTAL	201,760	199,881	201,512	198,755	208,245	6,485	3.2%
SAFETY AND HEALTH	683,442	729,138	755,875	762,440	813,392	129,950	19.0%
FACILITIES MANAGEMENT	425,807	485,316	540,751	591,567	588,117	162,310	38.1%
MAINTENANCE	817,884	821,381	843,643	861,869	896,906	79,022	9.7%
UTILITIES	366,729	390,424	385,671	388,728	429,268	62,539	17.1%
SAFEGUARDS AND SECURITY	508,706	608,987	677,717	744,771	783,865	275,159	54.1%
LOGISTICS SUPPORT	161,145	165,631	165,327	167,476	174,414	13,269	8.2%
QUALITY ASSURANCE	127,844	125,949	131,545	147,798	146,639	18,795	14.7%
LABORATORY/TECHNICAL SUPPORT	155,510	160,017	157,669	183,021	197,979	42,469	27.3%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.8%	5.1%	5.0%	5.1%	5.4%		
<b>TOTAL SITE SPECIFIC</b>	724,890	829,468	864,892	934,086	1,043,370	318,480	43.9%
MANAGEMENT/INCENTIVE FEE	406,432	454,564	465,405	514,964	594,222	187,790	46.2%
TAXES	83,852	94,428	89,948	101,311	111,238	27,386	32.7%
LDRD / PDRD / SDRD	234,606	280,476	309,539	317,811	337,910	103,304	44.0%

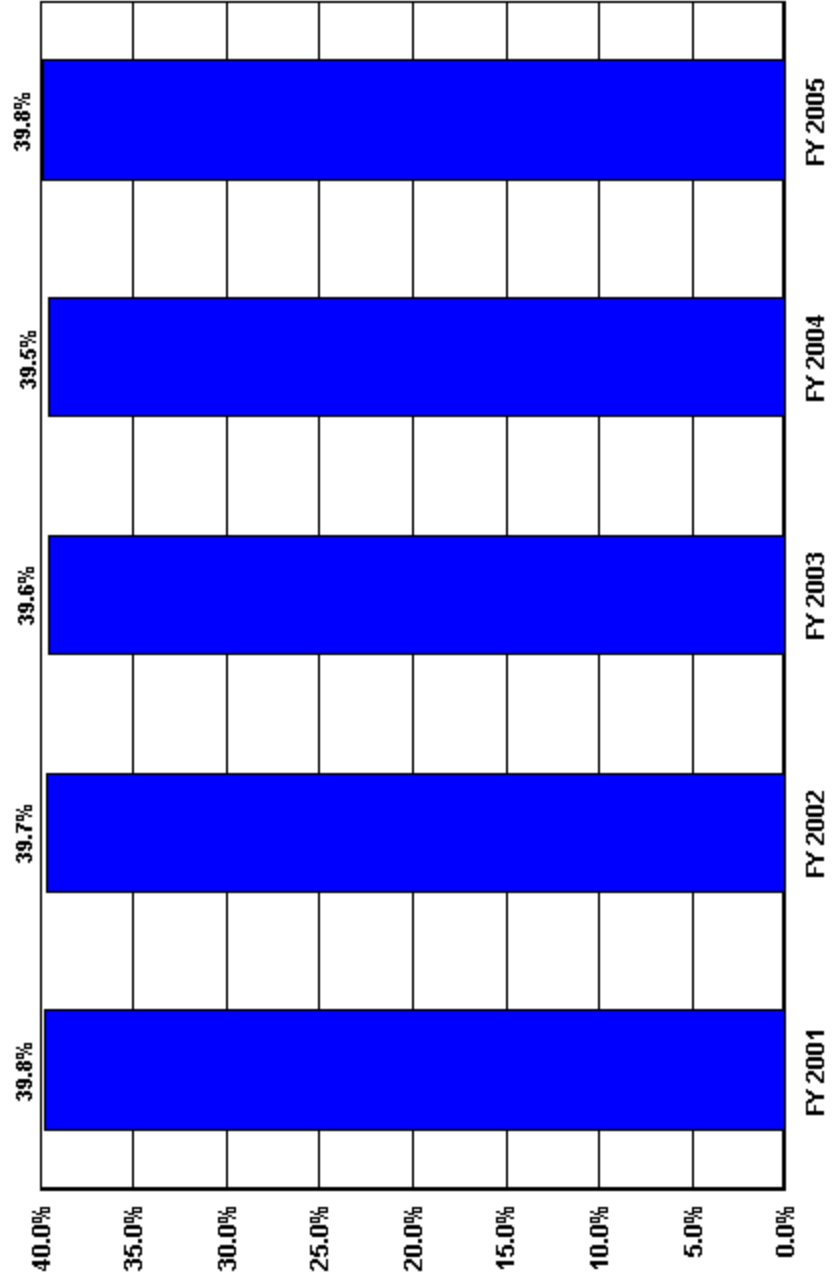
US Department of Energy  
 Total Functional Support  
 TOTAL FOR ALL 28 SITES



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	6,066,974	6,509,025	6,889,171	7,194,628	7,651,194

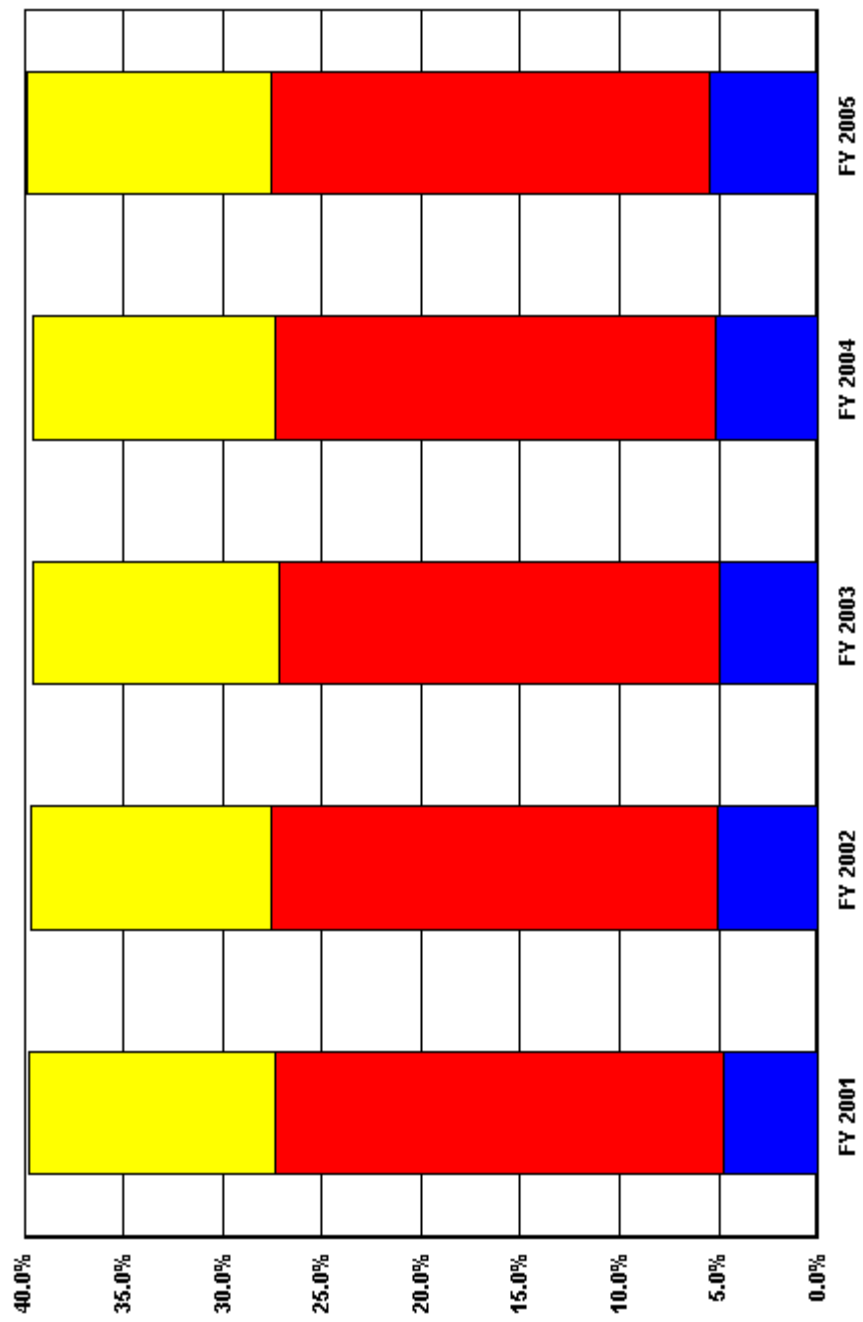
**US Department of Energy  
Total Functional Support as a % of Total Costs  
TOTAL FOR ALL 28 SITES**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>39.8%</b>	<b>39.7%</b>	<b>39.6%</b>	<b>39.5%</b>	<b>39.8%</b>

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



■ Gen Sup     
 ■ Mis Sup     
 ■ Site Specific

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	4.8%	5.1%	5.1%	5.1%	5.4%
Mis Sup	22.6%	22.5%	22.2%	22.2%	22.1%
Site Specific	12.4%	12.2%	12.4%	12.2%	12.3%

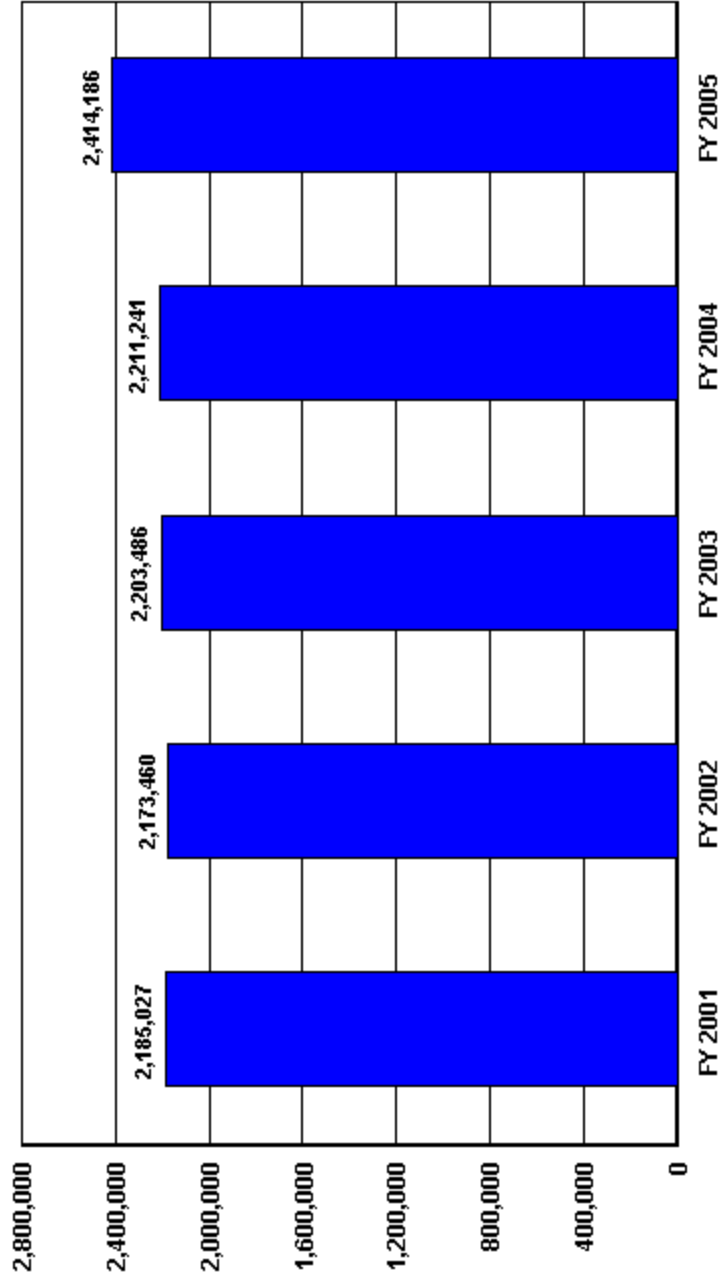
## Trends in Total Support Cost by Functional Categories

Total EM Sites (\$000)

FY 2005

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	4,537,281	4,608,603	4,850,316	5,022,107	5,436,742	899,461	19.8%
<b>Capital Construction</b>	331,611	307,985	245,417	213,373	171,095	-160,516	-48.4%
<b>Total Costs Less Construction</b>	4,205,670	4,300,618	4,604,899	4,808,734	5,265,647	1,059,977	25.2%
<b>Total Support Costs</b>	2,185,027	2,173,460	2,203,486	2,211,241	2,414,186	229,159	10.5%
<b>Mission Direct Operation</b>	2,020,643	2,127,158	2,401,413	2,597,493	2,851,461	830,818	41.1%
<b>Mission Direct Operation as % of Total Cost</b>	44.5%	46.2%	49.5%	51.7%	52.4%		
<b>Capital Construction as % of Total Cost</b>	7.3%	6.7%	5.1%	4.2%	3.1%		
<b>Total Support Cost as % of Total Cost</b>	48.2%	47.2%	45.4%	44.0%	44.4%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	48.2%	47.2%	45.4%	44.0%	44.4%		
<b>TOTAL SUPPORT COST</b>	2,185,027	2,173,460	2,203,486	2,211,241	2,414,186	229,159	10.5%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	13.0%	12.2%	11.9%	11.0%	11.6%		
<b>TOTAL GENERAL SUPPORT</b>	589,863	563,157	577,563	551,013	631,825	41,962	7.1%
EXECUTIVE DIRECTION	35,307	36,173	33,594	33,549	37,063	1,756	5.0%
HUMAN RESOURCES	55,974	54,253	56,086	56,169	58,940	2,966	5.3%
CFO	51,980	40,540	40,550	39,979	42,291	-9,689	-18.6%
PROCUREMENT	41,558	39,939	42,938	42,530	45,471	3,913	9.4%
LEGAL	22,765	22,213	25,232	16,732	17,049	-5,716	-25.1%
CENTRAL ADMIN SERVICES	59,700	60,169	67,051	58,571	64,255	4,555	7.6%
PROGRAM/PROJECT CONTROL	97,473	96,626	93,838	96,536	102,640	5,167	5.3%
INFORMATION OUTREACH	29,958	27,861	24,685	20,601	20,694	-9,264	-30.9%
INFORMATION SERVICES	177,958	166,192	171,476	157,440	161,869	-16,089	-9.0%
OTHER	17,190	19,191	22,113	28,906	81,553	64,363	374.4%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	29.5%	29.0%	27.8%	26.9%	25.8%		
<b>TOTAL MISSION SUPPORT</b>	1,340,509	1,337,161	1,349,021	1,350,546	1,401,939	61,430	4.6%
ENVIRONMENTAL	93,231	83,457	81,935	73,384	74,980	-18,251	-19.6%
SAFETY AND HEALTH	333,897	345,275	334,331	333,109	365,887	31,990	9.6%
FACILITIES MANAGEMENT	133,842	116,922	133,089	128,724	123,331	-10,511	-7.9%
MAINTENANCE	309,199	308,796	304,468	291,694	307,706	-1,493	-0.5%
UTILITIES	90,133	94,409	99,481	92,763	102,962	12,829	14.2%
SAFEGUARDS AND SECURITY	174,080	190,564	208,714	229,653	216,099	42,019	24.1%
LOGISTICS SUPPORT	66,276	61,799	60,786	59,404	65,032	-1,244	-1.9%
QUALITY ASSURANCE	60,422	56,553	51,171	53,313	53,084	-7,338	-12.1%
LABORATORY/TECHNICAL SUPPORT	79,429	79,386	75,046	88,502	92,858	13,429	16.9%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	5.6%	5.9%	5.7%	6.2%	7.0%		
<b>TOTAL SITE SPECIFIC</b>	254,655	273,142	276,902	309,682	380,422	125,767	49.4%
MANAGEMENT/INCENTIVE FEE	212,651	231,932	238,698	278,122	343,012	130,361	61.3%
TAXES	21,385	21,913	19,642	20,681	21,697	312	1.5%
LDRD / PDRD / SDRD	20,619	19,297	18,562	10,879	15,713	-4,906	-23.8%

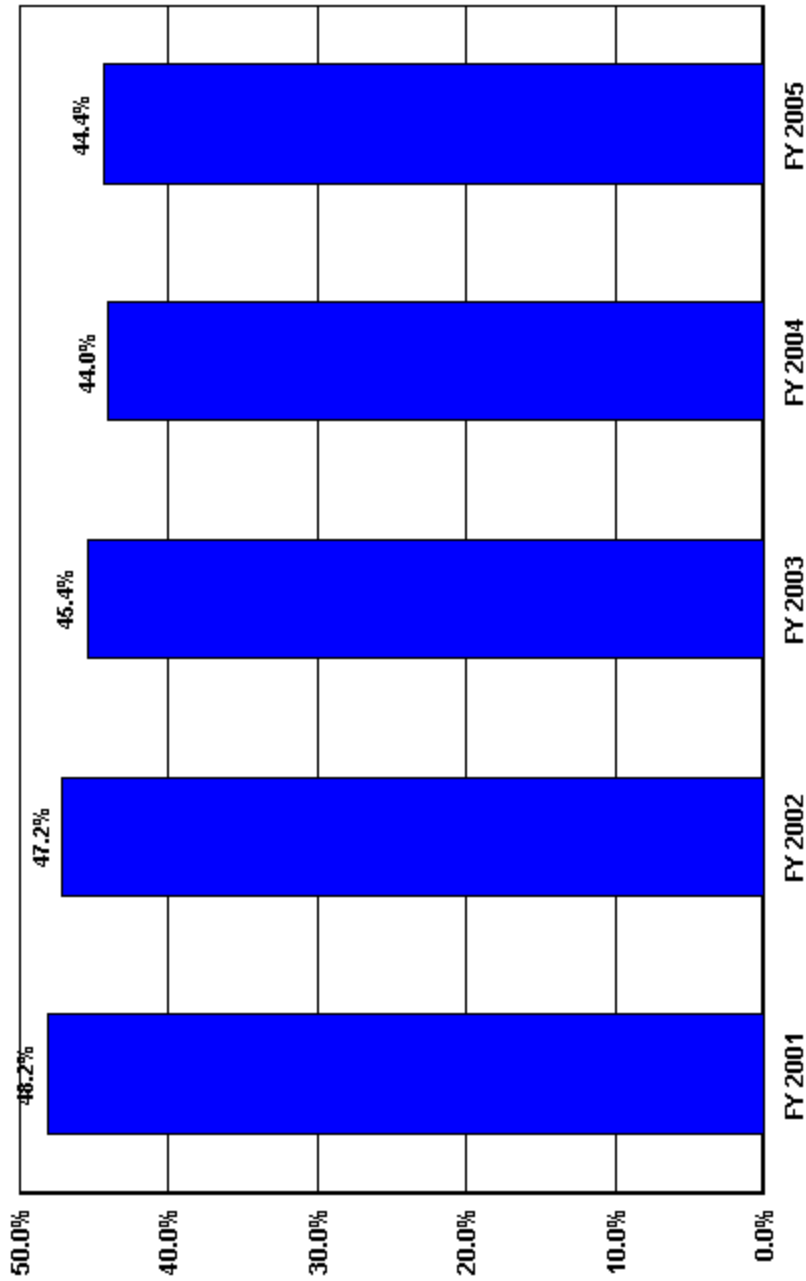
US Department of Energy  
 Total Functional Support  
 Total EM Sites



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	2,185,027	2,173,460	2,203,486	2,211,241	2,414,186

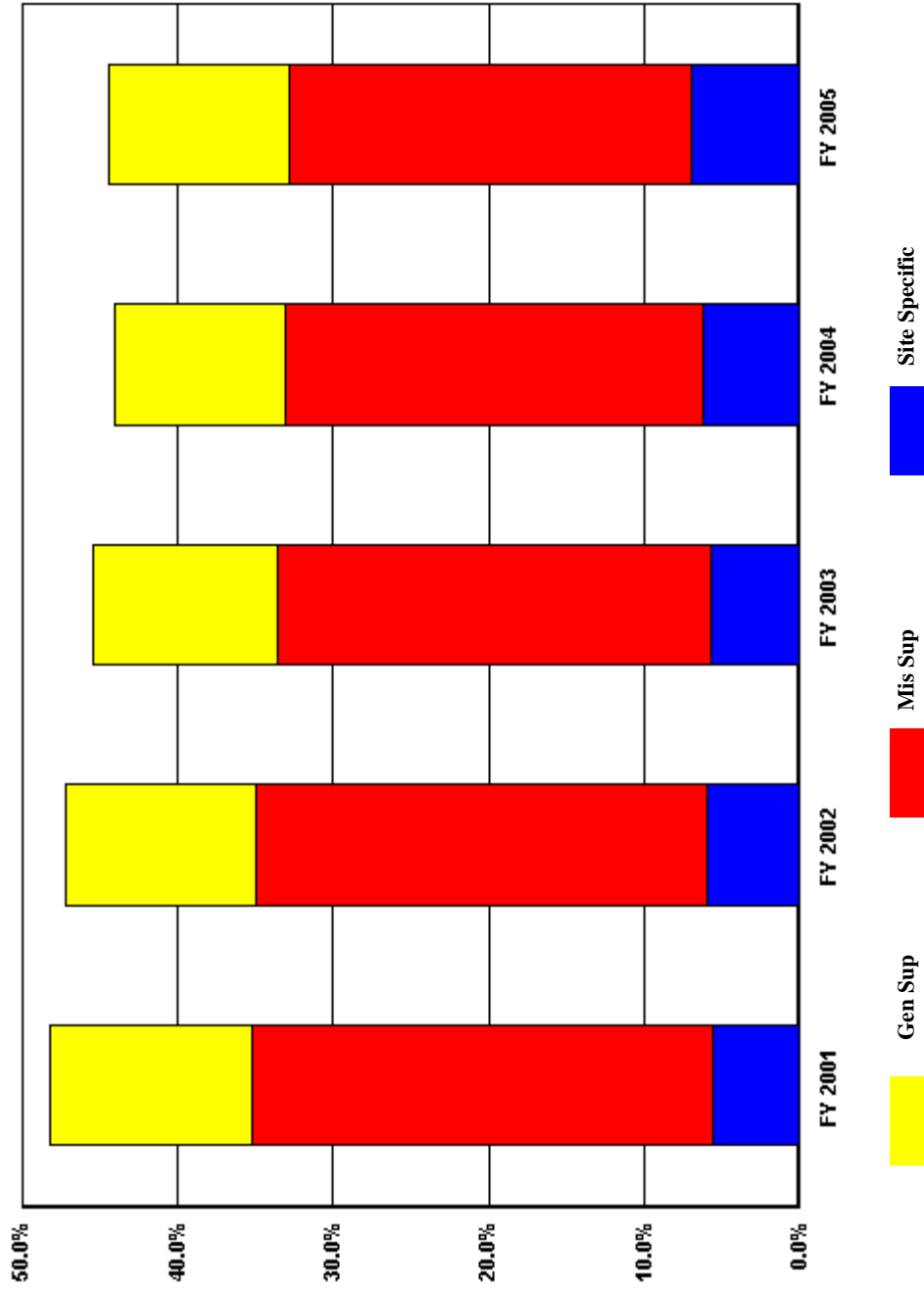
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Total EM Sites**



 Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>48.2%</b>	<b>47.2%</b>	<b>45.4%</b>	<b>44.0%</b>	<b>44.4%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	13.0%	12.2%	11.9%	11.0%	11.6%
Mis Sup	29.5%	29.0%	27.8%	26.9%	25.8%
Site Specific	5.6%	5.9%	6.2%	6.2%	7.0%



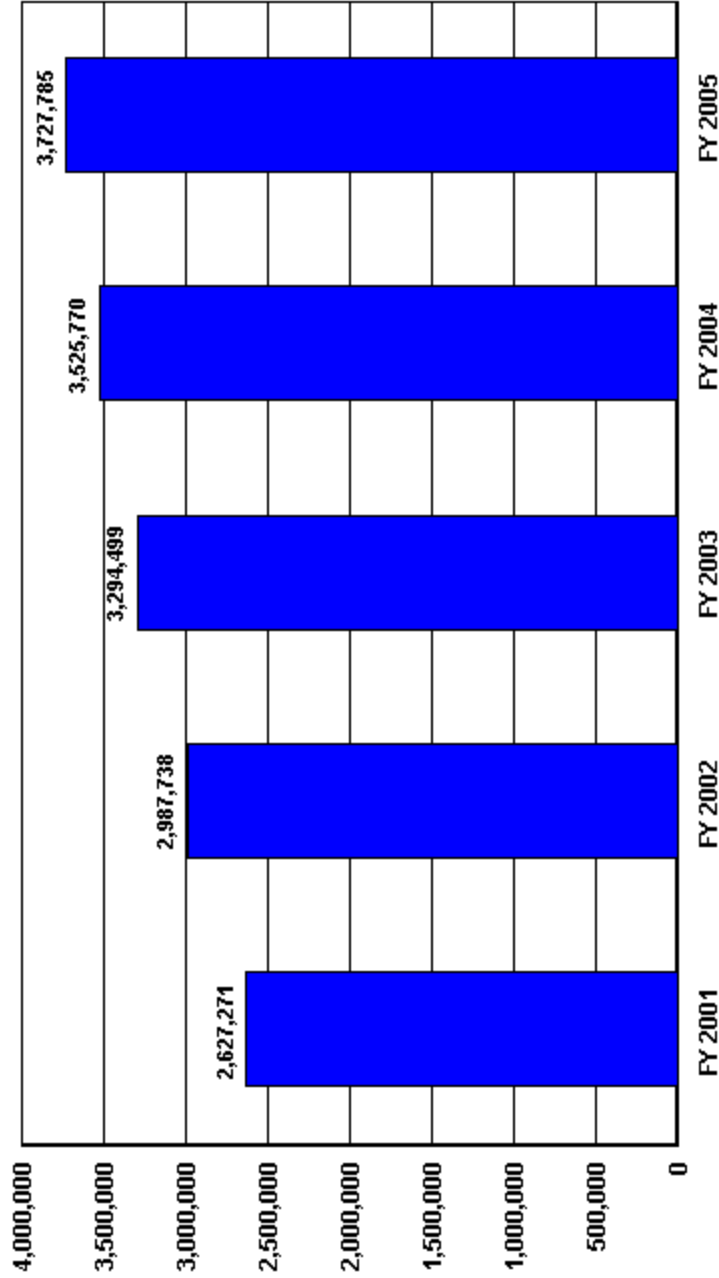
## Trends in Total Support Cost by Functional Categories

Total NNSA Sites (\$000)

FY 2005

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	7,012,121	7,828,446	8,462,837	8,776,954	9,260,922	2,248,801	32.1%
<b>Capital Construction</b>	673,316	725,250	867,559	773,737	768,869	95,553	14.2%
<b>Total Costs Less Construction</b>	6,338,805	7,103,196	7,595,278	8,003,217	8,492,053	2,153,248	34.0%
<b>Total Support Costs</b>	2,627,271	2,987,738	3,294,499	3,525,770	3,727,785	1,100,514	41.9%
<b>Mission Direct Operation</b>	3,711,534	4,115,458	4,300,779	4,477,447	4,764,268	1,052,734	28.4%
<b>Mission Direct Operation as % of Total Cost</b>	52.9%	52.6%	50.8%	51.0%	51.4%		
<b>Capital Construction as % of Total Cost</b>	9.6%	9.3%	10.3%	8.8%	8.3%		
<b>Total Support Cost as % of Total Cost</b>	37.5%	38.2%	38.9%	40.2%	40.3%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	37.5%	38.2%	38.9%	40.2%	40.3%		
<b>TOTAL SUPPORT COST</b>	2,627,271	2,987,738	3,294,499	3,525,770	3,727,785	1,100,514	41.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	11.7%	11.7%	12.3%	12.6%	12.7%		
<b>TOTAL GENERAL SUPPORT</b>	821,262	914,502	1,041,699	1,108,136	1,176,929	355,667	43.3%
EXECUTIVE DIRECTION	76,710	87,114	91,919	90,692	86,869	10,159	13.2%
HUMAN RESOURCES	88,278	94,814	106,969	107,785	122,111	33,833	38.3%
CFO	52,690	55,212	56,317	61,594	64,510	11,820	22.4%
PROCUREMENT	55,128	58,320	69,829	76,261	82,231	27,103	49.2%
LEGAL	24,326	24,400	27,097	24,503	27,549	3,223	13.2%
CENTRAL ADMIN SERVICES	80,302	88,861	95,421	96,698	97,469	17,167	21.4%
PROGRAM/PROJECT CONTROL	47,484	49,864	86,190	105,388	121,639	74,155	156.2%
INFORMATION OUTREACH	56,990	60,209	63,009	64,036	64,621	7,631	13.4%
INFORMATION SERVICES	304,760	377,959	419,544	454,288	474,702	169,942	55.8%
OTHER	34,594	17,749	25,404	26,891	35,228	634	1.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	20.7%	21.1%	21.2%	22.1%	22.0%		
<b>TOTAL MISSION SUPPORT</b>	1,449,443	1,652,982	1,791,833	1,935,399	2,041,715	592,272	40.9%
ENVIRONMENTAL	73,969	83,114	80,177	83,305	94,380	20,411	27.6%
SAFETY AND HEALTH	239,448	278,483	310,907	310,606	331,094	91,646	38.3%
FACILITIES MANAGEMENT	210,956	274,355	300,763	343,463	346,216	135,260	64.1%
MAINTENANCE	322,556	316,305	351,713	376,126	383,930	61,374	19.0%
UTILITIES	172,320	189,894	175,314	182,835	192,346	20,026	11.6%
SAFEGUARDS AND SECURITY	279,663	346,474	396,448	440,339	485,304	205,641	73.5%
LOGISTICS SUPPORT	62,337	70,003	70,500	72,398	74,845	12,508	20.1%
QUALITY ASSURANCE	47,888	51,093	58,954	72,482	71,759	23,871	49.8%
LABORATORY/TECHNICAL SUPPORT	40,306	43,261	47,057	53,845	61,841	21,535	53.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	5.1%	5.4%	5.4%	5.5%	5.5%		
<b>TOTAL SITE SPECIFIC</b>	356,566	420,254	460,967	482,235	509,141	152,575	42.8%
MANAGEMENT/INCENTIVE FEE	127,853	143,976	157,538	163,930	168,268	40,415	31.6%
TAXES	60,126	68,537	68,278	73,725	84,165	24,039	40.0%
LDRD / PDRD / SDRD	168,587	207,741	235,151	244,580	256,708	88,121	52.3%

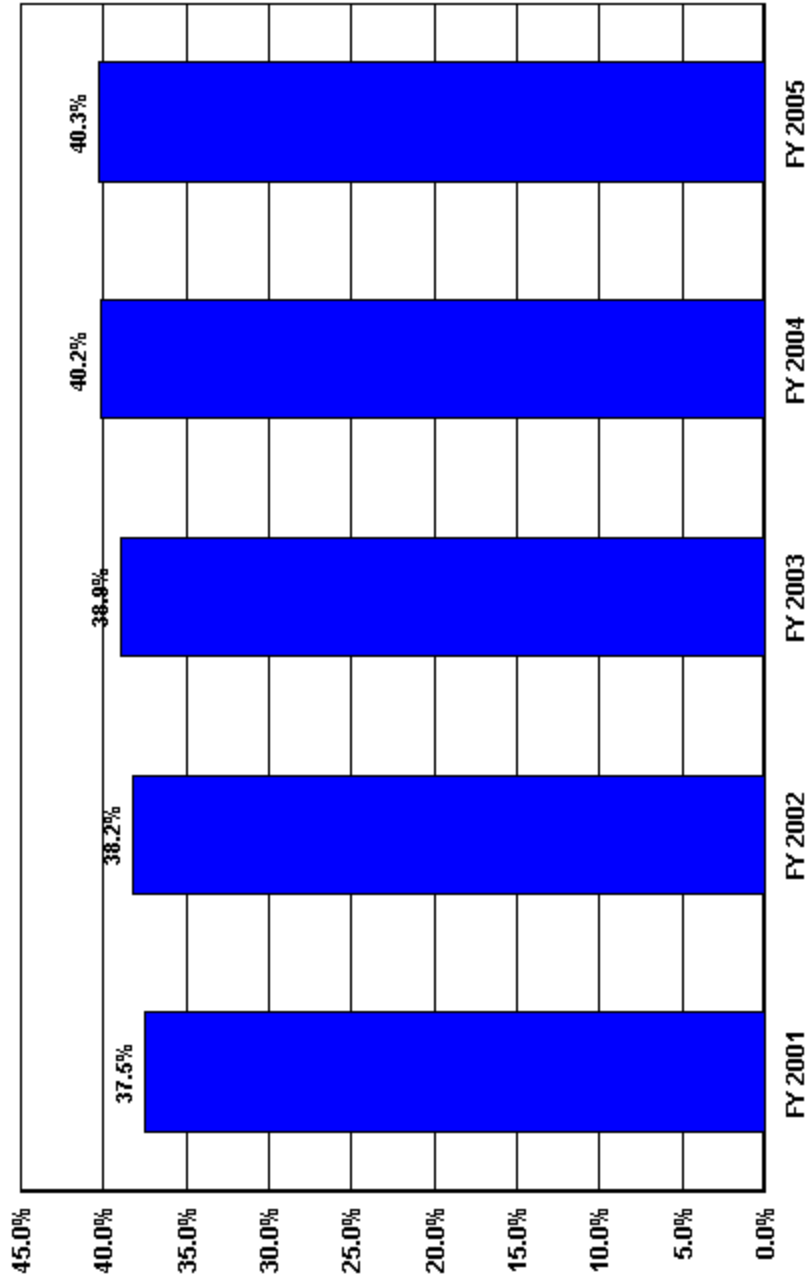
US Department of Energy  
 Total Functional Support  
 Total NNSA Sites



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	2,627,271	2,987,738	3,294,499	3,525,770	3,727,785

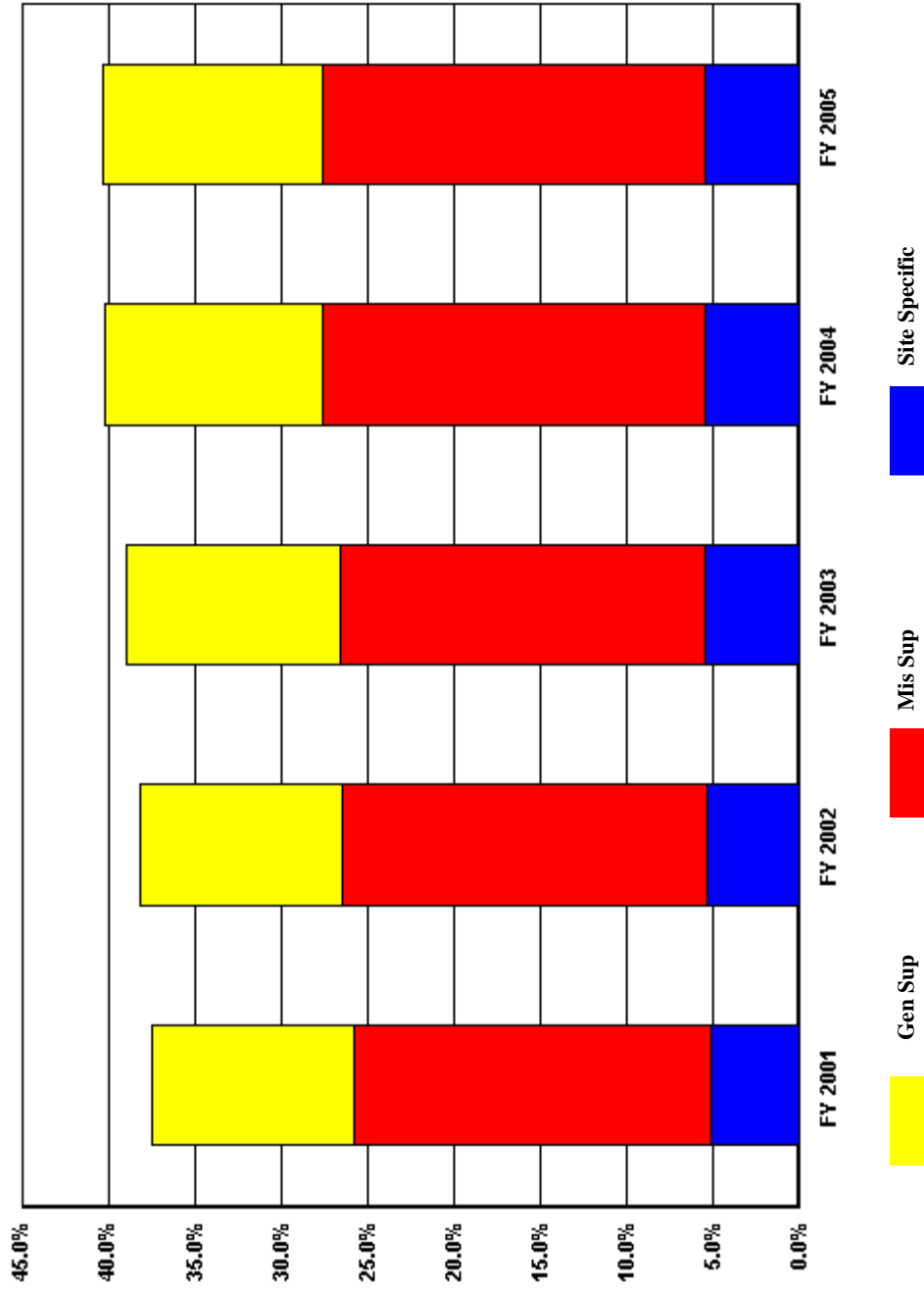
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Total NNSA Sites**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>37.5%</b>	<b>38.2%</b>	<b>38.9%</b>	<b>40.2%</b>	<b>40.3%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	11.7%	11.7%	12.3%	12.6%	12.7%
Mis Sup	20.7%	21.1%	21.2%	22.1%	22.0%
Site Specific	5.1%	5.4%	5.4%	5.5%	5.5%

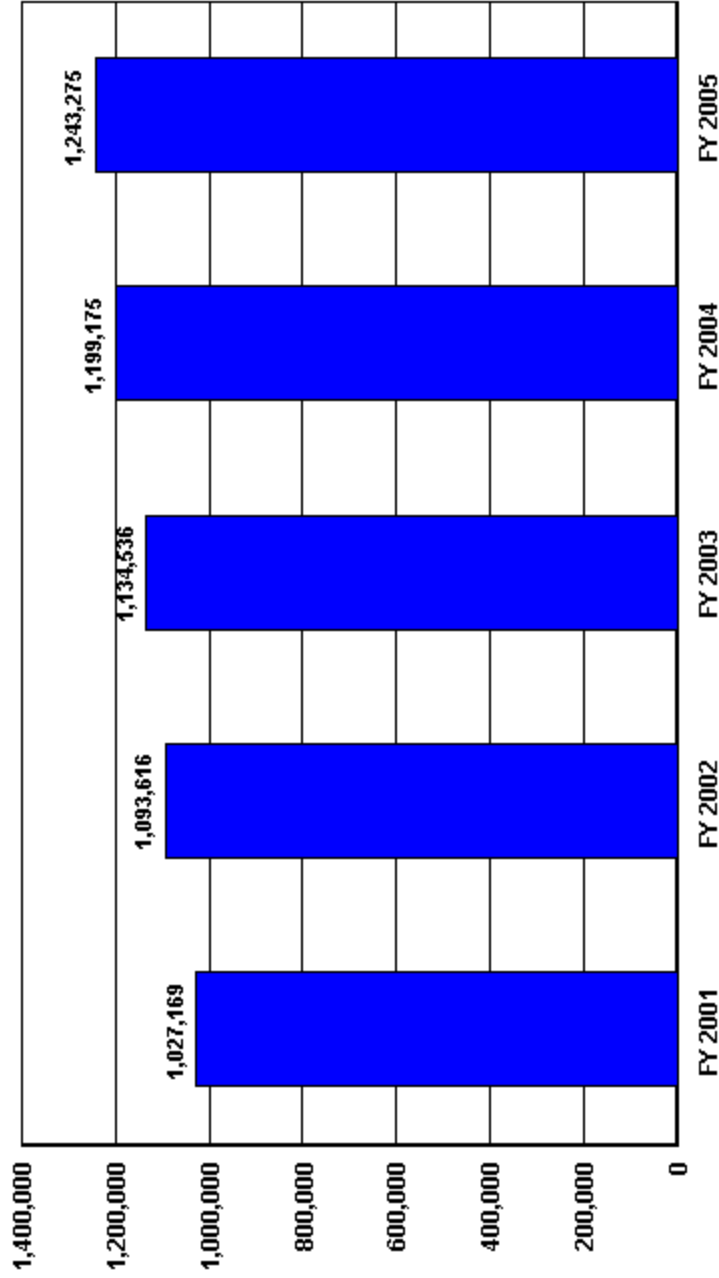
**Trends in Total Support Cost by Functional Categories**

Total SC Sites (\$000)

FY 2005

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	3,161,664	3,403,677	3,494,621	3,767,686	3,921,501	759,837	24.0%
<b>Capital Construction</b>	335,901	404,320	414,893	442,388	391,537	55,636	16.6%
<b>Total Costs Less Construction</b>	2,825,763	2,999,357	3,079,728	3,325,298	3,529,964	704,201	24.9%
<b>Total Support Costs</b>	1,027,169	1,093,616	1,134,536	1,199,175	1,243,275	216,106	21.0%
<b>Mission Direct Operation</b>	1,798,594	1,905,741	1,945,192	2,126,123	2,286,689	488,095	27.1%
<b>Mission Direct Operation as % of Total Cost</b>	56.9%	56.0%	55.7%	56.4%	58.3%		
<b>Capital Construction as % of Total Cost</b>	10.6%	11.9%	11.9%	11.7%	10.0%		
<b>Total Support Cost as % of Total Cost</b>	32.5%	32.1%	32.5%	31.8%	31.7%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	32.5%	32.1%	32.5%	31.8%	31.7%		
<b>TOTAL SUPPORT COST</b>	1,027,169	1,093,616	1,134,536	1,199,175	1,243,275	216,106	21.0%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	11.9%	11.8%	12.1%	11.4%	11.2%		
<b>TOTAL GENERAL SUPPORT</b>	376,752	402,677	424,090	429,345	441,095	64,343	17.1%
EXECUTIVE DIRECTION	35,001	42,820	51,517	55,702	60,751	25,750	73.6%
HUMAN RESOURCES	27,223	28,459	30,851	32,289	33,059	5,836	21.4%
CFO	34,997	36,541	42,056	44,732	47,963	12,966	37.0%
PROCUREMENT	22,371	23,147	24,691	28,635	29,256	6,885	30.8%
LEGAL	9,044	9,725	10,361	11,486	11,106	2,062	22.8%
CENTRAL ADMIN SERVICES	34,761	34,617	34,730	36,095	39,306	4,545	13.1%
PROGRAM/PROJECT CONTROL	28,511	28,649	29,945	12,499	11,883	-16,628	-58.3%
INFORMATION OUTREACH	35,012	37,797	42,160	68,346	74,537	39,525	112.9%
INFORMATION SERVICES	118,083	125,258	121,072	122,758	120,543	2,460	2.1%
OTHER	31,749	35,664	36,707	16,803	12,691	-19,058	-60.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	17.8%	17.4%	17.5%	17.5%	17.5%		
<b>TOTAL MISSION SUPPORT</b>	563,614	593,058	612,933	657,837	685,683	122,069	21.7%
ENVIRONMENTAL	27,609	26,191	33,293	35,963	33,146	5,537	20.1%
SAFETY AND HEALTH	102,848	99,691	102,366	110,166	106,956	4,108	4.0%
FACILITIES MANAGEMENT	65,229	76,991	88,843	99,914	101,529	36,300	55.7%
MAINTENANCE	151,535	163,537	154,139	165,324	173,482	21,947	14.5%
UTILITIES	100,226	102,147	107,163	108,243	126,323	26,097	26.0%
SAFEGUARDS AND SECURITY	42,016	50,075	51,543	56,017	61,116	19,100	45.5%
LOGISTICS SUPPORT	25,994	27,943	28,967	30,743	29,025	3,031	11.7%
QUALITY ASSURANCE	12,654	9,374	11,339	11,078	11,072	-1,582	-12.5%
LABORATORY/TECHNICAL SUPPORT	35,503	37,109	35,280	40,389	43,034	7,531	21.2%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.7%	2.9%	2.8%	3.0%	3.0%		
<b>TOTAL SITE SPECIFIC</b>	86,803	97,881	97,513	111,993	116,497	29,694	34.2%
MANAGEMENT/INCENTIVE FEE	39,191	40,795	40,109	43,085	46,031	6,840	17.5%
TAXES	2,212	3,648	1,578	6,556	4,977	2,765	125.0%
LDRD / PDRD / SDRD	45,400	53,438	55,826	62,352	65,489	20,089	44.2%

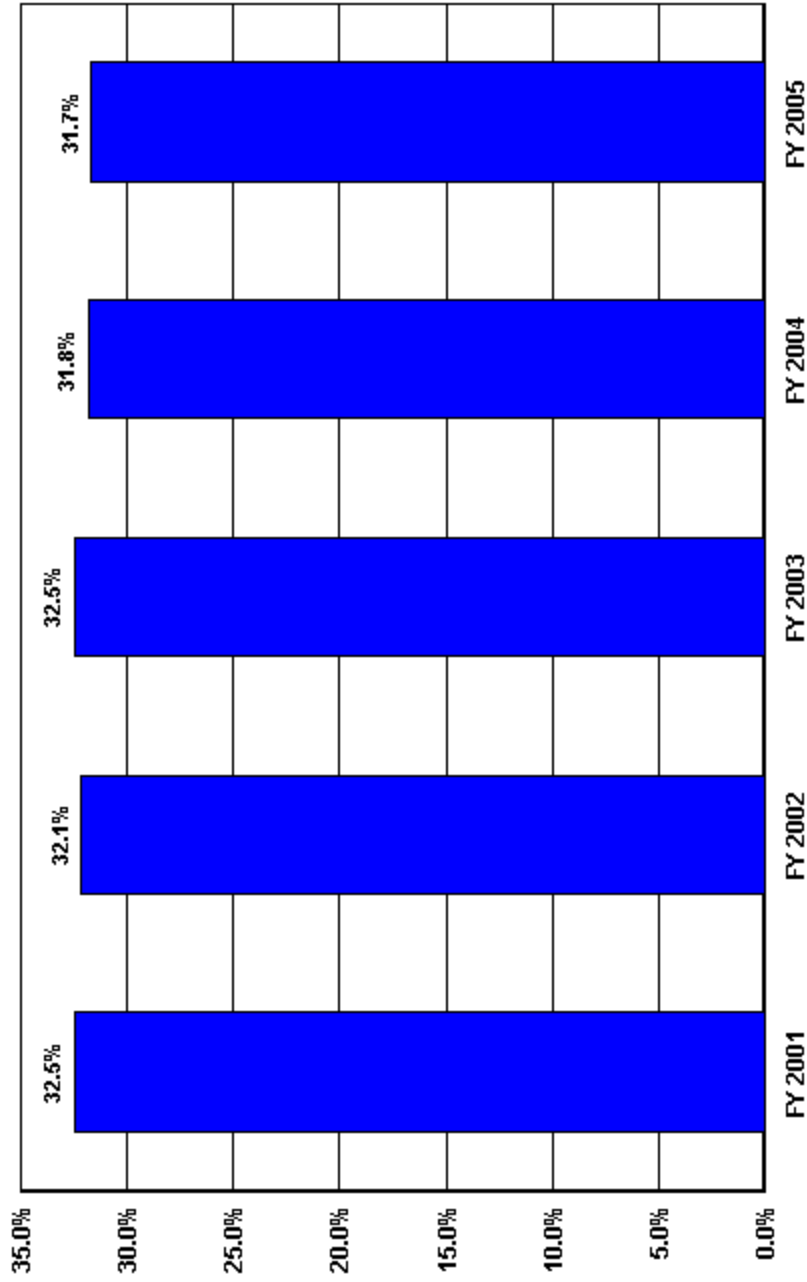
US Department of Energy  
 Total Functional Support  
 Total SC Sites



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	1,027,169	1,093,616	1,134,536	1,199,175	1,243,275

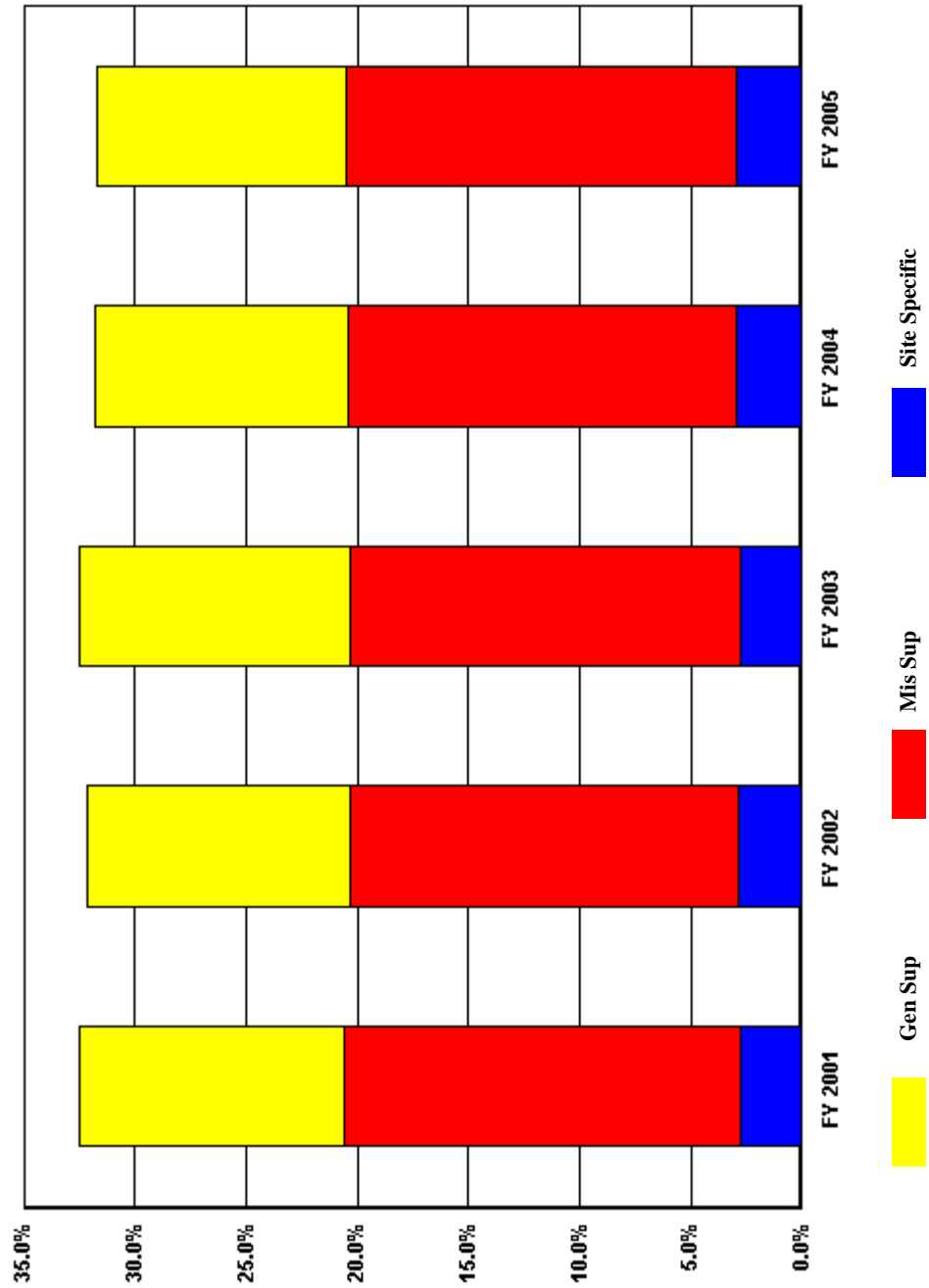
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Total SC Sites**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>32.5%</b>	<b>32.1%</b>	<b>32.5%</b>	<b>31.8%</b>	<b>31.7%</b>

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



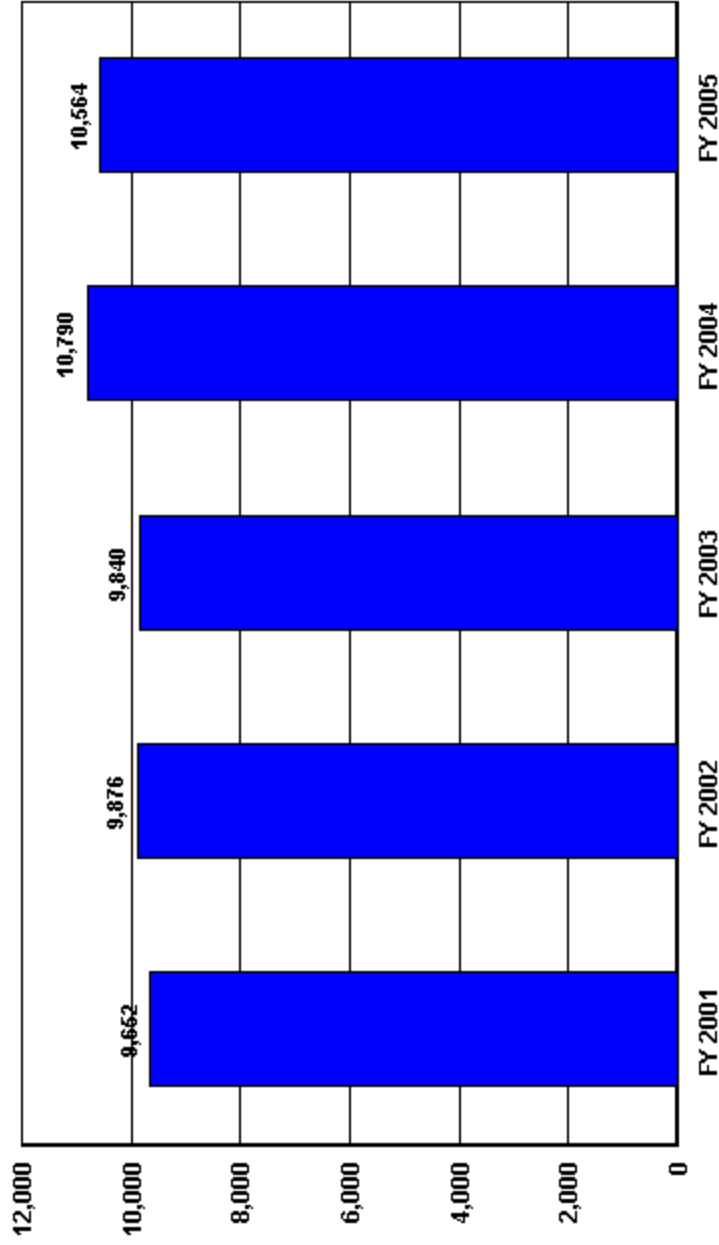
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	11.9%	11.8%	12.1%	11.4%	11.2%
Mis Sup	17.8%	17.4%	17.5%	17.5%	17.5%
Site Specific	2.7%	2.9%	3.0%	3.0%	3.0%



**Trends in Total Support Cost by Functional Categories**  
**Ames National Lab/Iowa State University (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	23,804	25,973	26,240	28,196	29,600	5,796	24.3%
<b>Capital Construction</b>	1,654	2,538	1,650	2,435	2,517	863	52.2%
<b>Total Costs Less Construction</b>	22,150	23,435	24,590	25,761	27,083	4,933	22.3%
<b>Total Support Costs</b>	9,652	9,876	9,840	10,790	10,564	912	9.4%
<b>Mission Direct Operation</b>	12,498	13,559	14,750	14,971	16,519	4,021	32.2%
<b>Mission Direct Operation as % of Total Cost</b>	52.5%	52.2%	56.2%	53.1%	55.8%		
<b>Capital Construction as % of Total Cost</b>	6.9%	9.8%	6.3%	8.6%	8.5%		
<b>Total Support Cost as % of Total Cost</b>	40.5%	38.0%	37.5%	38.3%	35.7%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	40.5%	38.0%	37.5%	38.3%	35.7%		
<b>TOTAL SUPPORT COST</b>	9,652	9,876	9,840	10,790	10,564	912	9.4%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	17.9%	15.9%	13.7%	15.0%	11.6%		
<b>TOTAL GENERAL SUPPORT</b>	4,251	4,128	3,593	4,232	3,428	-823	-19.4%
EXECUTIVE DIRECTION	653	639	654	678	744	91	13.9%
HUMAN RESOURCES	243	251	258	264	258	15	6.2%
CFO	867	901	932	1,335	1,214	347	40.0%
PROCUREMENT	179	187	188	231	206	27	15.1%
LEGAL	0	0	0	0	0	0	0.0%
CENTRAL ADMIN SERVICES	186	153	155	144	125	-61	-32.8%
PROGRAM/PROJECT CONTROL	1,230	1,220	1,195	1,332	199	-1,031	-83.8%
INFORMATION OUTREACH	360	366	362	342	354	-6	-1.7%
INFORMATION SERVICES	843	778	922	848	987	144	17.1%
OTHER	-310	-367	-1,073	-942	-659	-349	-112.6%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	19.1%	18.7%	20.2%	19.6%	19.9%		
<b>TOTAL MISSION SUPPORT</b>	4,558	4,859	5,297	5,523	5,886	1,328	29.1%
ENVIRONMENTAL	31	40	37	39	43	12	38.7%
SAFETY AND HEALTH	994	1,055	1,128	1,114	1,267	273	27.5%
FACILITIES MANAGEMENT	140	276	436	278	329	189	135.0%
MAINTENANCE	1,325	1,325	1,335	1,527	1,620	295	22.3%
UTILITIES	902	965	962	930	1,034	132	14.6%
SAFEGUARDS AND SECURITY	152	212	219	211	271	119	78.3%
LOGISTICS SUPPORT	299	324	353	375	380	81	27.1%
QUALITY ASSURANCE	59	60	62	66	73	14	23.7%
LABORATORY/TECHNICAL SUPPORT	656	602	765	983	869	213	32.5%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	3.5%	3.4%	3.6%	3.7%	4.2%		
<b>TOTAL SITE SPECIFIC</b>	843	889	950	1,035	1,250	407	48.3%
MANAGEMENT/INCENTIVE FEE	843	889	950	1,035	1,250	407	48.3%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

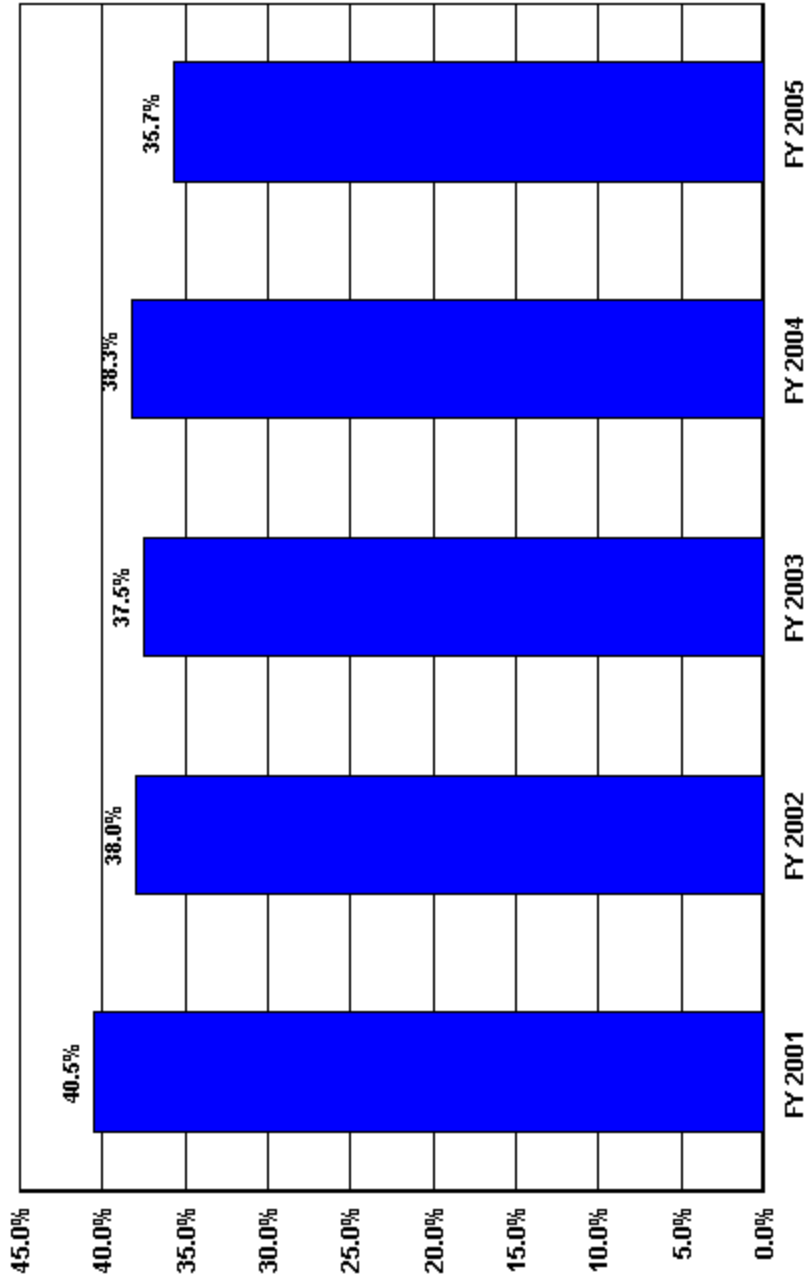
US Department of Energy  
 Total Functional Support  
 Ames National Lab/Iowa State University



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	9,652	9,876	9,840	10,790	10,564

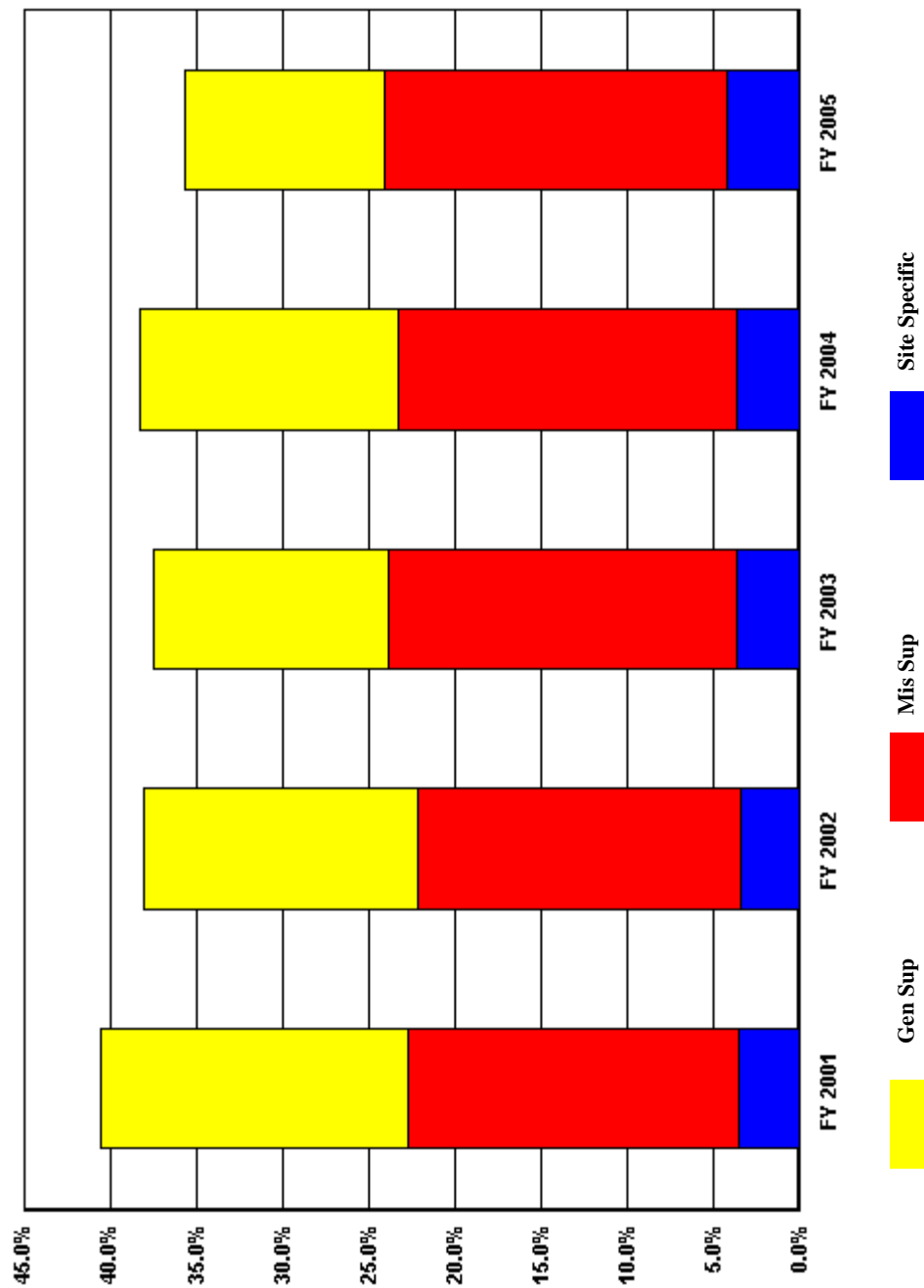
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Ames National Lab/Iowa State University**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>40.5%</b>	<b>38.0%</b>	<b>37.5%</b>	<b>38.3%</b>	<b>35.7%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	17.9%	15.9%	13.7%	15.0%	11.6%
Mis Sup	19.1%	18.7%	20.2%	19.6%	19.9%
Site Specific	3.5%	3.4%	3.7%	3.7%	4.2%

---

**SITE PROFILE**  
**Ames National Lab/Iowa State University**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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

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 646 people (320 FTE's) worked at Ames Laboratory in FY2005.

Recent Scientific Achievements include:

- Better bond coat performance  
Using fundamental information from an initial study of the high-temperature phase equilibria in the Ni-Al-Pt system, researchers at DOE's Ames Laboratory and Iowa State University developed novel bond coat (BC) alloy compositions for advanced thermal barrier coating (TBC) systems that result in remarkable performance improvements. Demonstrating up to a 20-fold performance improvement over existing technologies, their invention may significantly increase the durability and reliability of TBCs used on turbine engine components and will help engine designers increase the operating temperature and efficiency of the engines. The technology won a 2005 R&D 100 award.

---

**SITE PROFILE**  
**Ames National Lab/Iowa State University**

---

- "Tall" crystals  
Ames Laboratory researchers have achieved a first in the world of novel optical materials, modifying an old technique known as microtransfer molding to create multilevel photonic crystals at micron- and submicron-length scales. Their ability to construct photonic crystals four millimeters square (approximately one-eighth of an inch square) and 12 layers high in the open air, without benefit of a "clean-room" environment or the multimillion dollar equipment traditionally required to create such structures, holds potential for significantly reducing the costs associated with fabricating photonic crystals.
  
- Ames chemists resolve century-old controversy  
Ames Laboratory senior chemist Andreja Bakac and assistant scientist Oleg Pestovsky have resolved the 100-year-old debate over the mechanism that triggers one of the most powerful oxidizing reactions available for breaking apart organic molecules. They have generated, characterized and ruled out iron (IV) as the crucial intermediate in the Fenton reaction, a complex and pervasive reaction in matters associated with biological systems, environmental and atmospheric processes, and catalytic chemistry. Their indisputable research results establish hydroxyl radicals (OH radicals) as the crucial Fenton intermediates.
  
- Solving the Hydrogen Storage Dilemma  
A major stumbling block for hydrogen-powered vehicles is figuring out a way to carry enough hydrogen onboard to travel even moderate distances between refueling stops. A group of Ames Laboratory researchers will be investigating a possible solution to that problem thanks to \$1.6 million in funding under the \$64 Million Hydrogen Fuel Initiative. The ideal solution would be a hydrogen-rich solid material that gives up its hydrogen atoms easily, through moderate heating or by other means. These materials could also be recharged, absorbing new hydrogen atoms during refueling from a pressurized hydrogen gas source. Ames Lab researchers are looking at some novel materials, light-metal alanates, borohydrides, amides, imides, and their derivatives that have a total hydrogen content exceeding 10 percent by weight.

### TRENDS

Ames Laboratory's total costs increased from \$23,804K in FY2001 to \$29,598 in FY2005. This was an increase of 24.3%. The Laboratory's total functional support costs increased from \$9,652K in FY2001 to \$10,562K in FY2005, an increase of 9.4%.

---

**SITE PROFILE**  
**Ames National Lab/Iowa State University**

---

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**PROGRAM/PROJECT CONTROL**

Program/Project Planning & Control

During the FY2004 peer review of support cost by functional activity, the review team determined that organizational burden costs should be treated as payroll burden taxes and benefits and therefore should follow labor dollars. Ames clarified that although Ames program burdens contain the same type cost components as other DOE laboratories, the distribution of these costs is made on a Total Modified Cost (TMC) base instead of following labor. Ames agreed to change the categorization of program burden costs with the stipulation that Ames' program burden costs will follow TMC and be reported appropriately in all those functions cost categories. Therefore FY2005 functional costs have been prepared incorporating this change. Of the \$1,165K removed from the Program/Project Planning & Control category for this reason, approximately 80% of those costs were redirected into SC Mission Direct. The remaining 20% were distributed to all other Mission Direct categories and the Environmental, Safety, Health and Assurance activities.

**OTHER**

This category includes:

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

**SAFEGUARDS AND SECURITY**

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

**MANAGEMENT/INCENTIVE FEE**

The management fee paid to the Ames Laboratory contractor consists of two components. The first component consists of a flat fee not to exceed \$100K. The amount of this part of the award was increased to \$125K in FY2005. The second component of the management fee is based on a percentage applied to the annual operating costs. Since the total laboratory operating costs increased from \$22,150K in FY2001 to \$27,081K in FY2005, the amount of this component increased accordingly.

**SITE PROFILE**  
**Ames National Lab/Iowa State University**

**COST SAVINGS INITIATIVES**  
(\$ in 000's)

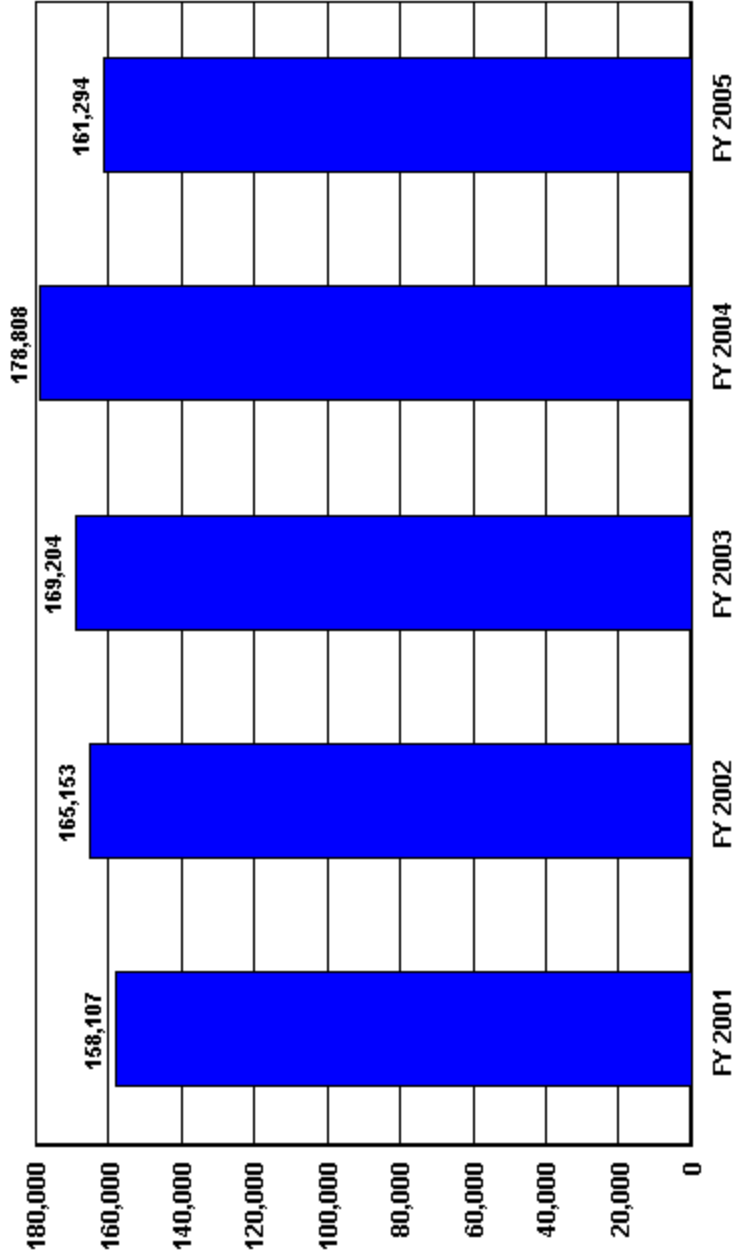
INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Eliminate auto pool	47	Cost savings initiatives include elimination of the automobile pool.	Martin Straka
Reduce rented space	0	Rented space has been closely scrutinized and significant efforts have been made to reduce the Laboratory's occupancy of non-owned space (note anomaly in the Functional Category – Facilities Management).	
Reduce FTE's	0	The Electronic Engineers section in the Engineering Services Group, as well as one administrative position in the Engineering Services Group; the Auger service of the Materials Preparation Center; and efforts in the Graphics and Printing shop were eliminated due to reduced demand for these services by the scientific community (reduction of approximately 2.5, 0.6, 1.75, and 1.16 FTE's respectively).	



**Trends in Total Support Cost by Functional Categories**  
**Argonne National Lab/University of Chicago (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	516,931	540,849	536,503	569,758	520,675	3,744	0.7%
<b>Capital Construction</b>	29,182	26,194	26,001	35,565	30,211	1,029	3.5%
<b>Total Costs Less Construction</b>	487,749	514,655	510,502	534,193	490,464	2,715	0.6%
<b>Total Support Costs</b>	158,107	165,153	169,204	178,808	161,294	3,187	2.0%
<b>Mission Direct Operation</b>	329,642	349,502	341,298	355,385	329,170	-472	-0.1%
<b>Mission Direct Operation as % of Total Cost</b>	63.8%	64.6%	63.6%	62.4%	63.2%		
<b>Capital Construction as % of Total Cost</b>	5.6%	4.8%	4.8%	6.2%	5.8%		
<b>Total Support Cost as % of Total Cost</b>	30.6%	30.5%	31.5%	31.4%	31.0%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	30.6%	30.5%	31.5%	31.4%	31.0%		
<b>TOTAL SUPPORT COST</b>	158,107	165,153	169,204	178,808	161,294	3,187	2.0%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	11.0%	11.0%	11.1%	11.4%	11.1%		
<b>TOTAL GENERAL SUPPORT</b>	56,665	59,713	59,534	65,181	57,694	1,029	1.8%
EXECUTIVE DIRECTION	5,857	8,024	9,716	11,716	9,775	3,918	66.9%
HUMAN RESOURCES	4,171	4,215	4,021	4,069	3,668	-503	-12.1%
CFO	4,982	5,043	4,448	4,005	4,149	-833	-16.7%
PROCUREMENT	4,107	4,216	4,333	4,507	4,138	31	0.8%
LEGAL	2,394	2,500	2,664	3,572	3,751	1,357	56.7%
CENTRAL ADMIN SERVICES	10,912	11,064	10,532	9,964	8,991	-1,921	-17.6%
PROGRAM/PROJECT CONTROL	797	696	975	1,894	1,947	1,150	144.3%
INFORMATION OUTREACH	4,102	3,963	4,157	3,969	3,652	-450	-11.0%
INFORMATION SERVICES	17,796	18,776	17,925	20,857	18,308	512	2.9%
OTHER	1,547	1,216	763	628	-685	-2,232	-144.3%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	15.6%	15.5%	16.4%	15.6%	15.5%		
<b>TOTAL MISSION SUPPORT</b>	80,550	84,060	87,825	89,027	80,473	-77	-0.1%
ENVIRONMENTAL	5,120	7,462	7,353	7,828	6,184	1,064	20.8%
SAFETY AND HEALTH	16,702	13,365	14,951	15,900	12,437	-4,265	-25.5%
FACILITIES MANAGEMENT	8,233	9,942	11,087	8,957	8,987	754	9.2%
MAINTENANCE	16,769	17,481	18,599	20,631	18,193	1,424	8.5%
UTILITIES	18,495	19,070	19,913	20,181	22,672	4,177	22.6%
SAFEGUARDS AND SECURITY	9,079	10,566	9,630	9,908	7,641	-1,438	-15.8%
LOGISTICS SUPPORT	5,665	5,679	5,849	5,355	4,298	-1,367	-24.1%
QUALITY ASSURANCE	366	376	443	267	61	-305	-83.3%
LABORATORY/TECHNICAL SUPPORT	121	119	0	0	0	-121	-100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.0%	4.0%	4.1%	4.3%	4.4%		
<b>TOTAL SITE SPECIFIC</b>	20,892	21,380	21,845	24,600	23,127	2,235	10.7%
MANAGEMENT/INCENTIVE FEE	5,419	6,195	5,834	6,145	7,140	1,721	31.8%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	15,473	15,185	16,011	18,455	15,987	514	3.3%

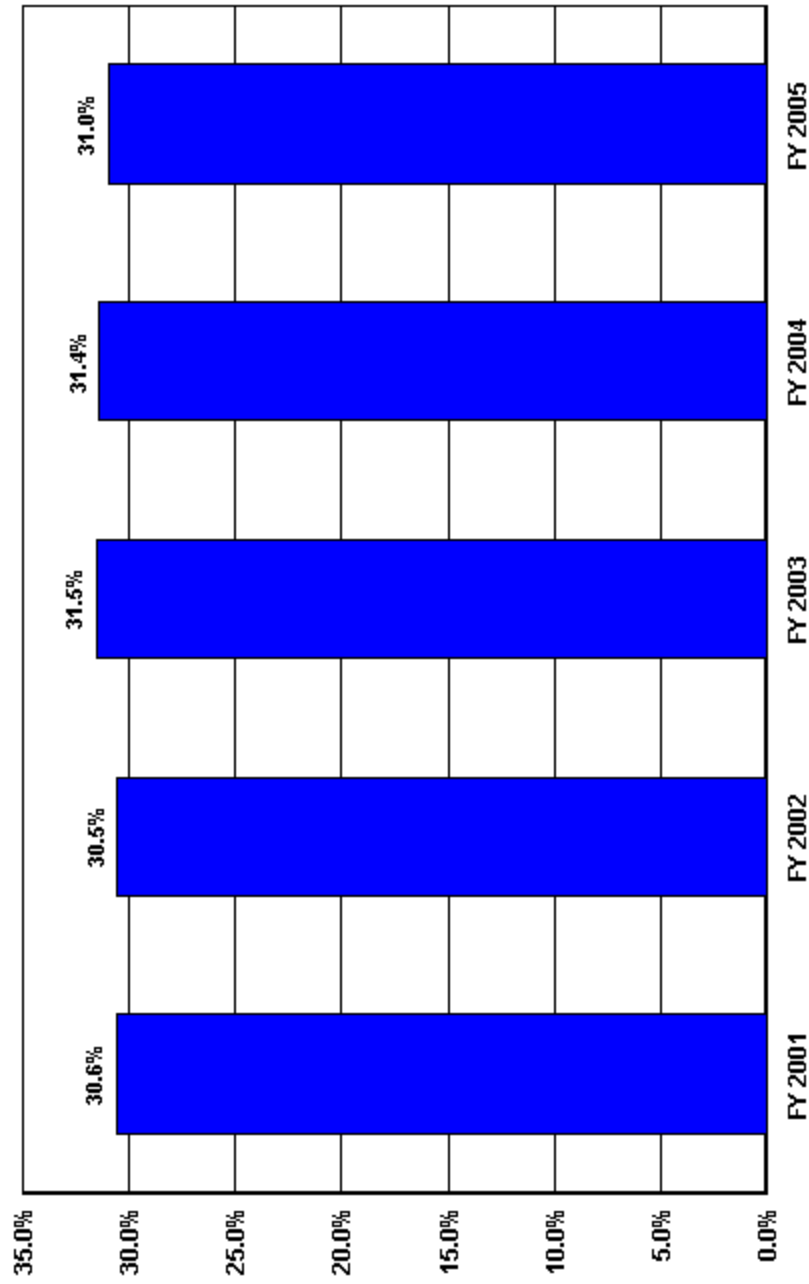
**US Department of Energy**  
**Total Functional Support**  
 Argonne National Lab/University of Chicago



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	158,107	165,153	169,204	178,808	161,294

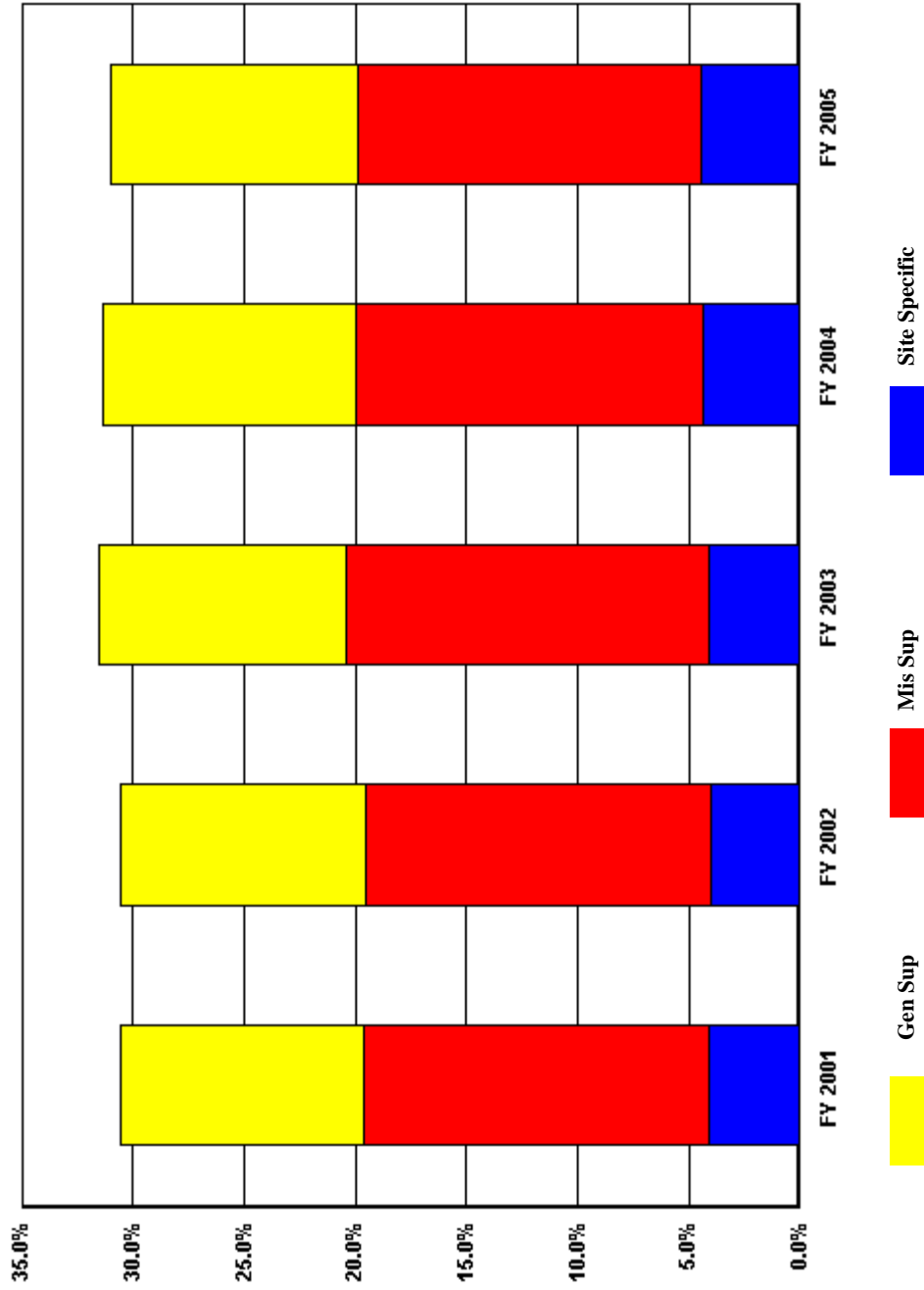
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Argonne National Lab/University of Chicago**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>30.6%</b>	<b>30.5%</b>	<b>31.5%</b>	<b>31.4%</b>	<b>31.0%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	11.0%	11.0%	11.1%	11.4%	11.1%
Mis Sup	15.6%	15.5%	16.4%	15.6%	15.5%
Site Specific	4.0%	4.0%	4.1%	4.3%	4.4%

---

**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.

At the end of FY2005, the laboratory employed about 2,600 regular employees, including about 1,200 scientists and engineers, of whom about 700 hold doctorate degrees. Argonne's annual operating budget of about \$450 million supports approximately 2,400 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. The 1,500 acre site is surrounded by forest preserve and is approximately 25 miles southwest of Chicago's Loop. The site also houses the U.S. Department of Energy's Chicago Operations Office.

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

---

**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

---

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 detecting 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.

## II. TRENDS

During FY2005, Argonne experienced a significant restructuring due to the transition of the Argonne West site to the new Idaho National Laboratory effective January 31, 2005. The financial information provided reflects twelve months of Argonne East with four months of Argonne West.

Argonne took several steps to maintain a relatively constant ratio of functional costs as a percent of total cost:

- activity-based budgeting was implemented for all non-direct funded organizations,
- activities were analyzed to determine the right size for the restructured Laboratory, and
- all required reductions were implemented in a timely fashion.

---

**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

---

The actions resulted in a 9.8% reduction in total functional support cost compared with an 8.6% reduction in Laboratory costs as compared to FY2004.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**OTHER**

Other (-\$685K) decreased by \$1,313K due primarily to the Argonne West transition.

**ENVIRONMENTAL**

(\$6,184K) decreased by \$1,644K due to increased efficiencies in the waste management program.

**SAFETY AND HEALTH**

(\$12,437K) decreased by \$3,463K due primarily to the Argonne West transition.

**SAFEGUARDS AND SECURITY**

(\$7,641K) decreased by \$2,268K due primarily to the Argonne West transition.

**QUALITY ASSURANCE**

(\$61K) decreased by \$206K due to the Argonne West transition.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Subcontract Negotiations	4,560	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 FY2005 totaled \$4,560K.	Martin Straka

**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

Fringe Benefits	3,570	<p>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 FY2005 is provided below:</p> <p>Argonne coordinated 16 benefit plan changes saving the Laboratory \$2.9M: increased retiree contributions, increased out-of-pocket maximum limits, decreased out-of-network coverage, etc.</p> <p>Argonne implemented a fully self-insured medical and dental plan that maintained the same coordination of benefits provision and avoided additional claim costs of over \$485K plus saved \$259K in administration fees.</p> <p>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 resulted in a savings of \$411K in FY2005.</p>	Martin Straka
Travel Costs	200	By implementing a new on-line travel booking tool with lower transaction fees, Argonne realized savings in excess of \$200K	Martin Straka
Service Station	375	The on-site Argonne service station and swimming pool were closed, which resulted in cost avoidance of \$353K for needed facility repairs and upgrades plus an estimated \$22K in annual maintenance costs.	Martin Straka
Power Usage	50	Argonne responded to a request from Commonwealth Edison to curtail power usage to help mitigate local power shortage problems and this action resulted in a savings in excess of \$50K.	Martin Straka



---

**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

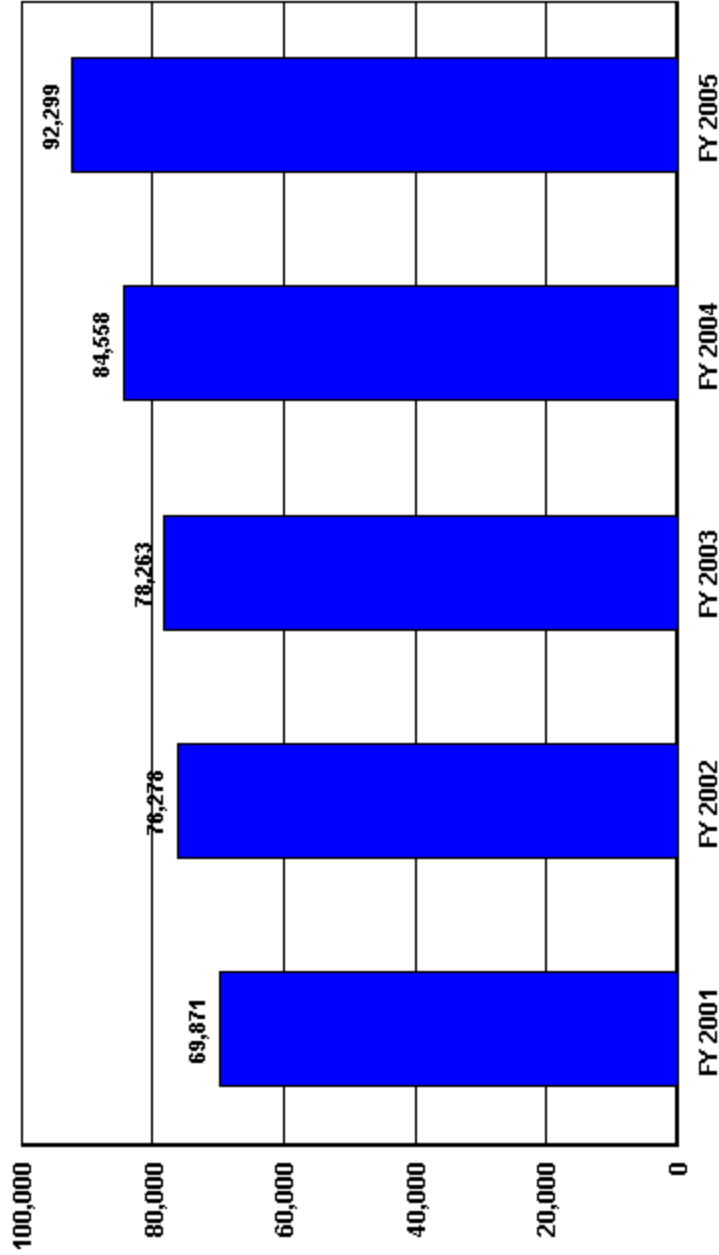
---

Mail Delivery	150	Argonne switched to mail stop service for site-wide mail delivery in lieu of door-to-door delivery and realized a savings of approximately \$150K.	Martin Straka
---------------	-----	----------------------------------------------------------------------------------------------------------------------------------------------------	---------------

**Trends in Total Support Cost by Functional Categories**  
**Bettis Atomic Power Lab/Bechtel (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	331,052	340,980	337,705	360,172	437,357	106,305	32.1%
<b>Capital Construction</b>	20,663	19,401	18,274	21,438	29,496	8,833	42.7%
<b>Total Costs Less Construction</b>	310,389	321,579	319,431	338,734	407,861	97,472	31.4%
<b>Total Support Costs</b>	69,871	76,278	78,263	84,558	92,299	22,428	32.1%
<b>Mission Direct Operation</b>	240,518	245,301	241,168	254,176	315,562	75,044	31.2%
<b>Mission Direct Operation as % of Total Cost</b>	72.7%	71.9%	71.4%	70.6%	72.2%		
<b>Capital Construction as % of Total Cost</b>	6.2%	5.7%	5.4%	6.0%	6.7%		
<b>Total Support Cost as % of Total Cost</b>	21.1%	22.4%	23.2%	23.5%	21.1%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	21.1%	22.4%	23.2%	23.5%	21.1%		
<b>TOTAL SUPPORT COST</b>	69,871	76,278	78,263	84,558	92,299	22,428	32.1%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	6.8%	7.3%	8.2%	7.8%	7.1%		
<b>TOTAL GENERAL SUPPORT</b>	22,636	24,754	27,852	28,121	31,050	8,414	37.2%
EXECUTIVE DIRECTION	3,193	3,206	3,330	3,487	4,090	897	28.1%
HUMAN RESOURCES	3,640	3,825	4,143	4,503	5,913	2,273	62.4%
CFO	2,233	2,236	2,785	2,881	2,123	-110	-4.9%
PROCUREMENT	2,100	2,178	2,012	2,262	2,410	310	14.8%
LEGAL	122	137	157	199	229	107	87.7%
CENTRAL ADMIN SERVICES	1,229	1,427	1,324	1,481	1,247	18	1.5%
PROGRAM/PROJECT CONTROL	444	500	559	644	698	254	57.2%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	9,675	11,245	13,542	12,664	14,139	4,464	46.1%
OTHER	0	0	0	0	201	201	100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	12.7%	13.7%	13.4%	14.2%	12.8%		
<b>TOTAL MISSION SUPPORT</b>	41,902	46,557	45,173	51,097	55,911	14,009	33.4%
ENVIRONMENTAL	5,535	6,141	5,815	6,219	6,561	1,026	18.5%
SAFETY AND HEALTH	11,994	12,825	14,277	16,855	18,760	6,766	56.4%
FACILITIES MANAGEMENT	3,227	4,319	2,282	2,336	2,139	-1,088	-33.7%
MAINTENANCE	5,757	5,949	6,859	9,066	10,003	4,246	73.8%
UTILITIES	2,499	2,854	2,846	2,739	2,783	284	11.4%
SAFEGUARDS AND SECURITY	6,020	6,554	6,769	7,482	8,106	2,086	34.7%
LOGISTICS SUPPORT	2,459	2,950	2,423	2,026	2,038	-421	-17.1%
QUALITY ASSURANCE	4,411	4,965	3,902	4,374	5,521	1,110	25.2%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	1.6%	1.5%	1.6%	1.5%	1.2%		
<b>TOTAL SITE SPECIFIC</b>	5,333	4,967	5,238	5,340	5,338	5	0.1%
MANAGEMENT/INCENTIVE FEE	5,069	4,577	4,531	4,605	4,712	-357	-7.0%
TAXES	264	390	707	735	626	362	137.1%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

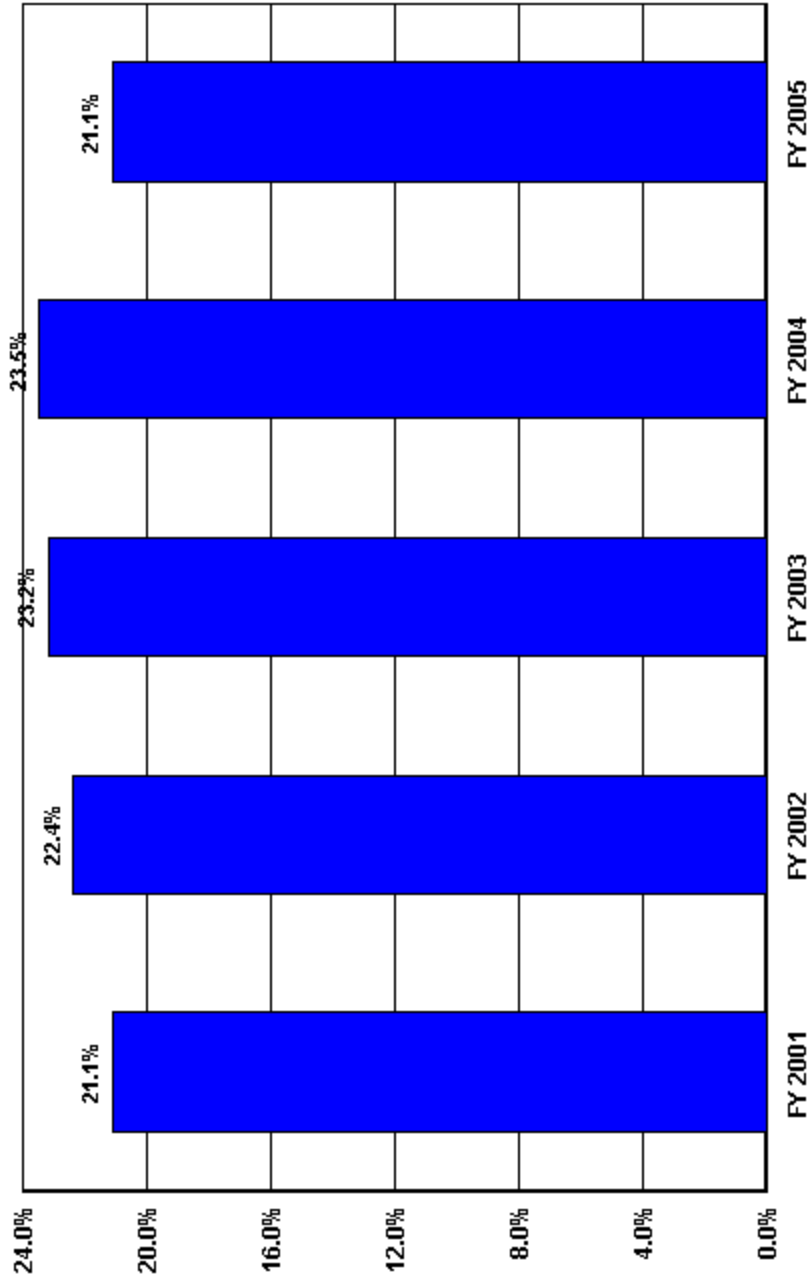
US Department of Energy  
 Total Functional Support  
 Bettis Atomic Power Lab/Bechtel



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	69,871	76,278	78,263	84,558	92,299

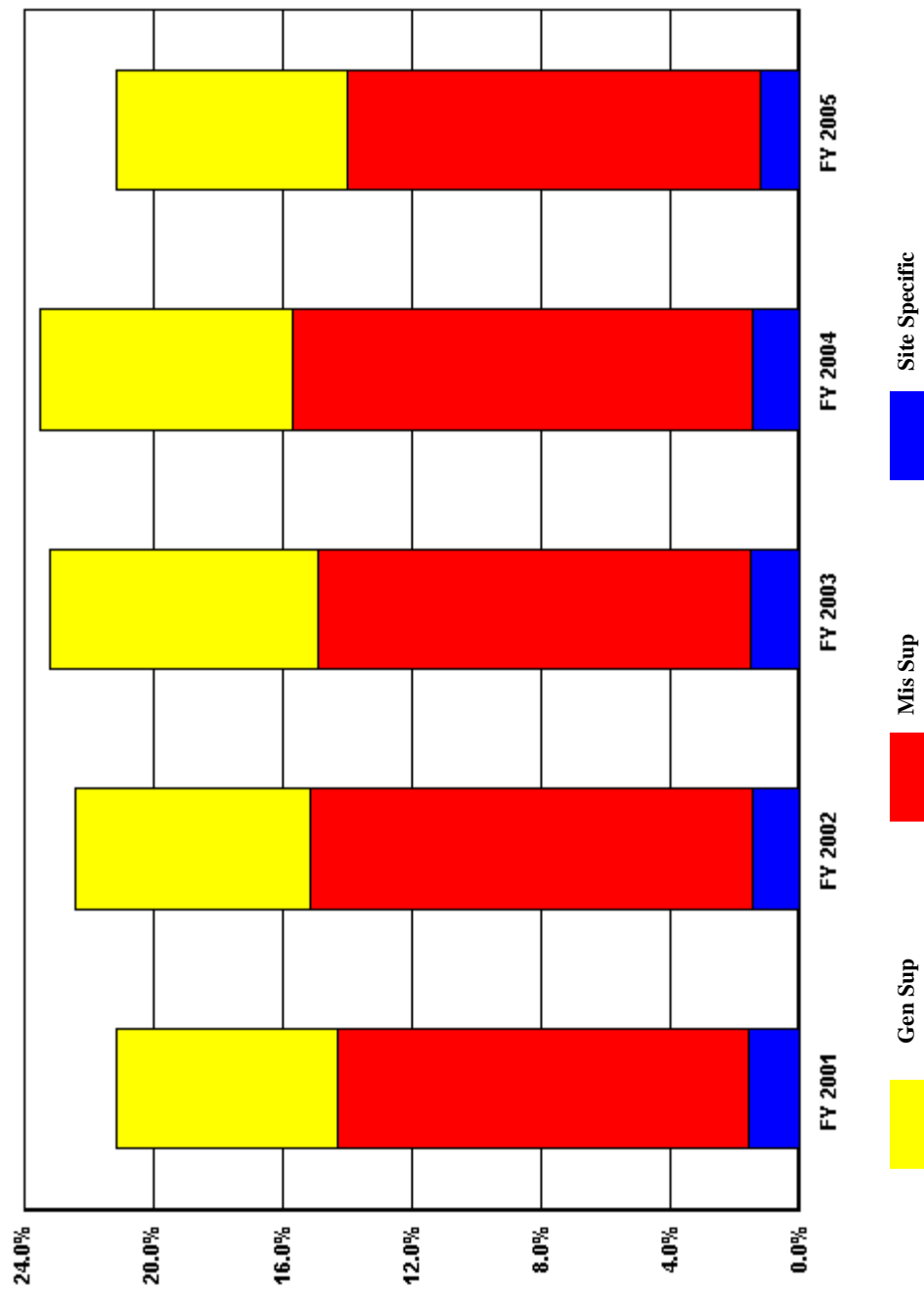
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Bettis Atomic Power Lab/Bechtel**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	21.1%	22.4%	23.2%	23.5%	21.1%

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	6.8%	7.3%	8.2%	7.8%	7.1%
Mis Sup	12.7%	13.7%	13.4%	14.2%	12.8%
Site Specific	1.6%	1.5%	1.6%	1.5%	1.2%

---

**SITE PROFILE**  
**Bettis Atomic Power Lab/Bechtel**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

The Bettis Laboratory is a research and development laboratory operated by Bechtel Bettis, Inc. (BBI), a subsidiary of Bechtel National, Inc. (BNI), for the Naval Nuclear Propulsion Program (NNPP), 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. BNI 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 (NRF) 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 SEAWOLF Class of attack

---

**SITE PROFILE**  
**Bettis Atomic Power Lab/Bechtel**

---

submarines, and is developing new technologies and designs for the Navy's future ships including the VIRGINIA Class of submarines and the CVN 21 Aircraft Carrier Program.

Bettis has also played a role in the development of land-based nuclear reactor plants. Under DOE's office of Naval Reactors (NR), Bettis worked on the design and development of the first United States full-scale nuclear power plant for civilian use, the Shippingport 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 3,400 people at all of its sites.

BBI also operates the NRF located in Idaho Falls, Idaho. The NRF examines naval spent nuclear fuel and irradiated test specimens. The information derived from these examinations is used to develop new technology and to improve the cost-effectiveness of existing designs.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Incentive Compensation included, which was not included in previous submittals.

**HUMAN RESOURCES**

Increases in manpower to support Human Resources Management System, Space Power program and increased staffing goals. Increased cost for relocation and recruiting to support FY05 hiring campaign.

**CFO**

Decrease reflects the completion of major programming initiatives in support of the Common Financial System Project which was rolled into production in November 2004.

**CENTRAL ADMIN SERVICES**

Costs associated with mail services now shown under Information Services. Previous shown incorrectly in this category.

---

**SITE PROFILE**  
**Bettis Atomic Power Lab/Bechtel**

---

**INFORMATION SERVICES**

Increase related to costs for super workstations as well as realignment of maintenance contracts to improve cost performance. Costs associated with mail service are now shown in this category instead of Central Admin Services.

**OTHER**

Settlement with Eastern Idaho Metal Trades Council and employee claims.

**MAINTENANCE**

Increase in manpower for maintenance personnel, craft and custodians. Also, increase in procurement of furniture and support materials for more rearrangement efforts and additional Personnel Carriers needed for maintenance of the site.

**SAFEGUARDS AND SECURITY**

Increase in labor costs.

**QUALITY ASSURANCE**

Increase in Bettis-Idaho Facility manpower and adjustment of the workforce skill mix associated with the implementation of radiological safety procedures which resulted in the need for additional Nuclear Inspectors.

**TAXES**

Reduction is due to an error in the FY04 calculation. The FY04 costs should have been \$629,423.

**CAPITAL CONSTRUCTION**

Increase cost for equipment purchased to support Advanced Concepts, Network Support and Telecommunications, Bettis-Idaho Facility Operations, Acoustics and Materials Testing, and Analytical Chemistry Testing work efforts.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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



**SITE PROFILE**  
**Bettis Atomic Power Lab/Bechtel**

Machine and Fabrication Blanket Order	55	In FY 2005, the use of a Machine and Fabrication (M&F) blanket order with a local supplier saved administrative support costs. The M&F blanket order allows requisitioners to contract directly with suppliers with minimal procurement support. This is due to the establishment of a blanket contract that includes pre-negotiated terms and rates coupled with procedures that are in line with the approved Procurement manual. As such, the requisitioner can directly solicit quotations for intricate machining work and place the order without any administrative support. The contracts are placed and paid using the Procurement Card (P-Card).	John Drager
Core "Alpha Contracting"	72	Through the use of "Alpha Contracting" methodologies, a one-month scheduler improvement was realized in the fiscal year Core negotiation process. The scheduler improvements were gained through the elimination of redundant negotiation cycles and the reduced need for multiple proposal preparations. As such, administrative costs associated with the negotiation process were eliminated.	John Drager
Multi-Year Contracting for Shipyard	30	During FY 2005, Bettis realized cost savings resulting from the placement of a two-year funding extension (instead of an annual funding extension) of the Northrop Grumman Newport News (NGNN) A1B Development contract last year. Placement of the multi-year funding extension required a nominal investment of additional time, and resulted in approximately 250 hours (\$30,000) of savings related to place the Contract Year 2006 funding extension as a separate procurement action. These savings do not include the savings realized by the Government in conducting an audit of the proposal and reviewing and approving Bettis' procurement recommendation.	John Drager

---

**SITE PROFILE**  
**Bettis Atomic Power Lab/Bechtel**

---

Joint Procurements	29	Bettis has participated in 56 Multi-Prime Procurements in FY 2005. Of those actions, another Prime handled all the work associated with 24 actions. As such, the Bettis administrative effort to issue the inquiry, negotiate the pricing and write the recommendation has been eliminated. This saved approximately 240 hours (10 hours per action).	John Drager
--------------------	----	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

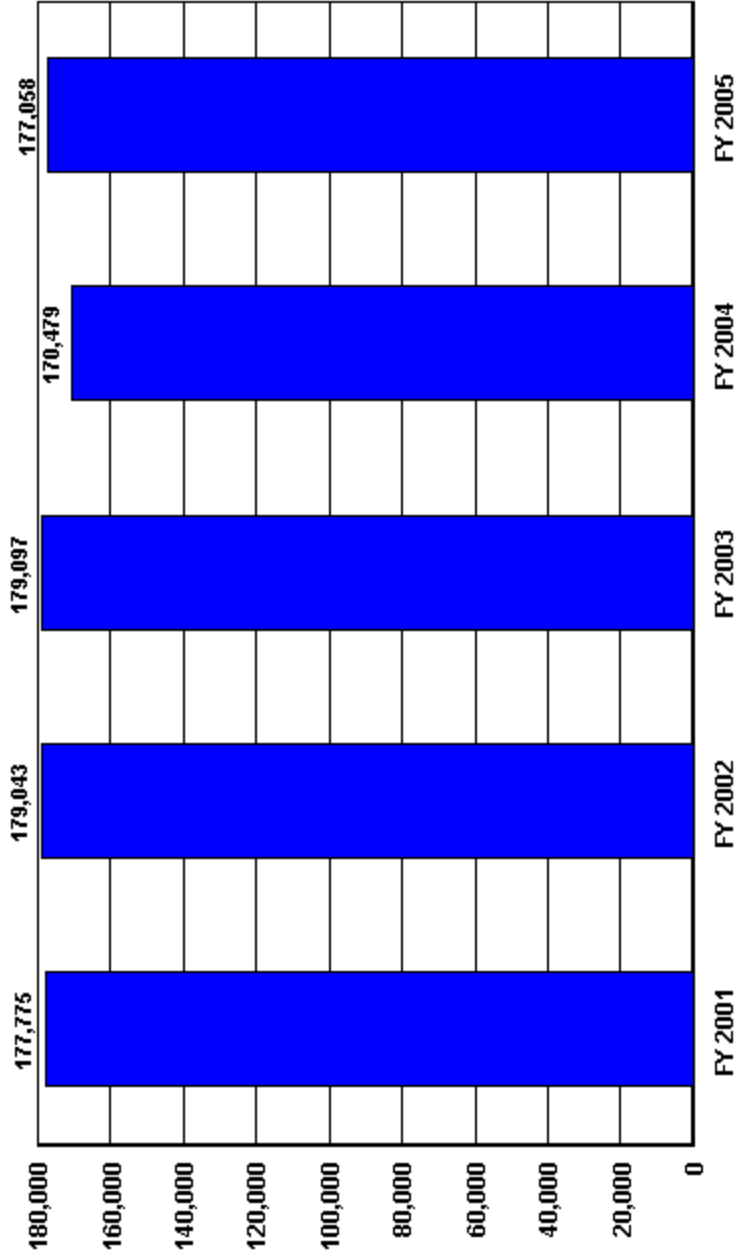
**SITE PROFILE**  
**Bettis Atomic Power Lab/Bechtel**

<p>NRF Vendor Stocking</p>	<p>96</p>	<p>Several years ago, NRF implemented three vendor stocking contracts that were designed to streamline the way that certain materials are procured. Contracts were implemented for the following commodities:</p> <ul style="list-style-type: none"> <li>• Janitorial Supplies</li> <li>• Compressed Gases and Liquid Nitrogen</li> <li>• Office Supplies and Paper</li> </ul> <p>The concept of vendor stocking is based upon the vendor managing the inventory replenishment process. Specifically, the vendor is tasked with functions of inventorying, requisitioning, buying, delivering and stocking the products that are supplied under his contract.</p> <p>The main benefit of vendor stocking is that NRF personnel do not have to be involved in the inventory replenishment process since the vendor handles these functions. For example, the requisitioner does not have to determine what needs to be ordered and in what quantities, the buyer does not have to place numerous purchase orders, the receiving department does not have to receive products or deliver them to the end user. All of this is done by the vendor through the vendor stocking contract.</p> <p>This translates into a labor savings for NRF.</p> <p>For FY 2005, NRF has recognized the following estimated labor savings through vendor stocking:</p> <ul style="list-style-type: none"> <li>• Janitorial Supplies Vendor Stocking Contract – Estimated labor savings of \$43,000</li> <li>• Compressed Gas Vendor Stocking Contract – Estimated labor savings of \$8,000</li> <li>• Office Supplies/Paper Vendor Stocking Contract – Estimated labor savings of \$45,000</li> </ul>	<p>John Drager</p>
----------------------------	-----------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------

**Trends in Total Support Cost by Functional Categories**  
**Brookhaven National Lab/Brookhaven Science Assoc. (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	448,953	449,038	446,464	454,425	467,976	19,023	4.2%
<b>Capital Construction</b>	43,491	37,302	32,622	30,439	28,071	-15,420	-35.5%
<b>Total Costs Less Construction</b>	405,462	411,736	413,842	423,986	439,905	34,443	8.5%
<b>Total Support Costs</b>	177,775	179,043	179,097	170,479	177,058	-717	-0.4%
<b>Mission Direct Operation</b>	227,687	232,693	234,745	253,507	262,847	35,160	15.4%
<b>Mission Direct Operation as % of Total Cost</b>	50.7%	51.8%	52.6%	55.8%	56.2%		
<b>Capital Construction as % of Total Cost</b>	9.7%	8.3%	7.3%	6.7%	6.0%		
<b>Total Support Cost as % of Total Cost</b>	39.6%	39.9%	40.1%	37.5%	37.8%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	39.6%	39.9%	40.1%	37.5%	37.8%		
<b>TOTAL SUPPORT COST</b>	177,775	179,043	179,097	170,479	177,058	-717	-0.4%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	14.3%	14.6%	15.4%	11.9%	11.9%		
<b>TOTAL GENERAL SUPPORT</b>	64,311	65,703	68,535	54,106	55,905	-8,406	-13.1%
EXECUTIVE DIRECTION	7,428	7,386	7,665	7,725	11,599	4,171	56.2%
HUMAN RESOURCES	3,974	3,827	3,856	3,927	4,028	54	1.4%
CFO	2,560	2,262	2,187	2,390	2,484	-76	-3.0%
PROCUREMENT	1,343	1,573	1,592	2,087	2,106	763	56.8%
LEGAL	912	1,354	1,063	1,090	1,606	694	76.1%
CENTRAL ADMIN SERVICES	5,367	5,647	5,944	6,209	6,270	903	16.8%
PROGRAM/PROJECT CONTROL	19,884	19,557	20,283	2,571	2,995	-16,889	-84.9%
INFORMATION OUTREACH	3,593	3,724	4,397	5,139	7,536	3,943	109.7%
INFORMATION SERVICES	16,052	17,030	16,852	16,712	17,019	967	6.0%
OTHER	3,198	3,343	4,696	6,256	262	-2,936	-91.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	22.7%	22.3%	21.9%	22.2%	22.8%		
<b>TOTAL MISSION SUPPORT</b>	101,923	100,303	97,712	101,082	106,911	4,988	4.9%
ENVIRONMENTAL	2,852	2,746	2,671	3,989	4,442	1,590	55.8%
SAFETY AND HEALTH	18,040	18,616	17,457	18,154	17,236	-804	-4.5%
FACILITIES MANAGEMENT	3,965	5,491	4,980	5,130	4,745	780	19.7%
MAINTENANCE	30,261	29,626	28,035	27,726	29,532	-729	-2.4%
UTILITIES	24,458	20,479	21,691	24,223	29,335	4,877	19.9%
SAFEGUARDS AND SECURITY	6,339	7,173	7,099	7,548	7,628	1,289	20.3%
LOGISTICS SUPPORT	3,233	3,220	3,190	3,304	3,487	254	7.9%
QUALITY ASSURANCE	485	620	731	739	1,044	559	115.3%
LABORATORY/TECHNICAL SUPPORT	12,290	12,332	11,858	10,269	9,462	-2,828	-23.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.6%	2.9%	2.9%	3.4%	3.0%		
<b>TOTAL SITE SPECIFIC</b>	11,541	13,037	12,850	15,291	14,242	2,701	23.4%
MANAGEMENT/INCENTIVE FEE	6,428	6,869	6,719	6,908	6,992	564	8.8%
TAXES	907	884	0	2,089	2	-905	-99.8%
LDRD / PDRD / SDRD	4,206	5,284	6,131	6,294	7,248	3,042	72.3%

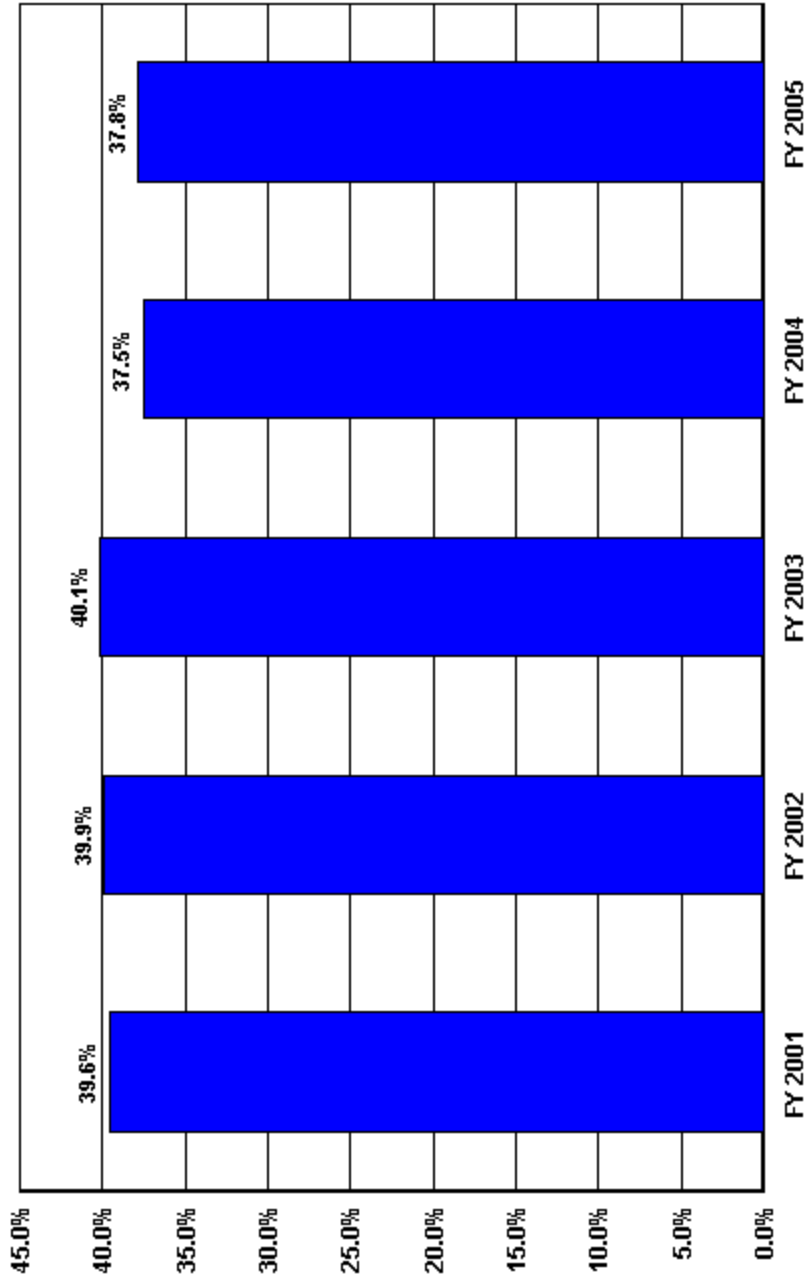
**US Department of Energy**  
**Total Functional Support**  
 Brookhaven National Lab/Brookhaven Science Assoc.



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>177,775</b>	<b>179,043</b>	<b>179,097</b>	<b>170,479</b>	<b>177,058</b>

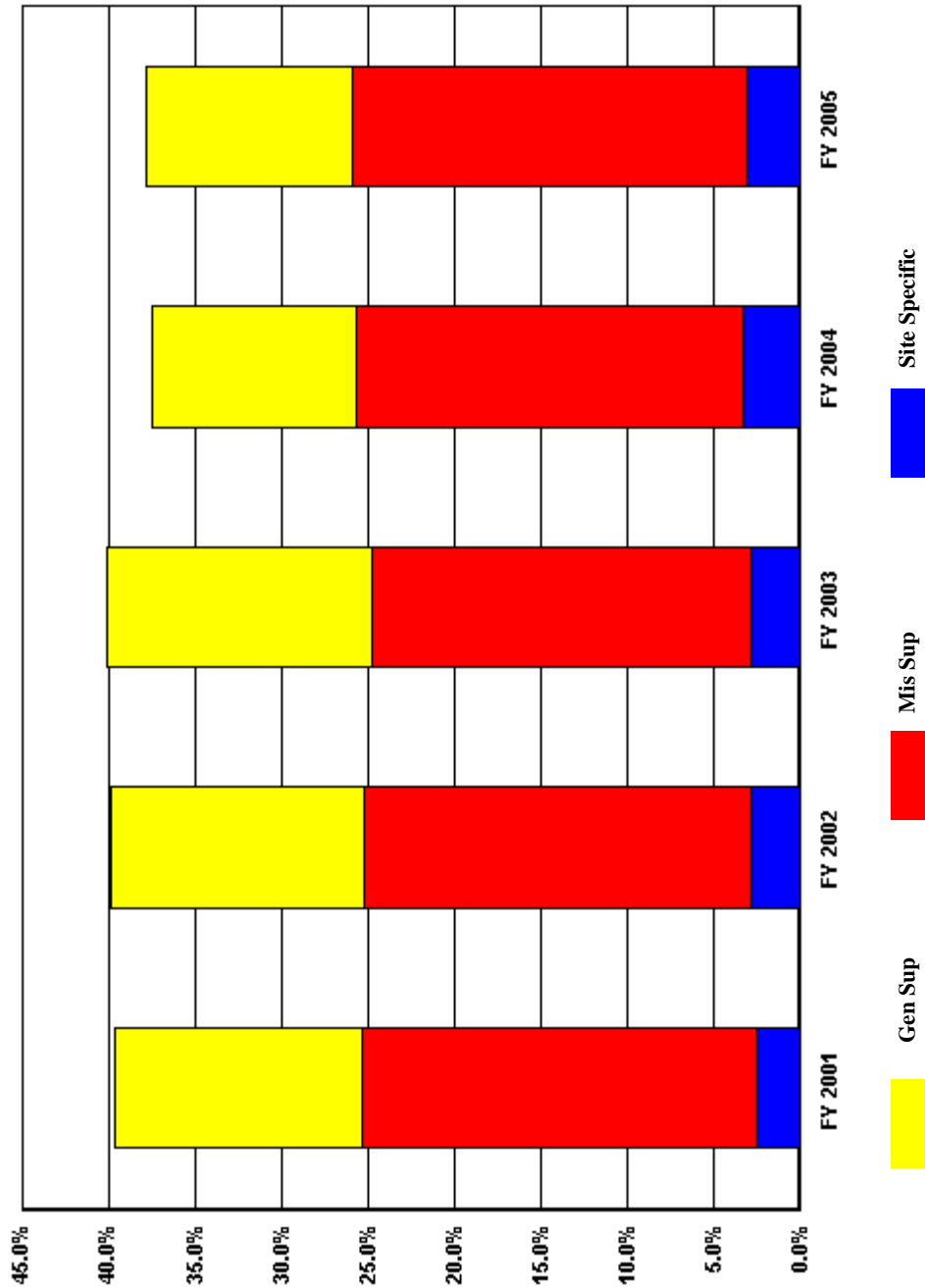
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Brookhaven National Lab/Brookhaven Science Assoc.**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>39.6%</b>	<b>39.9%</b>	<b>40.1%</b>	<b>37.5%</b>	<b>37.8%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	14.3%	14.6%	15.4%	11.9%	11.9%
Mis Sup	22.7%	22.3%	21.9%	22.2%	22.8%
Site Specific	2.6%	2.9%	2.9%	3.4%	3.0%

---

**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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. 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 the U.S. Department of Energy's strategic missions, is to:

- Conceive, design, construct and operate complex, “leading edge”, user-oriented facilities in a safe and environmentally 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:**



---

**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

---

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  
National Nuclear Data Center

**Facilities Under Construction at BNL:**

Center for Functional Nanomaterials

**Background**

Brookhaven National Laboratory (BNL) is a U.S. Department of Energy (DOE) research facility located on Long Island, New York (which is east of New York City), on a 5,300-acre campus. Approximately 30% of the total area is developed. BNL has approximately 2,650 employees. For financial purposes, the laboratory categorizes salary into Scientific, Professional, Technical, Management and Union categories. For FYE 2005, the Laboratory reported 2,617 FTE's.

BNL is managed and operated for DOE by Brookhaven Science Associates in partnership with the Research Foundation of the State University of New York 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, homeland security, 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 FY05, the Laboratory received \$63.0m from Work for Others (WFO), which includes \$11.0M 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

---

**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

---

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. 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. They also manage problem or non-routine wastes to reduce management and disposal costs.

There are approximately 359 buildings and 269 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

---

**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

---

that are considered permanent. Retrofitting older facilities to comply with current ES&H standards is extremely costly.

The large research facilities consume extraordinary amounts of electricity for their operation. Due to unprecedented increases in fuel costs, the Laboratory's unit price is projected to increase approximately 70% in FY 06 compared to FY 05. Over the years, the Laboratory has benefited from an agreement between the New York Power Authority (NYPA) and the local electrical utility. This agreement, which expired in July 2005, provided power from upstate at a substantial savings to the Laboratory. However, BNL and DOE were successful in obtaining a three year extension of the NYPA contract. And while electricity costs will be greater than the previous contract, this contract extension is the least expensive option.

The costs reported on the functional cost report reflect the direct charges to DOE programs (operating, capital equipment, AIP, GPP and line items), work for others (B&R 40xxxxxxx series), non-federal agencies (B&Rs in the 60xxxxxxx, 65xxxxxxx and WNxxxxxxx series), other DOE labs (B&R YN19) and indirect and other intermediate costs collected in B&R YN0100000 that are fully distributed.

In addition, BNL's reported Functional Costs does not include a Payment in lieu of Taxes (PILT). The Chicago Operations Office has yet to prepare the payment.

## **II. Highlights of Trends from FY 2001 to FY 2005**

BNL's Percent of Functional Support Costs to Total Site Cost has declined from 39.4% to 37.8%. 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. 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**

#### **EXECUTIVE DIRECTION**

Increase caused by a reclassification of Program Development, Standards Based Management and Labwide Planning per Peer Review Recommendations.

---

**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

---

**LEGAL**

Legal fees vary from year to year depending on the number of cases being tried and/or actively litigated. In FY2005, the lab went through a jury trial in connection with one case and dealt with summary judgment motions that were extensively briefed in several other cases.

**INFORMATION OUTREACH**

Increase caused by a reclassification of Post Docs and PECASE per Peer Review Recommendations.

**OTHER**

The lower amount is due to reclassifications from executive direction and program planning and control. The balance of \$262,000 represents legal settlements.

**UTILITIES**

Increase caused by increases in fuel oil and electric power expenses.

**QUALITY ASSURANCE**

Increase caused by a reclassification of Independent Oversight per Peer Review Recommendations.

**TAXES**

BNL paid PILT taxes for FY's 03 and 04 in FY 04. We have yet to pay the PILT tax for FY 05 although the check was requested prior to the fiscal year end.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Utility Savings	2,016	As stated in the Functional Cost Profile, over the years, Brookhaven National Laboratory (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 \$2.0M. NYPA Power Contract Savings (compared to LIPA) was \$16.4M.	Martin Straka

**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

Fringe Benefit Savings	2,400	Over the years the Laboratory has experienced a continuous increase in benefit costs. During FY05, the Laboratory modified its benefits program as follows with a total projected savings of \$2.4m: <ul style="list-style-type: none"> <li>• Life, long-term disability, and accidental death and dismemberment insurances were moved from Cigna to Prudential, thus reducing the cost of coverage</li> <li>• Cigna medical plan was moved from a minimum premium insurance arrangement to a self-insured arrangement, thus reducing the administrative costs of coverage</li> <li>• Cigna PPO medical plan was moved to an OAP medical plan for non-IBEW employees to access deeper discounts with providers</li> <li>• Cigna prescription program was modified to use an alliance with Aon to access deeper discounts on prescription drugs</li> <li>• Vytra medical plan was moved from a fully-insured HMO medical plan to a self-insured PPO medical plan for non-IBEW employees to access deeper discounts with providers</li> <li>• Stop loss insurance was implemented for the self-insured medical plans with Cigna and Vytra, thus providing a cap on extraordinary claims</li> </ul>	Martin Straka
Severance Pay Savings	210	Lowering Severance Pay policy for non-union employees from a formula of continuous years of service with max of 39 weeks at an uncapped amount to a formula of continuous years of service with a max of 39 weeks at a capped amount of \$45K.	Martin Straka
Vacation Carryover	1,200	Reduction of employee vacation carryover from 24 days to 20 days.	Martin Straka
Delay of non-union salary increase	1,700	Delay of Non-Union Salary increase from January 1, 2005 to April 1, 2005.	Martin Straka
Hiring Freeze	1,000	Hiring Freeze	Martin Straka

---

**SITE PROFILE**

**Brookhaven National Lab/Brookhaven Science Assoc.**

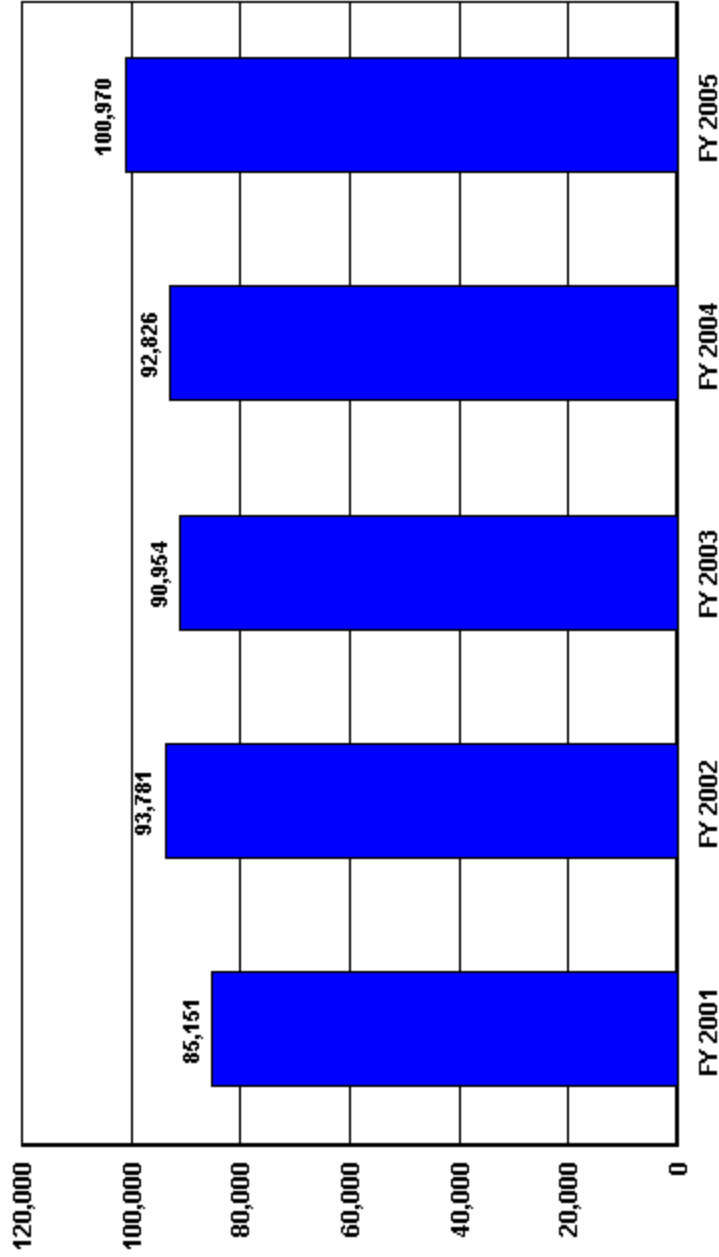
---

Fuel Oil Purchasing Plan	1,900	Fuel Oil strategic purchasing plan saved laboratory .4M. In addition, savings in using fuel instead of natural gas saved 1.5M.	Martin Straka
--------------------------	-------	--------------------------------------------------------------------------------------------------------------------------------	---------------

**Trends in Total Support Cost by Functional Categories**  
**Fermi National Accelerator Lab/University Research (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	312,709	323,866	302,734	318,041	318,468	5,759	1.8%
<b>Capital Construction</b>	79,669	69,658	54,529	59,326	45,132	-34,537	-43.4%
<b>Total Costs Less Construction</b>	233,040	254,208	248,205	258,715	273,336	40,296	17.3%
<b>Total Support Costs</b>	85,151	93,781	90,954	92,826	100,970	15,819	18.6%
<b>Mission Direct Operation</b>	147,889	160,427	157,251	165,889	172,366	24,477	16.6%
<b>Mission Direct Operation as % of Total Cost</b>	47.3%	49.5%	51.9%	52.2%	54.1%		
<b>Capital Construction as % of Total Cost</b>	25.5%	21.5%	18.0%	18.7%	14.2%		
<b>Total Support Cost as % of Total Cost</b>	27.2%	29.0%	30.0%	29.2%	31.7%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	27.2%	29.0%	30.0%	29.2%	31.7%		
<b>TOTAL SUPPORT COST</b>	85,151	93,781	90,954	92,826	100,970	15,819	18.6%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	8.5%	9.3%	9.1%	9.5%	10.4%		
<b>TOTAL GENERAL SUPPORT</b>	26,675	30,058	27,651	30,181	32,971	6,296	23.6%
EXECUTIVE DIRECTION	4,668	5,441	4,825	4,969	4,960	292	6.3%
HUMAN RESOURCES	2,880	3,202	3,484	3,468	3,567	687	23.9%
CFO	1,613	1,725	2,058	2,169	2,262	649	40.2%
PROCUREMENT	1,583	1,788	1,738	1,824	1,806	223	14.1%
LEGAL	451	1,080	1,994	2,175	715	264	58.5%
CENTRAL ADMIN SERVICES	2,090	2,455	1,734	1,923	1,800	-290	-13.9%
PROGRAM/PROJECT CONTROL	641	351	301	288	250	-391	-61.0%
INFORMATION OUTREACH	1,723	1,928	2,449	2,743	3,188	1,465	85.0%
INFORMATION SERVICES	10,991	12,023	9,051	10,603	14,402	3,411	31.0%
OTHER	35	65	17	19	21	-14	-40.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	17.8%	18.8%	19.9%	18.6%	20.3%		
<b>TOTAL MISSION SUPPORT</b>	55,541	60,743	60,172	59,030	64,616	9,075	16.3%
ENVIRONMENTAL	2,137	1,869	1,466	1,265	1,040	-1,097	-51.3%
SAFETY AND HEALTH	8,726	8,951	9,341	10,080	10,732	2,006	23.0%
FACILITIES MANAGEMENT	1,466	2,247	2,275	2,706	1,897	431	29.4%
MAINTENANCE	17,063	18,246	18,319	19,517	22,391	5,328	31.2%
UTILITIES	15,915	17,517	17,196	16,078	19,429	3,514	22.1%
SAFEGUARDS AND SECURITY	2,420	2,712	2,835	2,984	3,305	885	36.6%
LOGISTICS SUPPORT	4,518	4,629	4,657	4,126	3,936	-582	-12.9%
QUALITY ASSURANCE	0	0	41	17	31	31	100.0%
LABORATORY/TECHNICAL SUPPORT	3,296	4,572	4,042	2,257	1,855	-1,441	-43.7%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	0.9%	0.9%	1.0%	1.1%	1.1%		
<b>TOTAL SITE SPECIFIC</b>	2,935	2,980	3,131	3,615	3,383	448	15.3%
MANAGEMENT/INCENTIVE FEE	2,935	2,980	3,131	3,615	3,383	448	15.3%
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

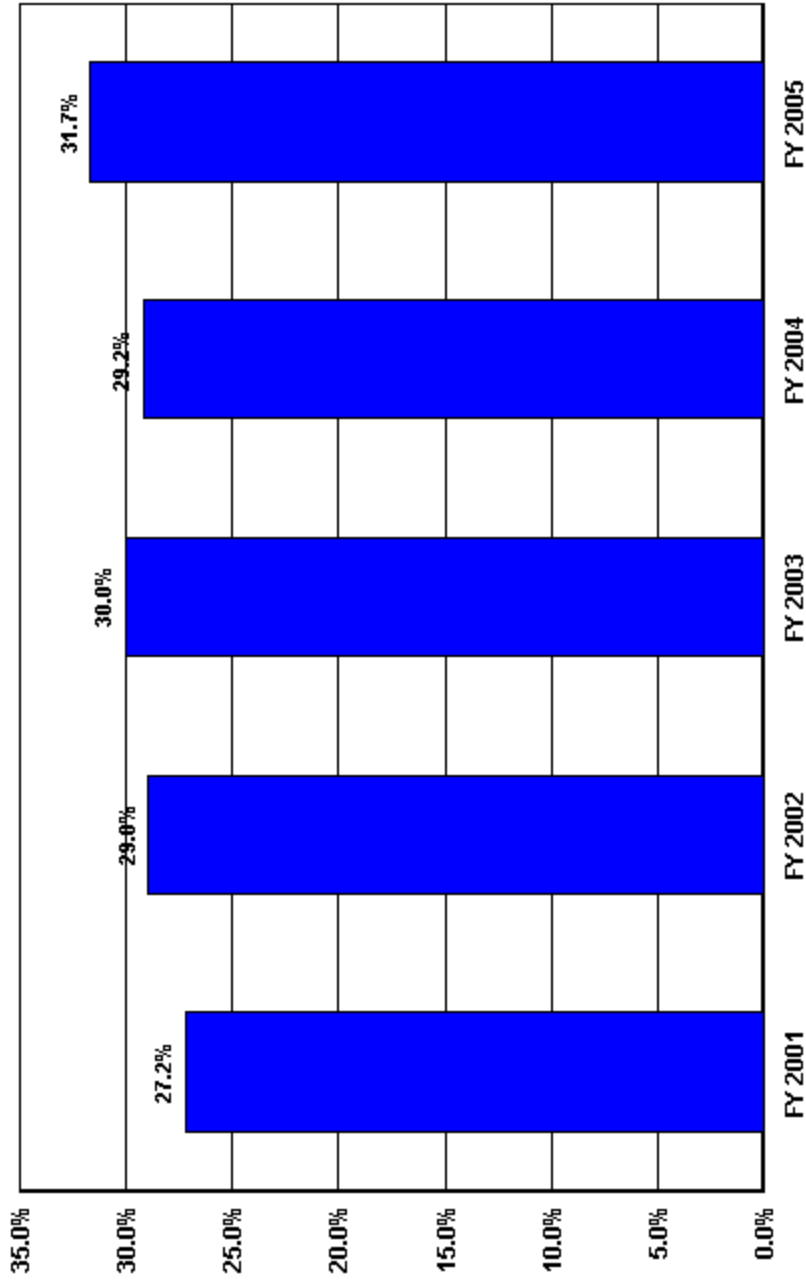


■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>85,151</b>	<b>93,781</b>	<b>90,954</b>	<b>92,826</b>	<b>100,970</b>



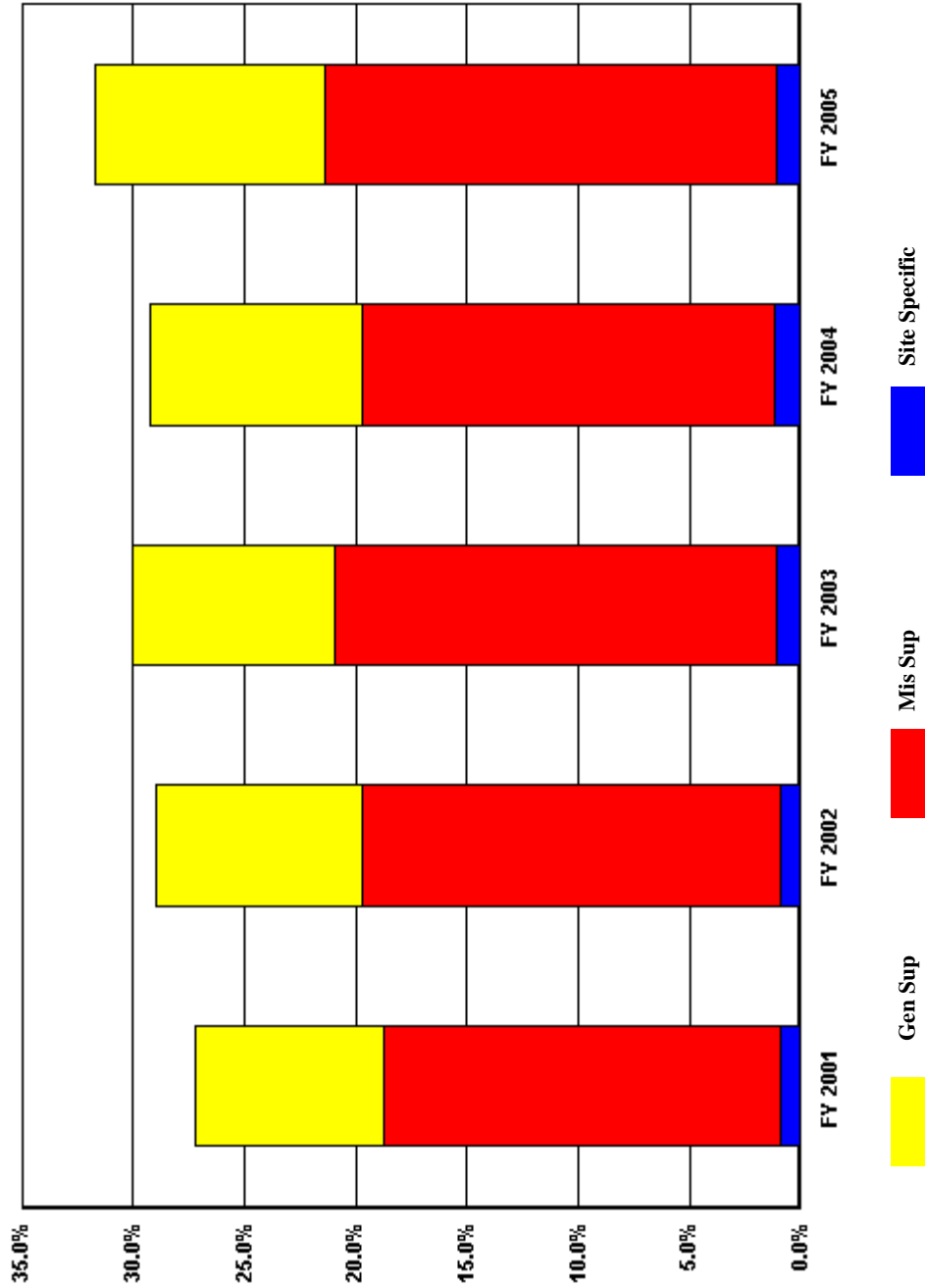
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Fermi National Accelerator Lab/University Research**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	27.2%	29.0%	30.0%	29.2%	31.7%

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	8.5%	9.3%	9.1%	9.5%	10.4%
Mis Sup	17.8%	18.8%	19.9%	18.6%	20.3%
Site Specific	0.9%	0.9%	1.0%	1.1%	1.1%

---

**SITE PROFILE**  
**Fermi National Accelerator Lab/University Research**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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 2,100 people are employed at the Lab. Fermilab has an on-site housing operation to accommodate users and their families, and an on-site cafeteria for employees, users and visitors.

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

**TRENDS:**

1. Trend in Functional Support Costs from fiscal year 2001 to fiscal year 2005:

General Support costs are up 23% over five years. The major component of this increase is explained in Information Services below. Mission Support costs have increased approximately 14% from their steady state of \$60 million over the past three years, explained in #2 below.

2. Trend in Functional Support Costs as a percentage of Total Site Costs from fiscal year 2001 to fiscal year 2005:

Overall support costs have increased to their highest level in five years due to a complete analysis of building maintenance costs in fiscal year 2005 in order to meet the reporting requirements of the Infrastructure Division of the Office of Science, resulting of the reclassification of approximately \$5 million from Mission Direct. In addition, the cessation of NuMI activities reduced Capital/ Construction significantly. The higher rate when compared to the 2002 — 2004 period is also due to increased power costs as explained below.

---

**SITE PROFILE**  
**Fermi National Accelerator Lab/University Research**

---

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**LEGAL**

Costs decreased by 67% due to the settlement in FY05 of legal claims related to construction of the NuMI tunnel, resulting in the cessation of external legal support costs.

**INFORMATION SERVICES**

The increase in costs was due to a one-time expense for Oracle licenses of \$935,000, and centralization of computing service by the Computing Division.

**FACILITIES MANAGEMENT**

The decrease of 30% is primarily due to reclassification of some labor costs of the building managers to the maintenance category.

**UTILITIES**

The increase of 21% resulted from increased running time of the accelerator complex in FY05. Also, due to competition as required by electrical power deregulation in Illinois, the monthly power bill increased by 35% in the last 4 months of the fiscal year.

**QUALITY ASSURANCE**

In fiscal year 2005, this category increased by 82% or \$14K, due to an increase in self-assessment programs.

**CAPITAL CONSTRUCTION**

The 24% decrease resulted from completion of the NuMI construction project.

**COST SAVINGS INITIATIVES**

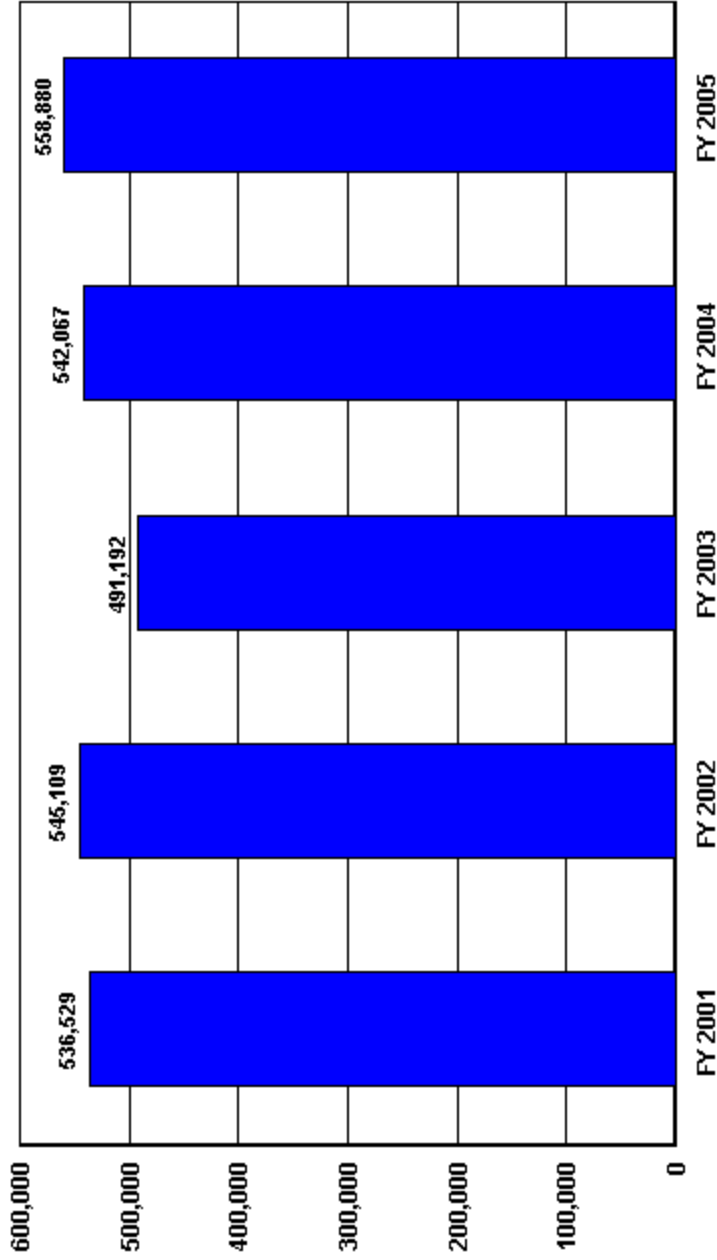
(\$ in 000's)

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 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	1,026,383	1,094,351	1,069,009	1,167,697	1,222,861	196,478	19.1%
<b>Capital Construction</b>	73,694	58,732	56,468	58,847	41,523	-32,171	-43.7%
<b>Total Costs Less Construction</b>	952,689	1,035,619	1,012,541	1,108,850	1,181,338	228,649	24.0%
<b>Total Support Costs</b>	536,529	545,109	491,192	542,067	558,880	22,351	4.2%
<b>Mission Direct Operation</b>	416,160	490,510	521,349	566,783	622,458	206,298	49.6%
<b>Mission Direct Operation as % of Total Cost</b>	40.5%	44.8%	48.8%	48.5%	50.9%		
<b>Capital Construction as % of Total Cost</b>	7.2%	5.4%	5.3%	5.0%	3.4%		
<b>Total Support Cost as % of Total Cost</b>	52.3%	49.8%	45.9%	46.4%	45.7%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	52.3%	49.8%	45.9%	46.4%	45.7%		
<b>TOTAL SUPPORT COST</b>	536,529	545,109	491,192	542,067	558,880	22,351	4.2%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	13.4%	12.4%	12.1%	11.6%	11.0%		
<b>TOTAL GENERAL SUPPORT</b>	137,516	135,448	129,237	135,314	134,413	-3,103	-2.3%
EXECUTIVE DIRECTION	9,270	8,855	8,275	6,793	8,383	-887	-9.6%
HUMAN RESOURCES	15,790	14,574	14,630	17,329	15,136	-654	-4.1%
CFO	10,462	9,260	8,271	8,880	8,345	-2,117	-20.2%
PROCUREMENT	11,112	9,967	10,633	10,559	10,016	-1,096	-9.9%
LEGAL	3,647	4,866	4,780	4,227	5,518	1,871	51.3%
CENTRAL ADMIN SERVICES	10,407	10,689	10,001	10,290	11,039	632	6.1%
PROGRAM/PROJECT CONTROL	26,434	27,840	25,810	27,604	28,433	1,999	7.6%
INFORMATION OUTREACH	4,825	4,904	4,228	3,804	2,815	-2,010	-41.7%
INFORMATION SERVICES	43,614	40,563	40,913	41,826	40,341	-3,273	-7.5%
OTHER	1,955	3,930	1,696	4,002	4,387	2,432	124.4%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	32.0%	30.5%	30.2%	30.1%	28.7%		
<b>TOTAL MISSION SUPPORT</b>	328,115	333,728	323,217	350,948	351,287	23,172	7.1%
ENVIRONMENTAL	31,417	23,906	21,693	25,868	27,845	-3,572	-11.4%
SAFETY AND HEALTH	70,632	75,905	73,126	77,562	84,092	13,460	19.1%
FACILITIES MANAGEMENT	44,127	42,673	40,183	40,257	40,088	-4,039	-9.2%
MAINTENANCE	83,920	90,036	84,682	81,221	77,272	-6,648	-7.9%
UTILITIES	10,488	10,133	10,869	10,120	10,642	154	1.5%
SAFEGUARDS AND SECURITY	28,311	31,750	33,980	41,198	41,576	13,265	46.9%
LOGISTICS SUPPORT	20,513	19,117	18,383	17,445	16,543	-3,970	-19.4%
QUALITY ASSURANCE	7,772	9,279	8,359	8,343	7,227	-545	-7.0%
LABORATORY/TECHNICAL SUPPORT	30,935	30,929	31,942	48,934	46,002	15,067	48.7%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	6.9%	6.9%	3.6%	4.8%	6.0%		
<b>TOTAL SITE SPECIFIC</b>	70,898	75,933	38,738	55,805	73,180	2,282	3.2%
MANAGEMENT/INCENTIVE FEE	59,262	63,746	27,384	46,246	61,191	1,929	3.3%
TAXES	11,636	12,187	11,354	9,559	11,989	353	3.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

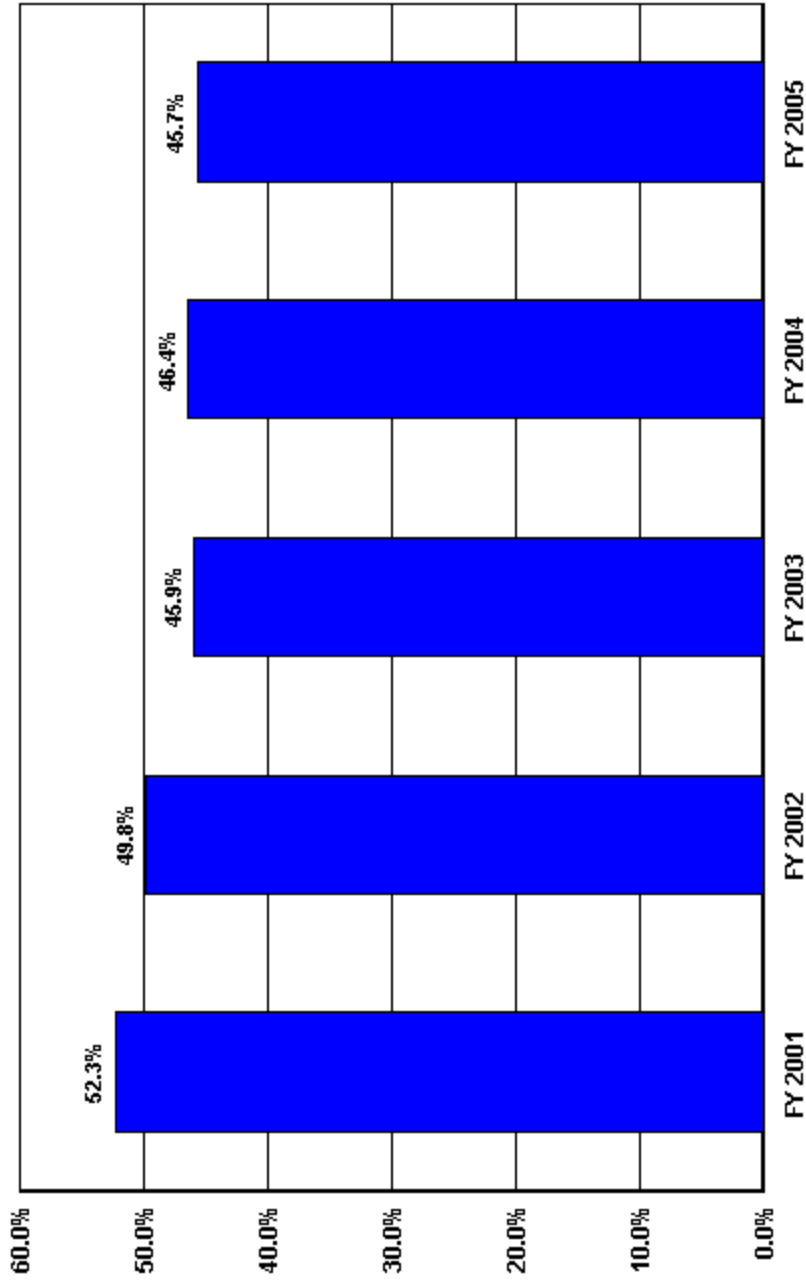
**US Department of Energy  
Total Functional Support  
Hanford/Fluor Daniel, Bechtel & CH2M Hill**



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>536,529</b>	<b>545,109</b>	<b>491,192</b>	<b>542,067</b>	<b>558,880</b>

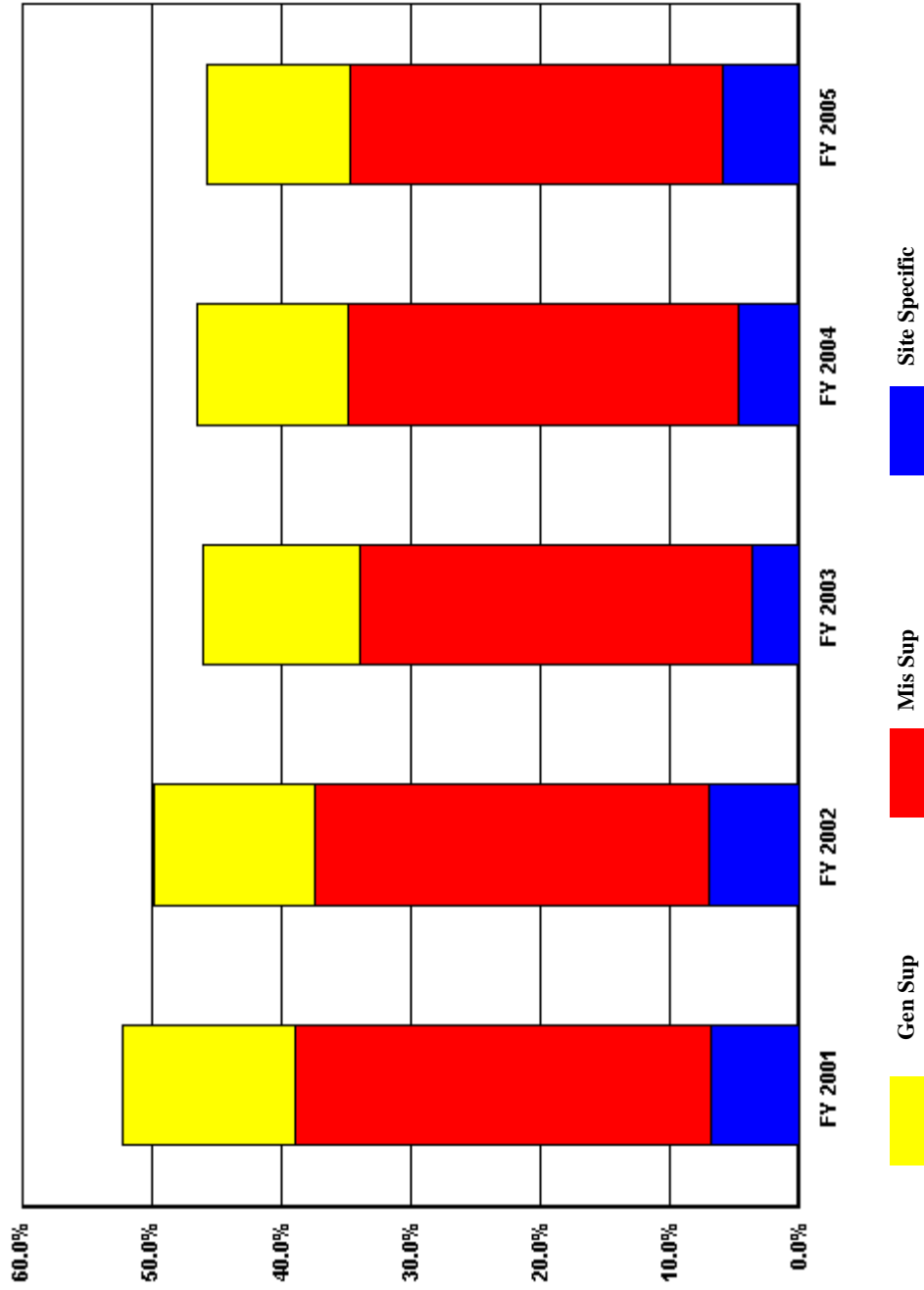
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Hanford/Fluor Daniel, Bechtel & CH2M Hill**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>52.3%</b>	<b>49.8%</b>	<b>45.9%</b>	<b>46.4%</b>	<b>45.7%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	13.4%	12.4%	12.1%	11.6%	11.0%
Mis Sup	32.0%	30.5%	30.2%	30.1%	28.7%
Site Specific	6.9%	6.9%	3.6%	4.8%	6.0%



---

**SITE PROFILE**  
**Hanford/Fluor Daniel, Bechtel & CH2M Hill**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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

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

The DOE Richland Operations Office (RL) oversees the bulk of cleanup, including plutonium stabilization, cleanup of contaminated soil and buildings, stabilization and storage of spent nuclear fuel, and waste treatment and disposal. Fluor Hanford Inc. and Washington Closure Hanford complete cleanup activities for RL.

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

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

The site continues to progress on its three primary objectives:

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

The River Corridor encompasses approximately 210 square miles adjacent to the Columbia River. It is divided into three areas: the 100 Area, comprising nine shut-down plutonium production reactors and support facilities; the 300 Area, comprising manufacturing and research facilities; and the 600

---

**SITE PROFILE**  
**Hanford/Fluor Daniel, Bechtel & CH2M Hill**

---

Area, encompassing 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

The functional support costs as a percentage of total cost have decreased since the FY 2001 baseline, but have been stable during the past three years.

The Site Specific category changed the most significantly, with a 30.8% increase. This increase is due to increases in taxes and award fee, which are explained more fully below. Other variance analysis for specific functional categories is based upon the guidance of plus/minus 20% change.

NOTE: While it should be noted that functional support costs are not intended to be utilized to compare sites, there are some differences in the Hanford site that may distort Hanford data. The FMSIC functional cost guidance states that the contractor that originates the costs should report functional costs. With several major contractors at Hanford the costs could appear "out of line" with similar sites in certain categories, due to the fact that some functions have been centralized from a site perspective. In addition, the geographic location and size of the site requires the performance of many fundamental infrastructure support activities that may not be required at smaller sites.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**LEGAL**

Increase due to lawsuit settlements and additional legal costs in FY 2005.

**INFORMATION OUTREACH**

In FY04 this category included "K Basins Hydrolasing Demonstration" costs. This was a one time activity with specific funding that did not continue for FY05.

**MANAGEMENT/INCENTIVE FEE**

Additional fee paid to contractors, consistent with DOE approved fee plan.

**TAXES**

Increase due to additional limitations placed on the Research & Development tax credit and how it is calculated.

**SITE PROFILE**  
**Hanford/Fluor Daniel, Bechtel & CH2M Hill**

**COST SAVINGS INITIATIVES**  
(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Commission Recapture	76	The commission recapture program requests the defined benefit pension plan investment managers direct a percentage of their trading activities to brokers who then in turn, refund the pension plan a portion of the commission.	Fluor Hanford
Plan Merger	41	The three defined benefit plans merged into one plan. This merger resulted in a reduction of premiums required to be paid to the Pension Benefit Guarantee Corporation (PBGC).	Fluor Hanford
Fee Negotiation	255	A renegotiation of fees with the defined benefit custodial trustee and record keeper for the plans resulted in an approximate annual cost avoidance of \$255K.	Fluor Hanford
Truck and Pup Operations	1,200	Efficiencies stemmed from utilizing trucks and trailers to haul a large stockpile of non-radioactive soil from the B Reactor Area to ERDF.	WCH
100 Area Remediation and Backfill	2,100	Labor underruns throughout all remediation sites due to resource sharing/limitations; savings were achieved during mobilization of the 100-B/C Remaining Pipelines and Sewers and 118-K-1 burial ground remediation subcontractors; field sampling and analytical analysis savings.	WCH
Facility Characterization	4,100	Efficiencies were achieved by revising the methods used for contamination characterization and deactivating the large beryllium-contaminated 314 facility. Rather than using paint as a contaminate fixative, a special spray bond material was used that significantly reduced the resources required, reduced schedule time, and increased safety. Also, fewer samples and lab analysis were required than planned.	WCH

---

**SITE PROFILE**  
**Hanford/Fluor Daniel, Bechtel & CH2M Hill**

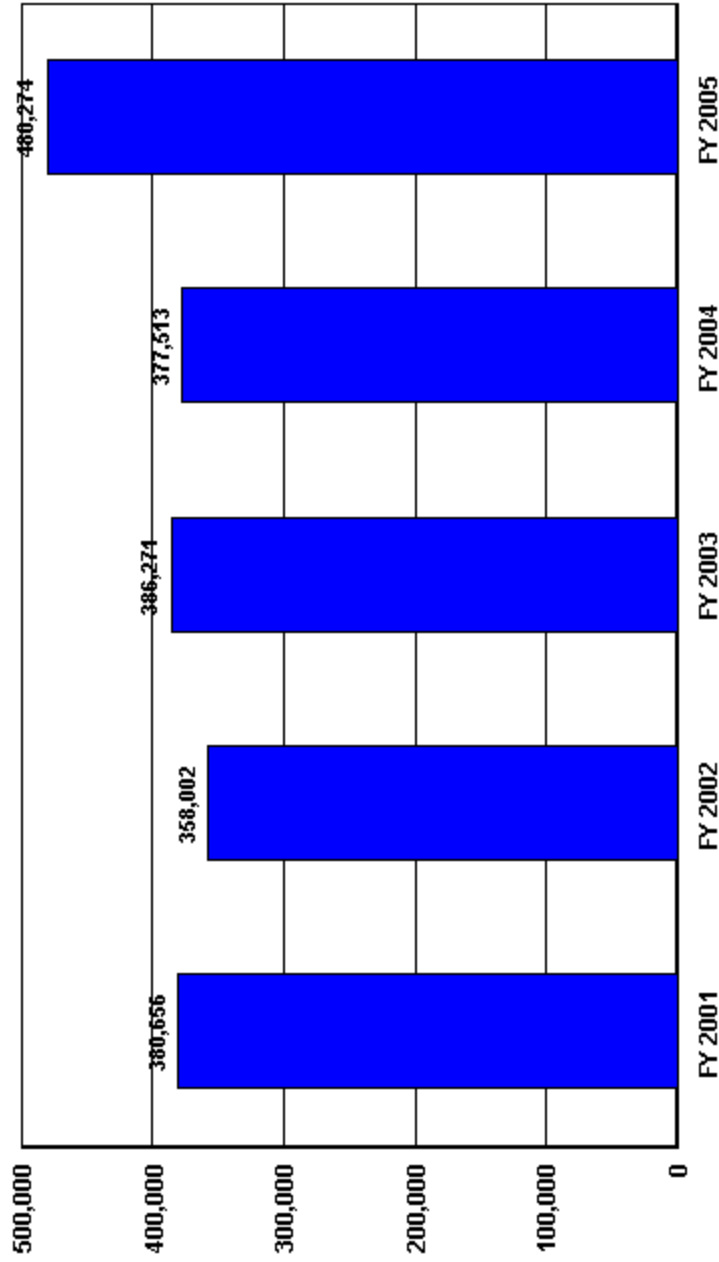
---

Sampling Efficiencies	1,100	Efficiencies realized in performing peer review of human health risk scenarios, DQO development, reconnaissance sampling, and work associated with the Columbia River work plan and data compilation.	WCH
Reduction to retiree medical	2,300	Efficiencies were achieved by accomplishing tasks with fewer project support resources; costs for legacy retiree medical plan were less than anticipated; performance fee was reduced due to award of the new Hanford River Corridor Contract before fiscal year end.	WCH

**Trends in Total Support Cost by Functional Categories**  
**Idaho National Lab/Bechtel BWXT Idaho (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	719,531	680,174	712,704	766,686	954,705	235,174	32.7%
<b>Capital Construction</b>	30,673	26,100	15,280	16,005	14,457	-16,216	-52.9%
<b>Total Costs Less Construction</b>	688,858	654,074	697,424	750,681	940,248	251,390	36.5%
<b>Total Support Costs</b>	380,656	358,002	386,271	377,513	480,274	99,618	26.2%
<b>Mission Direct Operation</b>	308,202	296,072	311,153	373,168	459,974	151,772	49.2%
<b>Mission Direct Operation as % of Total Cost</b>	42.8%	43.5%	43.7%	48.7%	48.2%		
<b>Capital Construction as % of Total Cost</b>	4.3%	3.8%	2.1%	2.1%	1.5%		
<b>Total Support Cost as % of Total Cost</b>	52.9%	52.6%	54.2%	49.2%	50.3%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	52.9%	52.6%	54.2%	49.2%	50.3%		
<b>TOTAL SUPPORT COST</b>	380,656	358,002	386,271	377,513	480,274	99,618	26.2%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	17.0%	16.1%	17.2%	14.9%	15.4%		
<b>TOTAL GENERAL SUPPORT</b>	122,327	109,316	122,257	113,929	146,599	24,272	19.8%
EXECUTIVE DIRECTION	10,924	12,715	13,272	13,071	15,978	5,054	46.3%
HUMAN RESOURCES	10,127	9,510	9,576	9,392	13,897	3,770	37.2%
CFO	9,438	5,918	6,281	7,008	11,322	1,884	20.0%
PROCUREMENT	5,975	5,867	6,382	8,656	9,941	3,966	66.4%
LEGAL	9,479	9,341	9,979	4,702	4,082	-5,397	-56.9%
CENTRAL ADMIN SERVICES	17,145	15,147	20,359	16,328	20,110	2,965	17.3%
PROGRAM/PROJECT CONTROL	13,650	12,033	13,805	12,502	15,072	1,422	10.4%
INFORMATION OUTREACH	11,922	9,591	9,103	6,809	8,539	-3,383	-28.4%
INFORMATION SERVICES	34,431	27,168	32,461	35,311	46,953	12,522	36.4%
OTHER	-764	2,026	1,039	150	705	1,469	192.3%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	28.3%	28.3%	28.8%	27.4%	27.5%		
<b>TOTAL MISSION SUPPORT</b>	203,444	192,374	205,079	210,246	262,936	59,492	29.2%
ENVIRONMENTAL	10,107	8,740	9,333	2,420	6,000	-4,107	-40.6%
SAFETY AND HEALTH	46,354	47,705	49,189	58,985	66,995	20,641	44.5%
FACILITIES MANAGEMENT	18,927	18,516	31,115	25,759	29,560	10,633	56.2%
MAINTENANCE	63,443	53,315	49,239	52,181	67,937	4,494	7.1%
UTILITIES	8,413	10,964	15,932	15,185	20,722	12,309	146.3%
SAFEGUARDS AND SECURITY	21,693	21,514	25,442	30,067	35,937	14,244	65.7%
LOGISTICS SUPPORT	11,517	10,104	11,917	12,544	13,723	2,206	19.2%
QUALITY ASSURANCE	15,178	12,252	10,750	11,379	12,926	-2,252	-14.8%
LABORATORY/TECHNICAL SUPPORT	7,812	9,264	2,162	1,726	9,136	1,324	16.9%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	7.6%	8.3%	8.3%	7.0%	7.4%		
<b>TOTAL SITE SPECIFIC</b>	54,885	56,312	58,935	53,338	70,739	15,854	28.9%
MANAGEMENT/INCENTIVE FEE	30,891	33,778	37,109	38,109	51,655	20,764	67.2%
TAXES	3,375	3,237	3,264	4,350	3,371	-4	-0.1%
LDRD / PDRD / SDRD	20,619	19,297	18,562	10,879	15,713	-4,906	-23.8%

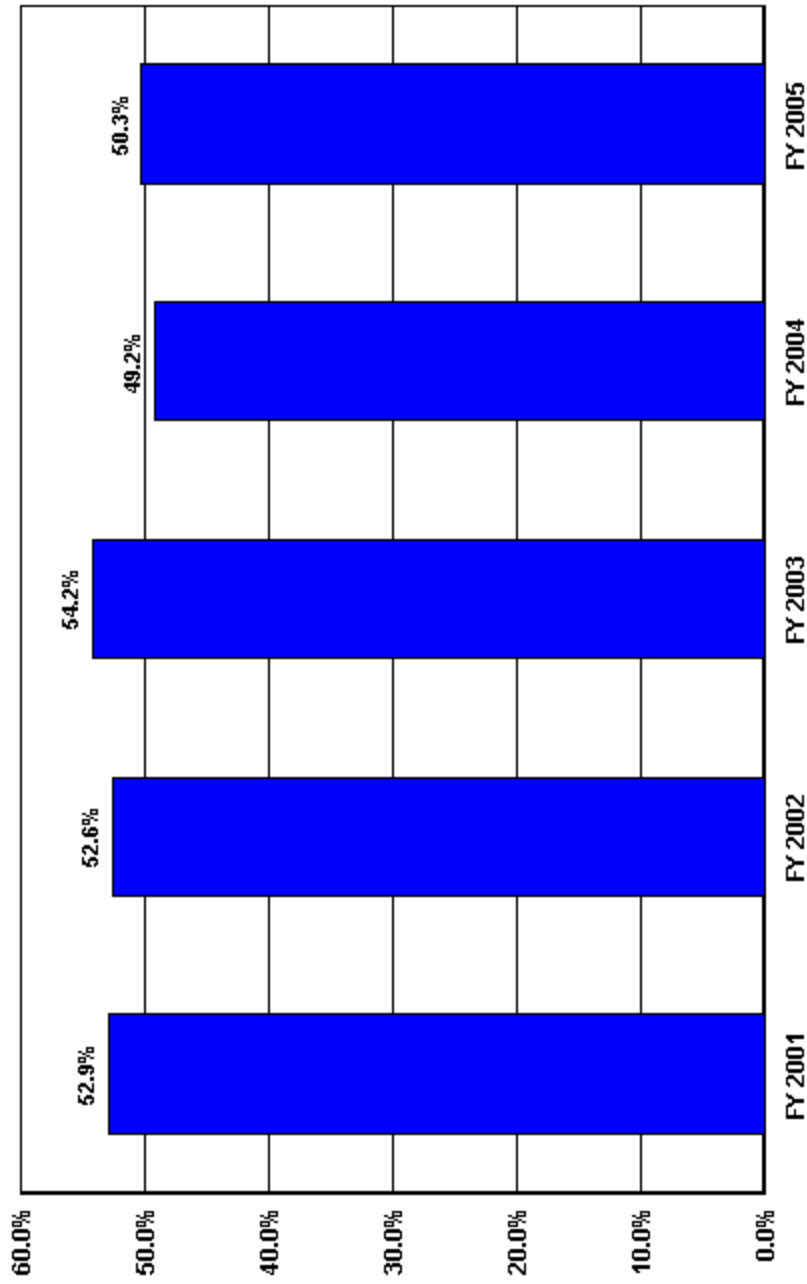
**US Department of Energy**  
**Total Functional Support**  
 Idaho National Lab/Bechtel BWXT Idaho



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>380,656</b>	<b>358,002</b>	<b>386,271</b>	<b>377,513</b>	<b>480,274</b>

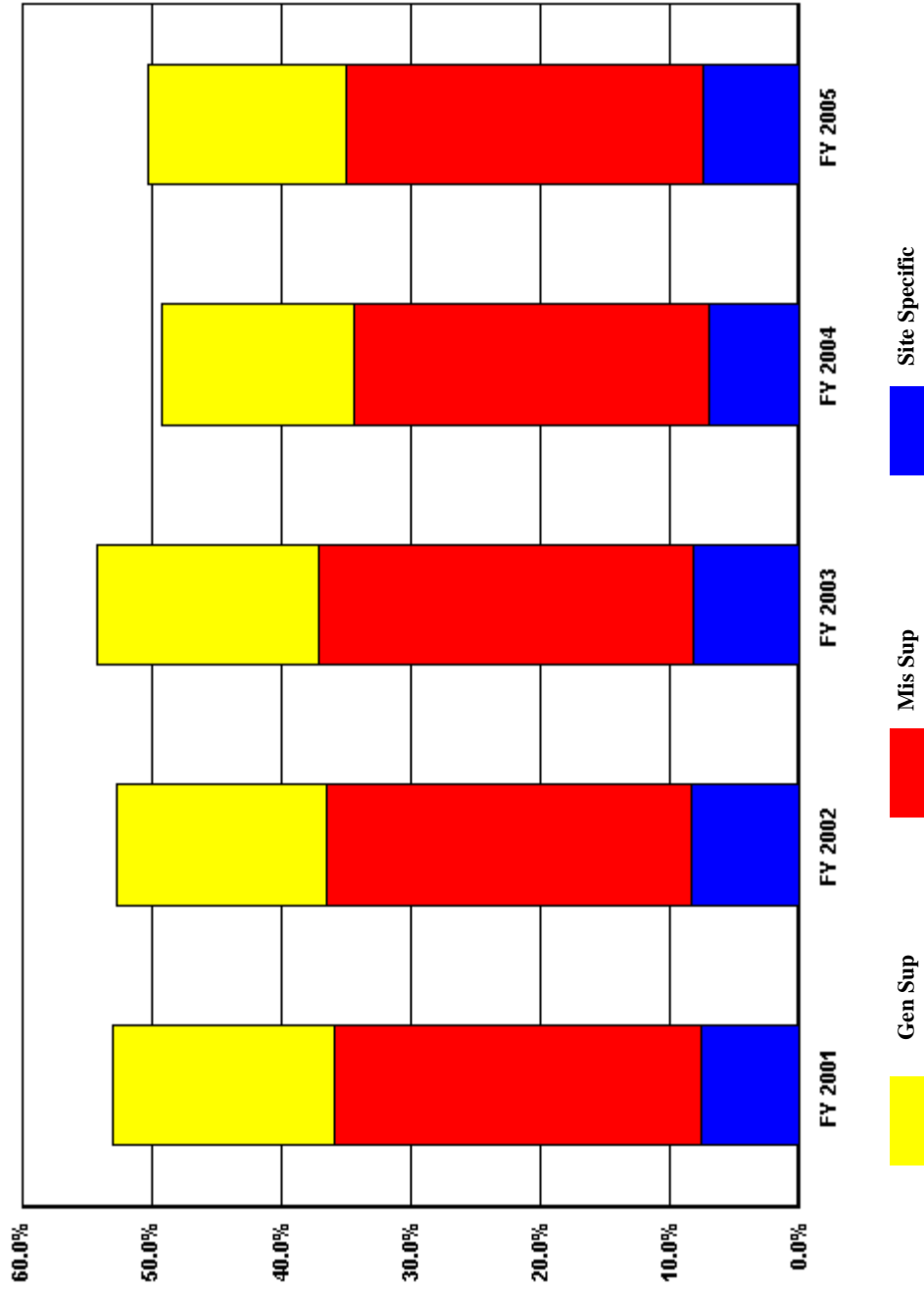
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Idaho National Lab/Bechtel BWXT Idaho**



 Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>52.9%</b>	<b>52.6%</b>	<b>54.2%</b>	<b>49.2%</b>	<b>50.3%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
Idaho National Lab/Bechtel BWXT Idaho**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	17.0%	16.1%	17.2%	14.9%	15.4%
Mis Sup	28.3%	28.3%	28.8%	27.4%	27.5%
Site Specific	7.6%	8.3%	8.3%	7.0%	7.4%



---

**SITE PROFILE**  
**Idaho National Lab/Bechtel BWXT Idaho**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**SITE BACKGROUND**

In FY 2005 the Idaho National Engineering and Environmental Laboratory (INEEL) contract was split into two separate contracts through competitive bids initiated by the DOE Idaho Operations Office (DOE-ID). The first solicitation was for the Management and Operations (M&O) responsibilities of the new Idaho National Laboratory (INL) which includes the Laboratory portion of the INEEL, plus consolidating the former Argonne National Laboratory — West (ANL-W) operated by the University of Chicago (UC) into the INL. The second solicitation was for the management responsibilities related to the Site’s clean-up activities.

On February 1, 2005 Battelle Energy Alliance, LLC (BEA) assumed management responsibilities of the INL from predecessor contractors Bechtel BWXT Idaho, LLC (BBWI) and UC. The stated goal of the INL contract is to “Work towards the creation of a world-class, multi-disciplinary laboratory focused on nuclear energy and national security research and development.”

On May 1, 2005 CH2M-WG Idaho, LLC (CWI) assumed management responsibilities of the Idaho Cleanup Project (ICP) from BBWI. The stated goal of the Idaho Cleanup Project is to “Complete the environmental cleanup in a safe, cost effective manner, consistent with the principles of the EM Closure Planning Guidance Document dated June 1, 2004.”

In addition, on May 1, 2005 BBWI took over the contract for the Advanced Mixed Waste Treatment Project which previously was handled as a privatization contract with British Nuclear Fuels Limited.

**SITE CHARACTERISTICS**

The INL/ICP functional cost profile is a result of the many factors and characteristics associated with our operational missions. A comprehensive knowledge of site-specific characteristics (missions, 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 Idaho’s functional cost profile include:

- INL is a multi-program FFRDC laboratory with a diverse customer base.
- The INL/ICP occupies 889 square miles with the associated logistics/infrastructure.
- There are 8 major “site” operating complexes and 5 facilities in the City of Idaho Falls, which are 40 to 60 miles from the site. Approximately 2,100 employees work in town locations while 3,700 employees work in site locations.

---

**SITE PROFILE**  
**Idaho National Lab/Bechtel BWXT Idaho**

---

- INL/ICP provides support services of \$17.3M to other “on-site” government entities, e.g., the Naval Reactors Facility (NRF) and DOE-ID.
- Examples of operational missions include:
  - Environmental — The ICP is involved in the 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 INL is involved in scientific research and development with a focus on nuclear energy and national security.
  - Nuclear Operations — The INL operates the Advanced Test Reactor (ATR) which provides material and fuel test results for the U.S. Navy and produces various isotopes.
  - Manufacturing — The INL produces tank armor for the U.S. Army.
- ICP environmental operations are guided by the Idaho Settlement Agreement between the Department, the Navy, and the State of Idaho.
- INL/ICP is one of the largest employers in the state of Idaho.

**HIGHLIGHTS OF TRENDS**

- 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.
- FY 2005 Total Functional Support increased by \$109.1M largely due to INEEL contract restructuring and required increases in pension plan contributions.

**ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEAR**

Compared to FY 2004, INL/ICP functional support costs have increased \$109.1M. As explained in the Background section, the INL/ICP experienced substantial changes in FY 2005. Many of the changes in specific functional support cost categories are due to these events. Since FY 2005 represents an anomaly and the specific category changes are due to the various contract transitions, there will be no analysis of changes in individual functional support categories.

---

**SITE PROFILE**  
**Idaho National Lab/Bechtel BWXT Idaho**

---

**COST SAVINGS INITIATIVES**

The INL/ICP employs an integrated approach to cost management. Five 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 and Achieving the Competitive Edge (ACE), which are proven systematic methods of applying step-by-step improvements to our current work processes.
- 3) Employ outside experts to independently review and validate cost estimates.
- 4) Utilize performance measures and benchmarks to provide overall indicators of cost efficiency.
- 5) Utilize the ACE cost efficiency and avoidance methodology and tools to identify and pursue cost-saving improvements of management processes.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**OTHER**

The Other category of \$534K was composed of \$67K for General Liability, \$58K for D&O Insurance and \$409K for BEA Transition Contract.

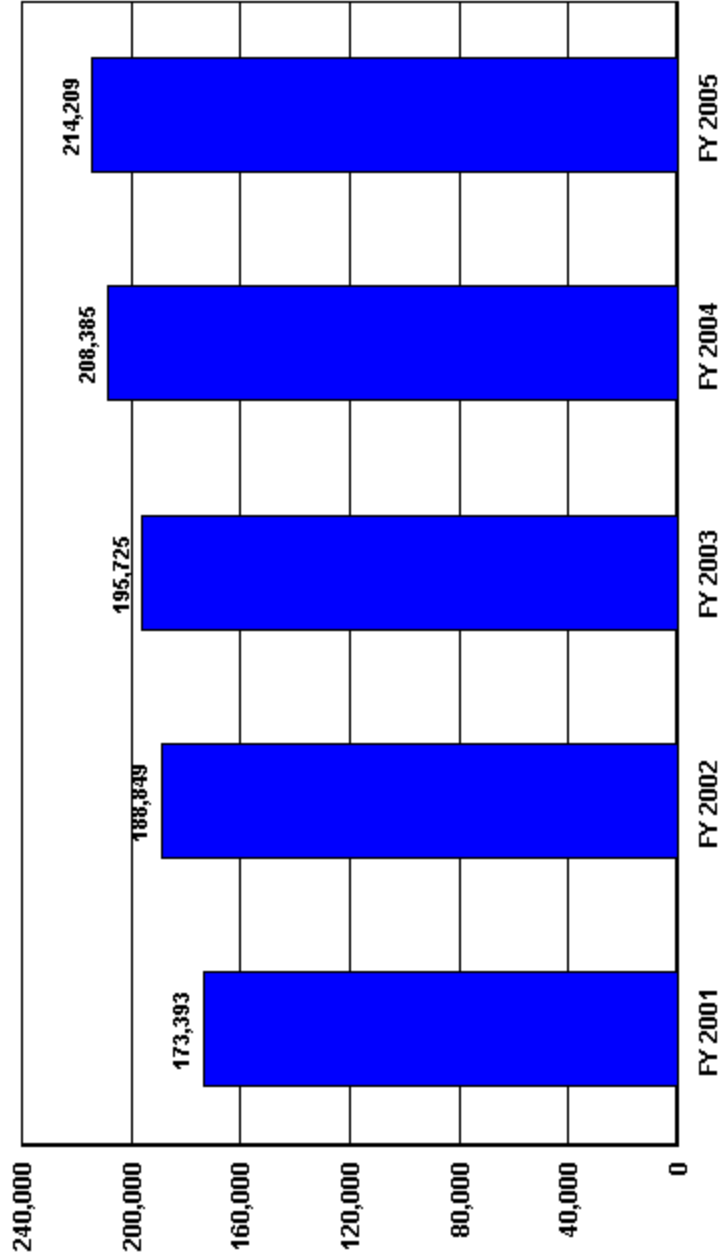
**COST SAVINGS INITIATIVES**  
(\$ in 000's)

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

**Trends in Total Support Cost by Functional Categories**  
**Kansas City Plant/Honeywell, FM&T (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	406,112	452,522	484,983	515,898	538,395	132,283	32.6%
<b>Capital Construction</b>	45,427	55,396	66,438	58,710	39,207	-6,220	-13.7%
<b>Total Costs Less Construction</b>	360,685	397,126	418,545	457,188	499,188	138,503	38.4%
<b>Total Support Costs</b>	173,393	188,849	195,725	208,385	214,209	40,816	23.5%
<b>Mission Direct Operation</b>	187,292	208,277	222,820	248,803	284,979	97,687	52.2%
<b>Mission Direct Operation as % of Total Cost</b>	46.1%	46.0%	45.9%	48.2%	52.9%		
<b>Capital Construction as % of Total Cost</b>	11.2%	12.2%	13.7%	11.4%	7.3%		
<b>Total Support Cost as % of Total Cost</b>	42.7%	41.7%	40.4%	40.4%	39.8%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	42.7%	41.7%	40.4%	40.4%	39.8%		
<b>TOTAL SUPPORT COST</b>	173,393	188,849	195,725	208,385	214,209	40,816	23.5%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	15.0%	14.9%	14.2%	13.7%	13.6%		
<b>TOTAL GENERAL SUPPORT</b>	60,737	67,402	68,841	70,893	73,135	12,398	20.4%
EXECUTIVE DIRECTION	4,598	4,216	5,741	5,942	6,178	1,580	34.4%
HUMAN RESOURCES	4,947	4,467	3,896	3,625	3,734	-1,213	-24.5%
CFO	5,266	4,286	5,209	5,834	6,045	779	14.8%
PROCUREMENT	6,108	6,299	6,453	6,769	6,483	375	6.1%
LEGAL	1,238	2,053	2,096	1,040	1,135	-103	-8.3%
CENTRAL ADMIN SERVICES	209	430	220	268	274	65	31.1%
PROGRAM/PROJECT CONTROL	6,410	7,172	8,207	8,581	8,786	2,376	37.1%
INFORMATION OUTREACH	3,163	3,888	2,812	3,494	4,399	1,236	39.1%
INFORMATION SERVICES	29,926	33,391	34,207	35,340	35,690	5,764	19.3%
OTHER	-1,128	1,200	0	0	411	1,539	136.4%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	22.5%	21.2%	20.9%	21.5%	21.0%		
<b>TOTAL MISSION SUPPORT</b>	91,366	95,841	101,175	110,680	113,319	21,953	24.0%
ENVIRONMENTAL	5,131	5,355	5,296	5,311	4,855	-276	-5.4%
SAFETY AND HEALTH	4,344	5,007	4,926	5,645	5,427	1,083	24.9%
FACILITIES MANAGEMENT	6,727	8,143	10,071	10,014	11,715	4,988	74.1%
MAINTENANCE	36,135	35,189	36,923	43,477	43,158	7,023	19.4%
UTILITIES	12,898	13,458	12,824	13,127	14,347	1,449	11.2%
SAFEGUARDS AND SECURITY	8,721	10,071	11,247	11,592	11,331	2,610	29.9%
LOGISTICS SUPPORT	6,270	6,399	6,795	7,726	7,951	1,681	26.8%
QUALITY ASSURANCE	7,450	8,203	9,165	9,450	9,463	2,013	27.0%
LABORATORY/TECHNICAL SUPPORT	3,690	4,016	3,928	4,338	5,072	1,382	37.5%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	5.2%	5.7%	5.3%	5.2%	5.2%		
<b>TOTAL SITE SPECIFIC</b>	21,290	25,606	25,709	26,812	27,755	6,465	30.4%
MANAGEMENT/INCENTIVE FEE	19,837	22,556	22,445	23,458	23,866	4,029	20.3%
TAXES	1,453	1,706	1,602	1,228	2,206	753	51.8%
LDRD / PDRD / SDRD	0	1,344	1,662	2,126	1,683	1,683	100.0%

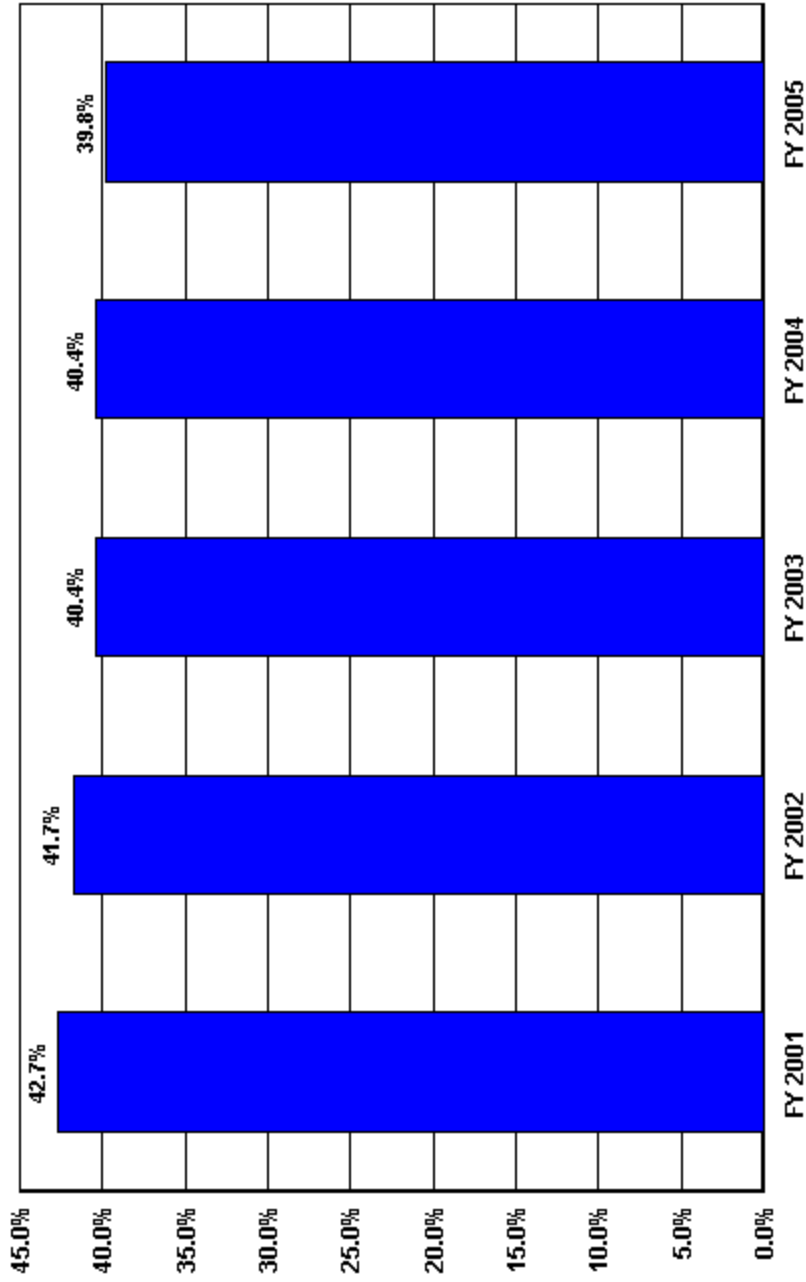
US Department of Energy  
 Total Functional Support  
 Kansas City Plant/Honeywell, FM&T



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	173,393	188,849	195,725	208,385	214,209

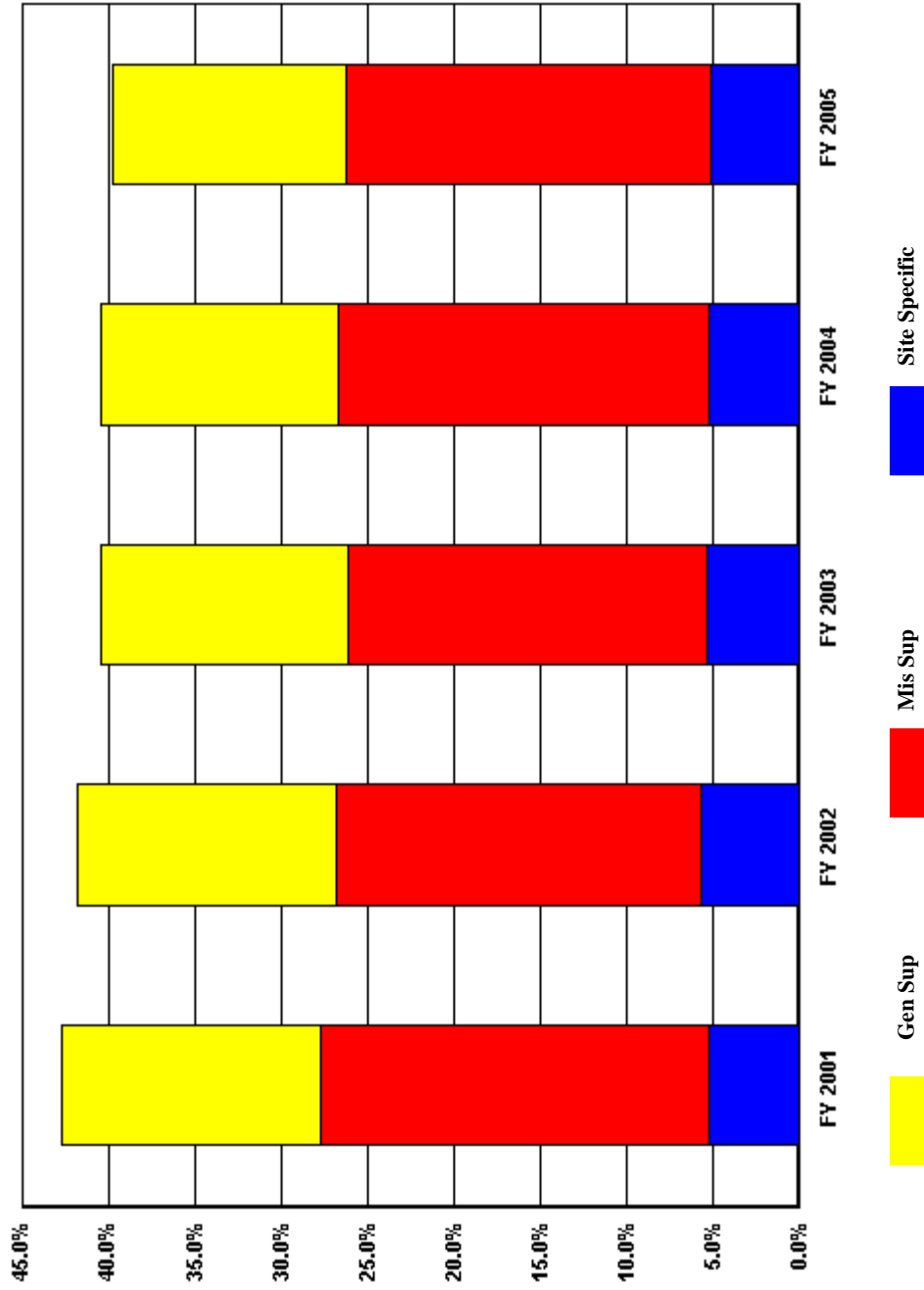
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Kansas City Plant/Honeywell, FM&T**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>42.7%</b>	<b>41.7%</b>	<b>40.4%</b>	<b>40.4%</b>	<b>39.8%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	15.0%	14.9%	14.2%	13.7%	13.6%
Mis Sup	22.5%	21.2%	20.9%	21.5%	21.0%
Site Specific	5.2%	5.7%	5.3%	5.2%	5.2%

---

**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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 60,000 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 2,950 people. The Kansas City facility resides on 141 acres including grounds and parking lots and currently utilizes approximately 2.9 million square feet of building space (primarily within one manufacturing building). The plant provides utility services to the South Kansas City Federal Complex which includes the plant and General Services Administration (GSA) space leased to other federal agencies. The plant bills GSA for their utilities. In October 1994, the FM&T division assumed responsibility for Kirtland Operations previously operated by EG&G. Kirtland Operations is situated on four separate sites in Albuquerque, New Mexico: 20.2 fenced acres owned by the U.S. Air Force and occupied under permit to the DOE, the Craddock Facility, the Air Park Facility, and the Coyote Canyon Facility. The Kirtland Operation also provides facility support and training for Fort Chaffee, Arkansas, which supports the Office of Secure Transportation, and engineering and technical support for Los Alamos, New Mexico. There are approximately 30,000 items of equipment at the combined facilities.

#### Functional Support Cost Trends

The plant cost profile is influenced by program requirements and funding trends associated with Defense Programs' workload and complementary work. Total operating costs (total costs less capital/construction) have increased steadily each year from FY2001 through FY2005. During the five year period, direct mission costs increased by 52%, while total functional support costs only increased by 24%. General Support functions have decreased from 17% to 15% of operating costs, while Mission Support functions have decreased from 25% to 23% during this time frame. A plant pension contribution requirement in FY2003 through FY2005



---

**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

---

was driven 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 FY2003, \$24.2M in FY2004 and \$22.3M in FY2005) impacted all categories through salaried and hourly labor pricing.

General Support

FY2005 General Support represents a \$2.2M (3.2%) increase over FY2004. The primary elements for this increase are Information Outreach (\$0.9M), Information Services (\$.4M), and Other (\$.4M) with the remaining elements all less than \$.3M. Information Outreach reflects continued growth in the Business Development organization established to grow complementary work offsetting Mission Direct costs through higher asset utilization. Information Services reflects DigitalWorks projects (projects designed to automate workflow), including PeopleSoft Time and Labor, Order Management Improvements and Factory Work Instruction Pilot, and a PC Refresh investment. The increase in Other is associated with the cost of organizational restructuring that occurred during FY2005.

FY2005 General Support costs represent a \$13.4 million increase from the FY2001 level. Element trends within the category reflect increases in Executive Direction (\$1.6M), Chief Financial Officer (\$.8M), Program/Project Planning & Control (\$3.4M), Information Outreach (\$1.2M), Information Services (\$5.8M) and Other (\$1.4M). The remaining four elements result in a net offset of -\$0.8M, of which Human Resources is the largest contributor, primarily due to a reduction of eleven associates during the period.

Executive Direction reflects the addition of seven associates in the Six Sigma and Business Excellence organization and the addition of four senior management staff over the five-year period. The change in Chief Financial Officer is influenced by an increase of eight associates primarily in inventory and cost accounting. Program/Project Planning & Control reflects an increase in labor costs for 24 associates and the additional travel and expenses related to supporting additional campaigns and increased direct mission work, which has increased 52% over the same period. Information Outreach reflects growth in the Business Development organization with the addition of five associates. 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 26 associates in the organization addressing critical skill initiatives during this period. Other is influenced by bid and proposal and contract transition labor charges that were identified as peculiar to FY2001 and organizational restructuring costs that were identified in FY2005.

The General Support - Other category consists of:

---

**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

---

(\$ in 000s)

FY 2005	\$411	Costs associated with organizational restructuring
FY 2004	\$0	
FY 2003	\$0	
FY 2002	\$1,200	Legal Settlement(s)
FY 2001	(1,128)	Bid & Proposal and Contract Transition Labor Costs Charged to Honeywell

Mission Support

Mission Support reflects a \$2.6M (2.4%) increase in FY2005 when compared to FY2004. This increase is primarily attributed to Facilities Management (\$1.7M) and Utilities (\$1.2M) and Laboratory/Technical Support (\$.7M), offset by reductions in the remaining elements all under \$0.5M. The increase in Facilities Management is due to increase contracted facilities engineering support and earned-value management services leading to certification initiative in FY2006. Utility costs increased primarily due to the increase cost of natural gas during FY2005.

Laboratory/Technical Support reflects an increase due the addition of five associates for engineering support in addition to normal escalation and the pension contribution impact.

The \$22.0 million increase in Mission Support costs from FY2001 to FY2005 is primarily attributed to increases in Safety & Health (\$1.1M), Facilities Management (\$5.0M), Maintenance (\$7.0M), Utilities (\$1.4M), Safeguards & Security (\$2.6M), Logistics Support (\$1.8M), Quality Assurance (\$2.0M) and Laboratory/Technical Support (\$1.3M).

Safety and Health reflects an increase of two 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, 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 three 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 FY2002. Logistics Support and Quality Assurance labor costs reflect the increase in pension expense and escalation. Laboratory/Technical Support reflects an increase of thirteen associates for engineering support during this period.

---

**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

---

Site Specific

The change in Site Specific costs between FY2001 and FY2005 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 FY2001. In FY2005, PDRD activities were reduced significantly over FY2004 levels. The \$1M year-over-year increase in Taxes is caused by a non-recurring Missouri tax refund received in FY2004.

Global Cost Drivers/Anomalies

Workload and funding reductions have required early and regular retirements and have created a disproportionate amount of retirees to current associates (the plant census has been reduced by 53% since 1990). Retiree Insurance is a significant fixed expense (\$11.3M) for the plant and is allocated to all cost categories.

Cost Savings Initiatives

Kansas City Plant/Honeywell FM&T is migrating to the Honeywell Operating System (HOS) with the balance of Honeywell International. HOS is about applying “lean” principles to the entire enterprise removing waste in every process. HOS is a holistic approach to drive improvements in safety, quality, delivery, and cost; through full integration of Six Sigma. HOS is not about working harder, but it is about synergistically integrating processes, skills, and technology, to reduce cycle time and cost, while improving quality. HOS is the next step in the pursuit operational excellence and responsiveness.

Some of the many Six Sigma Projects for 2005 that yielded part of over \$13.8M in Long Term Productivity efficiency gains are detailed below.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**INFORMATION OUTREACH**

Information Outreach reflects continued growth in the business development organization established to grow complementary work offsetting mission direct costs through higher asset utilization.

**OTHER**

The increase in other is associated with the cost of organizational restructuring that occurred during FY2005

**TAXES**

The \$1M year over year increase in taxes is caused by a non-recurring Missouri tax refund received in FY2004

---

**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

---

**LDRD / PDRD / SDRD**

In FY2005 PDRD activities were reduced significantly over FY2004 levels

**CAPITAL CONSTRUCTION**

FY05 had no new construction projects when compared to FY04. SMRI is nearing completion and accounted for over \$25M in FY 2004 compared to just over \$4M in FY 2005. FY 2004 had a completed project for boilers and controls with costs of \$600K that wasn't in FY 2005.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Reduction of Active Calibrated Items	338	A plant-wide effort to reduce the active calibrations by 15% from a baseline number of 38,151 Inspection Measuring and Test Equipment was implemented and executed from November 2004 through approximately September 2005. The equipment removed from the active schedule would have continued to be part of the reoccurring workload for the test equipment organization. Prior to this initiative, there was no clear process in place for identifying requirements based on production schedule, recent usage or ultimately making disposition of the need of the calibrated item. There is an anticipated increase of calibrated items based on the W76 and W80 LEPs.	

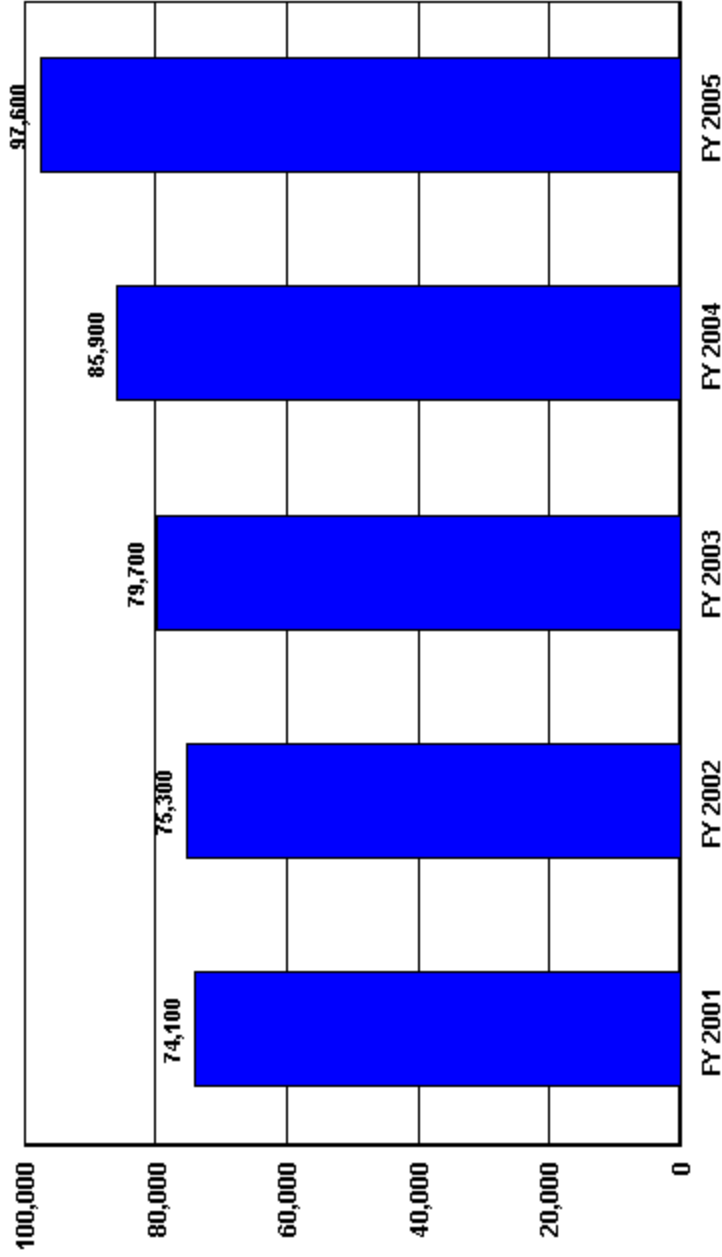
**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

Well Maintenance Contract Cost Savings	396	KCP well maintenance has been provided by the same group of consultants since December 2002. The work performed has always been at or above expectations based on the contract and scope of work, however the pricing was considered excessive by the Environmental Protection Specialist (EPS) overseeing the work. Based on several visits at the KCP, the contractor and the EPS analyzed the tasks performed, the working environment, the security requirements and a strong relationship with the Missouri State regulatory authorities. It was determined that a more cost efficient alternatives could be employed and thereby convinced the contractor to reduce the price. These monies were not spent for this activity and were reallocated to fund another project that had been submitted in the budget.	
Relocation Tiered Agreements	459	Three options, depending on the type of hire, will set limits on cost allowances for relocation expenses that are easier to estimate and control. Previously, there was only one relocation agreement with maximum benefits for all new hires and transfers, resulting in high costs to departmental overhead and expenses that were difficult to manage or predict.	
Purchasing non-refundable tickets	1,200	Honeywell began purchasing non-refundable tickets for associate travel in FY2002; this initiative reflects the utilization of an approach that was being applied at some other sites. During FY2005 the plant experienced a cost savings of \$1.2M for non-refundable tickets. FY2005 travel costs, excluding Work for Others activities, amounted to \$5.8M for the plant	

**Trends in Total Support Cost by Functional Categories**  
**Knolls Atomic Power Lab/Lockheed Martin (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	275,700	271,600	296,500	304,300	347,700	72,000	26.1%
<b>Capital Construction</b>	22,900	15,900	27,300	17,300	19,300	-3,600	-15.7%
<b>Total Costs Less Construction</b>	252,800	255,700	269,200	287,000	328,400	75,600	29.9%
<b>Total Support Costs</b>	74,100	75,300	79,700	85,900	97,600	23,500	31.7%
<b>Mission Direct Operation</b>	178,700	180,400	189,500	201,100	230,800	52,100	29.2%
<b>Mission Direct Operation as % of Total Cost</b>	64.8%	66.4%	63.9%	66.1%	66.4%		
<b>Capital Construction as % of Total Cost</b>	8.3%	5.9%	9.2%	5.7%	5.6%		
<b>Total Support Cost as % of Total Cost</b>	26.9%	27.7%	26.9%	28.2%	28.1%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	26.9%	27.7%	26.9%	28.2%	28.1%		
<b>TOTAL SUPPORT COST</b>	74,100	75,300	79,700	85,900	97,600	23,500	31.7%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	7.5%	8.4%	8.8%	9.1%	10.2%		
<b>TOTAL GENERAL SUPPORT</b>	20,700	22,900	26,100	27,800	35,600	14,900	72.0%
EXECUTIVE DIRECTION	3,100	2,800	3,000	3,200	3,000	-100	-3.2%
HUMAN RESOURCES	2,800	3,400	3,900	4,300	6,100	3,300	117.9%
CFO	2,900	2,500	3,100	4,000	3,300	400	13.8%
PROCUREMENT	2,000	1,700	2,000	1,900	2,400	400	20.0%
LEGAL	400	200	500	200	300	-100	-25.0%
CENTRAL ADMIN SERVICES	1,200	1,300	1,400	1,600	1,500	300	25.0%
PROGRAM/PROJECT CONTROL	300	400	400	500	700	400	133.3%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	8,000	10,600	11,800	12,100	13,800	5,800	72.5%
OTHER	0	0	0	0	4,500	4,500	100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	17.4%	17.2%	16.2%	17.2%	15.8%		
<b>TOTAL MISSION SUPPORT</b>	48,000	46,700	48,100	52,300	55,100	7,100	14.8%
ENVIRONMENTAL	5,000	4,600	5,300	5,900	7,600	2,600	52.0%
SAFETY AND HEALTH	11,300	11,000	11,200	11,600	12,000	700	6.2%
FACILITIES MANAGEMENT	5,300	2,600	4,300	5,500	5,200	-100	-1.9%
MAINTENANCE	11,500	12,900	10,600	12,700	13,100	1,600	13.9%
UTILITIES	3,200	2,600	3,000	2,900	3,000	-200	-6.3%
SAFEGUARDS AND SECURITY	6,000	7,200	8,400	8,400	9,100	3,100	51.7%
LOGISTICS SUPPORT	2,500	2,800	2,200	2,200	2,900	400	16.0%
QUALITY ASSURANCE	3,200	3,000	3,100	3,100	2,200	-1,000	-31.3%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.0%	2.1%	1.9%	1.9%	2.0%		
<b>TOTAL SITE SPECIFIC</b>	5,400	5,700	5,500	5,800	6,900	1,500	27.8%
MANAGEMENT/INCENTIVE FEE	5,100	5,000	5,000	5,200	5,400	300	5.9%
TAXES	300	700	500	600	1,500	1,200	400.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

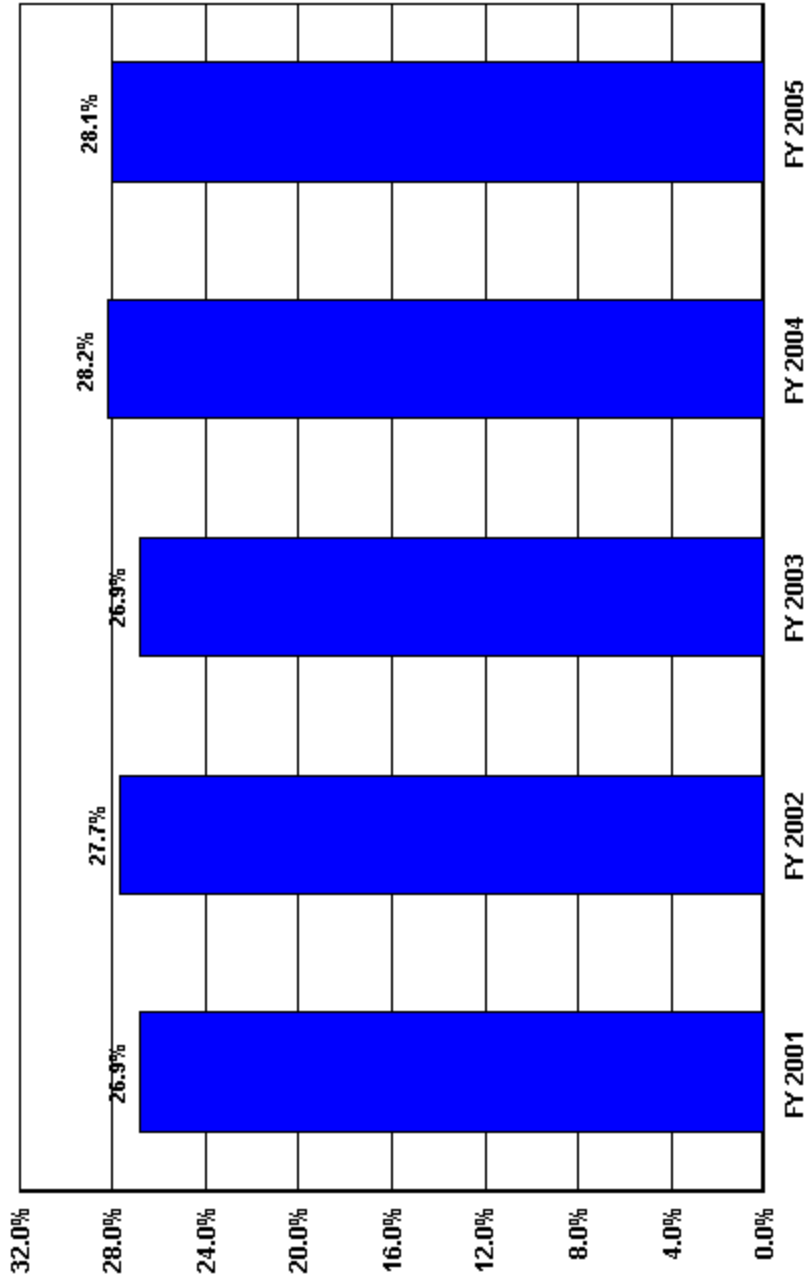
US Department of Energy  
 Total Functional Support  
 Knolls Atomic Power Lab/Lockheed Martin



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	74,100	75,300	79,700	85,900	97,600

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

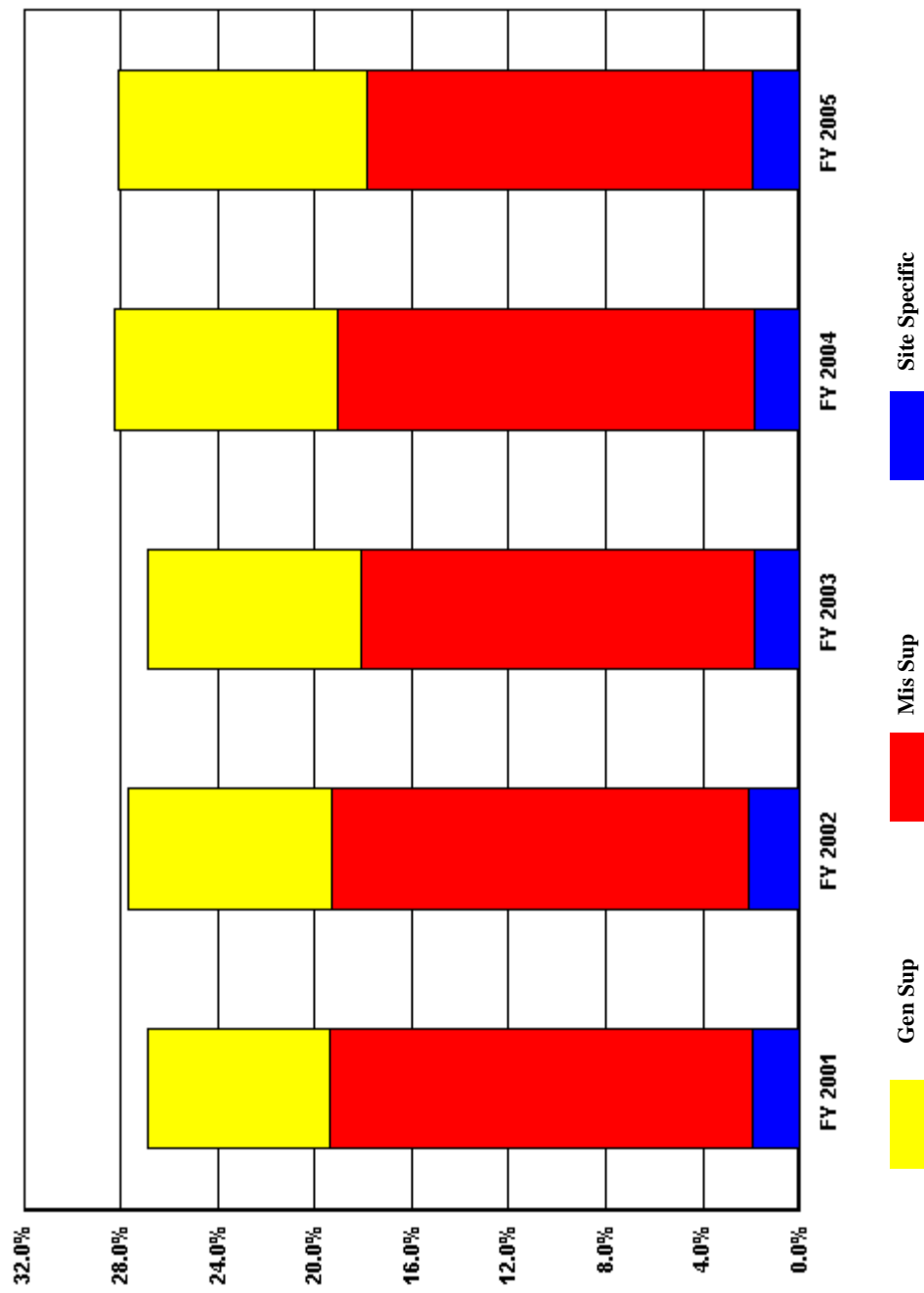


■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>26.9%</b>	<b>27.7%</b>	<b>26.9%</b>	<b>28.2%</b>	<b>28.1%</b>



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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	7.5%	8.4%	8.8%	9.1%	10.2%
Mis Sup	17.4%	17.2%	16.2%	17.2%	15.8%
Site Specific	2.0%	2.1%	1.9%	1.9%	2.0%

---

**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 to nuclear propulsion plant operating personnel.

KAPL currently employs more than 2,700 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 170 and 3,900 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 contract to establish KAPL from the Manhattan Engineering District in May of 1946. KAPL's mission was shifted completely to Naval nuclear propulsion by the mid-1950s. KAPL's initial efforts for the Navy were spent developing a nuclear reactor small enough to operate inside a submarine. The ex-SeaWolf (SSN 575) which was launched in 1955, represented the first KAPL-designed reactor plant. Subsequently, KAPL designed reactors for TRITON (SSN 586), NARWHAL (SSN 671) and the research submarine NR-1. KAPL has also designed reactors for BAINBRIDGE (CGN 25) and TRUXTON (CGN 35) cruisers, the LLOS ANGELES Class and VIRGINIA Class attack submarines and OHIO 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 additional VIRGINIA Class submarines and provides design and engineering support for the future CVN 21 Class aircraft carriers.

KAPL's efforts focus on designing the world's most technologically advanced nuclear reactor plants for the U.S. Naval Nuclear Propulsion Program. Fundamental research is conducted to develop improved materials and components for naval nuclear propulsion technology.

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

---

**SITE PROFILE**  
**Knolls Atomic Power Lab/Lockheed Martin**

---

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 1979, respectively, and are used to test reactors, reactor plant systems, and steam and electric plant components. The MARF and S8G prototypes are also used for training of U.S. Navy personnel as Naval nuclear propulsion plant operators. 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 1990s. At that time, the plants were shut down 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 from 1972 until 1993. 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. Today, all site structures and utilities have been removed; the site is now green grass and is in the final stages of decommissioning for unrestricted use.

KAPL's FY04 estimate for all taxes applicable to DOE Operations, with the exception of sales and use taxes, is \$472K. These taxes are accounted for in the tax category of the FY04 Functional Support Cost Report. Total sales and use tax, applicable to DOE Operations, for FY04 is estimated to be \$900K.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

Increases are primarily due to HR related staffing functions including recruitment and relocation associated with Space Program.

**PROCUREMENT**

Strong hiring in the procurement area due to Space Program and facilities support contributed to an increase in the total labor cost associated with this category.

**LEGAL**

Increases in outside legal service fees and related court costs contribute to the rise in the legal category.

---

**SITE PROFILE**  
**Knolls Atomic Power Lab/Lockheed Martin**

---

**INFORMATION SERVICES**

Higher costs are primarily the result of increased MP and associated Materials and Subcontracts in support of the Space Program. Also purchases of Automatic Data Processing equipment, including super work stations, were advanced into FY05 from FY06.

**OTHER**

Status of pending legal case settlement changed from contingent to probable and thus by accounting practice the liability was recognized.

**ENVIRONMENTAL**

Review of the category prompted the inclusion of Radiological Waste costs.

**SAFEGUARDS AND SECURITY**

Increases in this category are due to increased labor costs.

**LOGISTICS SUPPORT**

Purchase of respiratory equipment for emergency personnel primarily contributed to the increase in this category.

**QUALITY ASSURANCE**

Due to the attrition of multiple senior employees within QA.

**TAXES**

As a result of a New York State Tax Audit additional tax payments were required in FY05.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Intern Interviewing Process	19	During FY05 KAPL changed its' intern interview process from bringing intern candidates to the local area for interviews to conducting the intern interviews by phone. KAPL conducted 71 intern interviews for FY05 at a DOE savings of \$272 in interviewee travel costs per interview. This reduced travel resulted in a cost savings of approximately \$19,312.	Michelle Morgan

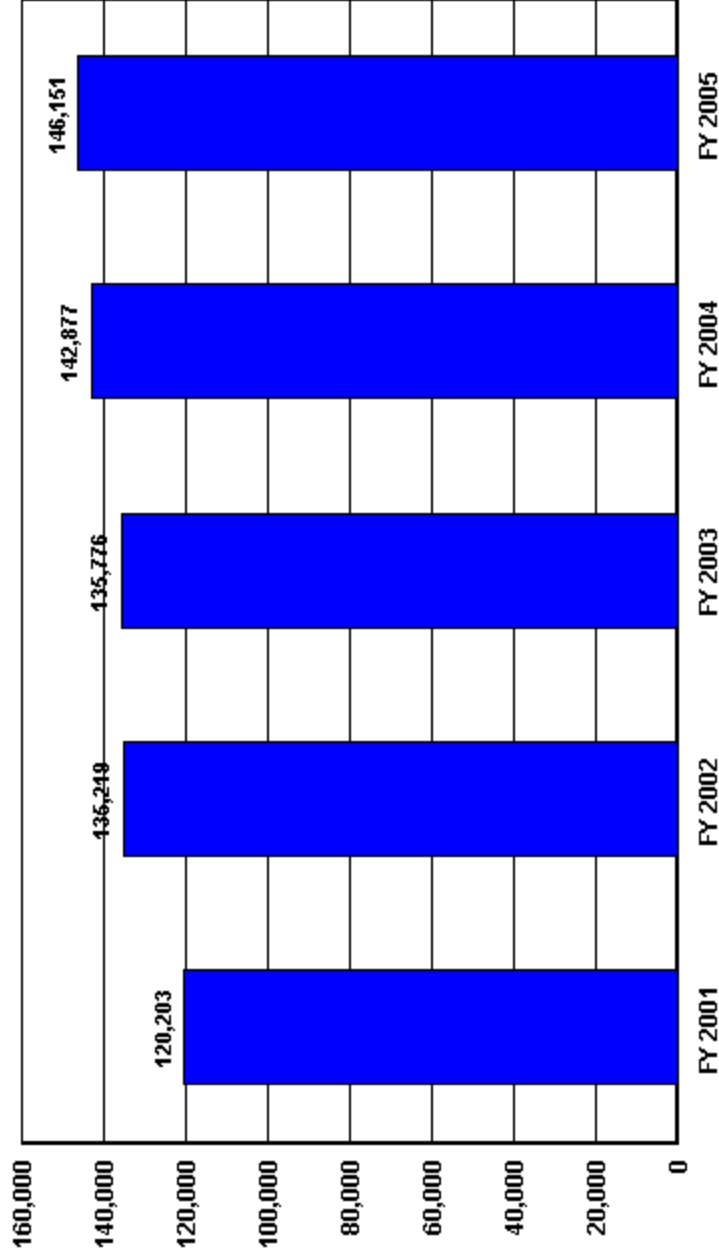
**SITE PROFILE**  
**Knolls Atomic Power Lab/Lockheed Martin**

Remote Drug Screening	26	KAPL also implemented a remote drug screen process for candidates that accepted positions and who did not need a complete physical prior to starting at KAPL. Previously candidates traveled to the area, after accepting an offer, to complete a physical on site. The new process allowed some of the candidates (96) to have a drug screen conducted at their location in lieu of traveling and coming onsite for the physical. The physical was then conducted in conjunction with their start date, therefore reducing the number of travel trips to the area. Total DOE savings related to remote drug screening equals \$26,112.	Michelle Morgan
Operations, Environmental and Health	1,200	In FY 2004, KAPL entered into a fixed price agreement for electricity costs through the Defense Energy Support Center. In FY 2005, the cost savings are estimated at approximately \$1.2M based on a comparison of contract to market rates.	Michelle Morgan

**Trends in Total Support Cost by Functional Categories**  
**L. Berkeley National Lab/University of California (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	432,025	478,705	456,430	503,724	523,738	91,713	21.2%
<b>Capital Construction</b>	46,568	65,282	52,427	59,006	82,227	35,659	76.6%
<b>Total Costs Less Construction</b>	385,457	413,423	404,003	444,718	441,511	56,054	14.5%
<b>Total Support Costs</b>	120,203	135,219	135,776	142,877	146,151	25,948	21.6%
<b>Mission Direct Operation</b>	265,254	278,204	268,227	301,841	295,360	30,106	11.3%
<b>Mission Direct Operation as % of Total Cost</b>	61.4%	58.1%	58.8%	59.9%	56.4%		
<b>Capital Construction as % of Total Cost</b>	10.8%	13.6%	11.5%	11.7%	15.7%		
<b>Total Support Cost as % of Total Cost</b>	27.8%	28.2%	29.7%	28.4%	27.9%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	27.8%	28.2%	29.7%	28.4%	27.9%		
<b>TOTAL SUPPORT COST</b>	120,203	135,219	135,776	142,877	146,151	25,948	21.6%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	10.4%	11.4%	11.9%	11.8%	11.6%		
<b>TOTAL GENERAL SUPPORT</b>	44,872	54,803	54,179	59,236	60,715	15,843	35.3%
EXECUTIVE DIRECTION	4,199	8,192	8,613	9,409	8,658	4,459	106.2%
HUMAN RESOURCES	3,610	3,676	4,466	5,278	5,178	1,568	43.4%
CFO	4,743	4,890	4,209	6,622	7,625	2,882	60.8%
PROCUREMENT	3,506	4,284	3,745	6,035	6,004	2,498	71.2%
LEGAL	1,646	1,503	1,428	1,763	2,407	761	46.2%
CENTRAL ADMIN SERVICES	6,069	5,847	5,494	5,066	4,341	-1,728	-28.5%
PROGRAM/PROJECT CONTROL	0	0	0	0	0	0	0.0%
INFORMATION OUTREACH	3,004	3,454	3,511	3,393	3,288	284	9.5%
INFORMATION SERVICES	19,270	20,916	21,449	20,871	21,605	2,335	12.1%
OTHER	-1,175	2,041	1,264	799	1,609	2,784	236.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	14.8%	14.0%	15.2%	14.0%	13.5%		
<b>TOTAL MISSION SUPPORT</b>	64,047	67,225	69,526	70,611	70,585	6,538	10.2%
ENVIRONMENTAL	5,127	2,159	4,508	4,658	4,724	-403	-7.9%
SAFETY AND HEALTH	7,068	9,254	8,693	7,734	7,970	902	12.8%
FACILITIES MANAGEMENT	14,556	16,125	16,767	16,534	18,225	3,669	25.2%
MAINTENANCE	15,527	16,322	17,004	19,443	17,351	1,824	11.7%
UTILITIES	5,918	7,947	6,724	6,817	6,422	504	8.5%
SAFEGUARDS AND SECURITY	2,590	3,259	3,165	3,652	3,486	896	34.6%
LOGISTICS SUPPORT	4,228	4,006	4,288	4,304	4,282	54	1.3%
QUALITY ASSURANCE	25	56	81	93	368	343	1,372.0%
LABORATORY/TECHNICAL SUPPORT	9,008	8,097	8,296	7,376	7,757	-1,251	-13.9%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.6%	2.8%	2.6%	2.6%	2.8%		
<b>TOTAL SITE SPECIFIC</b>	11,284	13,191	12,071	13,030	14,851	3,567	31.6%
MANAGEMENT/INCENTIVE FEE	2,950	3,107	3,071	2,947	3,695	745	25.3%
TAXES	349	271	342	484	313	-36	-10.3%
LDRD / PDRD / SDRD	7,985	9,813	8,658	9,599	10,843	2,858	35.8%

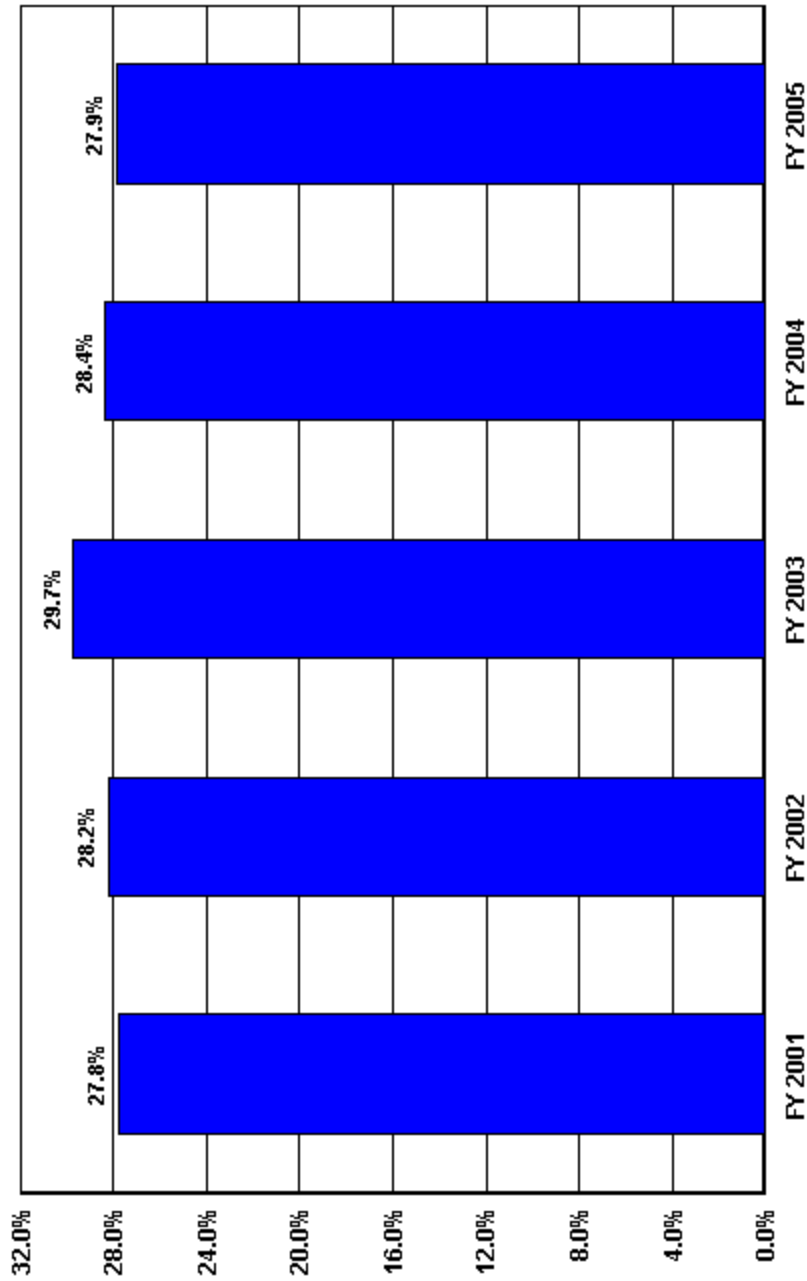
**US Department of Energy**  
**Total Functional Support**  
**L. Berkeley National Lab/University of California**



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>120,203</b>	<b>135,219</b>	<b>135,776</b>	<b>142,877</b>	<b>146,151</b>

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

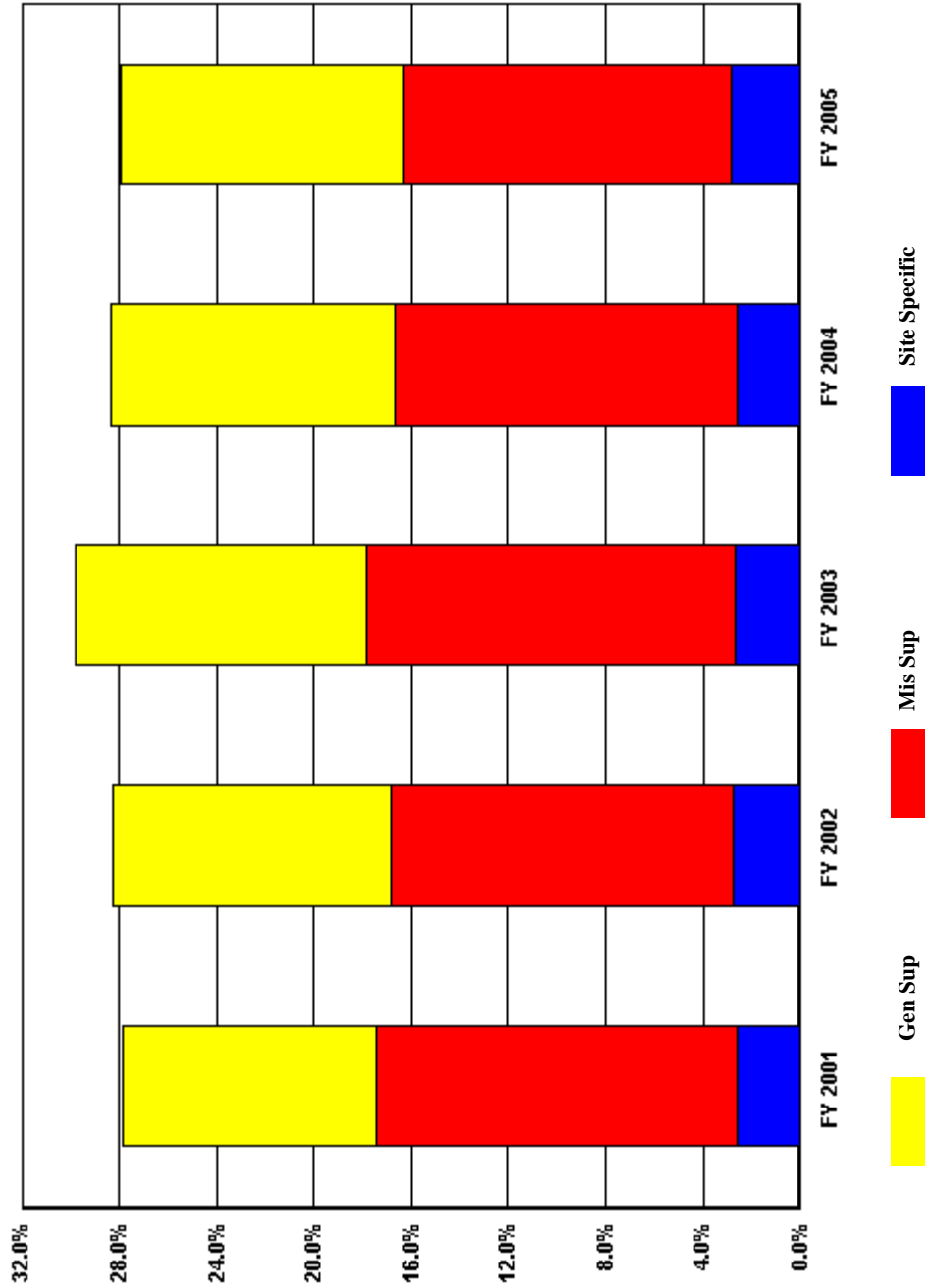


■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	27.8%	28.2%	29.7%	28.4%	27.9%



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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	14.8%	11.4%	11.9%	11.8%	11.6%
Mis Sup	2.6%	14.0%	15.2%	14.0%	13.5%
Site Specific	2.6%	2.8%	2.6%	2.6%	2.8%

---

**SITE PROFILE**  
**L. Berkeley National Lab/University of California**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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 10 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, and Surface Science; Advanced Detector Systems; and Environmental Assessment and Remediation. The Berkeley Lab provides several unique national experimental user facilities for qualified investigators: the Advanced Light Source (ALS); the National Energy Research Scientific Computing Center (NERSC); Energy Sciences Network (ESnet); and the National Center for Electron Microscopy.

LBNL is managed by the University of California 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 the following places due to space limitations on site: downtown Berkeley, Oakland for the NERSC facility, and Walnut Creek for the Joint Genome Institute. In FY 2005, the workforce was approximately 3,600 people, consisting of 61% Career employees, 14% Graduate Student Research Assistants & Student Assistants, 9% Postdoctoral Fellows & Researchers, 6% Faculty, and 10% other. LBNL's major DOE customer is Office of Science (SC), which accounted for 60% of Mission Direct costs, followed by work for other Agencies (Federal and Non-Federal). Other DOE programs include Energy Efficiency (EE), Fossil Energy (FE), Electric Transmission (TD), 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 for 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.

II. Trends:

LBNL's Functional Support Costs (FSC) as a percentage of total Site Costs have fluctuated between 27.8% and 29.7% with an average of 28.4% between FY01 and FY05. From FY04 to FY05, total Site costs increased by 4.0% while the total Functional Support Costs increased only by 2.3%. Explanation for functional support cost categories with major change (increase/decrease  $> \pm 20\%$ ) is detailed below.

---

**SITE PROFILE**  
**L. Berkeley National Lab/University of California**

---

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

Major changes from FY01 to FY05:

In FY02, Division Directors' salaries were moved from Organization Burden into G&A, which increased the Executive Direction category. In FY04, the CFO organization went through a rebuilding effort by increasing staffing to a more appropriate level to enhance financial integrity and services at LBNL. Also in FY04, a new Distributed Procurement Unit (DPU) was formed to manage the procurement card process. In FY05, the Assurance Office was created to increase functionality and scope relating to Institutional activities and compliance with the new UC-Contract with DOE.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**LEGAL**

Major costs include activities related to the counsel/patents office and external patent attorney fees. Cost increased by \$644K due to increased use of outside attorneys and a reduction in credits from Royalties on FY04 patents.

**OTHER**

Legal settlements have returned to levels more in line with historical trends with FY04 having fewer settlement expenses.

**QUALITY ASSURANCE**

The Assurance Office was expanded in scope and functionality to include more Institutional activities, specifically compliance with the UC-Contract with DOE

**MANAGEMENT/INCENTIVE FEE**

Increased by \$748K primarily due to a higher management fee with the new University of California Contract with DOE effective June 1, 2005.

**TAXES**

Decreased by \$171K primarily because purchases subject to sales tax have returned to historical levels, whereas FY04 had a higher amount of these purchases.

---

**SITE PROFILE****L. Berkeley National Lab/University of California**

---

**CAPITAL CONSTRUCTION**

Capital/Construction increased by 39.4%, or \$23,221K, primarily due to the increased activity on the Molecular Foundry construction project.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b> (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
Reorganization of ES&H	1,000	In FY05, the Environmental Health and Safety Division (EH&S) consolidated its activities and underwent further reorganization in order to absorb higher-than inflation cost increases and unfunded scope/mandates, which resulted in a number of staff reductions and other saving initiatives throughout the EH&S organization totaling ~\$1M. Specific initiatives included: on-site clinical laboratory operated in Health Services since the 1950's was closed; in Waste Management, the Compliance Team Leader position and the Operations Team Leader position were combined into one, the Data Validation position was eliminated reducing QA/QC efforts; waste transportation, treatment and disposal costs were reduced by using different vendors; Travel and Training expenditures were reduced by 50%; eliminated 1 Management Information System programmer.	Martin Straka
New Travel Agency	300	In FY05, the Travel Office aggressively negotiated lower fees with the Carlson Travel Agency. Use of the Carlson Agency resulted in a cost savings of approximately \$300K on airfare, international travel and other travel related costs.	Martin Straka

---

**SITE PROFILE**

**L. Berkeley National Lab/University of California**

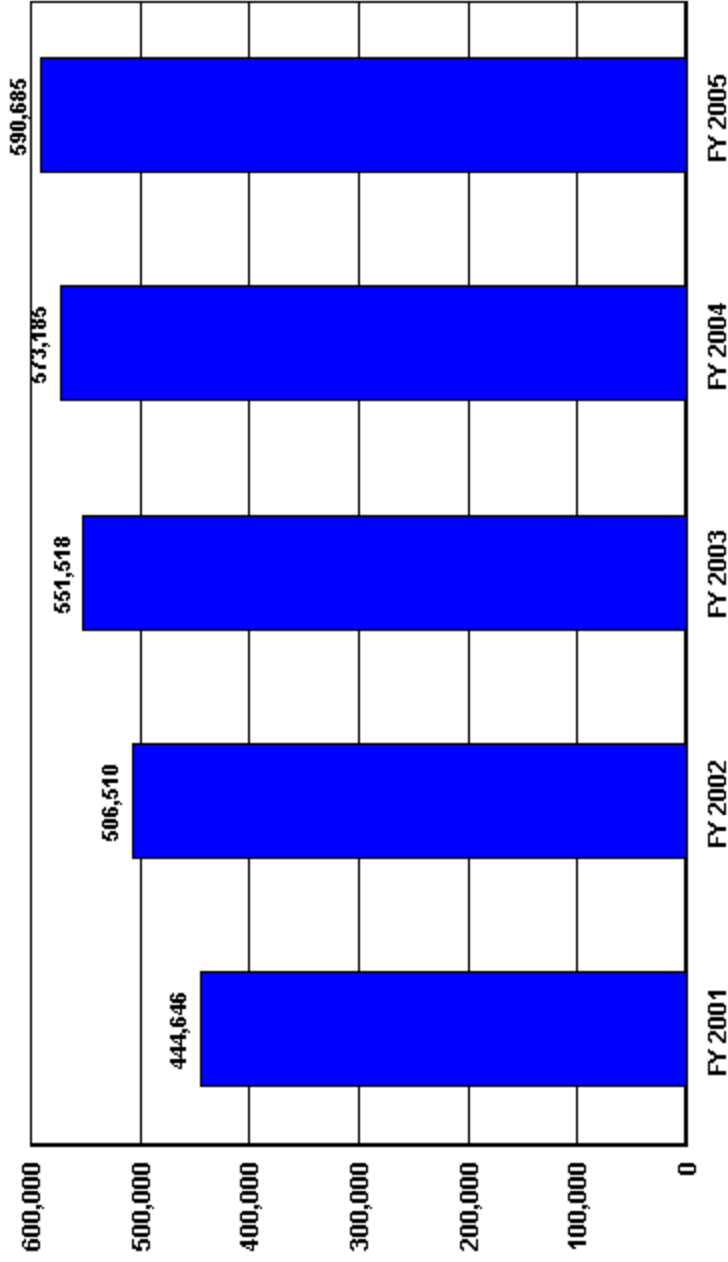
---

Facilities Division reductions	2,000	In FY05, Facilities Division returned over \$2 Million from the initial institutional budget allocation. These savings were in three main areas: Design and Construction, Planning and Non Capital Alterations. The Design and Construction department management reorganized the department and the gradual reduction in staff and associated activities reduced costs. There was also a reduction in the future project planning scope resulting from a stretched out schedule for DOE and third party funded major building projects. The LBNL long range plan schedule was extended reducing costs in FY 06. The allocation for non capital projects was reduced and some cost savings from the project plan realized on the move to the new West Berkeley Biocenter (Potter Building).	Martin Straka
--------------------------------	-------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------

**Trends in Total Support Cost by Functional Categories**  
**L. Livermore National Lab/University of California (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	1,373,045	1,527,088	1,576,453	1,629,678	1,625,780	252,735	18.4%
<b>Capital Construction</b>	213,526	242,488	222,413	121,369	116,104	-97,422	-45.6%
<b>Total Costs Less Construction</b>	1,159,519	1,284,600	1,354,040	1,508,309	1,509,676	350,157	30.2%
<b>Total Support Costs</b>	444,646	506,510	551,518	573,185	590,685	146,039	32.8%
<b>Mission Direct Operation</b>	714,873	778,090	802,522	935,124	918,991	204,118	28.6%
<b>Mission Direct Operation as % of Total Cost</b>	52.1%	51.0%	50.9%	57.4%	56.5%		
<b>Capital Construction as % of Total Cost</b>	15.6%	15.9%	14.1%	7.4%	7.1%		
<b>Total Support Cost as % of Total Cost</b>	32.4%	33.2%	35.0%	35.2%	36.3%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	32.4%	33.2%	35.0%	35.2%	36.3%		
<b>TOTAL SUPPORT COST</b>	444,646	506,510	551,518	573,185	590,685	146,039	32.8%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	10.2%	11.1%	12.4%	12.3%	12.0%		
<b>TOTAL GENERAL SUPPORT</b>	139,760	169,910	196,214	199,725	194,613	54,853	39.2%
EXECUTIVE DIRECTION	15,557	19,977	20,022	19,320	17,658	2,101	13.5%
HUMAN RESOURCES	17,093	18,993	19,546	19,685	19,382	2,289	13.4%
CFO	7,030	7,231	6,920	7,315	7,714	684	9.7%
PROCUREMENT	13,015	15,850	17,045	16,145	16,628	3,613	27.8%
LEGAL	3,280	3,060	3,194	3,221	3,166	-114	-3.5%
CENTRAL ADMIN SERVICES	18,834	21,644	22,746	21,071	22,646	3,812	20.2%
PROGRAM/PROJECT CONTROL	2,064	2,506	3,207	3,254	3,320	1,256	60.9%
INFORMATION OUTREACH	14,433	18,400	19,697	18,912	18,178	3,745	25.9%
INFORMATION SERVICES	38,090	56,726	70,597	74,373	80,708	42,618	111.9%
OTHER	10,364	5,523	13,240	16,429	5,213	-5,151	-49.7%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	18.1%	18.0%	18.5%	18.9%	20.3%		
<b>TOTAL MISSION SUPPORT</b>	249,009	274,828	292,313	307,599	329,657	80,648	32.4%
ENVIRONMENTAL	17,598	24,197	25,839	24,612	23,572	5,974	33.9%
SAFETY AND HEALTH	31,284	44,328	47,993	48,923	50,255	18,971	60.6%
FACILITIES MANAGEMENT	39,382	51,540	53,764	60,131	61,882	22,500	57.1%
MAINTENANCE	71,642	43,512	55,419	65,484	73,564	1,922	2.7%
UTILITIES	15,173	22,277	15,076	16,030	21,403	6,230	41.1%
SAFEGUARDS AND SECURITY	44,648	55,237	63,306	60,026	62,551	17,903	40.1%
LOGISTICS SUPPORT	10,831	12,874	10,441	9,835	9,815	-1,016	-9.4%
QUALITY ASSURANCE	5,866	4,613	4,675	4,930	5,912	46	0.8%
LABORATORY/TECHNICAL SUPPORT	12,585	16,250	15,800	17,628	20,703	8,118	64.5%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.1%	4.0%	4.0%	4.0%	4.1%		
<b>TOTAL SITE SPECIFIC</b>	55,877	61,772	62,991	65,861	66,415	10,538	18.9%
MANAGEMENT/INCENTIVE FEE	13,929	14,632	14,925	13,419	13,701	-228	-1.6%
TAXES	212	310	199	314	414	202	95.3%
LDRD / PDRD / SDRD	41,736	46,830	47,867	52,128	52,300	10,564	25.3%

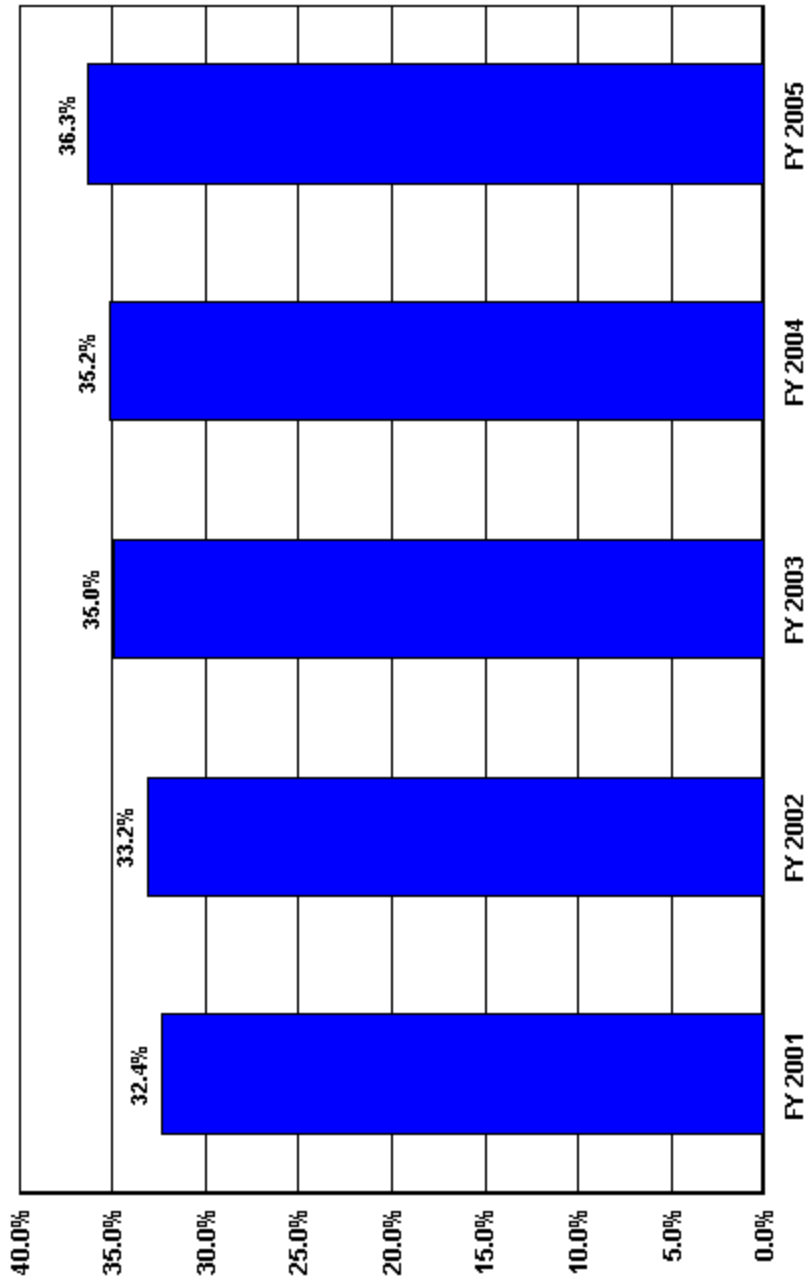
**US Department of Energy**  
**Total Functional Support**  
 L. Livermore National Lab/University of California



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>444,646</b>	<b>506,510</b>	<b>551,518</b>	<b>573,185</b>	<b>590,685</b>

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

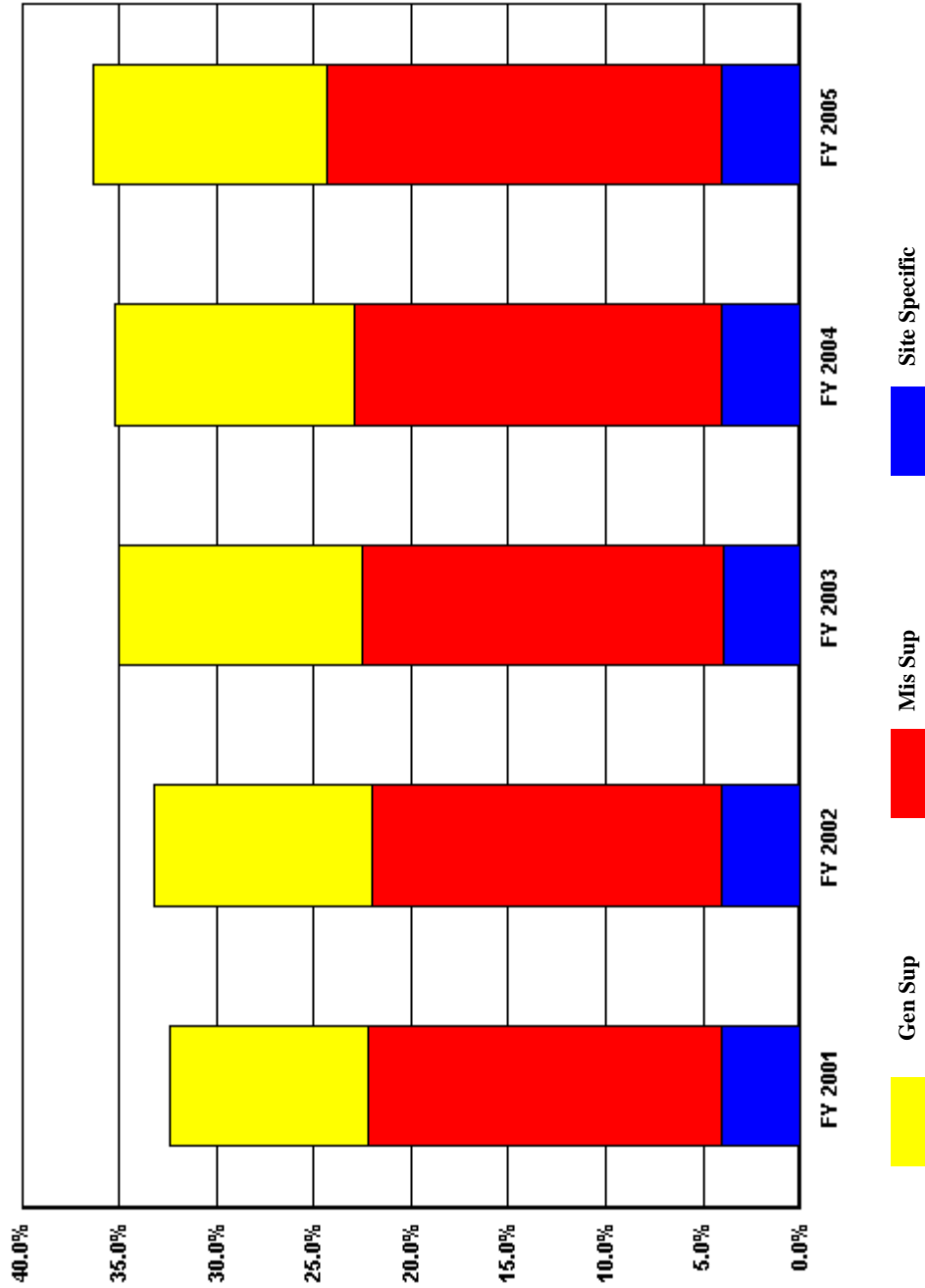


■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>32.4%</b>	<b>33.2%</b>	<b>35.0%</b>	<b>35.2%</b>	<b>36.3%</b>



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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	18.1%	18.0%	18.5%	18.9%	20.3%
Mis Sup	4.1%	4.0%	4.0%	4.0%	4.1%
Site Specific	10.2%	11.1%	12.4%	12.3%	12.0%

---

**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 Livermore are contributing to homeland security and the war against terrorism. With its special capabilities, the Laboratory is also able to meet enduring national needs in conventional defense, energy, environment, biosciences, and basic science.

LLNL has a diverse customer base with major efforts for DOE and NNSA program offices (Defense Programs, Defense Nuclear Nonproliferation, Science, and Environmental Restoration and Waste Management), as well as considerable work for other federal and non-federal agencies.

LLNL is a world-class leader in technical research and development. The Laboratory is home to several of the world's fastest supercomputers: BlueGene/L (the first supercomputer to exceed 100 trillion operations per second [teraflops] and capable of performing 280teraflops or more), the 23-teraflops Thunder machine (which was put into production in December 2004), and 100-teraflops ASC Purple system (which is installed and being tested).

In support of Stockpile Stewardship, the first series of hohlraum experiments were completed at the National Ignition Facility (NIF); the second "quad" of NIF lasers was commissioned making NIF (at 153 kilojoules) the world's most energetic laser with only 8 of its 192 beams in operation; and the 1,000th line replaceable unit was installed, which was an important milestone achieved ahead of schedule.

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. For the third year in a row, LLNL received an "R&D 100 Award" for an important advance in biological agent detector technology. Laboratory researchers have earned 106 "R&D 100 Awards" since 1978 (including four in 2005), which is indicative of LLNL's many other technical accomplishments.

Other recent LLNL breakthroughs in science and technology include: the use of supercomputer simulations to find the cause of stress hardening of metals, the discovery of the role "gene deserts" in

---

**SITE PROFILE**  
**L. Livermore National Lab/University of California**

---

DNA have in regulating gene activity, and reconciliation of observational data of temperatures in the tropical troposphere and computer simulation of global warming. For the global warming work, LLNL scientist Ben Santer received a DOE Distinguished Scientist Award.

LLNL has approximately 8,646 University of California employees, which includes all workforce categories except contractors. LLNL's highly educated workforce includes approximately 1,753 doctorates, 1,211 masters, and 1,932 bachelor degrees. The primary LLNL site is located on one square mile, 40 miles southeast of San Francisco.

### **Trends**

LLNL's total functional support costs have increased approximately \$146.2M, from \$444.5M in Fiscal Year (FY) 2001 to \$590.7M in FY 2005 (see the table above). During the same period, functional support costs as a percentage of total Laboratory costs have increased from 32.4% to 36.3%.

This growth in support costs is attributable to increases in Information Services, Maintenance/Facilities Management, Safeguards & Security, and Safety & Health.

- Costs in the Information Services category have risen due to internal reinvestments such as increased software site licenses, Automated Software Distribution, the Enterprise Project Accounting and Reporting (EPAR) project, and the People Information Project (PIP).
- LLNL's facility investments such as the Facilities and Infrastructure Reinvestment Program (FIRP) and LLNL's Maintenance Reinvestment Program, both designed to address maintenance deficiencies and reduce the ongoing deferred maintenance backlog throughout the Laboratory, have driven the Maintenance/Facilities Management categories higher.
- The rise in Safeguards & Security costs is mainly attributable to an increase in security requirements and activities as a result of the September 11, 2001, incident.
- Safety & Health increases have been mainly the result of additional compliance requirements.

The following paragraphs highlight the DOE functional support categories where a significant change occurred in raw costs from FY 2004 to FY 2005. Each paragraph annotates the total raw costs for the functional area, the net change from the prior year, and a brief explanation of the change. A concise description of the costs in each category has also been included.

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

The "Other" category in FY 2005 totaled \$5,213K and consisted of: Accounting adjustments (\$175K), Self Insurance/Reserve (5,287K), Bad Debt Allowance (23K)

---

**SITE PROFILE**  
**L. Livermore National Lab/University of California**

---

and special items (-273K).

**Cost Saving Initiatives**

LLNL continues to pursue institutional cost savings and efficiencies and launched a Process Improvement Initiative in FY 2004 to foster a systematic Laboratory-wide effort to examine and improve key work processes. As of November 2005, over 100 Laboratory managers will have either completed one or more formal process-focused training courses or participated in active learning sessions in preparation for leadership of a Process Improvement (PI) project. The goal is to train 400 managers by the fall of 2006.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

The DoD Program Office was removed and is no longer captured in the Executive Direction functional category since it is now more appropriately categorized as a program management function. This category includes costs associated with the Laboratory Director, Associate Directors, and various strategic planning.

**CFO**

Increased due to a one-time increment to prepare for the Enterprise Project Accounting and Reporting (EPAR) project.

**CENTRAL ADMIN SERVICES**

Increased due to increased demand and equipment purchases associated with the Technical Information Department and Laboratory Services Associate Director's Office. Costs associated with travel-related support, printing and publication services, and the cafeterias are also included in this category.

**INFORMATION OUTREACH**

Decreased due to a decline in Public Affairs and Institutional Tours, exclusion of DOE Tech Transfer activities based on the FY 2004 Peer Review recommendations, and funding cuts associated with the Critical Skills Internship Program. Costs in this category also consist of Industrial Partnerships, University of California (UC) relations, Student Trainees/Post-Docs, and various fellowships.

**INFORMATION SERVICES**

Increase is attributed to requirement workshops and application configurations associated with the Enterprise Project Accounting and Reporting (EPAR) project; and costs for configuration management and system infrastructure associated with the People Information Project (PIP).

---

**SITE PROFILE**  
**L. Livermore National Lab/University of California**

---

**OTHER**

In FY 2004 there were substantial Self-Insurance costs that did not recur in FY 2005.

**ENVIRONMENTAL**

Contract support costs for the Environmental Impact Statement (EIS) declined as the project neared completion in FY 2005. In this category, costs primarily stem from Environmental Protection and Pollution Prevention, and Medical Waste Processing.

**SAFETY AND HEALTH**

Increased due to additional compliance requirements for emergency preparedness plans, a Fire Alarm project, 10CFR851 worker safety compliance, and OA40 Correction Action Plan. Activities in this category include Hazards Control, Health Services, and the Document Manager.

**FACILITIES MANAGEMENT**

Due to an increase in Plant Engineering (PE) jobs resulting from increased funding for Institutional General Plant Projects (IGPP) and various facility revitalization projects. Costs associated with the Institutional Facility Manager (IFM) and a variety of facilities-related projects are also captured in this category.

**MAINTENANCE**

Due mainly to an increase in maintenance-related Facilities and Infrastructure Revitalization Projects (FIRP) in FY 2005 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.

**UTILITIES**

Increased by \$5,373K due mainly to an increase in electricity costs. Expenses in this category include electricity costs and mechanical utilities costs for water, gas, and sewage.

**SAFEGUARDS AND SECURITY**

Increased primarily due to additional costs in B&R FS for the Barrier Project. This category mainly consists of Safeguards & Security Program activities and includes costs related to the Superblock, a defense plutonium research and development facility.

**QUALITY ASSURANCE**

Increase due to additional support costs for Software Quality Assurance (SQA) and Biogovernance activities. This category is primarily comprised of various assurance offices and Engineering Compliance.

**SITE PROFILE**  
**L. Livermore National Lab/University of California**

**LABORATORY/TECHNICAL SUPPORT**

Increased mainly due to an increase in funding for the Materials Computation Analysis & Process (MCAP) laboratories.

**TAXES**

Increased by \$100K, for sales taxes paid on the purchase of TESA locks.

**COST SAVINGS INITIATIVES**

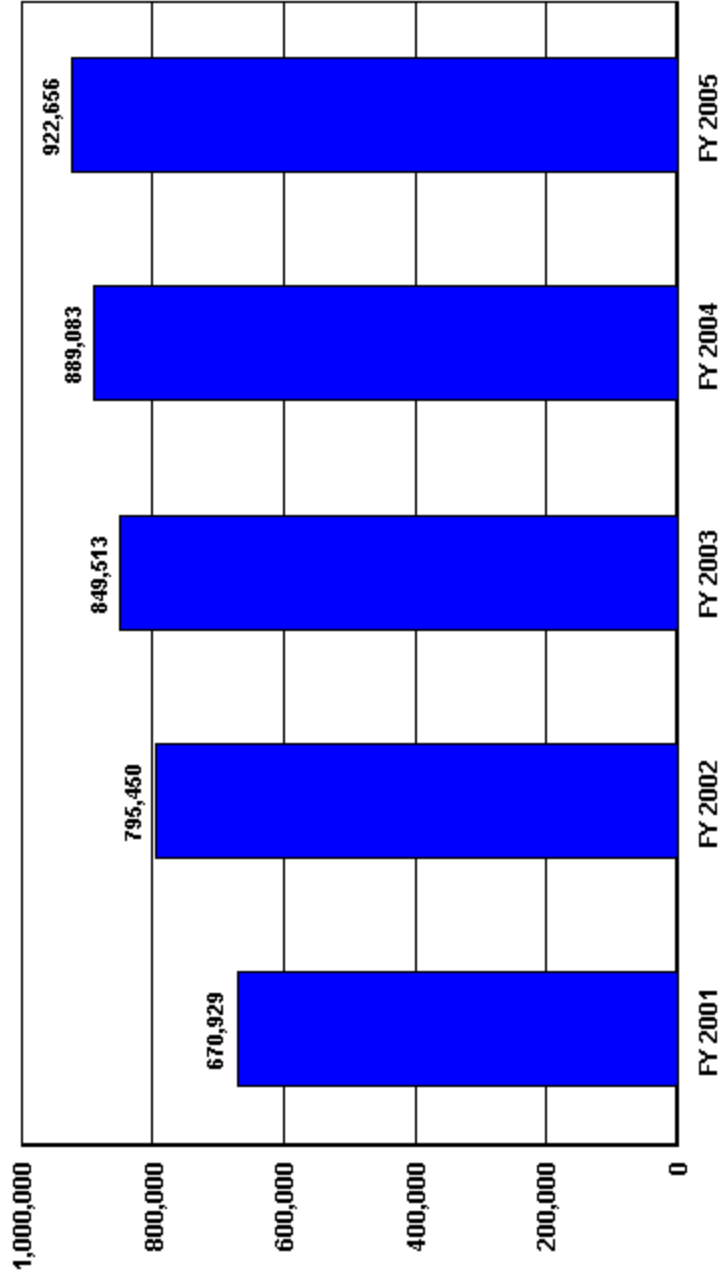
(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Decontamination and Demolition	1,671	Buildings 230, 854B, 854D, 854E, 854J, and trailers 1830, 4180, 4440, 5926, and 3629 were demolished in FY 2005. The project opened up half an acre of valuable space, eliminated over \$1,157K of deferred maintenance and nearly \$514K per year in annual maintenance.	Virginia Oviedo
Improvement Mechanism Process	2,000	Using Process Improvement mechanisms, the People Information Project team identified the opportunity to transform the Personnel Action Form process from 157 steps on average to 36 and signatures/approvals from 25 to 13. Estimated savings is \$2M.	Virginia Oviedo
Safeguards & Security	300	Standardized the operating hours of the perimeter security gates, and the closure of redundant gates will save \$300K per year.	Virginia Oviedo

**Trends in Total Support Cost by Functional Categories**  
**Los Alamos National Lab/University of California (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	1,721,019	1,996,416	2,108,937	1,989,615	2,104,479	383,460	22.3%
<b>Capital Construction</b>	239,245	232,949	217,249	155,439	192,522	-46,723	-19.5%
<b>Total Costs Less Construction</b>	1,481,774	1,763,467	1,891,688	1,834,176	1,911,957	430,183	29.0%
<b>Total Support Costs</b>	670,929	795,450	849,513	889,083	922,656	251,727	37.5%
<b>Mission Direct Operation</b>	810,845	968,017	1,042,175	945,093	989,301	178,456	22.0%
<b>Mission Direct Operation as % of Total Cost</b>	47.1%	48.5%	49.4%	47.5%	47.0%		
<b>Capital Construction as % of Total Cost</b>	13.9%	11.7%	10.3%	7.8%	9.1%		
<b>Total Support Cost as % of Total Cost</b>	39.0%	39.8%	40.3%	44.7%	43.8%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	39.0%	39.8%	40.3%	44.7%	43.8%		
<b>TOTAL SUPPORT COST</b>	670,929	795,450	849,513	889,083	922,656	251,727	37.5%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	13.7%	12.8%	13.3%	15.1%	15.0%		
<b>TOTAL GENERAL SUPPORT</b>	234,962	256,484	279,694	300,813	315,966	81,004	34.5%
EXECUTIVE DIRECTION	14,443	22,708	24,063	26,984	19,489	5,046	34.9%
HUMAN RESOURCES	20,831	21,793	23,248	20,669	22,250	1,419	6.8%
CFO	8,401	9,708	11,268	11,636	14,614	6,213	74.0%
PROCUREMENT	12,501	12,935	17,438	20,831	22,353	9,852	78.8%
LEGAL	10,040	8,776	9,784	9,161	10,857	817	8.1%
CENTRAL ADMIN SERVICES	26,572	28,110	27,601	26,261	25,967	-605	-2.3%
PROGRAM/PROJECT CONTROL	22,810	18,872	15,043	15,627	17,544	-5,266	-23.1%
INFORMATION OUTREACH	22,890	20,607	20,620	19,653	18,781	-4,109	-18.0%
INFORMATION SERVICES	82,755	108,088	124,248	141,741	148,165	65,410	79.0%
OTHER	13,719	4,887	6,381	8,250	15,946	2,227	16.2%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	20.4%	22.0%	22.0%	24.0%	23.7%		
<b>TOTAL MISSION SUPPORT</b>	350,280	440,047	463,681	477,570	497,897	147,617	42.1%
ENVIRONMENTAL	20,638	24,461	17,663	21,873	27,373	6,735	32.6%
SAFETY AND HEALTH	62,574	71,974	87,621	79,530	93,009	30,435	48.6%
FACILITIES MANAGEMENT	71,082	103,706	100,559	105,828	96,693	25,611	36.0%
MAINTENANCE	56,486	62,111	63,717	57,124	56,184	-302	-0.5%
UTILITIES	58,613	68,293	60,013	65,869	63,632	5,019	8.6%
SAFEGUARDS AND SECURITY	63,247	88,642	101,450	102,620	118,199	54,952	86.9%
LOGISTICS SUPPORT	6,934	8,823	10,872	13,476	11,747	4,813	69.4%
QUALITY ASSURANCE	8,602	9,530	17,941	26,457	24,974	16,372	190.3%
LABORATORY/TECHNICAL SUPPORT	2,104	2,507	3,845	4,793	6,086	3,982	189.3%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	5.0%	5.0%	5.0%	5.6%	5.2%		
<b>TOTAL SITE SPECIFIC</b>	85,687	98,919	106,138	110,700	108,793	23,106	27.0%
MANAGEMENT/INCENTIVE FEE	19,356	19,455	19,031	22,790	19,448	92	0.5%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	66,331	79,464	87,107	87,910	89,345	23,014	34.7%

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

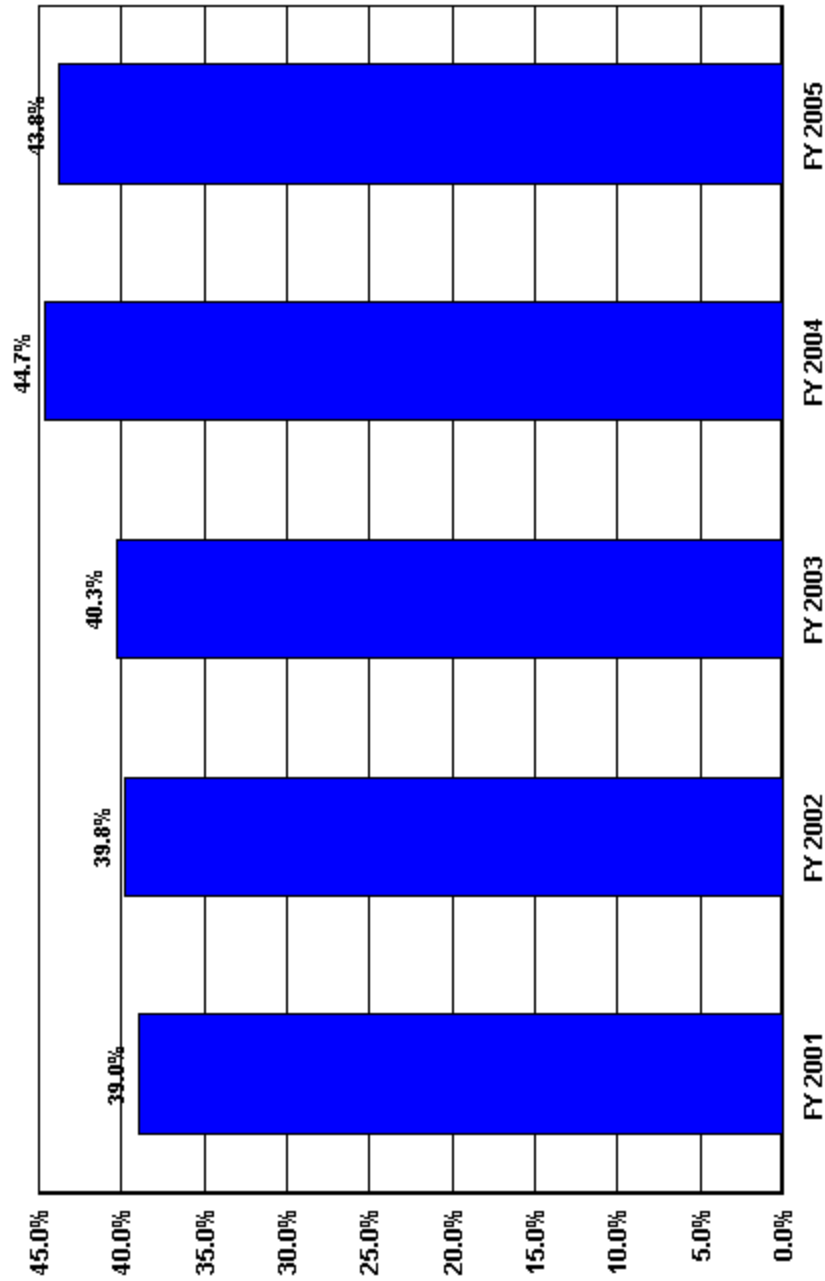


■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>670,929</b>	<b>795,450</b>	<b>849,513</b>	<b>889,083</b>	<b>922,656</b>



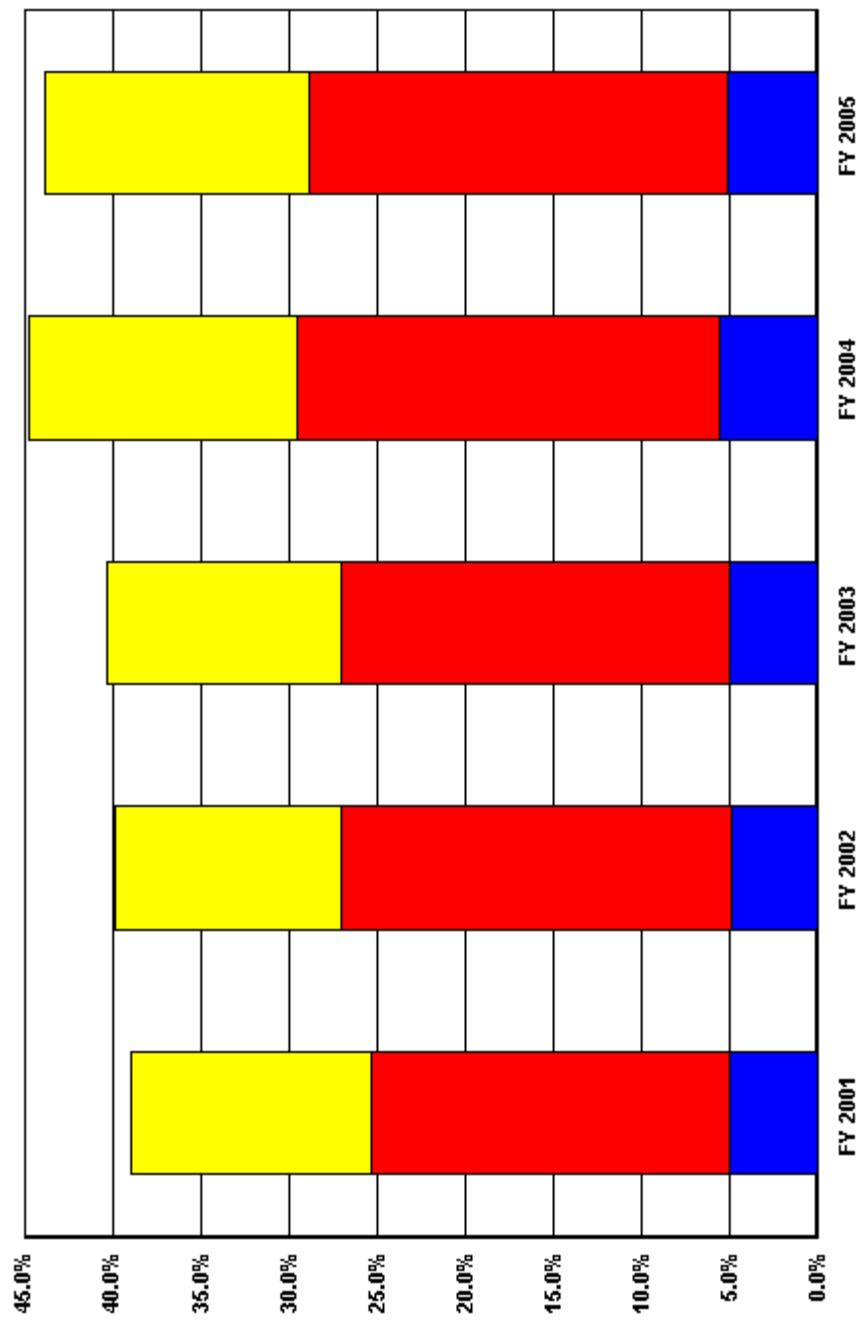
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Los Alamos National Lab/University of California**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>39.0%</b>	<b>39.8%</b>	<b>40.3%</b>	<b>44.7%</b>	<b>43.8%</b>

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



■ Gen Sup     
 ■ Mis Sup     
 ■ Site Specific

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	13.7%	12.8%	13.3%	15.1%	15.0%
Mis Sup	20.4%	22.0%	24.0%	24.0%	23.7%
Site Specific	5.0%	5.0%	5.6%	5.6%	5.2%

---

**SITE PROFILE**  
**Los Alamos National Lab/University of California**

---

**SITE OVERVIEW AND CHARACTERISTIC**

On July 15, 1945, a Los Alamos physicist threw the switch that detonated the world's first atomic bomb. The resultant explosion ushered in the Atomic Age and established Los Alamos National Laboratory as a world-class research institution. Today, the Laboratory is operated by the University of California for the National Nuclear Security Administration of the U.S. Department of Energy.

Laboratory personnel work on advanced technologies to meet the needs of the twenty-first century, such as hydrogen fuel cell development, supercomputing, and applied environmental research. Yet, since its creation, the primary responsibility of the Laboratory has been to maintain the effectiveness of the nation's nuclear deterrent, including stewardship of the existing nuclear weapons stockpile, managing nuclear materials, and stemming the proliferation of weapons of mass destruction. Recently, Laboratory scientists developed a detector that is far more sensitive than x-rays and can see through lead or other heavy shielding in truck trailers or cargo containers to detect uranium, plutonium or other dense materials. The detectors are currently being used at US borders.

The Laboratory 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. The Laboratory is home to the "Q Machine" supercomputer, one of the world's most powerful computers. This computer allows scientists to visualize and predict real phenomena, from the inner workings of nuclear weapons to the course of wildfires, global weather patterns and epidemics. In 2005, Laboratory researchers set a new world's record by performing the first million-atom computer simulation in biology using the "Q Machine" supercomputer.

A University of California scientist working at the Laboratory with collaborators from the University of Cambridge (England) and the World Health Organization National Influenza Center at Erasmus Medical Center, (Rotterdam, Netherlands) have developed a computer modeling method for mapping the evolution of the influenza virus. The method could soon help medical researchers worldwide develop a better understanding of certain mutations in influenza and other viruses that allow diseases to dodge the human immune system.

In 2005, scientists at the Laboratory captured four of R&D Magazine's 2005 R&D 100 Awards—bringing the Laboratory total to 87 over the past 18 years. The outstanding achievements of more than 300 Laboratory employees were recognized by DOE and NNSA with 2005 Defense Programs Awards of Excellence. The Laboratory received seven, or more than half, of the 2005 Pollution Prevention (P2) Environmental Stewardship Awards given nationally by the National Nuclear Security Administration.

---

**SITE PROFILE**  
**Los Alamos National Lab/University of California**

---

The Laboratory is located in northern New Mexico, approximately 35 miles northwest of Santa Fe, on 38 square miles (approximately 27,800 acres) of mesas and canyons. Twenty of these square miles are considered secure areas with limited access. The site consists of 47 separate technical areas, a large central administrative area and many outlying research sites scattered across the mesas and canyons. Nuclear facilities are located at 13 of the 47 technical areas. The Laboratory maintains a total of 2,224 individual facilities. The Laboratory is the largest employer in northern New Mexico employing 9,580 fulltime UC employees, consisting of 3,410 technical staff members, 1,957 technicians, 2,583 administrative staff, 675 management employees, 367 post doctoral employees, and 588 students.

Number of contractors on site: The Laboratory employs 2,947 contractor personnel in the capacity of a security force (606), a site support workforce (1,629), and technical and non-technical contractor employees employed throughout the Laboratory (712).

The Laboratory supports one main cafeteria, two satellite cafeterias and a vending truck service for the 38 square miles of Laboratory facilities. The Laboratory also provides economical housing to students on short-term assignments and maintains a shuttle service for traveling from work-site to work-site and to carry employees to and from outlying parking areas.

Of the Laboratory's total expenditures of \$2,104M, the Laboratory spent \$975M on subcontracted activities. This subcontracted work falls into the following categories:

Materials . . . . .	\$172M
Services . . . . .	\$437M
Equipment . . . . .	\$39M
Capital/Construction . . . . .	\$135M
Site Support Services . . . . .	\$146M
Travel/Miscellaneous . . . . .	\$46M

The following three types of customers sponsor Laboratory activities:

National Nuclear Security Administration (NNSA) . . . . .	72%
Department of Energy (DOE) (non-NNSA) . . . . .	14%
Non-DOE Work for Others (WFO) . . . . .	14%

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

Department of Defense . . . . .	25%
Other Defense-Related . . . . .	31%
Department of Health and Human Services . . . . .	10%

---

**SITE PROFILE**  
**Los Alamos National Lab/University of California**

---

Department of Homeland Security . . . . .	17%
National Aeronautics and Space Administration. . .	5%
Non-federal funding Universities and Institutions . .	10%
Other . . . . .	3%

The Laboratory pays an estimated \$33 million in gross receipts tax on New Mexico services of approximately \$535 million. The Laboratory pays no gross receipts tax on the services it provides its customers.

II. HIGHLIGHTS OF TRENDS — LANL’s total functional support costs for FY01 - FY05 have increased by \$251.7M while the percentage of total functional support costs to total site costs has increased from 39.0% to 43.8

Costs for safety and health, maintenance, utilities, and safeguards and security may appear to be out of line with “similar” sites. As described in the site profile above, the Los Alamos National Laboratory is a very large research and development facility housing special nuclear material facilities, plutonium facilities and accelerator facilities which contribute to total functional support costs.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

The variance in this category is due primarily to an accounting change. Costs to support offices of Associate Directors had been captured in G&A. The costs associated with these administrative offices are now captured in organizational support. Using the standard work breakdown structure in place of organizational support programs, it is now practical to distribute these costs among other functional cost categories.

**CFO**

This increase reflects the increased staffing in two CFO Division Groups: CFO-1 (Accounting) and CFO-4 (Internal Controls and Compliance). The increased staffing represents an investment in better performance in the accounting department and a more robust system of financial internal controls.

**INFORMATION SERVICES**

During FY05, there were increases in the costs associated with Qwest telecommunication services, computer data storage costs, and desktop software licenses.

**OTHER**

The variance reflects an accrual for anticipated legal settlement, decrease in other legal settlements and increase in Institutional Program Development.

---

**SITE PROFILE**  
**Los Alamos National Lab/University of California**

---

**ENVIRONMENTAL**

The increase is due primarily to the site-wide environmental impact study and monitoring wells necessary to monitor compliance with state regulations. Waste shipments to WIPP site in Carlsbad, NM resumed in FY05 and 600 drums were sent.

**LABORATORY/TECHNICAL SUPPORT**

This category includes costs that were classified in category 21 Other Technical Support. Although there was a decrease in analytical chemistry services, the demand for technical support services increased during FY05.

**CAPITAL CONSTRUCTION**

Overall, FY05 was an outstanding year for the Laboratory's major line item projects. The Chemistry and Metallurgy Research Facility Replacement (CMRR) project received CD-1 approval in the Q3 of FY05; The Nuclear Materials Safeguards and Security Upgrade Project Phase One (NMSSUP Phase I) was completed and received Critical Decision 4 (CD-4); The National Security Sciences Building (NSSB) line item construction project continued its solid performance in FY05. The project is currently expected to be completed ahead of schedule; The TA-55 Reinvestment line item construction project received CD-0 in the Q2 of FY05. The project is actively working conceptual design activities with two of the project's sub-elements having had their 90% design review in September; Critical Decision 0 (CD-0) approvals were received for the Radioactive Liquid Waste Treatment Facility Project and the TA-55 Radiography Project; Critical Decision 2a and 3a (CD-2a/3a) approval was achieved for the Critical Experiments Facility (CEF) Project; Critical Decision 2/3 (CD-2/3) approval was achieved for the Power Grid Infrastructure upgrade project; Critical Decision 1, 2a and 3a (CD-2a/3a) approval was achieved on the DARHT-II project; Critical Decision 2/3 (CD-2/3) approval was achieved on the Security Perimeter Project.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

---

**SITE PROFILE**

**Los Alamos National Lab/University of California**

---

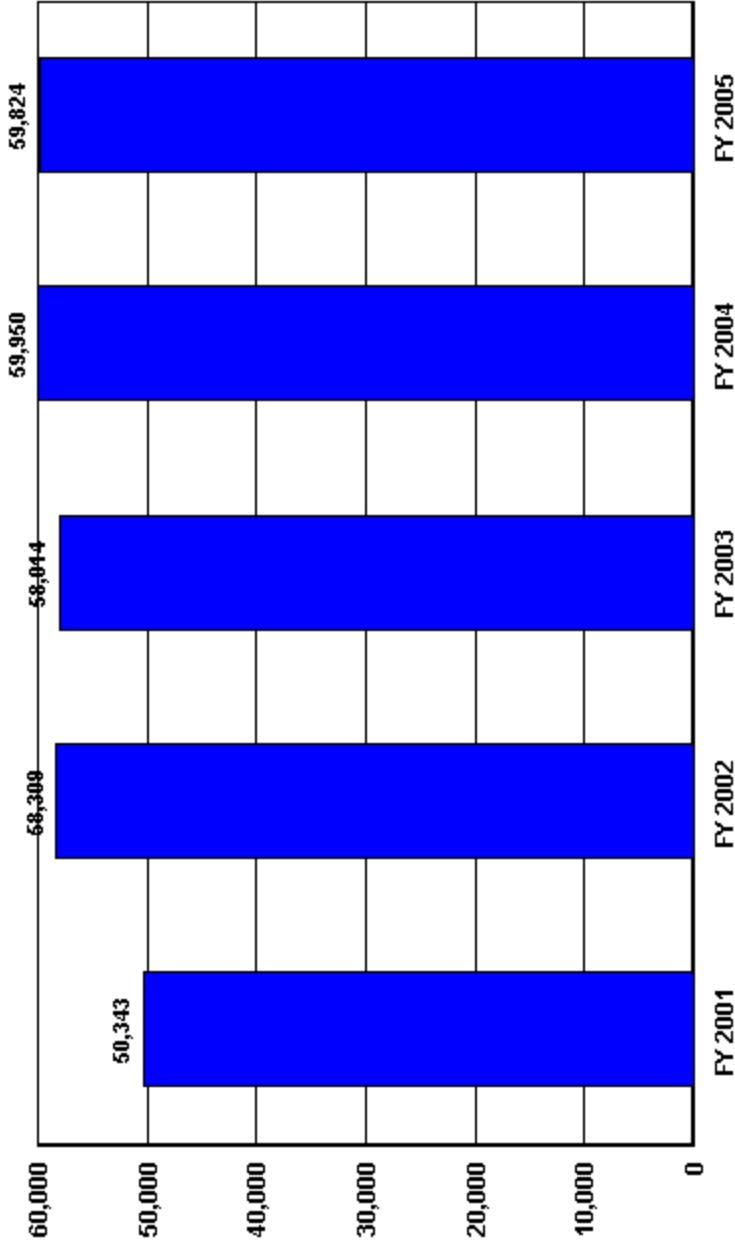
KSL Taxi Service	423	<p>The Laboratory conducted a traffic and usage study to determine how to reduce the costs of the KSL taxi service and make it more economically feasible. The study indicated that traffic into and out of Technical Area 3 was the principle use for the taxi service, followed by trips to and from the town site and up and down the Pajarito Road corridor. The new service plan established regular routes for these high-density areas, with dispatch service continuing for remote areas. The study, using GPS mapping technology linked up with drivers' logs on rider usage, pickup locations and destinations, revealed peak usage times and key facilities visited. This data provided insight for designing a more efficient service model.</p> <p>The FY05 cost savings were realized after the new service model was implemented in early July. It is estimated that FY06 cost savings will be \$770,000 for the entire year (assuming FY04 costs as the base). This \$770,000 in savings is net after the additional investment required to operate under the new service model (lease costs for vehicles will increase as larger capacity buses will be required).</p>	Brendon Sehorn
Furniture Re-Use Program	533	<p>In FY05, a furniture re-use program was developed to track available furniture for internal customers. This allowed re-use of the furniture and reduced the purchases of new furniture resulting in documented savings for FY05 of \$533,100.</p>	Brendon Sehorn

**Trends in Total Support Cost by Functional Categories**  
**National Renewable Energy Lab/Midwest Research (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	207,507	198,306	222,231	226,879	209,985	2,478	1.2%
<b>Capital Construction</b>	5,361	7,599	6,628	11,563	14,314	8,953	167.0%
<b>Total Costs Less Construction</b>	202,146	190,707	215,603	215,316	195,671	-6,475	-3.2%
<b>Total Support Costs</b>	50,343	58,309	58,014	59,950	59,824	9,481	18.8%
<b>Mission Direct Operation</b>	151,803	132,398	157,589	155,366	135,847	-15,956	-10.5%
<b>Mission Direct Operation as % of Total Cost</b>	73.2%	66.8%	70.9%	68.5%	64.7%		
<b>Capital Construction as % of Total Cost</b>	2.6%	3.8%	3.0%	5.1%	6.8%		
<b>Total Support Cost as % of Total Cost</b>	24.3%	29.4%	26.1%	26.4%	28.5%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	24.3%	29.4%	26.1%	26.4%	28.5%		
<b>TOTAL SUPPORT COST</b>	50,343	58,309	58,014	59,950	59,824	9,481	18.8%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	15.4%	19.6%	16.9%	17.6%	18.5%		
<b>TOTAL GENERAL SUPPORT</b>	31,943	38,803	37,574	39,837	38,797	6,854	21.5%
EXECUTIVE DIRECTION	3,051	3,667	3,896	4,055	4,495	1,444	47.3%
HUMAN RESOURCES	1,418	1,651	1,546	1,895	1,969	551	38.9%
CFO	1,659	1,962	2,171	2,225	2,380	721	43.5%
PROCUREMENT	2,166	2,381	2,499	2,754	2,892	726	33.5%
LEGAL	1,323	1,916	1,442	1,435	1,513	190	14.4%
CENTRAL ADMIN SERVICES	2,184	2,553	2,486	2,599	2,551	367	16.8%
PROGRAM/PROJECT CONTROL	1,840	1,061	1,198	1,455	1,380	-460	-25.0%
INFORMATION OUTREACH	9,589	12,834	11,644	11,656	11,290	1,701	17.7%
INFORMATION SERVICES	6,794	8,652	8,751	9,419	8,226	1,432	21.1%
OTHER	1,919	2,126	1,941	2,344	2,101	182	9.5%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	6.6%	7.2%	6.8%	6.5%	7.4%		
<b>TOTAL MISSION SUPPORT</b>	13,734	14,342	15,031	14,683	15,567	1,833	13.3%
ENVIRONMENTAL	0	0	0	0	41	41	100.0%
SAFETY AND HEALTH	931	1,029	1,190	1,157	1,230	299	32.1%
FACILITIES MANAGEMENT	6,692	6,783	6,797	6,852	6,980	288	4.3%
MAINTENANCE	2,816	2,980	2,824	2,971	3,047	231	8.2%
UTILITIES	1,130	967	1,155	1,222	1,524	394	34.9%
SAFEGUARDS AND SECURITY	906	1,197	1,349	1,164	1,246	340	37.5%
LOGISTICS SUPPORT	408	406	789	524	538	130	31.9%
QUALITY ASSURANCE	579	719	641	508	715	136	23.5%
LABORATORY/TECHNICAL SUPPORT	272	261	286	285	246	-26	-9.6%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.2%	2.6%	2.4%	2.4%	2.6%		
<b>TOTAL SITE SPECIFIC</b>	4,666	5,164	5,409	5,430	5,460	794	17.0%
MANAGEMENT/INCENTIVE FEE	4,666	5,164	5,409	5,430	5,460	794	17.0%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%



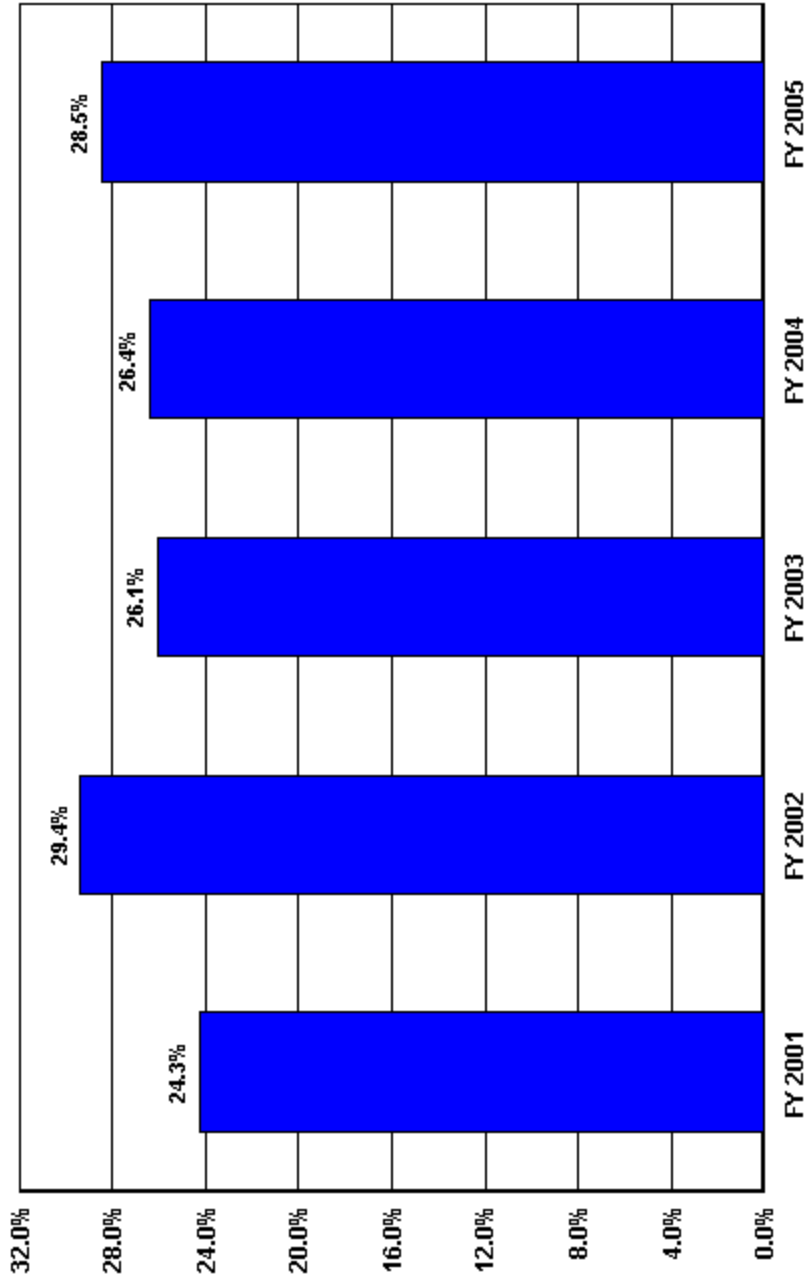
**US Department of Energy**  
**Total Functional Support**  
**National Renewable Energy Lab/Midwest Research**



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>50,343</b>	<b>58,309</b>	<b>58,014</b>	<b>59,950</b>	<b>59,824</b>

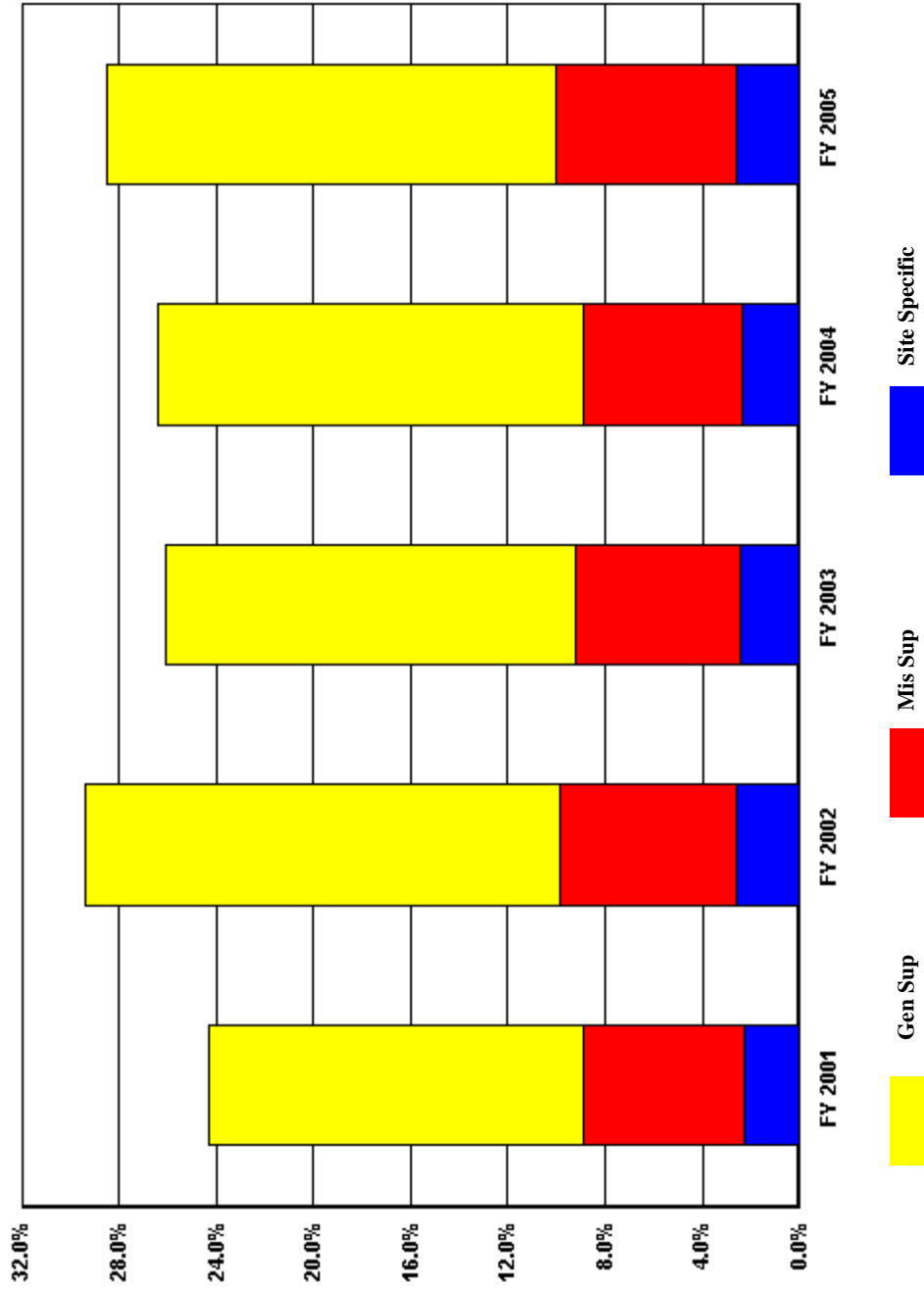
**US Department of Energy  
Total Functional Support as a % of Total Costs  
National Renewable Energy Lab/Midwest Research**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>24.3%</b>	<b>29.4%</b>	<b>26.1%</b>	<b>26.4%</b>	<b>28.5%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	15.4%	19.6%	16.9%	17.6%	18.5%
Mis Sup	6.6%	7.2%	6.8%	6.5%	7.4%
Site Specific	2.2%	2.6%	2.4%	2.4%	2.6%

---

**SITE PROFILE**  
**National Renewable Energy Lab/Midwest Research**

---

**SITE OVERVIEW AND CHARACTERISTIC**

The National Renewable Energy Laboratory is the only “single program” laboratory in the federal complex of laboratories dedicated to supporting renewable energy and energy efficiency technologies. NREL operates in six separate locations; five are near Golden, Colorado, 8 miles west of Denver, and one in Washington, D.C. The Golden area locations consist of the 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. The other locations near Golden are leased facilities.

NREL activities occupy about 640,000 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, adding about \$4.2 million per year to this category of cost.

NREL had 927 employees on 09/30/05 and 1228 persons on site at all its locations. The majority of NREL’s funding comes from the Office of Energy Efficiency and Renewable Energy, with lesser amounts provided by Energy Research and other DOE and non-DOE sources. NREL’s programs include:

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

**Cost Trends**

The data indicate that support costs as a percentage of total costs (excluding capital and construction) have risen over the period FY2001 — FY2005 from 33.2% to 44.0%. Over this period, the Laboratory has seen funding decline in constant dollar terms, and has been performing more research in-house rather than subcontracting the work. The percentage of work subcontracted in FY 2001

---

**SITE PROFILE**  
**National Renewable Energy Lab/Midwest Research**

---

was approximately 47%, but this dropped to about 35.5% in FY 2005, with in-house work requiring more reported support costs than work performed by subcontractors. The Laboratory believes this to be a significant distortion of the data, since ALL subcontracted research cost — both direct and indirect — are included in the Mission Direct category for the purposes of this report.

Other major drivers of this trend include increases in the category of Information Outreach. This category includes the costs of direct funded activities at NREL in furtherance of the DOE mission to bring the benefits of renewable energy research to the marketplace, and all technology transfer activities of the Laboratory. Although these costs are shown as General Support costs in this report, it is the Laboratory's position that getting the results of the Laboratory's research efforts into the public arena are as much a part of the DOE mission as the research itself.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**ENVIRONMENTAL**

Environmental costs were \$41K in FY2005 (versus \$0 in FY2004). This represented the cost of an environmental survey of the South Table Mountain site

**UTILITIES**

Utilities Costs rose by 24.71%. Electricity usage added \$84K, of which \$69K was due to an additional 1 million kwh used to power the dynamometer at the Wind Site, with most of the remainder due to an average rate increase of about 2%. Gas costs rose by \$75K, due primarily to a rate increase which averaged about 14% (\$41K), with the remainder due to increased volume.

**QUALITY ASSURANCE**

Quality Assurance costs showed an increase of 40.75%, or \$207K. This was due to a reclassification of \$142K of expenses previously classified as Executive Direction and \$57 K previously classified as Program/Project Control.

**CAPITAL CONSTRUCTION**

The Laboratory is constructing a new Science and Technology Facility scheduled for completion in 2006.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

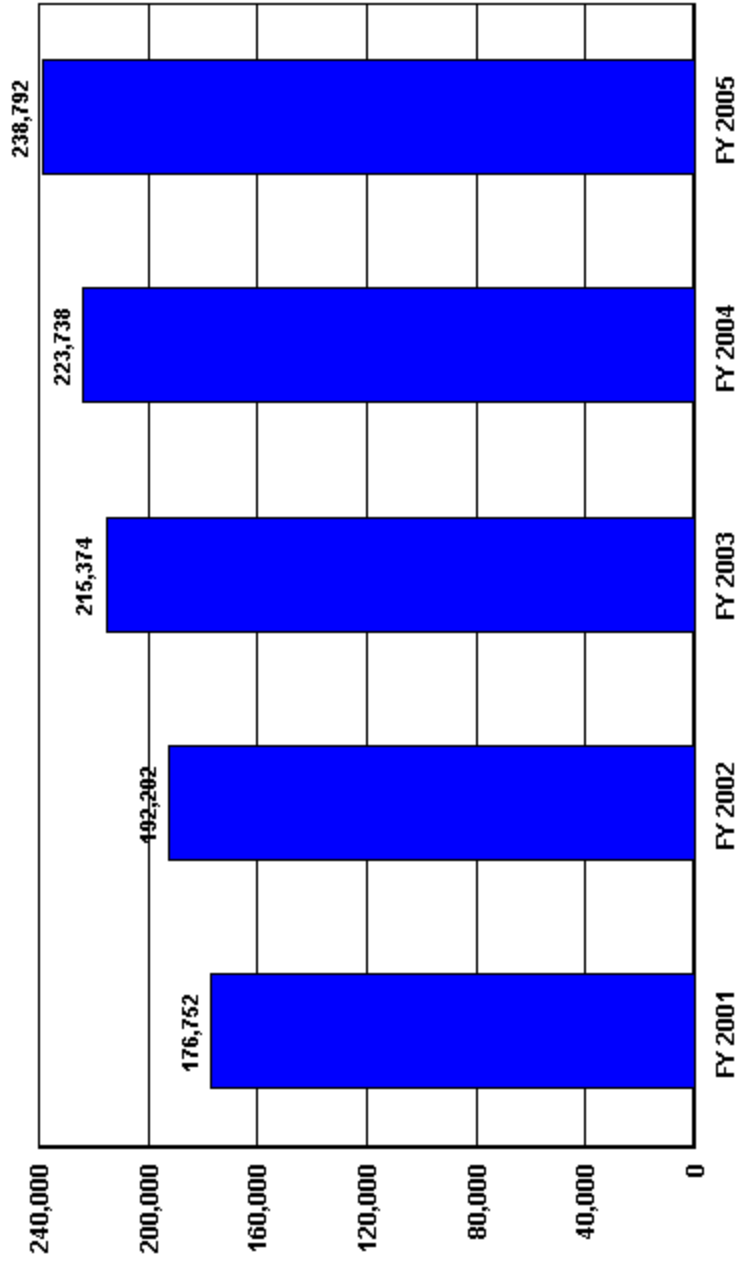
**SITE PROFILE**  
**National Renewable Energy Lab/Midwest Research**

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
Solid Bank Performance	30	Solid bank performance is important to effectively manage federal funds. The Laboratory's banking recompetition in FY04, which resulted in a 50% reduction of banking costs, continued to yield cost savings in FY05 (\$30K) while electronic controls to prevent fraudulent activities were fully implemented.	Dick Sinning
Personal Time Off Benefit Program	850	NREL's Personal Time Off (PTO) Benefit Program, implemented in FY04, 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 costs dropped \$850 thousand. At the same time, the program provides increased flexibility to staff by giving them more control over how they use their time off.	Dick Sinning

**Trends in Total Support Cost by Functional Categories**  
Nevada/Bechtel Nevada (\$000)  
FY 2005

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	482,055	504,990	586,903	579,641	617,831	135,776	28.2%
<b>Capital Construction</b>	31,866	19,276	23,569	33,186	23,944	-7,922	-24.9%
<b>Total Costs Less Construction</b>	450,189	485,714	563,334	546,455	593,887	143,698	31.9%
<b>Total Support Costs</b>	176,752	192,202	215,374	223,738	238,792	62,040	35.1%
<b>Mission Direct Operation</b>	273,437	293,512	347,960	322,717	355,095	81,658	29.9%
<b>Mission Direct Operation as % of Total Cost</b>	56.7%	58.1%	59.3%	55.7%	57.5%		
<b>Capital Construction as % of Total Cost</b>	6.6%	3.8%	4.0%	5.7%	3.9%		
<b>Total Support Cost as % of Total Cost</b>	36.7%	38.1%	36.7%	38.6%	38.7%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	36.7%	38.1%	36.7%	38.6%	38.7%		
<b>TOTAL SUPPORT COST</b>	176,752	192,202	215,374	223,738	238,792	62,040	35.1%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	10.1%	10.7%	10.7%	10.7%	10.5%		
<b>TOTAL GENERAL SUPPORT</b>	48,904	53,978	62,866	61,883	64,719	15,815	32.3%
EXECUTIVE DIRECTION	10,409	6,607	6,359	4,489	4,594	-5,815	-55.9%
HUMAN RESOURCES	3,302	3,656	3,919	3,553	4,357	1,055	32.0%
CFO	3,561	3,991	4,047	4,678	4,851	1,290	36.2%
PROCUREMENT	1,863	2,306	3,094	3,331	4,297	2,434	130.6%
LEGAL	865	1,012	1,352	1,272	982	117	13.5%
CENTRAL ADMIN SERVICES	8,114	9,566	11,391	9,332	9,517	1,403	17.3%
PROGRAM/PROJECT CONTROL	1,151	1,719	2,329	5,127	5,998	4,847	421.1%
INFORMATION OUTREACH	1,240	1,920	2,353	2,667	2,593	1,353	109.1%
INFORMATION SERVICES	17,378	21,177	25,135	24,916	24,062	6,684	38.5%
OTHER	1,021	2,024	2,887	2,518	3,468	2,447	239.7%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	21.9%	21.7%	20.5%	21.5%	22.8%		
<b>TOTAL MISSION SUPPORT</b>	105,419	109,529	120,128	124,846	140,689	35,270	33.5%
ENVIRONMENTAL	930	950	1,062	1,097	1,380	450	48.4%
SAFETY AND HEALTH	14,956	16,936	20,822	20,489	22,158	7,202	48.2%
FACILITIES MANAGEMENT	6,815	7,716	9,932	11,898	11,470	4,655	68.3%
MAINTENANCE	23,013	22,672	23,710	23,528	24,422	1,409	6.1%
UTILITIES	10,499	11,877	11,821	11,989	13,316	2,817	26.8%
SAFEGUARDS AND SECURITY	24,995	27,523	28,162	30,356	41,818	16,823	67.3%
LOGISTICS SUPPORT	10,408	11,174	12,153	12,359	12,721	2,313	22.2%
QUALITY ASSURANCE	5,576	3,548	3,737	4,879	5,436	-140	-2.5%
LABORATORY/TECHNICAL SUPPORT	8,227	7,133	8,729	8,251	7,968	-259	-3.1%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.7%	5.7%	5.5%	6.4%	5.4%		
<b>TOTAL SITE SPECIFIC</b>	22,429	28,695	32,380	37,009	33,384	10,955	48.8%
MANAGEMENT/INCENTIVE FEE	17,530	19,613	23,213	25,539	21,321	3,791	21.6%
TAXES	4,899	5,822	5,452	6,872	7,182	2,283	46.6%
LDRD / PDRD / SDRD	0	3,260	3,715	4,598	4,881	4,881	100.0%

US Department of Energy  
 Total Functional Support  
 Nevada/Bechtel Nevada

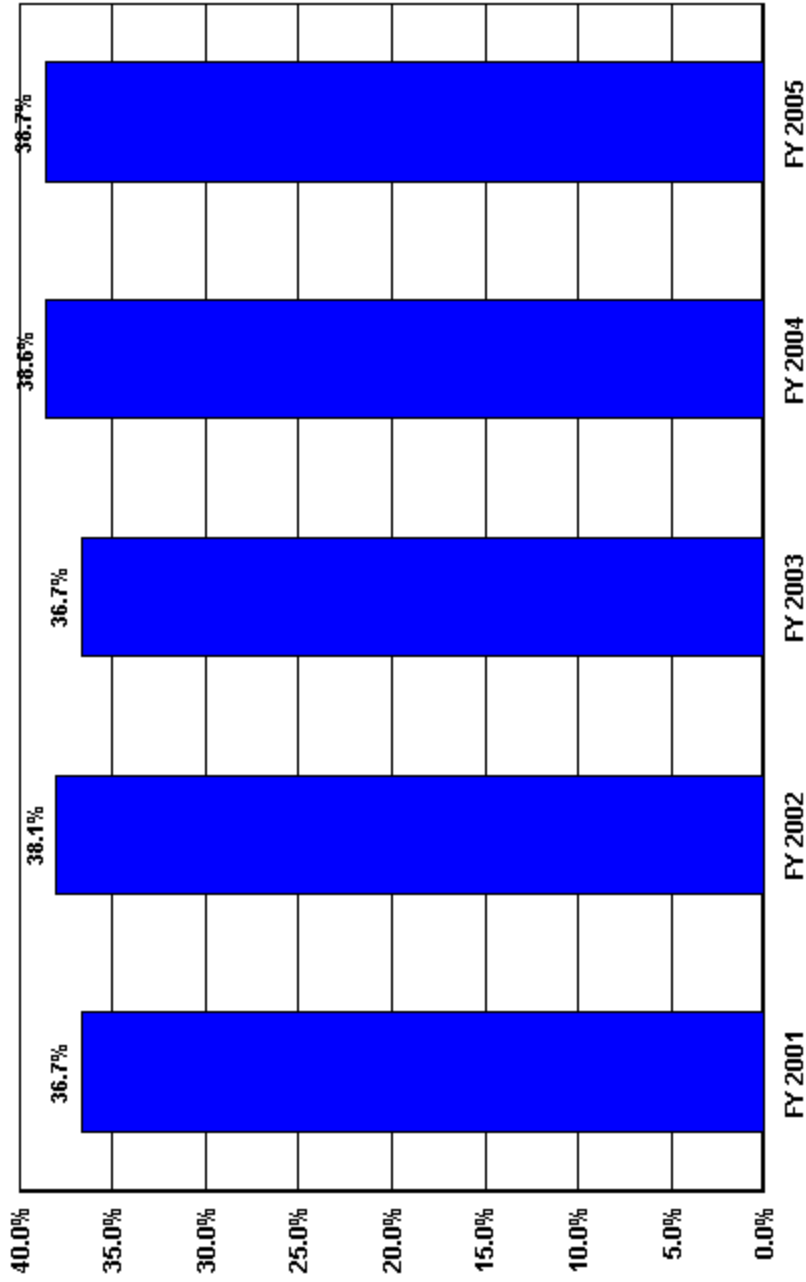


Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	176,752	192,202	215,374	223,738	238,792



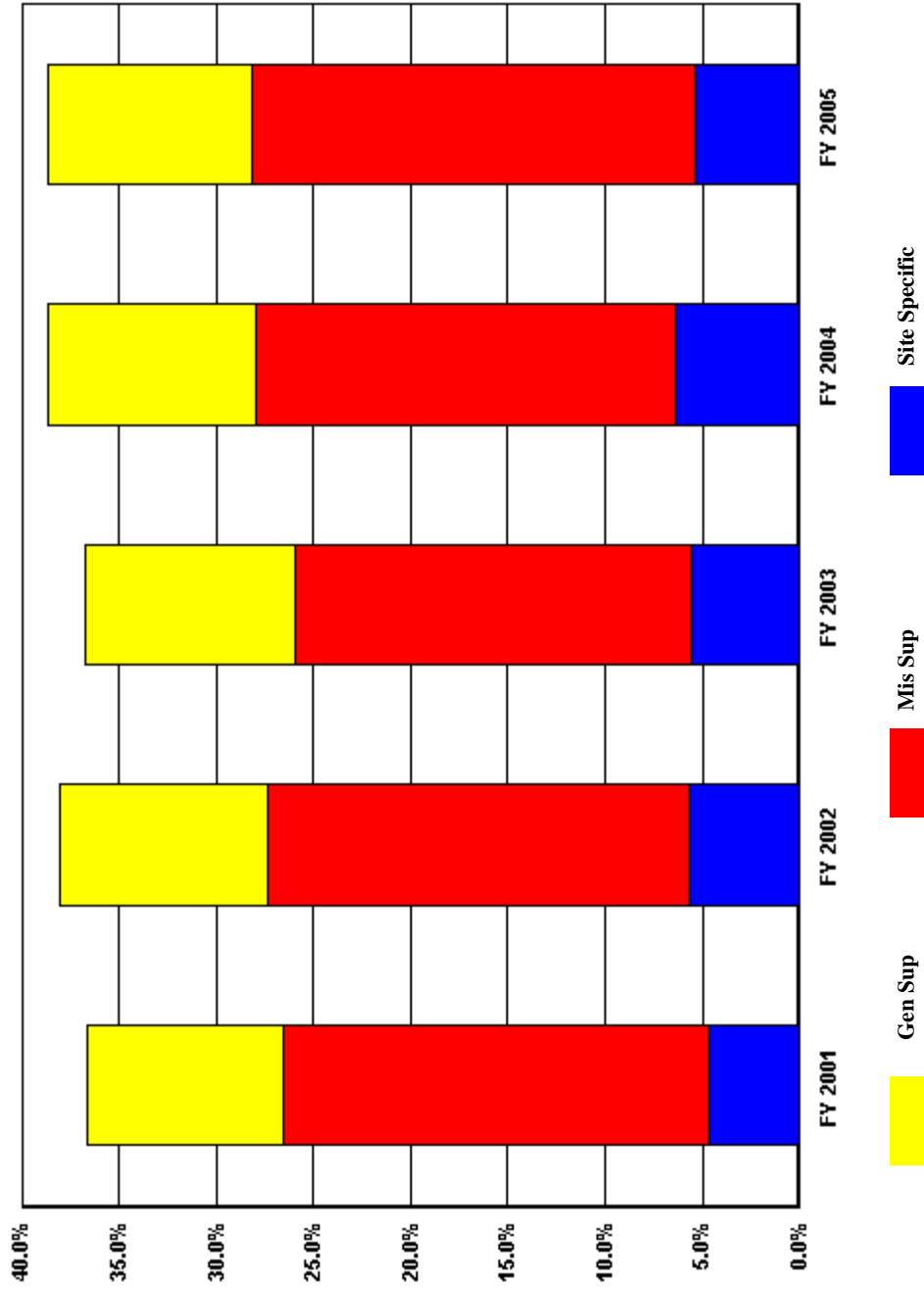
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Nevada/Bechtel Nevada**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>36.7%</b>	<b>38.1%</b>	<b>36.7%</b>	<b>38.6%</b>	<b>38.7%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	10.1%	10.7%	10.7%	10.7%	10.5%
Mis Sup	21.9%	21.7%	20.5%	21.5%	22.8%
Site Specific	4.7%	5.7%	5.5%	6.4%	5.4%

---

**SITE PROFILE**  
**Nevada/Bechtel Nevada**

---

**SITE OVERVIEW AND CHARACTERISTIC**

Bechtel Nevada (BN) is composed of Bechtel Nevada Corporation and Lockheed Martin Nevada Technologies, Inc. In FY 2005 BN employed approximately 3,100 full time employees.

BN is the Management and Operating contractor that manages operations at the Nevada Test Site (NTS) and its related facilities and laboratories. The primary mission is to maintain the NTS for testing. Located 65 miles north of Las Vegas, the NTS is a massive outdoor laboratory and national experimental center. It is one of the largest restricted access areas in the United States covering approximately 1,375 square miles. There are 400 miles of paved roads and 300 miles of unpaved roads, two airstrips, 10 heliports, several active water wells, and an electric power transmission system. Also located within the boundaries of the Nevada Test Site is the base camp of Mercury with many of the amenities found in a small town. Housing, medical services, fire protection, law enforcement, security, and a cafeteria are all on site. There are 535 support buildings including offices, laboratories, warehouses, training facilities, a hospital, post office, fire station, sheriff's substation; and a large motor pool complete with repair facilities. The climate is that of a high desert basin with an estimated rainfall of less than seven inches and 310 days of sunshine each year. The arid desert climate allows year-round operation.

Most of the mission direct work performed at the NTS is contracted directly with the Nevada Site Office. Therefore, support costs for BN may appear higher than other integrated contractors. In prior years mission direct work for the Nevada Site Office was included in BN's functional cost report. In FY 2004 only the integrated contractor's costs were included in the functional costs report. In FY 2005 the NSO costs are included in BN's functional cost report, at Headquarter's request. However, the dollar magnitude of NSO's cost is identified in the narrative. Besides the Department of Energy/National Nuclear Security Administration Nevada Site Office, Bechtel Nevada partners with the Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Sandia National Laboratories on many projects. Bechtel Nevada also works on projects for other federal agencies such as the Defense Threat Reduction Agency, NASA, the Nuclear Regulatory Commission, and the U.S. Air Force, Army, and Navy.

Bechtel Nevada is organized into three major areas of work: Stockpile Stewardship, National Security Response, and Programs and Operations Support Services.

Stockpile Stewardship provides experimental capabilities necessary to maintain confidence in the safety and performance of weapons in the U.S. nuclear weapons stockpile. Stockpile Stewardship is also responsible for maintaining the ability to resume underground nuclear testing.

---

**SITE PROFILE**  
**Nevada/Bechtel Nevada**

---

National Security Response includes Environmental Programs, Emergency Response and Nonproliferation Programs, activities conducted at the Remote Sensing and Special Technologies Laboratories, Combating Terrorism Programs, and Homeland Security and Technology Programs. This area provides high-hazard test and evaluation, applied engineering and technology, and the development of supporting facilities and infrastructure; as well as national weapons of mass destruction training for first responders.

Programs and Operations Support Services provides support services to the Stockpile Stewardship and National Security Response Programs. In addition, Programs and Operations Support Services provides Commercial Management and Administration, Financial, Management and Systems, Human Programs and Communications, and Project Management and Control Systems.

More than half of Bechtel Nevada's employees work in the Las Vegas area or at the nearby Nevada Test Site. The company has satellite offices in Livermore, California (Livermore Operations) Los Alamos, New Mexico (Los Alamos Operations) as well as the Special Technologies Laboratory in Santa Barbara, California. Bechtel Nevada also operates the Remote Sensing Laboratory in Nevada and its sister group located near Washington, D.C

**Other**

Details of costs included in the Other category, totaling \$3,468K in FY 2005 are: General Insurance (\$305K), Housing (\$647K), Legal Settlements (\$510K), Elk Hills Retirement (\$590K), Excess Property Sale (-\$142K), Retro Worker's Comp. (\$762K) and Other Adjustments (\$796K).

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

The increase is due to an increase of employees and a manager for the HR Department.

**PROCUREMENT**

The increase is due to an increase of scope by adding supply chain.

**LEGAL**

The decrease is due to General Counsel decreasing their use of outside counsel for FY 2005.

**PROGRAM/PROJECT CONTROL**

The increase is due to system improvements for a more accurate collection of project control costs.

---

**SITE PROFILE**  
**Nevada/Bechtel Nevada**

---

**INFORMATION SERVICES**

The decrease is due to a decrease in employees in the IS Departments.

**OTHER**

The increase is primarily due to increased workman's compensation claims. In 2001 legal costs for Workman's Comp were included in Legal. BN feels it is more appropriate in "Other" because it is not a recurring legal cost.

**ENVIRONMENTAL**

The increase is due to an increase in employees and implementation of a recycle program.

**SAFETY AND HEALTH**

The increase is due to an increase in subcontracts for RAD OPS division.

**MAINTENANCE**

The increase is due to maintenance of the building that houses BN personnel and the Nevada Site Office.

**UTILITIES**

The increase is due to the rising costs for natural gas and electricity.

**SAFEGUARDS AND SECURITY**

S&S is provided by the Site Office. S&S costs are included in FY05 and not included in FY04. The contract to provide S&S services for BN and the NTS resides with the Nevada Site Office and not with the M&O contractor. S&S services provided by NSO in FY 2004 were \$ 28,605,256 and in FY 2005 were \$ 38,255,395.

**QUALITY ASSURANCE**

The increase is due to the increased work scope that was driven primarily by the downsizing of NSO. CAC is now responsible for Contractor Assurance System and aviation safety oversight which were functions previously performed primarily by NSO personnel.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

---

**SITE PROFILE**  
**Nevada/Bechtel Nevada**

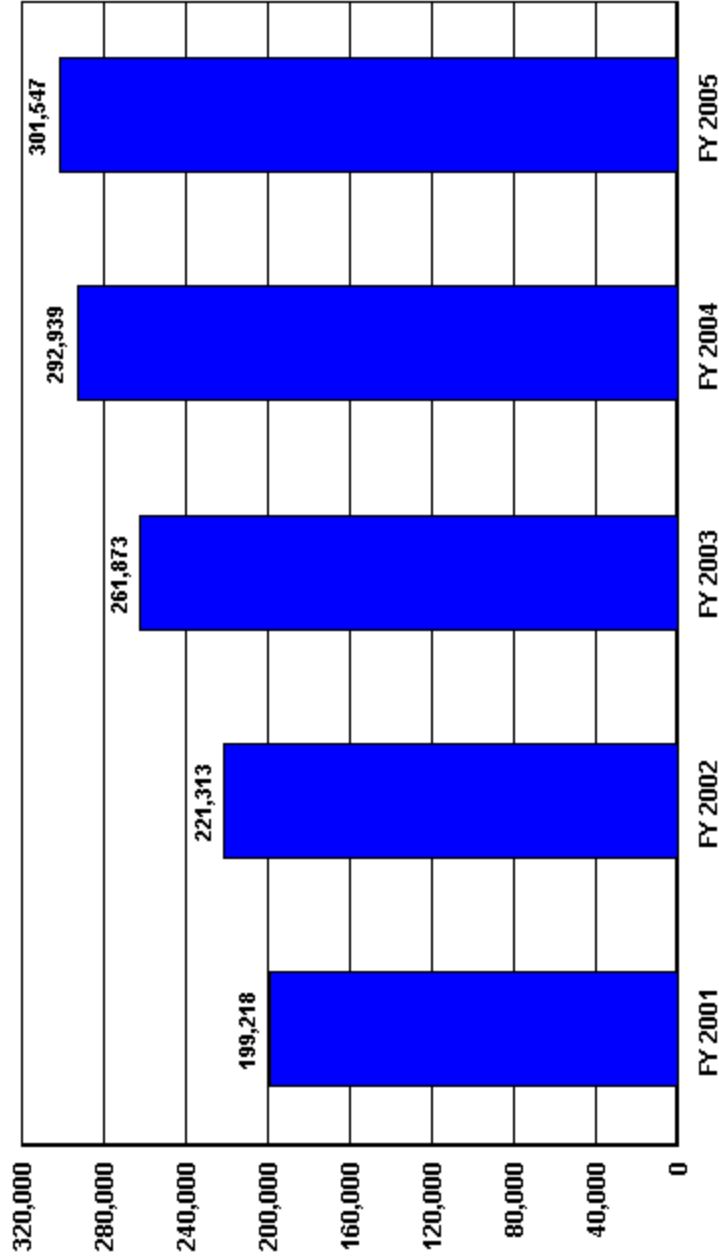
---

Six Sigma	5,424	In FY 2005, the Six Sigma program resulted in cost savings in the areas of Krakatau experiment scoping, Radiation/Nuclear Technologies, D&D in Area 25, Disposal cell design, Property Asset Management system, U1A Preventative Maintenance, and NTS commuter busing.	
-----------	-------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

**Trends in Total Support Cost by Functional Categories**  
**Oak Ridge National Lab/UT-Battelle (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	624,394	745,577	856,308	940,216	990,268	365,874	58.6%
<b>Capital Construction</b>	75,479	141,642	174,228	168,729	103,512	28,033	37.1%
<b>Total Costs Less Construction</b>	548,915	603,935	682,080	771,487	886,756	337,841	61.5%
<b>Total Support Costs</b>	199,218	221,313	261,873	292,939	301,547	102,329	51.4%
<b>Mission Direct Operation</b>	349,697	382,622	420,207	478,548	585,209	235,512	67.3%
<b>Mission Direct Operation as % of Total Cost</b>	56.0%	51.3%	49.1%	50.9%	59.1%		
<b>Capital Construction as % of Total Cost</b>	12.1%	19.0%	20.3%	17.9%	10.5%		
<b>Total Support Cost as % of Total Cost</b>	31.9%	29.7%	30.6%	31.2%	30.5%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	31.9%	29.7%	30.6%	31.2%	30.5%		
<b>TOTAL SUPPORT COST</b>	199,218	221,313	261,873	292,939	301,547	102,329	51.4%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	9.5%	8.4%	9.4%	9.1%	9.0%		
<b>TOTAL GENERAL SUPPORT</b>	59,342	62,495	80,907	85,217	89,423	30,081	50.7%
EXECUTIVE DIRECTION	5,681	5,537	12,581	12,801	13,906	8,225	144.8%
HUMAN RESOURCES	4,511	5,260	6,627	6,981	7,662	3,151	69.9%
CFO	5,087	5,057	11,232	10,731	12,016	6,929	136.2%
PROCUREMENT	3,078	2,752	4,853	5,320	5,658	2,580	83.8%
LEGAL	1,669	1,875	2,172	1,894	1,568	-101	-6.1%
CENTRAL ADMIN SERVICES	5,616	4,432	5,230	5,663	11,060	5,444	96.9%
PROGRAM/PROJECT CONTROL	1,084	1,057	2,192	1,354	1,136	52	4.8%
INFORMATION OUTREACH	7,643	7,247	8,604	9,935	9,228	1,585	20.7%
INFORMATION SERVICES	20,059	24,116	22,713	23,913	21,737	1,678	8.4%
OTHER	4,914	5,162	4,703	6,625	5,452	538	10.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	20.2%	18.9%	19.0%	19.6%	18.7%		
<b>TOTAL MISSION SUPPORT</b>	125,890	140,691	162,545	184,725	184,932	59,042	46.9%
ENVIRONMENTAL	5,440	5,400	10,862	10,449	9,888	4,448	81.8%
SAFETY AND HEALTH	22,684	21,358	27,414	30,172	25,971	3,287	14.5%
FACILITIES MANAGEMENT	14,039	17,436	27,711	33,889	30,136	16,097	114.7%
MAINTENANCE	50,201	58,928	47,556	51,137	57,405	7,204	14.4%
UTILITIES	13,423	12,338	19,269	20,510	22,929	9,506	70.8%
SAFEGUARDS AND SECURITY	9,108	13,947	15,266	16,985	17,196	8,088	88.8%
LOGISTICS SUPPORT	4,109	5,597	6,067	7,421	6,572	2,463	59.9%
QUALITY ASSURANCE	4,401	3,587	5,029	4,949	4,662	261	5.9%
LABORATORY/TECHNICAL SUPPORT	2,485	2,100	3,371	9,213	10,173	7,688	309.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.2%	2.4%	2.2%	2.4%	2.7%		
<b>TOTAL SITE SPECIFIC</b>	13,986	18,127	18,421	22,997	27,192	13,206	94.4%
MANAGEMENT/INCENTIVE FEE	6,450	6,959	7,056	7,043	8,184	1,734	26.9%
TAXES	287	301	308	1,353	1,822	1,535	534.8%
LDRD / PDRD / SDRD	7,249	10,867	11,057	14,601	17,186	9,937	137.1%

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

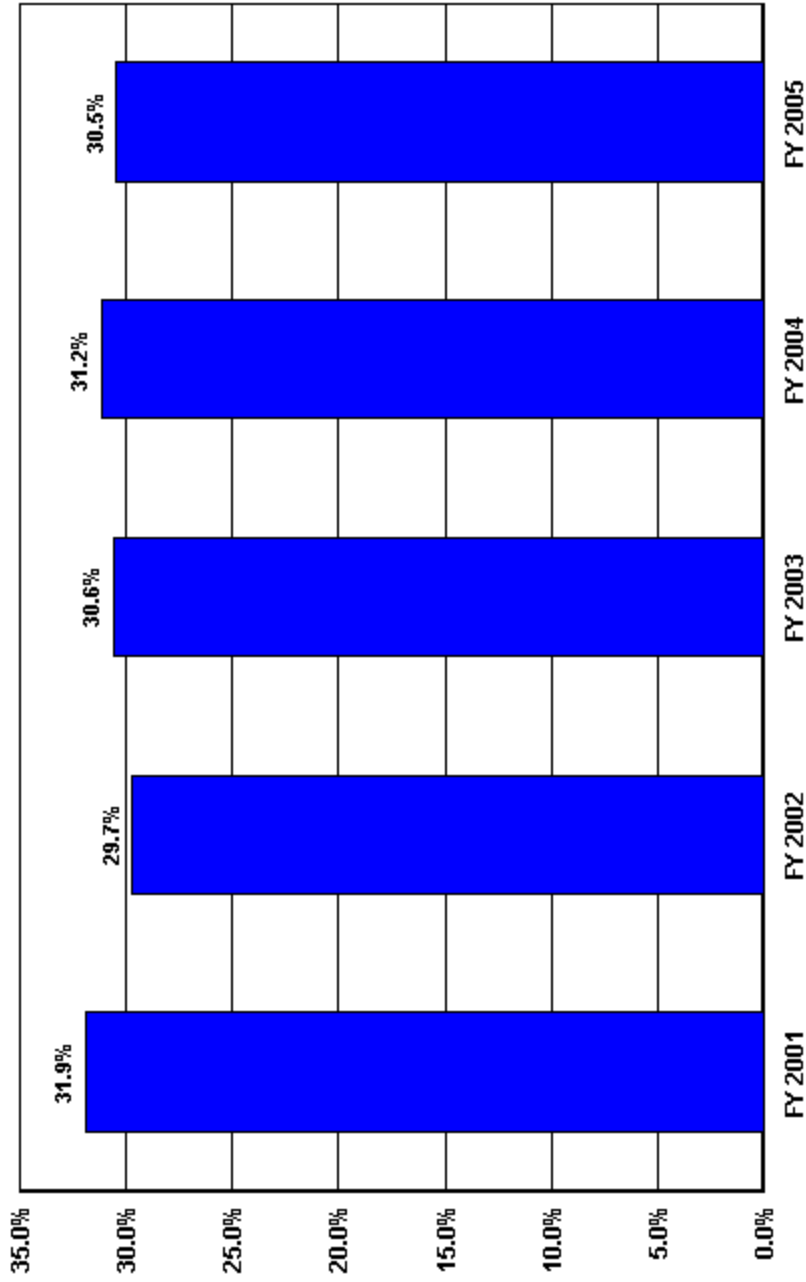


Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	199,218	221,313	261,873	292,939	301,547



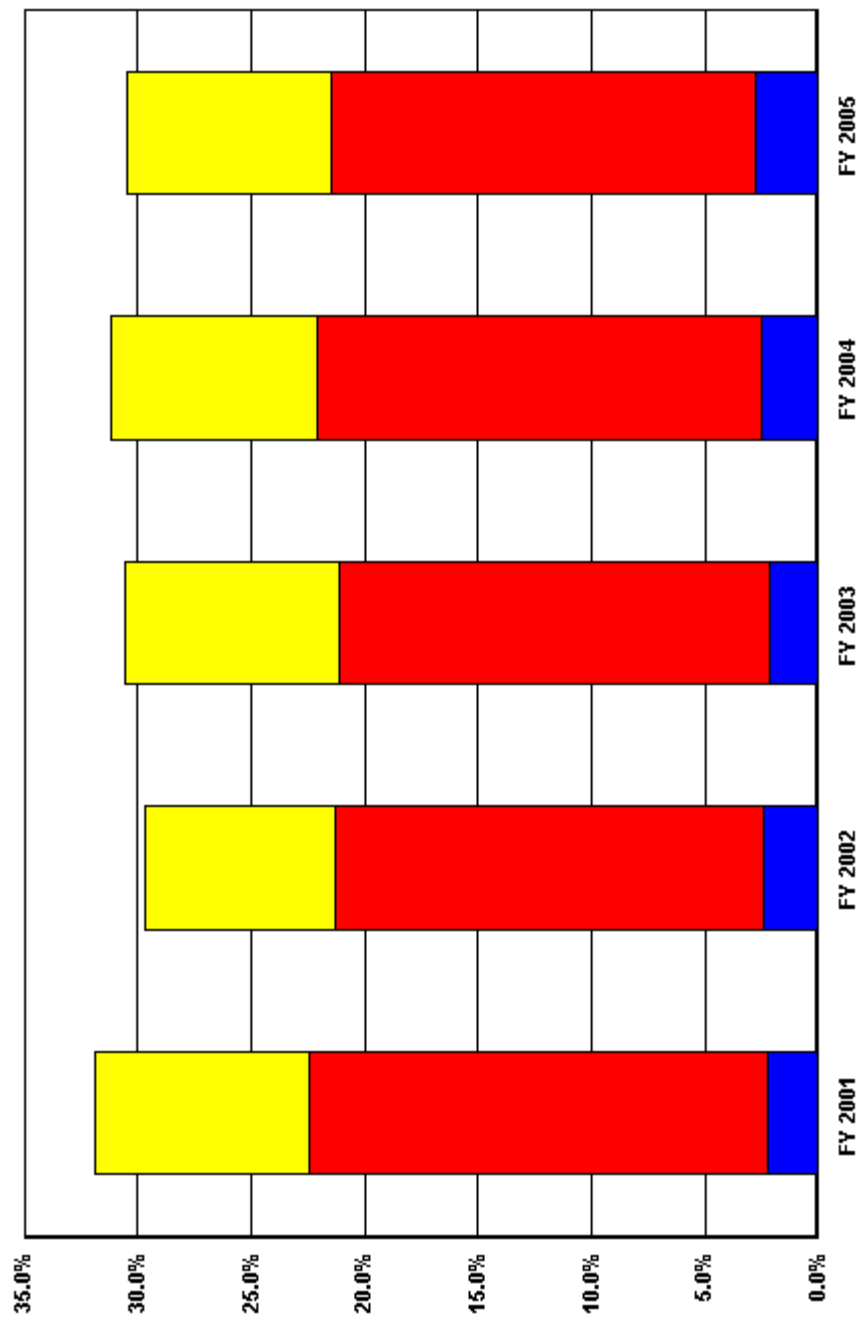
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Oak Ridge National Lab/UT-Battelle**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>31.9%</b>	<b>29.7%</b>	<b>30.6%</b>	<b>31.2%</b>	<b>30.5%</b>

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



Gen Sup
  Mis Sup
  Site Specific

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	9.5%	8.4%	9.4%	9.1%	9.0%
Mis Sup	20.2%	18.9%	19.0%	19.6%	18.7%
Site Specific	2.2%	2.4%	2.2%	2.4%	2.7%

---

**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**Background**

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

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

ORNL has a staff of over 4,000 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 344 active buildings, 63 active trailers, with approximately 3.9 million square feet of building space.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**CENTRAL ADMIN SERVICES**

Although there was no official documentation, through discussions with UT Battelle personnel, we determined that Central Administrative Services increased because the system for capturing these costs was refined which resulted in the increase.

---

**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

---

**TAXES**

Taxes increased by \$469,000 (25 percent) in FY 2005 due to the inclusion of cost element 44000722 (Tennessee state use tax) and a full year of the third party facilities.

**COST SAVINGS INITIATIVES**

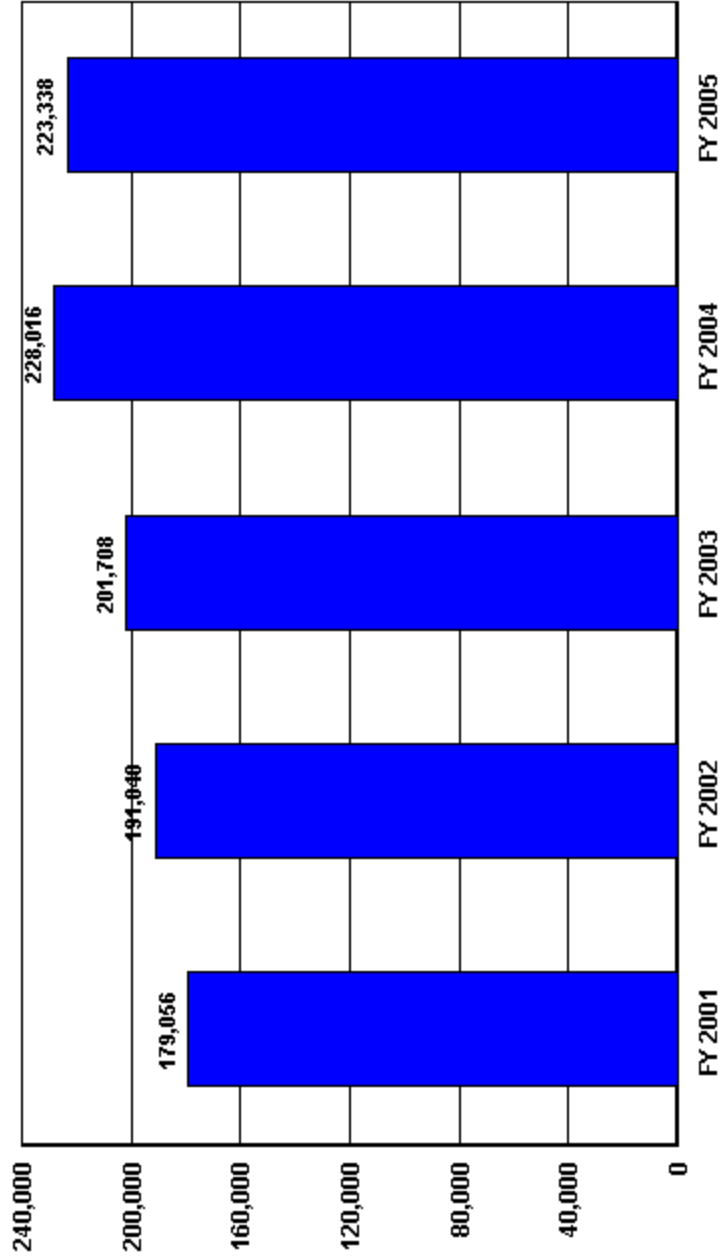
(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**OREMEF/Bechtel Jacobs (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	456,011	501,221	537,019	654,843	769,055	313,044	68.6%
<b>Capital Construction</b>	21,369	35,273	11,242	33,306	43,948	22,579	105.7%
<b>Total Costs Less Construction</b>	434,642	465,948	525,777	621,537	725,107	290,465	66.8%
<b>Total Support Costs</b>	179,056	191,048	201,708	228,016	223,338	44,282	24.7%
<b>Mission Direct Operation</b>	255,586	274,900	324,069	393,521	501,769	246,183	96.3%
<b>Mission Direct Operation as % of Total Cost</b>	56.0%	54.8%	60.3%	60.1%	65.2%		
<b>Capital Construction as % of Total Cost</b>	4.7%	7.0%	2.1%	5.1%	5.7%		
<b>Total Support Cost as % of Total Cost</b>	39.3%	38.1%	37.6%	34.8%	29.0%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	39.3%	38.1%	37.6%	34.8%	29.0%		
<b>TOTAL SUPPORT COST</b>	179,056	191,048	201,708	228,016	223,338	44,282	24.7%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	13.5%	12.9%	11.7%	8.8%	7.6%		
<b>TOTAL GENERAL SUPPORT</b>	61,525	64,709	63,095	57,659	58,157	-3,368	-5.5%
EXECUTIVE DIRECTION	2,502	3,626	3,366	3,971	3,187	685	27.4%
HUMAN RESOURCES	7,318	9,916	11,020	7,661	9,327	2,009	27.5%
CFO	4,917	4,472	4,366	4,225	4,071	-846	-17.2%
PROCUREMENT	5,184	5,558	6,398	6,923	6,769	1,585	30.6%
LEGAL	1,325	1,136	1,288	1,318	1,572	247	18.6%
CENTRAL ADMIN SERVICES	6,466	6,883	7,527	7,299	7,684	1,218	18.8%
PROGRAM/PROJECT CONTROL	11,809	11,526	9,259	8,891	9,685	-2,124	-18.0%
INFORMATION OUTREACH	2,195	1,982	1,575	1,303	875	-1,320	-60.1%
INFORMATION SERVICES	19,515	19,535	18,248	16,062	14,985	-4,530	-23.2%
OTHER	294	75	48	6	2	-292	-99.3%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	21.3%	21.1%	22.3%	21.7%	19.3%		
<b>TOTAL MISSION SUPPORT</b>	96,960	105,958	119,865	141,921	148,299	51,339	52.9%
ENVIRONMENTAL	6,753	6,761	7,572	7,323	4,686	-2,067	-30.6%
SAFETY AND HEALTH	42,065	43,913	51,722	56,040	63,749	21,684	51.5%
FACILITIES MANAGEMENT	1,159	1,783	2,533	3,046	6,532	5,373	463.6%
MAINTENANCE	12,333	12,294	16,004	13,400	10,610	-1,723	-14.0%
UTILITIES	15,332	17,642	15,815	17,602	19,956	4,624	30.2%
SAFEGUARDS AND SECURITY	11,175	15,440	19,105	37,674	34,332	23,157	207.2%
LOGISTICS SUPPORT	3,019	3,193	1,453	1,757	2,075	-944	-31.3%
QUALITY ASSURANCE	4,723	4,513	4,911	4,770	5,298	575	12.2%
LABORATORY/TECHNICAL SUPPORT	401	419	750	309	1,061	660	164.6%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.5%	4.1%	3.5%	4.3%	2.2%		
<b>TOTAL SITE SPECIFIC</b>	20,571	20,381	18,748	28,436	16,882	-3,689	-17.9%
MANAGEMENT/INCENTIVE FEE	19,933	19,324	17,914	27,651	15,877	-4,056	-20.3%
TAXES	638	1,057	834	785	1,005	367	57.5%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

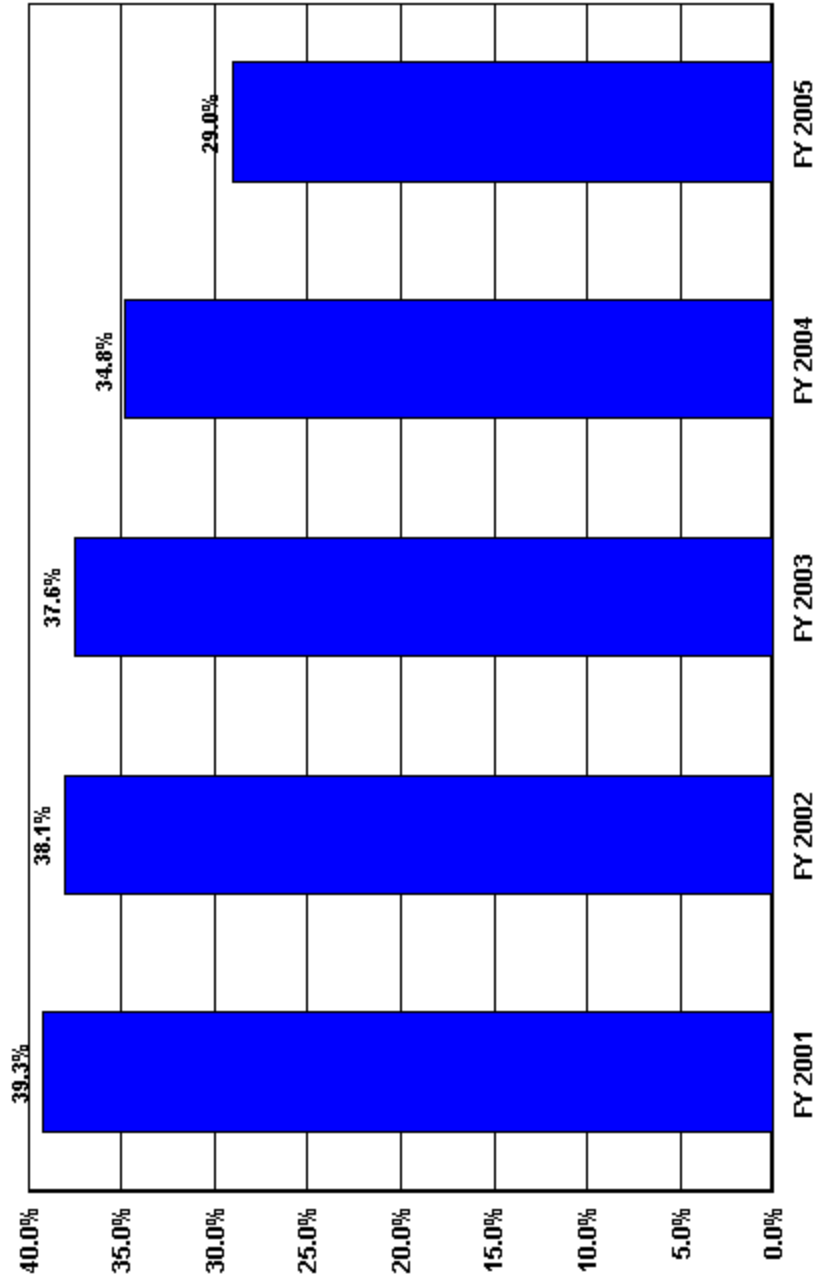
US Department of Energy  
 Total Functional Support  
 OREMEF/Bechtel Jacobs



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	179,056	191,048	201,708	228,016	223,338

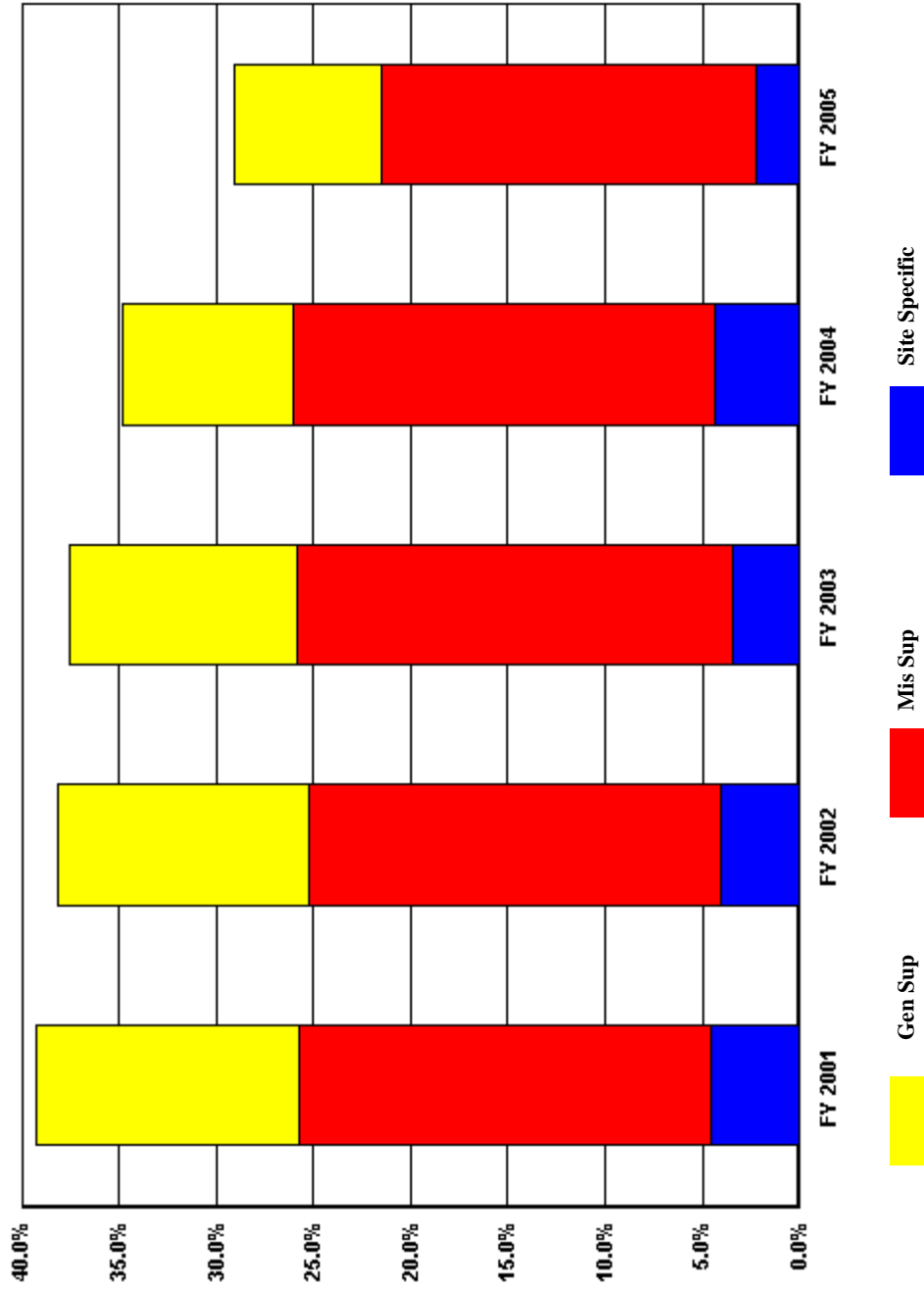
**US Department of Energy  
Total Functional Support as a % of Total Costs  
OREMEF/Bechtel Jacobs**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>39.3%</b>	<b>38.1%</b>	<b>37.6%</b>	<b>34.8%</b>	<b>29.0%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
OREMEF/Bechtel.Jacobs**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	13.5%	12.9%	11.7%	8.8%	7.6%
Mis Sup	21.3%	21.1%	22.3%	21.7%	19.3%
Site Specific	4.5%	4.1%	3.5%	4.3%	2.2%



---

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

---

**SITE OVERVIEW AND CHARACTERISTIC**

I. 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 1319 Bechtel Jacobs Company employees reside at the site with an additional 1,950 subcontractors 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 approximately 298 subcontractors. As of June 27, 2005, this scope of work transitioned in its entirety to two new prime contractors and is no longer part of the OREMEF submission. BJC supported 3 people at the site after the transition.

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. As of June 27, 2005, the Paducah Infrastructure scope of work transitioned to a new prime contractor and is no longer part of the OREMEF submission. BJC currently supports 147 employees and 576 post transition.

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 work scope 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 utilized for specific scopes of work and would be reflected in the mission direct category. Approximately 6% of the Bechtel Jacobs subcontracted work scope 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

---

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

---

Corporation performs approximately 16% of the work scope 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. The first milestone (disposal of legacy low level waste and legacy mixed low level waste) was completed as scheduled.

## II. 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.

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. The

---

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

---

support cost percentage continued to reduce in FY 2005 even though total cost increased, indicating that BJC support cost do not fluctuate with cost.

**III. Major Cost Saving Initiatives**

In FY 2001, Bechtel Jacobs Company (BJC) began implementing the Six Sigma program. Six Sigma is a problem-solving methodology that uses a systematic approach to allow an organization to improve quality quickly and effectively. It utilizes a rigorous set of statistical tools and methodologies designed to improve work quality, profitability, customer and employee satisfaction and leadership of business enterprises. BJC has combined the Six Sigma methodologies with behavioral-oriented Performance Based Leadership tools to improve the way we do business; tackle the issues that can hinder performance and drive us toward our goal of meeting business objectives and DOE expectations.

BJC calculates and tracks the cost savings derived from the Six Sigma Process Improvement Projects (PIPs) on a calendar year basis. The following is a brief description of the results and cost savings associated with PIPs that generated cost savings in 2005. Cost savings are unburdened and are net of any implementation (investment) cost.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

FY 2001 reduction was due to organization changes that combined organizational elements and reduced the number of managers. The increase in FY 2002 was due to the addition of three Six Sigma Black Belts. The FY 2004 increase (\$600K) was due to the addition of senior management positions to support the Accelerated Cleanup Plan. The FY 2005 decrease was due to the transitioning of Black Belts to field positions (\$300K).

**HUMAN RESOURCES**

The increase in FY 2005 was due to Worker's Compensation cost (\$800K), an additional employee in Labor Relations (\$100K), accrual of the variable pay plan earned in FY 2005 (\$300K), an increase in the benefits service center in support of WFT employees (\$500K), and an increase in Human Resource management (\$160K).

**CFO**

The reduction in FY 2005 reflects the loss of 1.5 FTEs (\$200K) of which .5 FTE transitioned with the Paducah/Portsmouth scopes of work.

**LEGAL**

The FY 2005 increase was due to additional support required from outside counsel (\$250K) as well as increased risk management support.

---

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

---

**CENTRAL ADMIN SERVICES**

The FY 2004 decrease (\$200K) was due to the reduction of 11 FTEs during the year.

**PROGRAM/PROJECT CONTROL**

Project Control cost increased in FY 2005 due to a comprehensive baseline support (5 FTEs, \$550K) and additional support required to facilitate the EVMS review (\$200K).

**INFORMATION OUTREACH**

Significant decrease in Information Outreach Activities.

**INFORMATION SERVICES**

FY 2005 decreases due to reduction in application maintenance costs (\$1M) and PC maintenance and asset management (\$1.3M). Some of these decreases were due to the transition of Paducah and Portsmouth scopes of work.

**ENVIRONMENTAL**

Significant decrease in Environmental costs were due to the restructuring of the sampling and analysis subcontract and reduction of FTE's in environmental services.

**SAFETY AND HEALTH**

Additional Radcon support caused the increase in S&H cost in FY 2005 including the cost of 7 additional FTEs.

**FACILITIES MANAGEMENT**

Increase in FY 2005 were due to the leasing of four buildings from CROET and increases in field services and engineering management. Additional increases were due to moves due to reorganizations and repositioning employees from buildings scheduled for demolition to other areas.

**MAINTENANCE**

Decrease in FY 2005 was due to leasing of four buildings from CROET, which transferred the cost from the maintenance category to Facilities Management (1.6 million). In addition, demolished facilities contributed to the further reduction in maintenance cost.

**SAFEGUARDS AND SECURITY**

Safeguards and Security costs went down in FY 2005 due to the transition of contractors at Paducah and Portsmouth in which the security support became Government Furnished Services and Information (GFSI).

**LOGISTICS SUPPORT**

Increases in FY 2005 were due to the implementation of a Central Receiving Facility.

---

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

---

**LABORATORY/TECHNICAL SUPPORT**

Increased costs in FY 2005 were due to the higher number of samples required to support project activities.

**MANAGEMENT/INCENTIVE FEE**

The decrease in FY 2005 was due to the accrual of fee on a percentage of target fee basis as approved by DOE.

**TAXES**

The FY 2005 increase reflects the taxes paid on earnings which increased during the period.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

Subcontract Initiation to Payment Process	86	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.	
Reduce Banking Costs	231	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.	

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Workforce Transition Subcontractor Benefits</p>	<p>173</p>	<p>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.</p>	
<p>Improve Health Physics Survey</p>	<p>153</p>	<p>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.</p>	

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

Waste Information Management System	2,340	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.	
Improve the Process for Benefit Transmittals	230	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.	
Surveillance and Maintenance	259	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.	



**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Melton Valley Hydrologic Isolation Project</p>	<p>1,590</p>	<p>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.</p>	
<p>Shipping UF6 Cylinders</p>	<p>1,317</p>	<p>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.</p>	

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Medical Space Utilization &amp; Operations</p>	<p>325</p>	<p>The BJC Health Center facility was scheduled for deactivation and demolition beginning in December, 2003. Relocation of this function to another facility was needed to support the D&amp;D schedule. The purpose of this PIP was to streamline facility space needs and reduce the costs associated with relocating the BJC Health Center facility. Data associated with specific day-to-day volume of traffic was collected and analyzed and a simulation model was developed to evaluate the facility resource needs to support both current activity and potential near-term increases. Improvements were identified for the scheduling of services provide by the Health Center, as well as addition communication on the hours of operation and the process for obtaining services. As a result, facility space needs were reduced and an existing facility location was identified.</p>	
<p>Equipment Calibration and Maintenance</p>	<p>36</p>	<p>The purpose of this PIP was to find ways to reduce calibration activities by 20%. Data analysis indicated that many calibrations were not needed as currently scheduled as there was no change in performance from the original check. The process of calibration requirement and completion was formalized to include the facility owner and required evaluation of each piece of equipment to identify a basis for the calibration schedule. Ultimately this process improvement reduced the number of calibration activities resulting in cost savings.</p>	

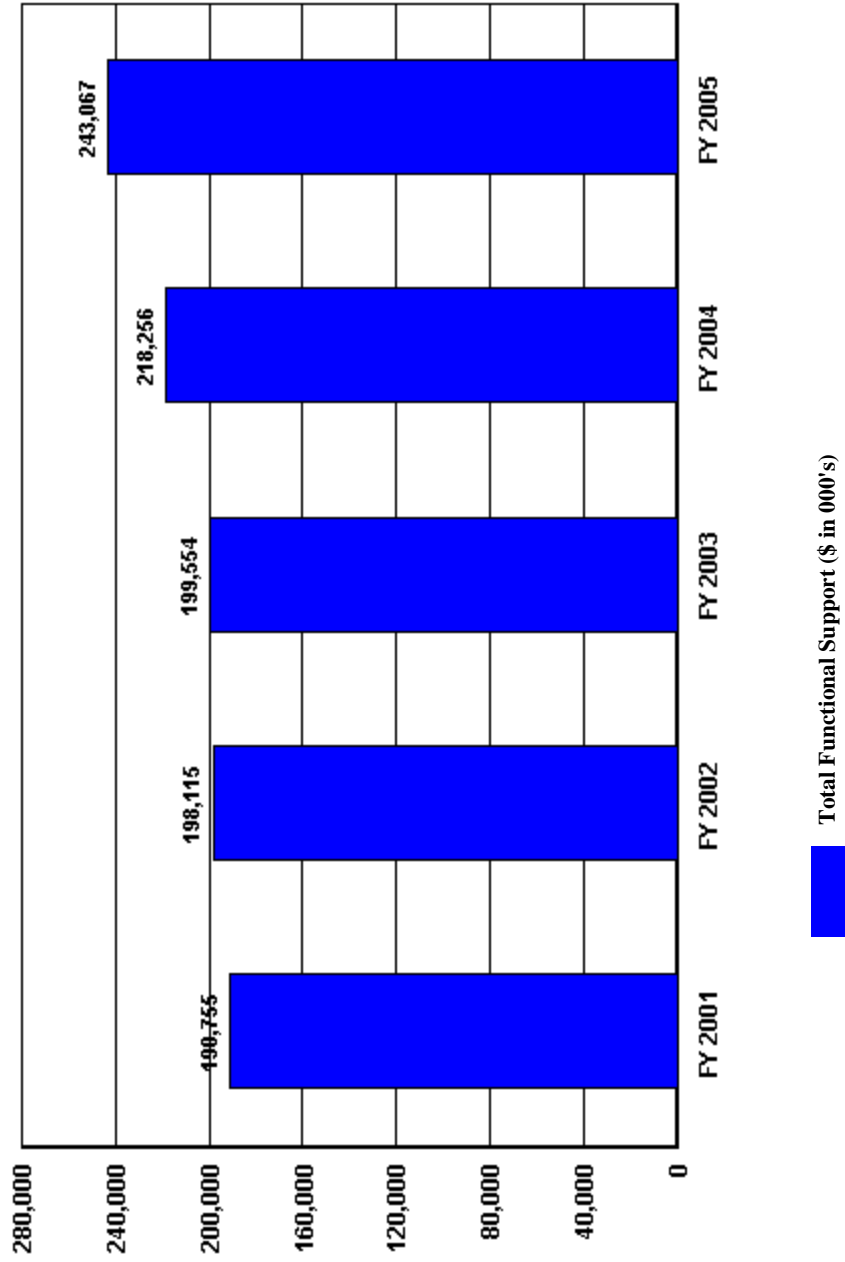
**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Technical Service Agreements</p>	<p style="text-align: center;">180</p>	<p>The invoicing process for Technical Service Agreements (TSA) required review and revision due to recent organization changes within Procurement and Field Services. A new process was designed that addressed the organizational changes and eliminated non-value added steps to reduce the current cycle time. The revised invoicing process provided electronic submittal of performance thereby eliminating the manual input into STAR. The direct benefit was a reduced number of labor hours to process performance summaries along with elimination of input errors. Dual approval cycle of performance summaries was also eliminated along with the elimination of the invoice concurrence sheet. The cycle time of the process was reduced from 72 to 47 days.</p>	
<p>Maintenance and Software Licensing Costs</p>	<p style="text-align: center;">144</p>	<p>The Information Technology (IT) Department initiated this PIP to determine the optimal venue to reduce costs by 10% without reducing service. The process involves an intricate network of data sharing for accurate reporting of salary, taxes, benefits, charitable giving, workforce transition employees, retirees, COBRA beneficiaries, accounts receivable, accounts payable, union contract requirements, prime contract requirements, and others. The software applications supporting these functions are the Human Resource Information System (HRIS), Cyborg, and Payroll, Absence, and Labor System (PALS), all of which feed Oracle Financials, the single piece of BJC mission-critical software. Key customers include Human Resource, employees, Chief Finance Officer, insurance companies, IRS, United Way, pension accruals, and subcontractors with workforce transition employees. The team concluded that direct-hire of current subcontracted expertise would be the only suitable option.</p>	

**Trends in Total Support Cost by Functional Categories**  
**Pacific Northwest National Lab/Battelle Memorial (\$000)**  
**FY 2005**

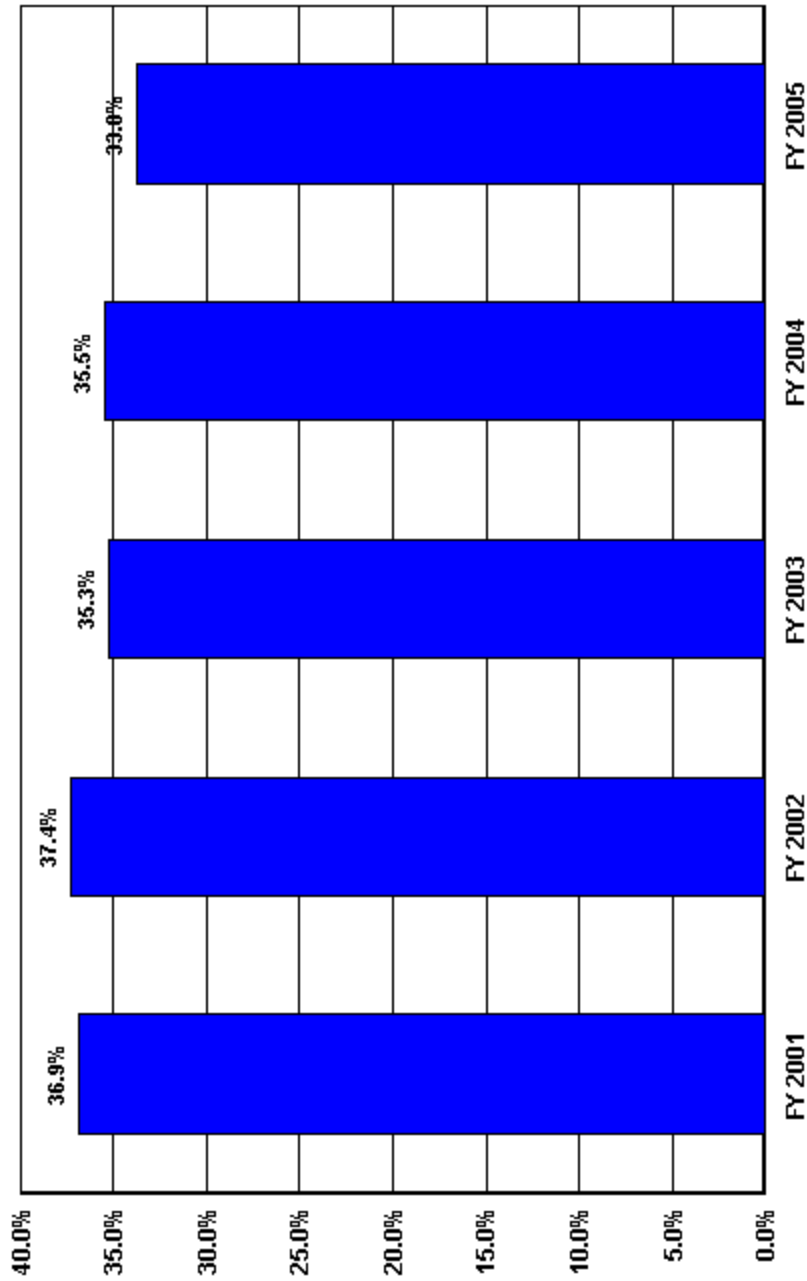
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	517,078	530,413	564,955	614,443	719,778	202,700	39.2%
<b>Capital Construction</b>	12,715	10,066	12,843	11,563	17,901	5,186	40.8%
<b>Total Costs Less Construction</b>	504,363	520,347	552,112	602,880	701,877	197,514	39.2%
<b>Total Support Costs</b>	190,755	198,115	199,554	218,256	243,067	52,312	27.4%
<b>Mission Direct Operation</b>	313,608	322,232	352,558	384,624	458,810	145,202	46.3%
<b>Mission Direct Operation as % of Total Cost</b>	60.7%	60.8%	62.4%	62.6%	63.7%		
<b>Capital Construction as % of Total Cost</b>	2.5%	1.9%	2.3%	1.9%	2.5%		
<b>Total Support Cost as % of Total Cost</b>	36.9%	37.4%	35.3%	35.5%	33.8%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	36.9%	37.4%	35.3%	35.5%	33.8%		
<b>TOTAL SUPPORT COST</b>	190,755	198,115	199,554	218,256	243,067	52,312	27.4%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	16.6%	16.8%	16.4%	15.3%	14.0%		
<b>TOTAL GENERAL SUPPORT</b>	85,802	89,026	92,896	93,904	100,486	14,684	17.1%
EXECUTIVE DIRECTION	2,803	3,905	3,887	4,697	7,288	4,485	160.0%
HUMAN RESOURCES	4,815	4,740	4,935	4,887	5,353	538	11.2%
CFO	10,417	11,814	11,452	11,510	11,849	1,432	13.7%
PROCUREMENT	6,056	5,639	5,713	6,194	6,710	654	10.8%
LEGAL	1,843	1,393	941	890	955	-888	-48.2%
CENTRAL ADMIN SERVICES	3,553	3,919	4,808	6,193	5,747	2,194	61.8%
PROGRAM/PROJECT CONTROL	3,012	3,798	2,976	3,096	3,617	605	20.1%
INFORMATION OUTREACH	9,597	11,132	12,762	36,777	41,162	31,565	328.9%
INFORMATION SERVICES	23,215	21,524	22,765	19,660	17,805	-5,410	-23.3%
OTHER	20,491	21,162	22,657	0	0	-20,491	-100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	15.9%	15.7%	14.4%	15.6%	15.7%		
<b>TOTAL MISSION SUPPORT</b>	82,041	83,422	81,113	95,827	113,029	30,988	37.8%
ENVIRONMENTAL	2,970	3,245	4,161	4,176	3,949	979	33.0%
SAFETY AND HEALTH	20,718	18,710	16,497	19,385	21,936	1,218	5.9%
FACILITIES MANAGEMENT	18,116	19,882	20,273	26,851	31,403	13,287	73.3%
MAINTENANCE	7,313	9,020	9,801	11,842	13,194	5,881	80.4%
UTILITIES	9,027	9,939	8,527	6,986	6,073	-2,954	-32.7%
SAFEGUARDS AND SECURITY	9,583	8,938	10,061	11,108	17,983	8,400	87.7%
LOGISTICS SUPPORT	1,287	1,558	1,538	2,056	2,579	1,292	100.4%
QUALITY ASSURANCE	6,638	3,969	4,319	4,128	3,982	-2,656	-40.0%
LABORATORY/TECHNICAL SUPPORT	6,389	8,161	5,936	9,295	11,930	5,541	86.7%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.4%	4.8%	4.5%	4.6%	4.1%		
<b>TOTAL SITE SPECIFIC</b>	22,912	25,667	25,545	28,525	29,552	6,640	29.0%
MANAGEMENT/INCENTIVE FEE	11,756	11,186	10,648	12,492	12,487	731	6.2%
TAXES	669	2,192	928	2,630	2,840	2,171	324.5%
LDRD / PDRD / SDRD	10,487	12,289	13,969	13,403	14,225	3,738	35.6%

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>190,755</b>	<b>198,115</b>	<b>199,554</b>	<b>218,256</b>	<b>243,067</b>

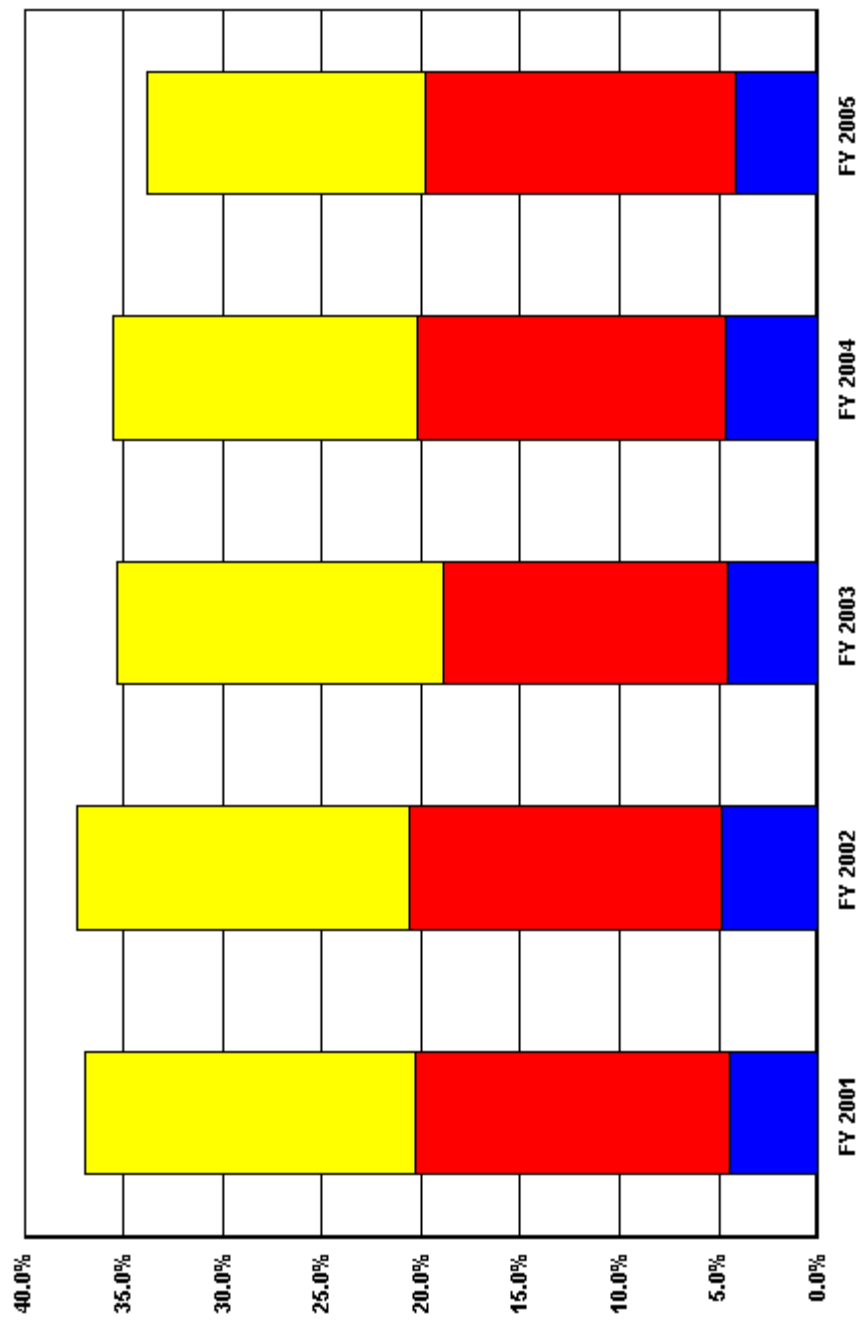
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Pacific Northwest National Lab/Battelle Memorial**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>36.9%</b>	<b>37.4%</b>	<b>35.3%</b>	<b>35.5%</b>	<b>33.8%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
Pacific Northwest National Lab/Battelle Memorial**



■ Gen Sup     
 ■ Mis Sup     
 ■ Site Specific

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	15.9%	15.7%	15.7%	15.3%	14.0%
Mis Sup	16.6%	16.4%	15.3%	15.6%	15.7%
Site Specific	4.4%	4.8%	4.5%	4.6%	4.1%

---

**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**History:**

Battelle Memorial Institute operates the Pacific Northwest National Laboratory (PNNL) 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.

**Mission:**

Pacific Northwest National Laboratory is a multi-program national laboratory that creates new knowledge and delivers solutions to science and technology challenges across the U.S. Department of Energy's science, national security, environmental quality, and energy resources missions. PNNL performs basic and applied research to deliver energy, environmental, and national security for 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.



---

**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

---

PNNL is a multi-program laboratory with a diverse customer base: Defense Programs, Energy Efficiency and Renewable Energy, Environment, Safety and Health, Environmental Management, Fossil Energy, Nuclear Energy, Science and Technology, Civilian Radioactive Waste Management and Work for Others. Special provisions of Battelle's contract with DOE allow for 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. In FY 2005, PNNL actively occupied 90 buildings with a yearend headcount of 3,919.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Increased due to campus planning and development costs associated with the relocation of 1,000 staff presently located in DOE-owned facilities scheduled for demolition and a reorganization that created two new research directorates.

**HUMAN RESOURCES**

Increased due to lab growth.

**PROCUREMENT**

The increase is due to growth and fewer cost being allocated to direct mission areas.

**PROGRAM/PROJECT CONTROL**

Higher levels of projects requiring project management support were started in this year.

**INFORMATION OUTREACH**

The increase is primarily associated with program office, management and development activities.

**ENVIRONMENTAL**

The main component of the decrease is continued efficiencies in effluent management.

**SAFETY AND HEALTH**

The change was driven by continuation of safety awareness programs throughout the lab, volume increases in the dosimetry and waste disposal service centers and moving control room costs to this category from Facilities Management.

---

**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

---

**FACILITIES MANAGEMENT**

The increase is the result of lab growth and leased facilities taking the place of DOE-owned facilities scheduled for demolition.

**SAFEGUARDS AND SECURITY**

Safeguards and Security costs increased \$6,875,000 (62 percent). This increase was mainly attributable to the transfer of costs related to cyber security activities from Mission Direct to the Safeguards and Security category. In addition, a one-time investment of \$1,500,000 was made in computing security.

**LOGISTICS SUPPORT**

Logistics Support costs increased \$523,000 (25 percent). This increase was caused by two main factors: 1) a small restructuring of Facilities Management and 2) relocation costs associated with newly leased buildings and space utilization practices.

**LABORATORY/TECHNICAL SUPPORT**

Laboratory/Technical Support costs increased by \$2,635,000 (28 percent). This increase is related to the Radiological Processing Laboratory (RPL). The RPL is in the middle of a three-year phased approach to move the operations of running this laboratory from Mission Direct funded to a service center where the "user pays" method is used to allocate costs. The transfer started in FY 2004 and will continue through FY 2006.

**CAPITAL CONSTRUCTION**

Data provided by PNNL this year showed Capital Construction costs of \$17,901,000. This is consistent with FY 2004 costs shown which were \$18,781,000. However, the amount shown in the system for FY 2004 Capital Construction was only \$11,563,000. Therefore, I believe we need to go back into the system and updated the FY 2004 costs to \$18,781,000 to agree with PNNL's most current submission. However, I was unable to update the FY 2004 costs to reflect the required change.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

---

**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

---

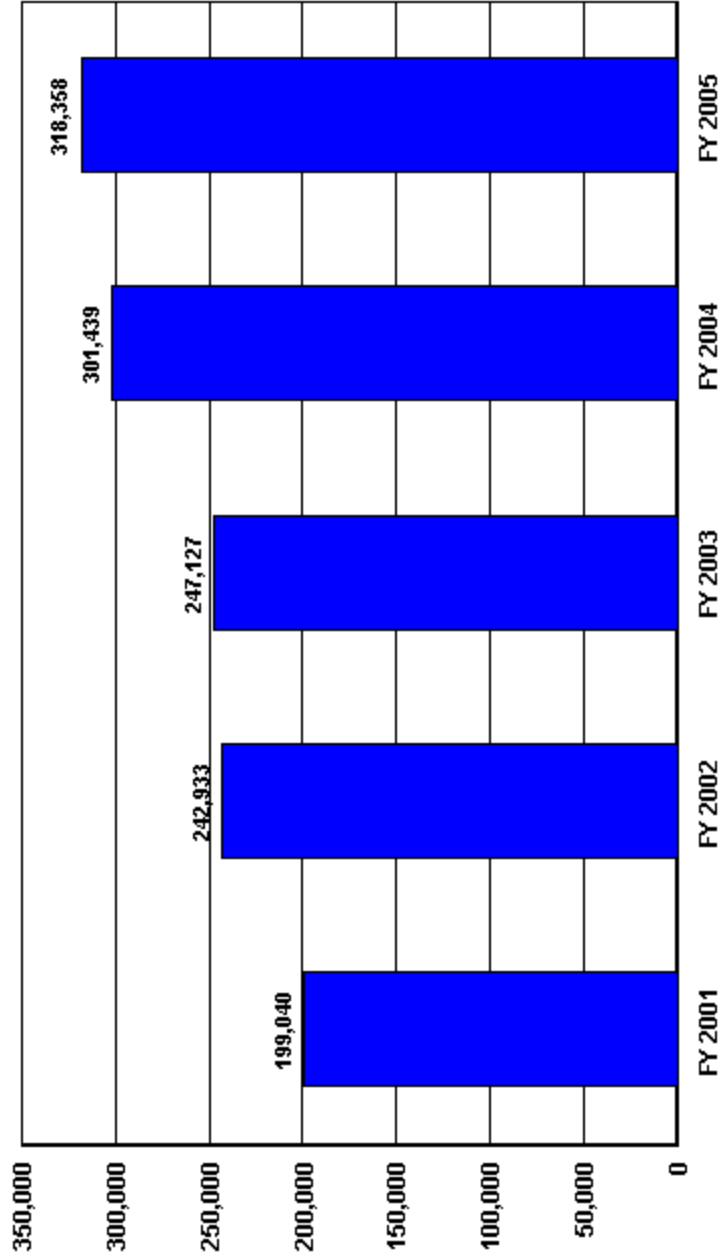
Leveraging cost savings agreements	2,000	Battelle continues to leverage cost savings by negotiating broad agreements that benefit all of the labs managed by Battelle. This results in an estimated annual savings to PNNL in excess of \$2M for airline agreements, travel services contracts, P-Card agreements, rental car agreements, joint systems, and joint software purchases. These savings and reductions have been realized and reinvested.	
Cost effectiveness space review	0	Resulted in addition of 33 workstations in current space. Also, developed a space utilization performance metric score card.	

**Trends in Total Support Cost by Functional Categories**  
**Pantex/BWXT (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	317,858	396,586	401,110	464,429	491,626	173,768	54.7%
<b>Capital Construction</b>	14,021	23,355	17,008	25,635	31,469	17,448	124.4%
<b>Total Costs Less Construction</b>	303,837	373,231	384,102	438,794	460,157	156,320	51.4%
<b>Total Support Costs</b>	199,040	242,933	247,127	301,439	318,358	119,318	59.9%
<b>Mission Direct Operation</b>	104,797	130,298	136,975	137,355	141,799	37,002	35.3%
<b>Mission Direct Operation as % of Total Cost</b>	33.0%	32.9%	34.1%	29.6%	28.8%		
<b>Capital Construction as % of Total Cost</b>	4.4%	5.9%	4.2%	5.5%	6.4%		
<b>Total Support Cost as % of Total Cost</b>	62.6%	61.3%	61.6%	64.9%	64.8%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		

<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	62.6%	61.3%	61.6%	64.9%	64.8%		
<b>TOTAL SUPPORT COST</b>	199,040	242,933	247,127	301,439	318,358	119,318	59.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	9.8%	9.4%	9.1%	10.7%	10.9%		
<b>TOTAL GENERAL SUPPORT</b>	31,287	37,166	36,560	49,619	53,552	22,265	71.2%
EXECUTIVE DIRECTION	1,015	1,186	1,163	1,259	1,243	228	22.5%
HUMAN RESOURCES	4,525	5,847	6,034	6,251	7,325	2,800	61.9%
CFO	2,763	3,342	4,061	5,276	5,526	2,763	100.0%
PROCUREMENT	2,745	3,432	3,014	4,682	4,594	1,849	67.4%
LEGAL	1,014	1,033	1,120	1,194	1,036	22	2.2%
CENTRAL ADMIN SERVICES	2,848	3,452	3,136	7,963	8,784	5,936	208.4%
PROGRAM/PROJECT CONTROL	1,521	3,986	4,003	5,911	7,996	6,475	425.7%
INFORMATION OUTREACH	444	468	542	1,632	1,526	1,082	243.7%
INFORMATION SERVICES	8,819	13,080	12,609	15,336	15,430	6,611	75.0%
OTHER	5,593	1,340	878	115	92	-5,501	-98.4%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	48.2%	45.2%	45.8%	48.5%	48.1%		
<b>TOTAL MISSION SUPPORT</b>	153,248	179,125	183,552	225,266	236,683	83,435	54.4%
ENVIRONMENTAL	9,576	9,976	9,799	9,517	11,589	2,013	21.0%
SAFETY AND HEALTH	30,681	41,234	40,776	42,388	45,485	14,804	48.3%
FACILITIES MANAGEMENT	12,206	16,313	17,227	35,700	33,435	21,229	173.9%
MAINTENANCE	37,621	39,355	38,894	43,554	43,820	6,199	16.5%
UTILITIES	9,516	7,724	8,538	9,227	10,704	1,188	12.5%
SAFEGUARDS AND SECURITY	43,940	54,738	58,922	67,571	74,572	30,632	69.7%
LOGISTICS SUPPORT	7,188	6,591	5,934	7,151	7,884	696	9.7%
QUALITY ASSURANCE	2,520	3,194	3,462	6,235	6,333	3,813	151.3%
LABORATORY/TECHNICAL SUPPORT	0	0	0	3,923	2,861	2,861	100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.6%	6.7%	6.7%	5.7%	5.7%		
<b>TOTAL SITE SPECIFIC</b>	14,505	26,642	27,015	26,554	28,123	13,618	93.9%
MANAGEMENT/INCENTIVE FEE	13,898	21,674	21,250	23,940	25,644	11,746	84.5%
TAXES	607	961	621	391	1,091	484	79.7%
LDRD / PDRD / SDRD	0	4,007	5,144	2,223	1,388	1,388	100.0%

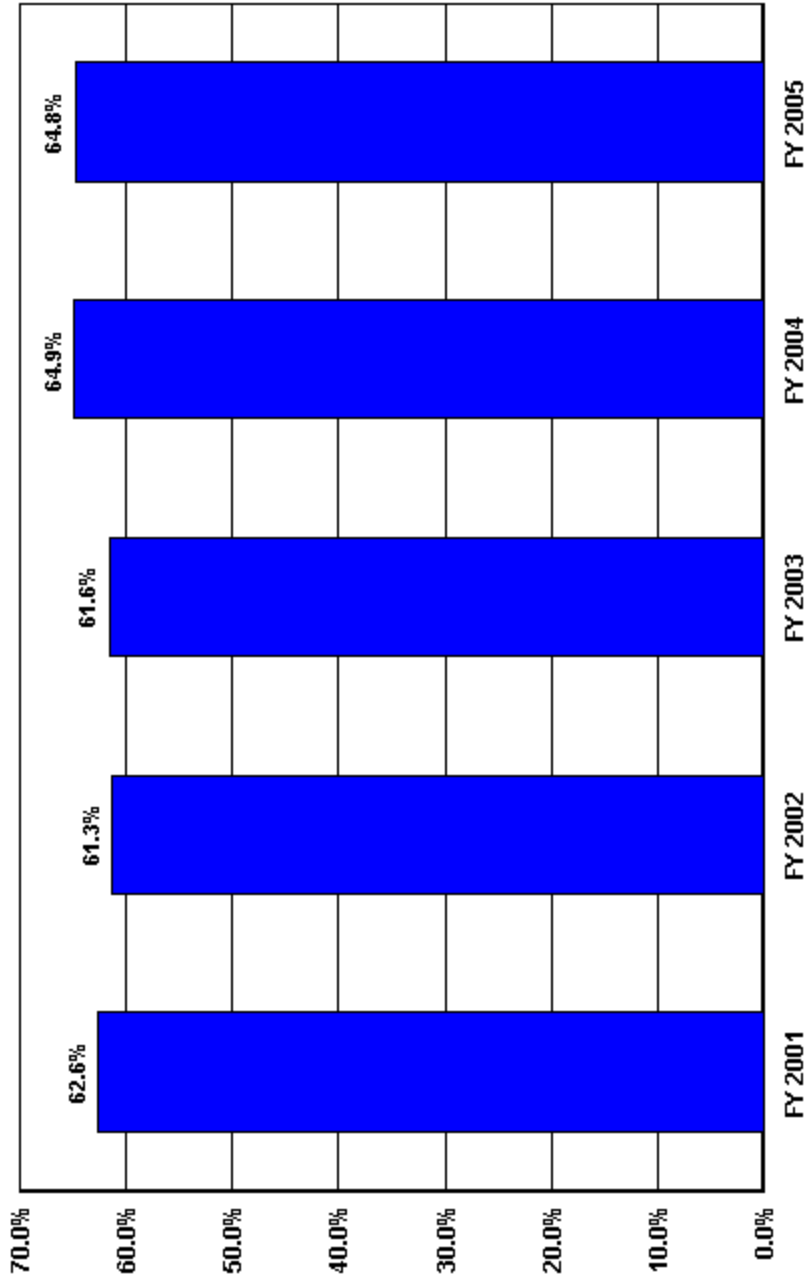
US Department of Energy  
 Total Functional Support  
 Pantex/BWXT



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	199,040	242,933	247,127	301,439	318,358

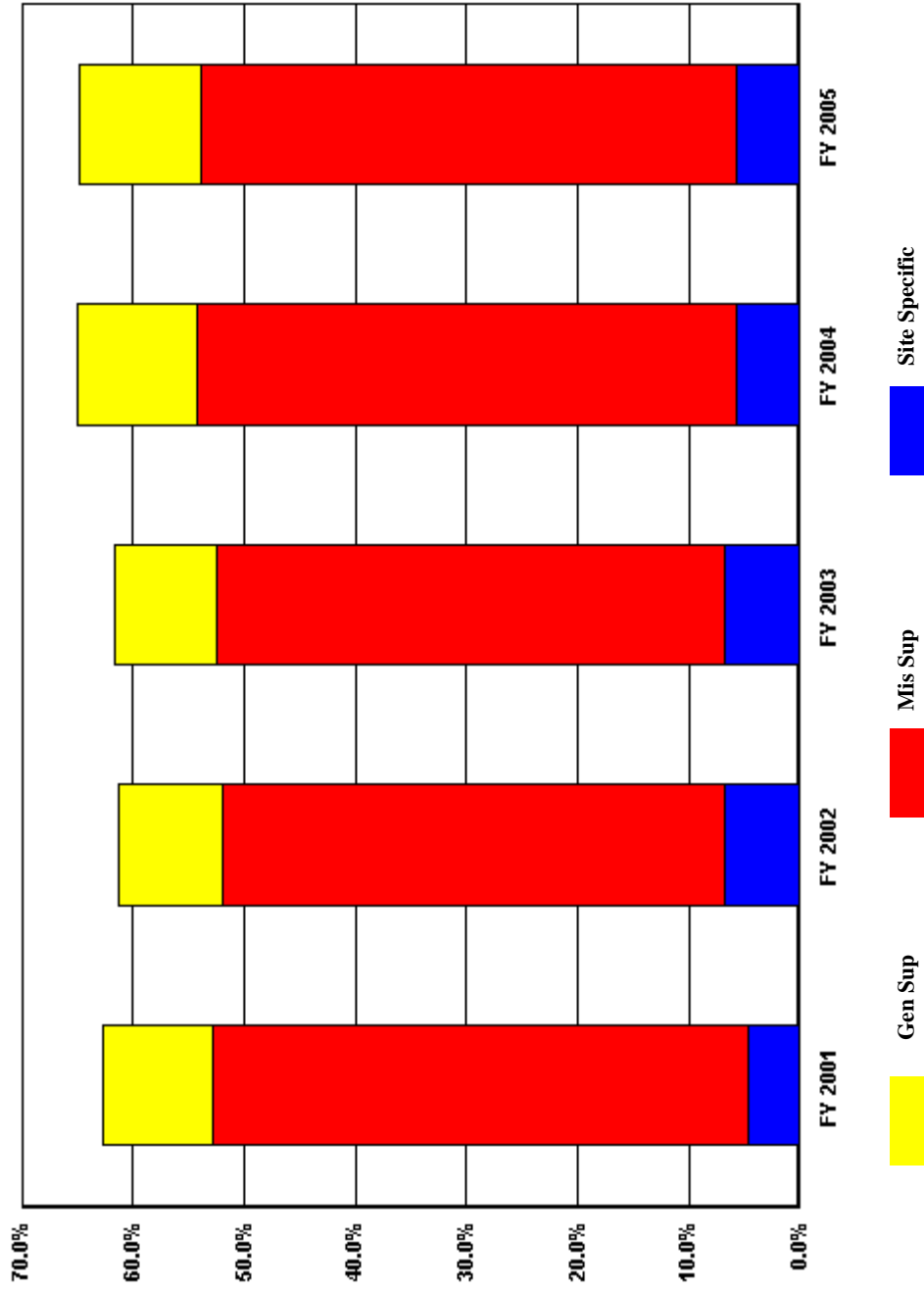
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Pantex/BWXT**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>62.6%</b>	<b>61.3%</b>	<b>61.6%</b>	<b>64.9%</b>	<b>64.8%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	9.8%	9.4%	9.1%	10.7%	10.9%
Mis Sup	48.2%	45.2%	45.8%	48.5%	48.1%
Site Specific	4.6%	6.7%	6.7%	5.7%	5.7%

---

**SITE PROFILE**  
**Pantex/BWXT**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**I. SITE 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 641 buildings containing approximately 2.9 million square feet and employs approximately 3,850 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 mission of BWXT Pantex is to support nuclear weapons stockpile stewardship while continuously improving levels of safety and productivity. Major activities include:

1. Evaluating, retrofitting, and repairing weapons in support of both life extension programs and certification of weapon safety and reliability
2. Dismantling weapons that are surplus to the stockpile
3. Sanitizing components from dismantled weapons
4. Developing, testing, and fabricating chemical and explosive components
5. Providing interim storage and surveillance of plutonium components.

Pantex has unique stockpile stewardship responsibilities for U.S. nuclear weapons. Modern technologies and capabilities are essential for supporting these mission requirements. The Engineering Campaign, the Readiness Campaign and the Plant Directed Research & Development (PDRD) program are focused on ensuring that Pantex has the capability and capacity to meet weapon requirements associated with defined workloads. Similar challenges are placed on the Readiness in Technical Base and Facilities (RTBF) program to provides facilities and infrastructure utilizing advanced scientific and technical tools in support of the NNSA nuclear weapons stockpile operational and mission requirements.

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.



---

**SITE PROFILE**  
**Pantex/BWXT**

---

**II. TRENDS:**

Total Functional Support Costs continue to rise each year with inflation, rising utility costs, and increased work scope in areas such as Infrastructure modifications, increased Security requirements and the compliance requirements associated with Safety and Health. Functional Support Costs as a percentage of total site costs have stayed relatively stable over the past five years despite the increased challenges and requirements surrounding support efforts such as infrastructure, safety and security.

**Comparison of FY2004 to FY2005:**

The overall increase in Total Plant cost from FY2004 to FY2005 is a reflection of heightened Security efforts driven by DBT requirements, Infrastructure improvements funded by FIRP and Operations of Facilities Congressional plus-up dollars, and accelerated Environmental Management efforts.

**Major Cost Drivers:**

When comparing Pantex with other sites, it is important to note that we are a unique facility with a work scope unlike any other.

Mission requirements have not varied substantially since FY2001, but increases in support costs have been driven by increased security requirements to meet DBT, infrastructure replacement and revitalization and technology improvements aimed at improving capability and capacity.

**Explanation of the “Other” Category**

In FY 2005, the “Other” category totaled \$92K and consisted of Beryllium (\$63K), Sandia/Tri-Lab (\$17K), and PXSO Miscellaneous Expenses (\$12K).

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

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

---

**SITE PROFILE**  
**Pantex/BWXT**

---

### **III. COST SAVINGS INITIATIVES**

BWXT Pantex continues to use a variety of initiatives to achieve productivity improvements in FY2005. Productivity Improvement included EPIC projects and numerous other process improvement initiatives. One hundred and sixty (160) cost savings and/or cost avoidance validations were completed in FY2005 resulting in an estimated annual impact of \$13.2 million. The following are some improvement examples that assisted BWXT Pantex in achieving significant productivity improvements.

All cost savings reported here were initiated at our site. The detailed validations of these initiatives, as well as others are on-file at Pantex. The validation process will continue as new cost savings are submitted for validation.

### **DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

#### **HUMAN RESOURCES**

The increase in HR spending is due in part to new management development initiatives. Approximately 300 managers at BWXT Pantex have been involved in this new program designed to improve their management skills, increase their leadership awareness, better deal with employee issues, and enhance communications with their peers/managers/employees. As a result of this initiative, resources have been put into a new process that improves the way the company selects new managers internally. In addition, a new Training Division was created in February of FY2005, making the isolation of training efforts easier to track for purposes of this report.

#### **LEGAL**

This small decrease was a reflection of a settlement that skewed FY04 data and a portion of the legal effort being shifted to Environmental in an effort to ensure that personnel involved in the procurement process are aware of Environmental Leadership and Fuel Efficiency Executive Orders and the required solicitation and contract clauses.

#### **CENTRAL ADMIN SERVICES**

Increase due to the assignment of three additional personnel in Document Control to assist with Interactive Electronic Procedures (IEP), Authorization Basis Documentation and Configuration Management efforts. In addition, Cafeteria/Vending costs are up based on the decision to outsource this effort, starting in FY2004.

---

**SITE PROFILE**  
**Pantex/BWXT**

---

**PROGRAM/PROJECT CONTROL**

Increase in Staff Augmentation contracts in direct support of the infrastructure improvements going on at the plant.

**ENVIRONMENTAL**

A large part of the increase ins the result of correcting the title of a charge code in the Sampling & Analysis effort. A charge code was titled wrong in FY04, causing \$769K to be misclassified as Lab/Tech when it should have been Environmental. In addition, D&D efforts reported as Mission work in FY0-4 were moved to Mission support for fY05 and Agreement in Principle cost paid by the Site Office was added to BWXT's total cost beginning in FY05 and split between Environmental and Safety/Health categories.

**SAFETY AND HEALTH**

The primary cause of the increase is a result of increased support in Authorization Basis for nuclear facilities, including Integrated Implementation Plan for Technical Safety Requirements. In addition, Nuclear Safety Officers were previously reported under Facilities Management based on the work breakdown structure, but have been moved to Safety for the FY05 report. A third factor involves Agreement in Principle cost paid by the Site Office. Beginning in FY05 this cost has been added in to BWXT's total cost and split between Environmental and Safety/Health categories.

**FACILITIES MANAGEMENT**

The focus for FY2005 has been more on new construction projects and upgrades versus the expense projects that were reflected in this category in FY2004. The decrease reflected here is offset by similar increases in Capital/Construction.

**SAFEGUARDS AND SECURITY**

Increased functional costs for Security are primarily attributable to the purchase of additional protective force equipment required to implement the 03 Design Basis Threat (DBT); technology deployment, as directed by headquarters; and continued support of the complex-wide Integrated Cyber Security Initiative (ICSI). As stated in last year's report, it is important to note that the Security functional costs, as defined by this report, are not indicative of the Safeguards & Security Program.

**LABORATORY/TECHNICAL SUPPORT**

A portion of this decrease was due to Metrology nonlabor funding beting diverted to support Tooling Re-start activities. The remaining perceived decrease is the result of correcting the title of a charge code in the Sampling & Analysis effort. A charge code was titled wrong in FY04, causing \$769K to be misclassified as Lab/Tech when it should have been environmental.

**SITE PROFILE**  
**Pantex/BWXT**

**TAXES**

The perceived increase to taxes is simply a return to normal spending. A refund was received from the State of Texas for franchise tax in FY2004 for overpayment of taxes in years 2000 through 2002, skewing the data for FY2004.

**LDRD / PDRD / SDRD**

Funding reductions and scope increases in the programs funding PDRD in FY05 necessitated a reduction in the PDRD amount. Based on current funding projections, this lower rate will also be applied to future years.

**CAPITAL CONSTRUCTION**

Additional scope was added for facility improvements in FY2005 and capital equipment purchases were up as a result of Security DBT requirements.

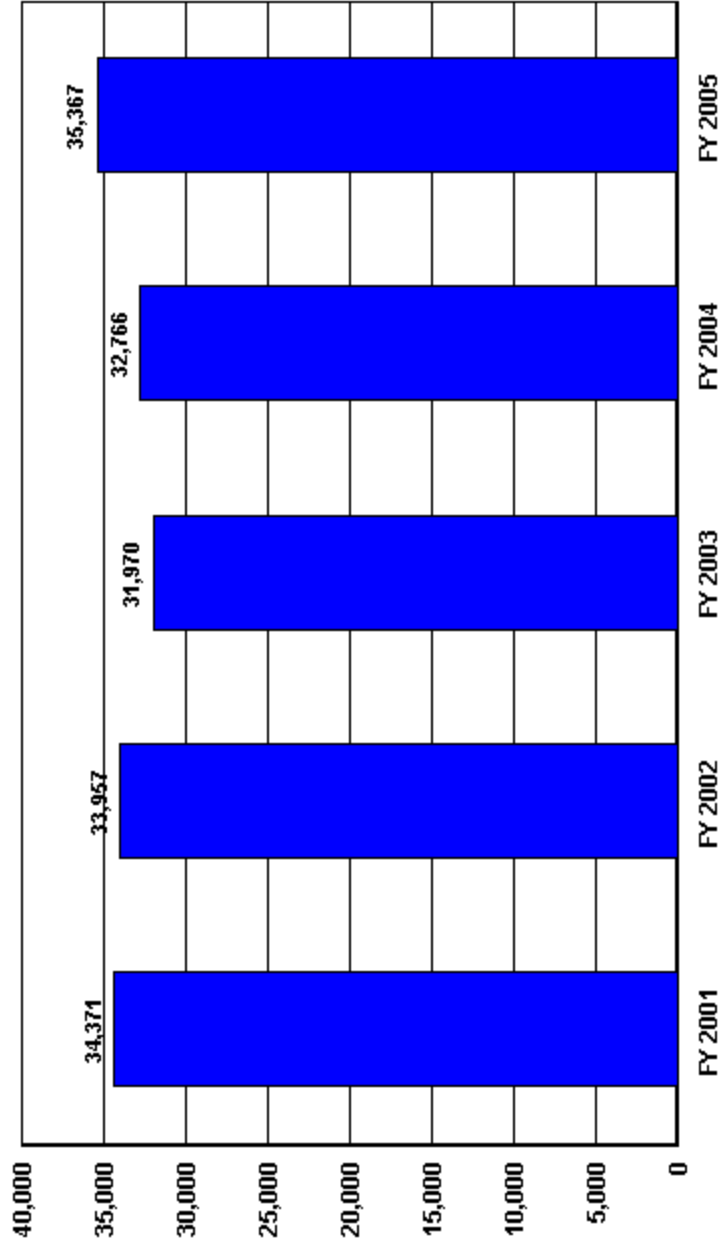
**COST SAVINGS INITIATIVES**  
(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Eliminated project to install strainers	997	Evaluation of the "Flush and Flow" requirement for HE facilities determined that installation of the strainers was not required. This resulted in the elimination of the project to install strainers for the HE facilities.	Angie Viner
Fire Watch	466	Implemented temporary fire panels and fire patrols in lieu of dedicated fire watch. Engineering revised the compensatory requirements to having a temporary fire panel monitor the water flow and UV detectors in the cells.	Angie Viner

**Trends in Total Support Cost by Functional Categories**  
**Princeton Plasma Physics Lab/Princeton University (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	76,097	73,904	66,456	75,117	81,158	5,061	6.7%
<b>Capital Construction</b>	5,729	5,220	5,398	12,297	16,671	10,942	191.0%
<b>Total Costs Less Construction</b>	70,368	68,684	61,058	62,820	64,487	-5,881	-8.4%
<b>Total Support Costs</b>	34,371	33,957	31,970	32,766	35,367	996	2.9%
<b>Mission Direct Operation</b>	35,997	34,727	29,088	30,054	29,120	-6,877	-19.1%
<b>Mission Direct Operation as % of Total Cost</b>	47.3%	47.0%	43.8%	40.0%	35.9%		
<b>Capital Construction as % of Total Cost</b>	7.5%	7.1%	8.1%	16.4%	20.5%		
<b>Total Support Cost as % of Total Cost</b>	45.2%	45.9%	48.1%	43.6%	43.6%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	45.2%	45.9%	48.1%	43.6%	43.6%		
<b>TOTAL SUPPORT COST</b>	34,371	33,957	31,970	32,766	35,367	996	2.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	14.3%	14.9%	16.9%	14.1%	15.8%		
<b>TOTAL GENERAL SUPPORT</b>	10,866	11,016	11,205	10,595	12,847	1,981	18.2%
EXECUTIVE DIRECTION	757	786	817	809	808	51	6.7%
HUMAN RESOURCES	1,037	958	1,036	960	790	-247	-23.8%
CFO	1,225	1,294	1,333	1,405	1,307	82	6.7%
PROCUREMENT	601	655	555	635	648	47	7.8%
LEGAL	35	-78	0	0	0	-35	-100.0%
CENTRAL ADMIN SERVICES	232	173	214	203	204	-28	-12.1%
PROGRAM/PROJECT CONTROL	692	677	739	705	664	-28	-4.0%
INFORMATION OUTREACH	2,908	3,142	3,125	2,925	2,982	74	2.5%
INFORMATION SERVICES	3,155	3,322	2,981	2,890	2,391	-764	-24.2%
OTHER	224	87	405	63	3,053	2,829	1,262.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	27.7%	27.5%	27.2%	25.7%	24.2%		
<b>TOTAL MISSION SUPPORT</b>	21,095	20,331	18,065	19,271	19,620	-1,475	-7.0%
ENVIRONMENTAL	1,214	1,107	0	0	0	-1,214	-100.0%
SAFETY AND HEALTH	2,711	2,580	1,555	1,852	1,798	-913	-33.7%
FACILITIES MANAGEMENT	2,580	3,280	3,334	3,387	3,473	893	34.6%
MAINTENANCE	7,100	6,215	7,144	6,461	6,699	-401	-5.6%
UTILITIES	3,899	3,273	2,348	3,554	3,788	-111	-2.8%
SAFEGUARDS AND SECURITY	1,055	1,409	1,346	1,598	1,485	430	40.8%
LOGISTICS SUPPORT	760	844	872	797	732	-28	-3.7%
QUALITY ASSURANCE	518	497	454	626	657	139	26.8%
LABORATORY/TECHNICAL SUPPORT	1,258	1,126	1,012	996	988	-270	-21.5%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	3.2%	3.5%	4.1%	3.9%	3.6%		
<b>TOTAL SITE SPECIFIC</b>	2,410	2,610	2,700	2,900	2,900	490	20.3%
MANAGEMENT/INCENTIVE FEE	2,410	2,610	2,700	2,900	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%

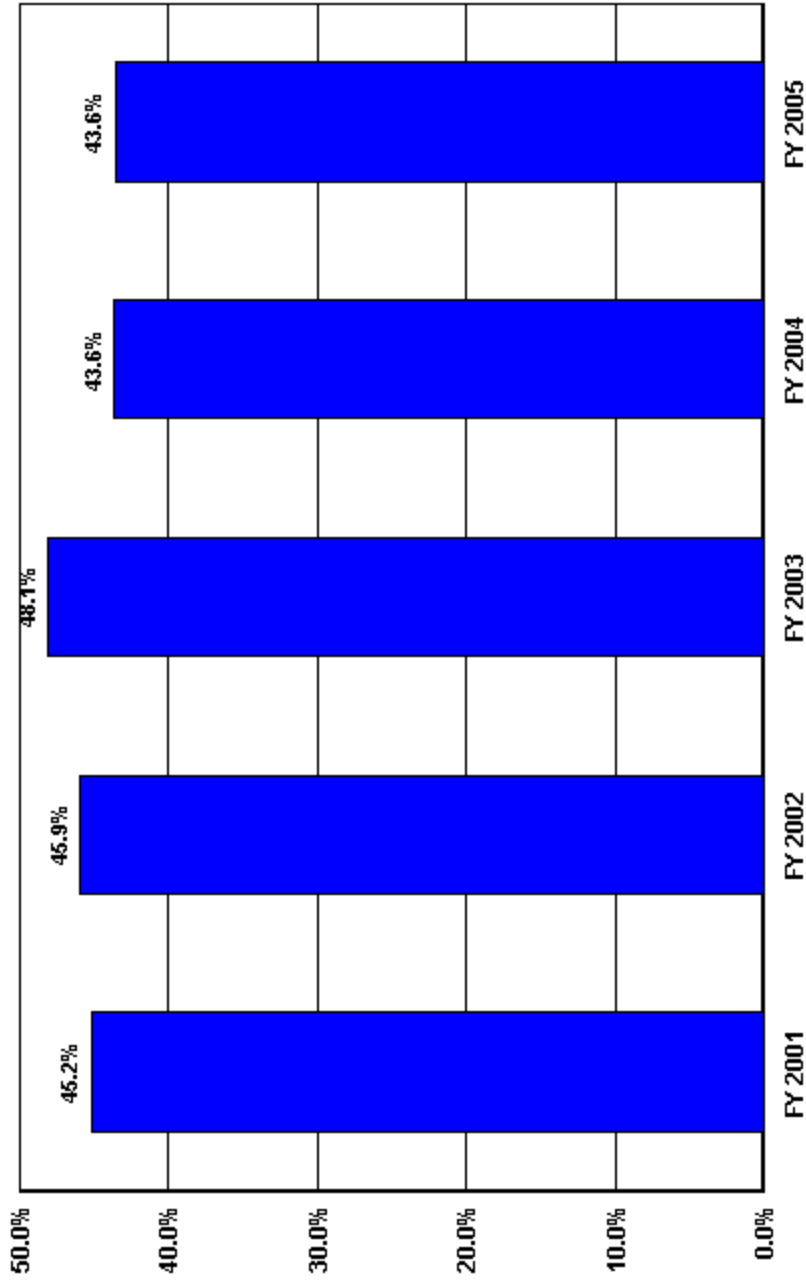
**US Department of Energy**  
**Total Functional Support**  
 Princeton Plasma Physics Lab/Princeton University



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>34,371</b>	<b>33,957</b>	<b>31,970</b>	<b>32,766</b>	<b>35,367</b>

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

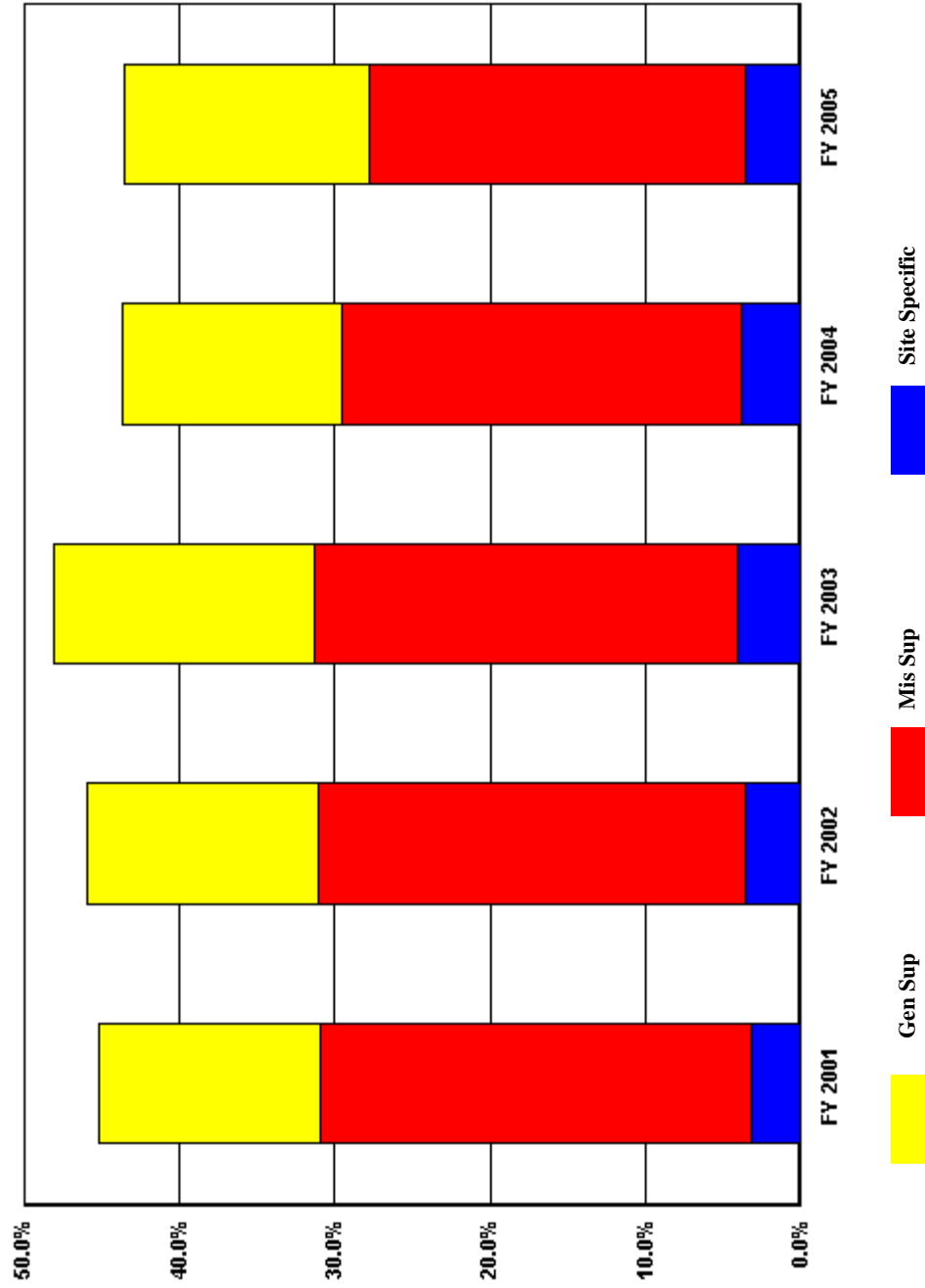


■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>45.2%</b>	<b>45.9%</b>	<b>48.1%</b>	<b>43.6%</b>	<b>43.6%</b>

**US Department of Energy  
Princeton Plasma Physics Lab/Princeton University**

**Percent of Support Category to Total Costs**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	14.3%	14.9%	14.1%	14.1%	15.8%
Mis Sup	27.7%	27.5%	27.2%	25.7%	24.2%
Site Specific	3.2%	3.5%	4.1%	3.9%	3.6%



---

**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 FY1999. D-Site was initially constructed for the Tokamak Fusion Test Reactor (TFTR) that ceased operations in FY1997. TFTR was decommissioned between FY2000 and FY2002, on schedule and under budget. Design and fabrication of a new fusion device, the National Compact Stellarator Experiment, commenced in FY2003 with first plasma planned for FY2008.

PPPL's FY2005 funding was approximately \$81 million, of which approximately \$75.3 million was provided from the Office of Fusion Energy Sciences, approximately \$3.3 million from other DOE programs, and approximately \$2.4 million from other federal agencies, non-federal sponsors and other DOE laboratories. The Laboratory costed approximately \$82 million during FY 2005. As of September 30, 2005, the number of regular employees at PPPL was approximately 395, not including approximately 20 subcontractors and limited duration employees, 40 graduate students, and visiting research staff.

**ANALYSIS OF CHANGE IN SUPPORT COSTS FROM PRIOR YEARS**

Although PPPL's Total Costs increased by \$8.6 million in FY 2004 as a result of an increase in funding for a number of PPPL's fusion projects, there was not a significant increase in Total Functional Support Costs (\$.8 million increase from FY 2003). For FY2005, Total Functional Support Costs were \$35.4 million, an increase of \$2.6 million over FY2004. However, PPPL conducted a Voluntary Separation Program (VSP) in FY2005 and the \$2.9M in severance costs associated with this program was included in the "Other" General Support category. Excluding these severance costs, the Total Functional Support Costs for FY2005 were \$.3 million less the FY2004.

In FY 2005, the "Other" category totaled \$3,053K and consisted of Severance/Termination

---

**SITE PROFILE**  
**Princeton Plasma Physics Lab/Princeton University**

---

(\$2,911K), Labor Rate Variance (\$11K) and Miscellaneous (\$131K).

Total Functional costs increased by approximately \$2.6 million from FY2004 to FY2005. This increase consists of a \$2.3 million increase in General Support costs and an increase of \$.3 million in Mission Support costs.

Mission Support Costs include both infrastructure costs and costs that are determined by PPPL's experimental program, such as electricity costs for operating experimental devices. Therefore, the percentage of Mission Support Costs to total costs may fluctuate from one fiscal year to the next primarily as a result of the nature of the research program being conducted in each fiscal year.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

The decrease in Human Resources costs in FY2005 is due to lower salary costs resulting from staffing changes. Two employees were replaced with lower compensated staff. A third employee who terminated in late FY2004 was not replaced.

**OTHER**

PPPL conducted a Voluntary Separation Program (VSP) in FY2005 and the \$2.9M in severance costs associated with this program was included in the "Other" General Support category.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

---

**SITE PROFILE**

**Princeton Plasma Physics Lab/Princeton University**

---

Early Retirement	900	<p>Staff Restructuring:</p> <p>PPPL invested in a significant restructuring initiative during FY2005 by offering Laboratory staff having a minimum of 10 years of service and being in excess of 55 years old the opportunity to retire and receive the standard severance benefit included in the PPPL Personnel Practices Manual. The intention of this initiative was to offer highly compensated staff the opportunity to retire early, in order that the Laboratory would be able to hire less costly replacements or cover the workload of the position being vacated by allocating the workload to other, existing positions.</p> <p>Twenty-nine staff accepted the Laboratory's offer and retired early. Most of these staff terminated on 1 June 2005; the majority of the remaining staff terminated on or before 30 September 2005. Laboratory management expects to replace approximately 18 of these positions with lower compensated staff; therefore, approximately 11 of the affected positions will not be replaced. PPPL expects to realize recurring annual savings of approximately \$2.5 million, commencing in FY2006. PPPL realized approximately \$.9 million of savings in FY2005. It is expected that these savings will be achieved without a significant corresponding adverse impact on the Laboratory's operations. The total severance payment made, including statutory benefits, was approximately \$2.9 million. Thus, the payback period for the investment made for this program will be approximately 1.15 years.</p>	Martin Straka
------------------	-----	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------

---

**SITE PROFILE**

**Princeton Plasma Physics Lab/Princeton University**

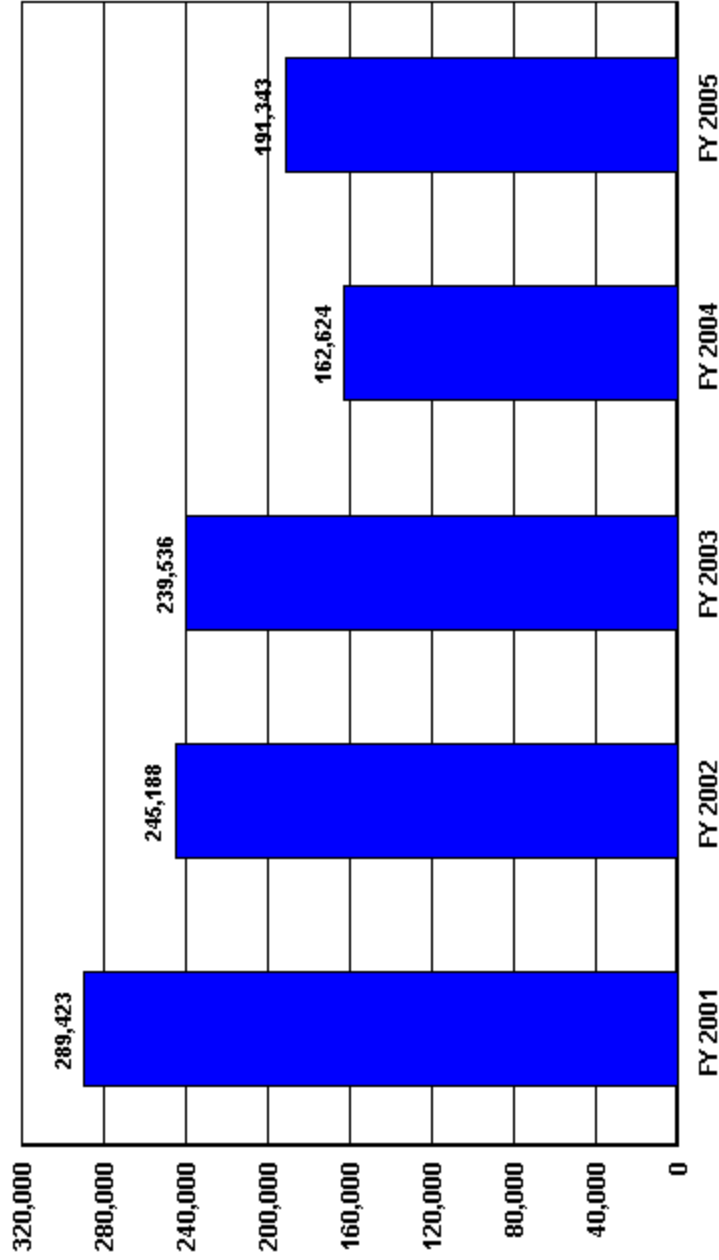
---

Home Data Communication Lines	48	Reimbursement of Home Data Communication Lines: In FY2005 PPPL changed its policy on the reimbursement of home data communication lines. PPPL no longer reimburses employees for home data lines. The estimated annual savings from this change is approximately \$48 thousand.	Martin Straka
-------------------------------------	----	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

**Trends in Total Support Cost by Functional Categories**  
**Rocky Flats/Kaiser-Hill (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	633,337	631,083	703,999	649,696	667,960	34,623	5.5%
<b>Capital Construction</b>	2,173	2,214	0	0	3	-2,170	-99.9%
<b>Total Costs Less Construction</b>	631,164	628,869	703,999	649,696	667,957	36,793	5.8%
<b>Total Support Costs</b>	289,423	245,188	239,536	162,624	191,343	-98,080	-33.9%
<b>Mission Direct Operation</b>	341,741	383,681	464,463	487,072	476,614	134,873	39.5%
<b>Mission Direct Operation as % of Total Cost</b>	54.0%	60.8%	66.0%	75.0%	71.4%		
<b>Capital Construction as % of Total Cost</b>	0.3%	0.4%	0.0%	0.0%	0.0%		
<b>Total Support Cost as % of Total Cost</b>	45.7%	38.9%	34.0%	25.0%	28.6%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	45.7%	38.9%	34.0%	25.0%	28.6%		
<b>TOTAL SUPPORT COST</b>	289,423	245,188	239,536	162,624	191,343	-98,080	-33.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	9.4%	7.4%	6.8%	7.4%	8.3%		
<b>TOTAL GENERAL SUPPORT</b>	59,513	46,497	47,792	48,050	55,413	-4,100	-6.9%
EXECUTIVE DIRECTION	3,910	915	520	1,472	1,307	-2,603	-66.6%
HUMAN RESOURCES	3,493	1,674	1,697	3,531	3,291	-202	-5.8%
CFO	9,935	4,474	4,130	3,498	2,810	-7,125	-71.7%
PROCUREMENT	3,291	2,372	2,279	2,674	1,674	-1,617	-49.1%
LEGAL	1,160	1,336	1,795	1,110	1,174	14	1.2%
CENTRAL ADMIN SERVICES	3,397	5,277	5,010	2,641	3,923	526	15.5%
PROGRAM/PROJECT CONTROL	6,562	4,329	4,092	6,334	5,103	-1,459	-22.2%
INFORMATION OUTREACH	1,618	2,189	2,108	888	770	-848	-52.4%
INFORMATION SERVICES	15,830	13,785	11,563	10,259	7,422	-8,408	-53.1%
OTHER	10,317	10,146	14,598	15,643	27,939	17,622	170.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	32.5%	27.5%	20.6%	14.4%	8.8%		
<b>TOTAL MISSION SUPPORT</b>	205,944	173,834	144,744	93,677	58,561	-147,383	-71.6%
ENVIRONMENTAL	14,902	13,740	12,786	9,671	12,043	-2,859	-19.2%
SAFETY AND HEALTH	47,149	42,207	33,350	16,566	13,145	-34,004	-72.1%
FACILITIES MANAGEMENT	32,462	15,420	9,979	15,927	5,408	-27,054	-83.3%
MAINTENANCE	33,587	32,712	22,092	9,762	6,713	-26,874	-80.0%
UTILITIES	9,840	10,289	8,846	1,615	1,862	-7,978	-81.1%
SAFEGUARDS AND SECURITY	44,055	42,845	43,835	29,621	11,694	-32,361	-73.5%
LOGISTICS SUPPORT	9,118	5,043	3,167	3,607	2,456	-6,662	-73.1%
QUALITY ASSURANCE	1,455	2,035	1,998	665	241	-1,214	-83.4%
LABORATORY/TECHNICAL SUPPORT	13,376	9,543	8,691	6,243	4,999	-8,377	-62.6%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	3.8%	3.9%	6.7%	3.2%	11.6%		
<b>TOTAL SITE SPECIFIC</b>	23,966	24,857	47,000	20,897	77,369	53,403	222.8%
MANAGEMENT/INCENTIVE FEE	23,966	24,857	47,000	20,897	77,369	53,403	222.8%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

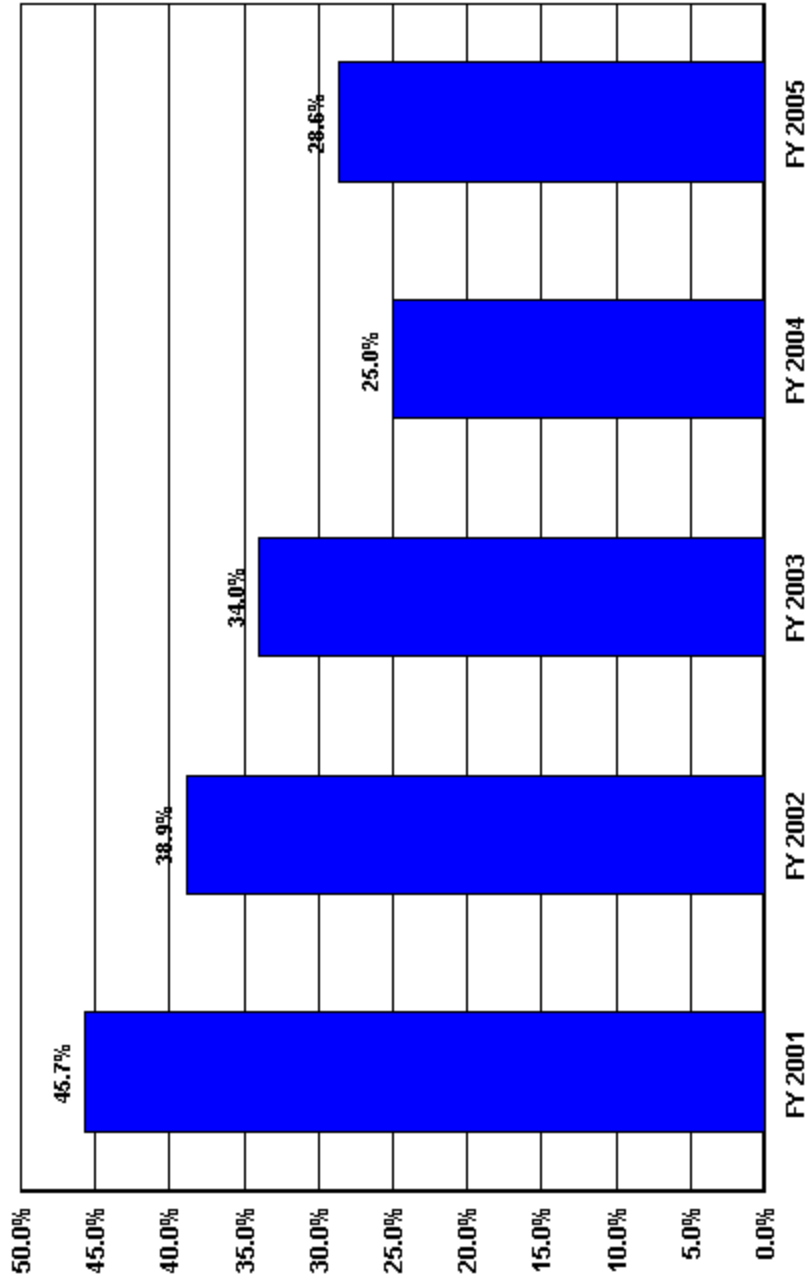
US Department of Energy  
 Total Functional Support  
 Rocky Flats/Kaiser-Hill



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	289,423	245,188	239,536	162,624	191,343

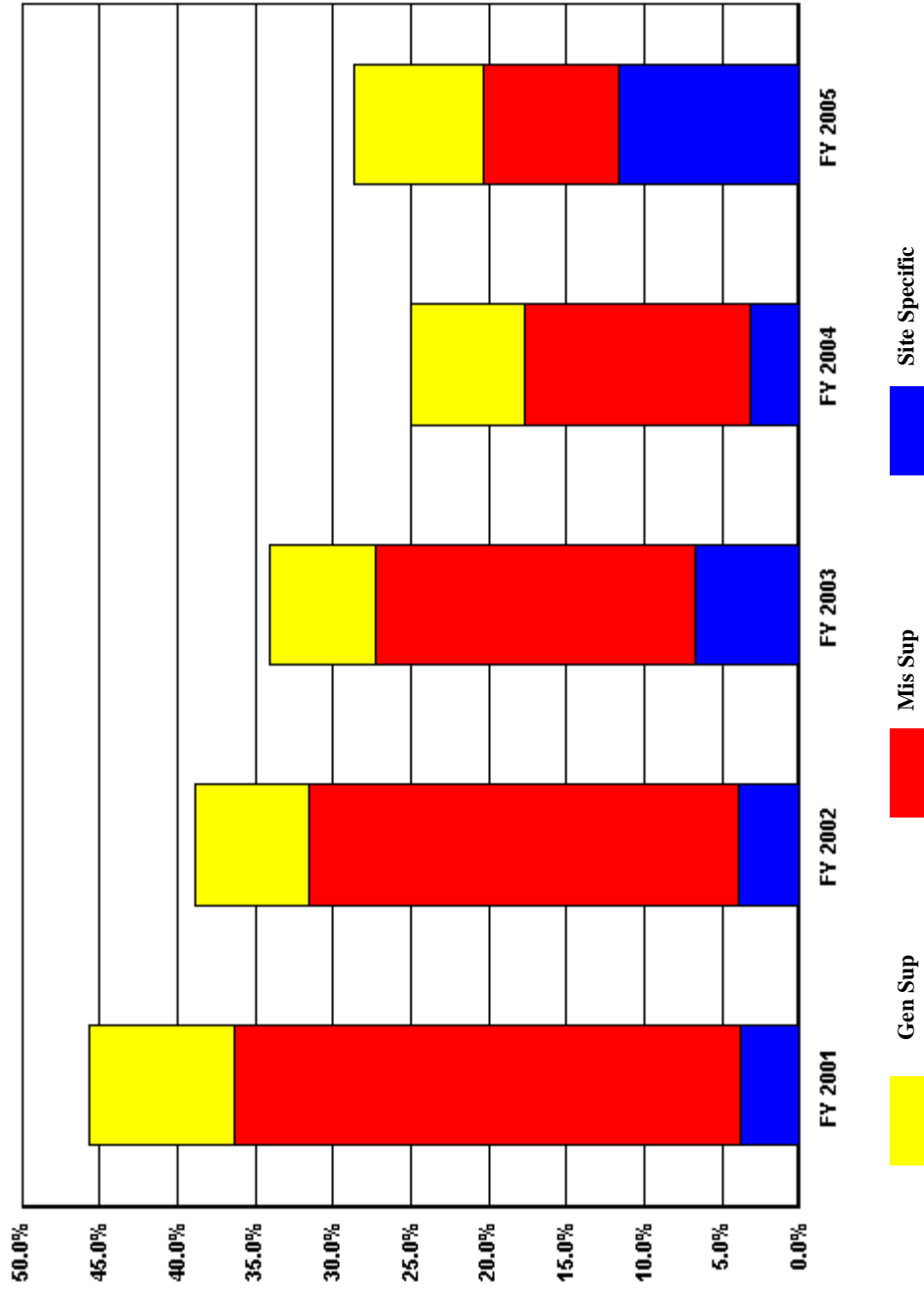
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Rocky Flats/Kaiser-Hill**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>45.7%</b>	<b>38.9%</b>	<b>34.0%</b>	<b>25.0%</b>	<b>28.6%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
Rocky Flats/Kaiser-Hill**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	9.4%	7.4%	6.8%	7.4%	8.3%
Mis Sup	32.5%	27.5%	20.6%	14.4%	8.8%
Site Specific	3.8%	3.9%	3.2%	3.2%	11.6%



---

**SITE PROFILE**  
**Rocky Flats/Kaiser-Hill**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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 2005. During FY 2005, there was a reduction in costs in nearly all of the General Support and Mission Support categories primarily due to staff reductions as buildings were physically closed and removed and final waste shipments were made. There was an increase in severance costs as a result of the staff reductions. Fee payments to the contractor also increased as the site neared completion. Under the provisions of the Site Closure Contract, approximately 50% of provisional fee earnings were held back against final physical completion of the project.

The Decontamination and Decommissioning of more than 3.4 million square feet of site facilities is now complete. The Rocky Flats Site facility contractor declared Physical Completion of the closure project on October 13, 2005. The scope of work under the Rocky Flats Closure Project Baseline was achieved with no fatalities and no life-threatening injuries. Physical completion is more than one year ahead of schedule and more than half a billion dollars under cost.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**CFO**

Staff reductions were made in all organizations. There was also an over-recovery of fringe pool (credit to cost) in FY05.

**PROCUREMENT**

Staff reductions were made due to removal of buildings and completion of procedure updates.

**CENTRAL ADMIN SERVICES**

There was an increase to DOE-RFPO support for records management, Independent Verification & Valuation, site radiation survey (helicopter flyover and analysis).

**INFORMATION SERVICES**

Computer hardware and software were upgraded in FY04. In FY05 there were staff reductions in applications management and customer service.

**OTHER**

In FY05 there was an increase in severance costs due to staff reductions.

---

**SITE PROFILE**  
**Rocky Flats/Kaiser-Hill**

---

**ENVIRONMENTAL**

Waste certification costs increased in FY05 due to increased waste volumes.

**SAFETY AND HEALTH**

There were numerous completions of assessments in FY04. Staff reductions were also made in these departments due to a smaller site workforce.

**FACILITIES MANAGEMENT**

A reduction in the site footprint (significant reduction in the number of site buildings and utilities) caused the reduction in facility management costs.

**MAINTENANCE**

A reduction in the site footprint (significant reduction in the number of site buildings, building/site alarm systems, and vehicle/equipment fleet) caused the reduction in site maintenance costs.

**SAFEGUARDS AND SECURITY**

Once SNM removal was completed and the Protective Area was closed, there was a reduction in early FY05 of the security force and operations.

**LOGISTICS SUPPORT**

The Building 551 warehouse was physically closed in FY05 which resulted in staff reductions.

**QUALITY ASSURANCE**

In early FY05, the shipment of TRU waste was completed which resulted in the reduction of quality assurance costs.

**LABORATORY/TECHNICAL SUPPORT**

Building 559 and Building 881 laboratories were physically closed and removed in FY05 which resulted in staff reductions.

**MANAGEMENT/INCENTIVE FEE**

Under the provisions of the Site Closure Contract, approximately 50% of provisional fee earnings were held back against final physical completion of the project. As the contractor neared completion in 2005, fee payments increased. On 12 December 2005, Kaiser-Hill submitted their invoice for the balance of the performance incentive fee based upon a physical completion date of 13 October 2005.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

---

**SITE PROFILE**  
**Rocky Flats/Kaiser-Hill**

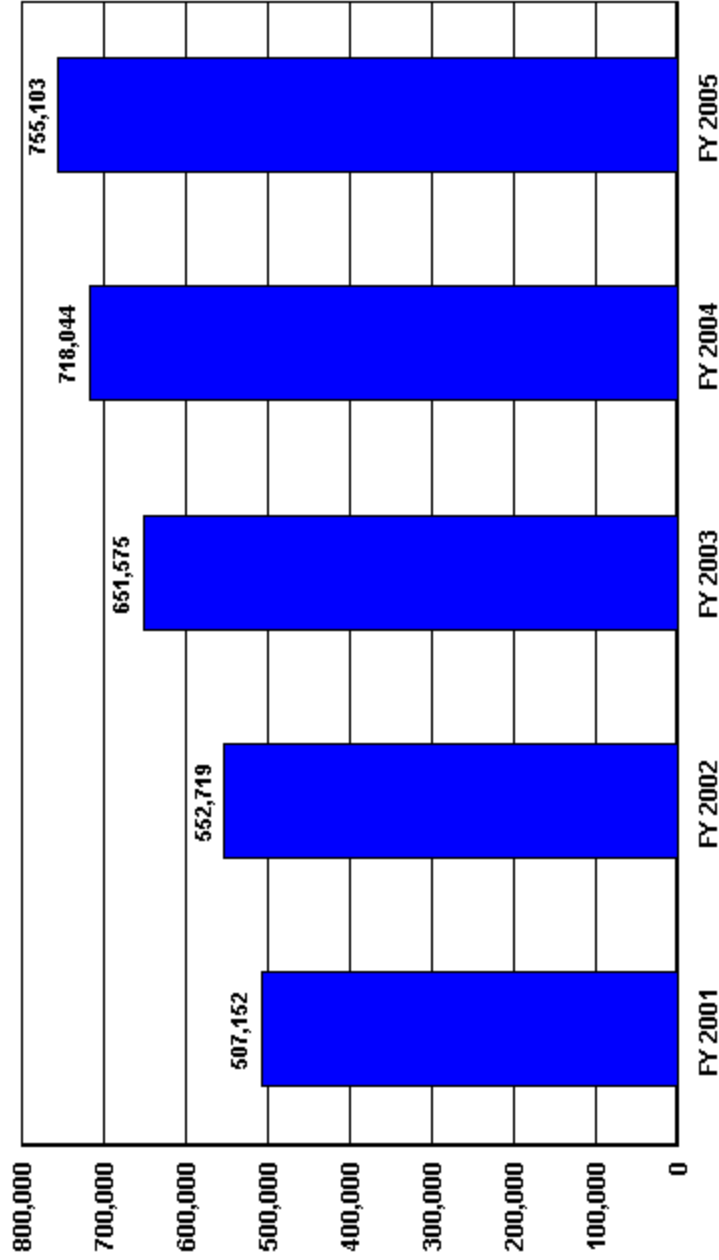
---

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Sandia National Lab/Lockheed Martin (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	1,492,505	1,698,646	1,944,556	2,193,341	2,273,769	781,264	52.3%
<b>Capital Construction</b>	75,723	94,291	192,109	264,797	219,298	143,575	189.6%
<b>Total Costs Less Construction</b>	1,416,782	1,604,355	1,752,447	1,928,544	2,054,471	637,689	45.0%
<b>Total Support Costs</b>	507,152	552,719	651,575	718,044	755,103	247,951	48.9%
<b>Mission Direct Operation</b>	909,630	1,051,636	1,100,872	1,210,500	1,299,368	389,738	42.8%
<b>Mission Direct Operation as % of Total Cost</b>	60.9%	61.9%	56.6%	55.2%	57.1%		
<b>Capital Construction as % of Total Cost</b>	5.1%	5.6%	9.9%	12.1%	9.6%		
<b>Total Support Cost as % of Total Cost</b>	34.0%	32.5%	33.5%	32.7%	33.2%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	34.0%	32.5%	33.5%	32.7%	33.2%		
<b>TOTAL SUPPORT COST</b>	507,152	552,719	651,575	718,044	755,103	247,951	48.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	12.7%	12.1%	13.0%	12.4%	12.4%		
<b>TOTAL GENERAL SUPPORT</b>	189,621	205,004	253,663	272,516	282,871	93,250	49.2%
EXECUTIVE DIRECTION	19,759	24,464	25,817	23,574	24,124	4,365	22.1%
HUMAN RESOURCES	24,356	27,061	28,780	28,412	29,143	4,787	19.7%
CFO	10,384	12,388	9,223	10,431	11,006	622	6.0%
PROCUREMENT	11,650	10,096	14,223	14,728	15,638	3,988	34.2%
LEGAL	5,385	5,640	5,501	5,315	6,043	658	12.2%
CENTRAL ADMIN SERVICES	13,997	14,208	14,942	15,745	15,953	1,956	14.0%
PROGRAM/PROJECT CONTROL	6,788	2,320	35,904	46,087	55,332	48,544	715.1%
INFORMATION OUTREACH	13,359	13,209	14,762	15,215	15,697	2,338	17.5%
INFORMATION SERVICES	81,025	94,905	103,679	113,066	105,703	24,678	30.5%
OTHER	2,918	713	832	-57	4,232	1,314	45.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	12.7%	12.0%	11.9%	12.1%	12.2%		
<b>TOTAL MISSION SUPPORT</b>	189,055	203,969	230,616	266,071	276,616	87,561	46.3%
ENVIRONMENTAL	1,014	1,362	1,022	1,585	1,707	693	68.3%
SAFETY AND HEALTH	29,772	32,040	33,805	32,944	39,140	9,368	31.5%
FACILITIES MANAGEMENT	60,077	71,259	88,261	95,093	102,712	42,635	71.0%
MAINTENANCE	30,605	32,406	30,530	37,278	37,511	6,906	22.6%
UTILITIES	21,793	21,157	20,875	19,036	21,180	-613	-2.8%
SAFEGUARDS AND SECURITY	33,111	31,564	43,143	67,242	61,118	28,007	84.6%
LOGISTICS SUPPORT	12,683	14,181	12,342	12,063	12,523	-160	-1.3%
QUALITY ASSURANCE	0	0	638	830	725	725	100.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	8.6%	8.5%	8.6%	8.2%	8.6%		
<b>TOTAL SITE SPECIFIC</b>	128,476	143,746	167,296	179,457	195,616	67,140	52.3%
MANAGEMENT/INCENTIVE FEE	16,788	18,367	23,143	24,288	24,726	7,938	47.3%
TAXES	51,168	53,958	57,128	63,575	68,883	17,715	34.6%
LDRD / PDRD / SDRD	60,520	71,421	87,025	91,594	102,007	41,487	68.6%

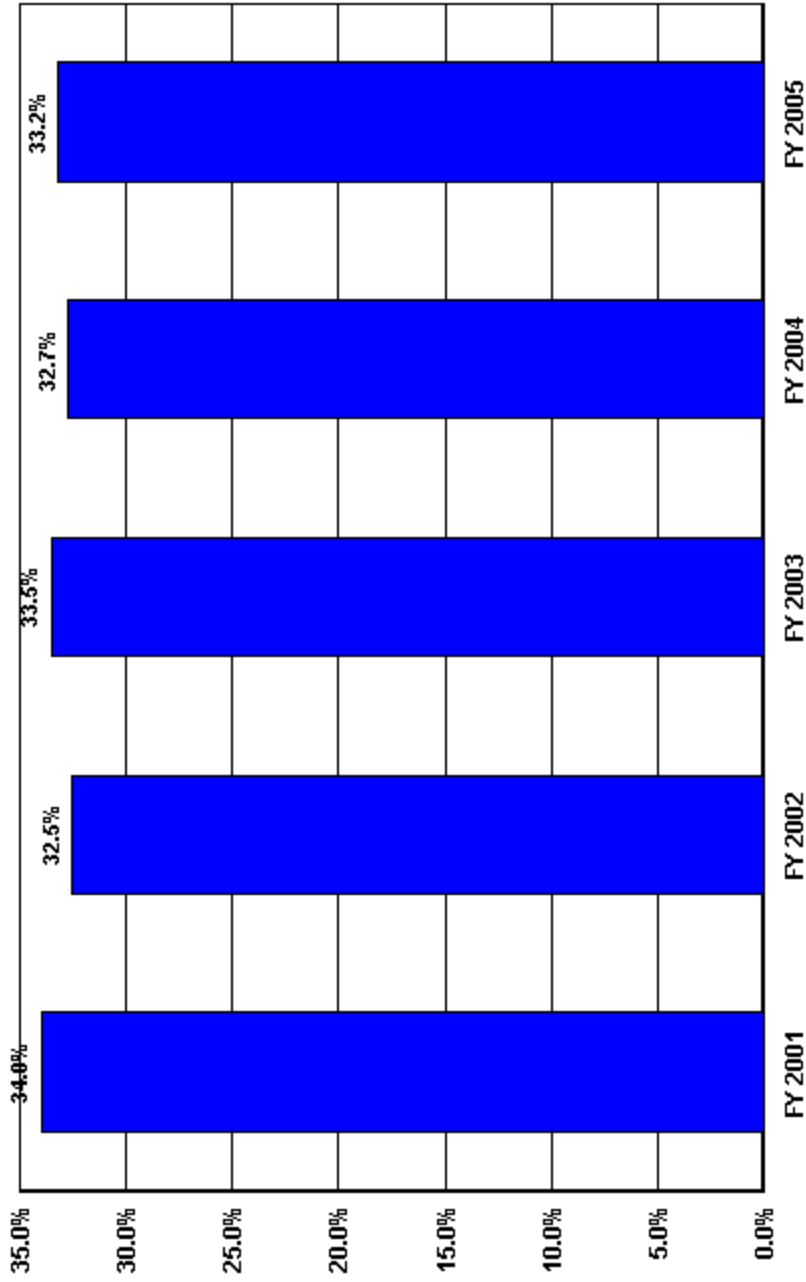
US Department of Energy  
 Total Functional Support  
 Sandia National Lab/Lockheed Martin



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	507,152	552,719	651,575	718,044	755,103

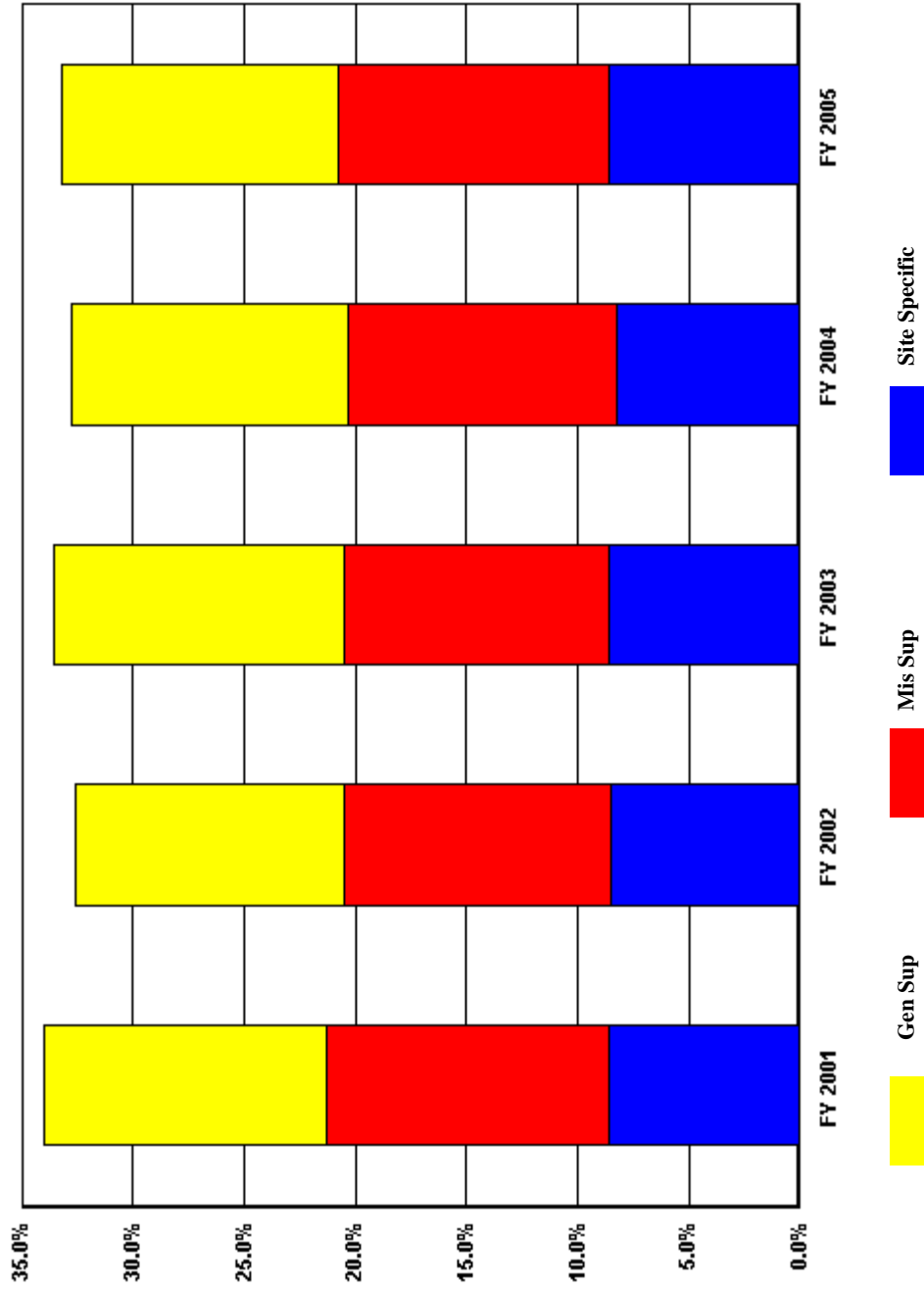
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Sandia National Lab/Lockheed Martin**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>34.0%</b>	<b>32.5%</b>	<b>33.5%</b>	<b>32.7%</b>	<b>33.2%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	12.7%	12.1%	13.0%	12.4%	12.4%
Mis Sup	12.7%	12.0%	11.9%	12.1%	12.2%
Site Specific	8.6%	8.5%	8.6%	8.2%	8.6%

---

**SITE PROFILE**  
**Sandia National Lab/Lockheed Martin**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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 — FY04 approximations

4 major sites (Albuquerque, NM; Livermore, CA; Tonopah Test Range, NV; Kauai Test Range, HI)  
Acres of land — 188,327  
Number of buildings — 1,287  
Building square footage — 6,452,000  
Number of buildings leased — 46  
Leased building square footage — 329,000  
Employees — 8,586

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

The \$550K increase from FY 2004 to FY 2005 is due primarily to the implementation of the contractor assurance system, a requirement of the prime contract

**HUMAN RESOURCES**

The \$731K increase from FY 2004 to FY 2005 was due primarily to an increase in costs for the "Get and Reapply People" program which is designed to create more operating space for several human resource areas.



---

**SITE PROFILE**  
**Sandia National Lab/Lockheed Martin**

---

**CFO**

The \$576K increase from FY 2004 to FY 2005 is due to increased cost in the controller's organization

**PROCUREMENT**

The increase in procurement costs from FY 2004 to FY 2005 was due to an increased budget used to full buyer positions vacant in FY 2004.

**LEGAL**

The \$729K increase from FY 2004 to FY 2005 is primarily a result of increased outside counsel costs caused by a larger volume of litigation.

**PROGRAM/PROJECT CONTROL**

The \$9.2 Million increase is due to increases in Program Management in our Nuclear Weapons (NW), and Military Technologies & Applications (MTA) strategic management units. These increases bolstered several programmatic areas including but not limited to Department of Defense Systems Analysis Center, Operations and Compliance, and Industrial Relations.

**INFORMATION SERVICES**

The \$7.3 Million decrease from FY 2004 to FY 2005 was due to contract labor costs previously being charged to the Special Projects area of the facilities service center were moved to a holding project to more accurately capture these costs causing in large part the \$7.3 drop in costs.

**OTHER**

Two elements made up the \$4.2 Million increase in Other. First, in response to an FY05 potential audit finding by KPMG, Sandia accrued \$3.68M in procurement card costs in order to comply with Cost Accounting Standards and Generally Accepted Accounting Principles. Additionally, accounts receivable wrote off \$1.3 Million in receivables.

**ENVIRONMENTAL**

The increase from FY 2004 to FY 2005 was due to an increase in costs due to a priority of facilities costs incurred in the latter half of FY 2005

**SAFETY AND HEALTH**

The increase of \$6.1 Million from FY 2004 to FY 2005 was due to several elements: First, extra expenditures went toward full-time staffing of emergency personnel for emergency management, as well as for corrective action related to the DOE/OA audit. Next, an ES&H Assurance System and a data warehouse were implemented. Finally, almost \$3 Million went to program improvements in the Safety Basis area.

---

**SITE PROFILE**  
**Sandia National Lab/Lockheed Martin**

---

**FACILITIES MANAGEMENT**

The \$10.7 Million increase from FY 2004 to FY 2005 was due to an increase in capital construction, renovation, and demolition projects.

**UTILITIES**

The \$2.1 Million increase from FY 2004 to FY 2005 was due to an increase in fuel costs coupled with a colder winter during the first half of FY 2005.

**SAFEGUARDS AND SECURITY**

The \$6.1 Million decrease in costs was due to major purchases, capital expenditures, and labor costs which were needed in FY 2004 to meet the '03 Design Basis Threat requirements. These activities were reduced in FY 2005 and many other activities were reclassified from S&S to IES as a result of the new costing principles and guidelines.

**QUALITY ASSURANCE**

The decrease in costs from FY 2004 to FY 2005 was due to methodology change in quality assurance data gathering.

**TAXES**

The \$5,307K increase from FY 2004 to FY 2005 is due to an increase in the New Mexico Gross Receipts Tax which is a result of an increase in total lab costs

**LDRD / PDRD / SDRD**

The \$10,413K from FY 2004 to FY 2005 in LDRD is due to an increase in lab total costs.

**CAPITAL CONSTRUCTION**

The decrease in capital equipment between FY 2004 and FY 2005 was the result of completion of the acquisition of Sandia's new Red Storm Computer in FY 2004. The decrease in construction revenue is due to the completion of several construction projects in FY 2004. These include: the Distributed Information System Lab in Sandia California; the modernization of communications infrastructure; and the first phase of a revitalization of test capabilities at Sandia New Mexico. In Amarillo, Texas, at the Pantex Facility, Sandia also completed construction of the Weapons Evaluation Test Lab.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

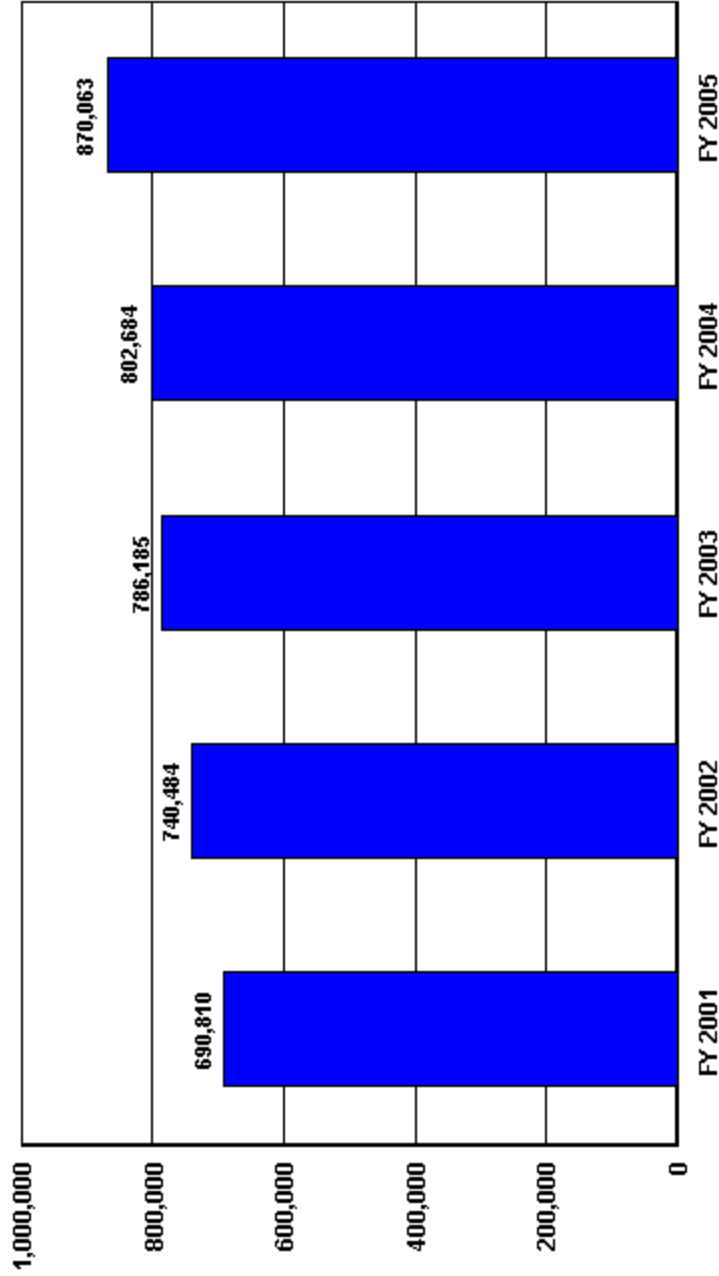
**SITE PROFILE**  
**Sandia National Lab/Lockheed Martin**

Disease Risk Mgmt Clinic--Preventive Medicine	113	The Disease Risk Management Clinic, a pilot program in which a focus on preventive medicine with services being provided by the clinic rather through traditional providers, resulted in a savings of \$112,520. This represents cost savings over the same services provided through Sandia's health plan.	John Valdez
Leadership Series	59	Transitional IES Leadership Series to video streaming resulting in a \$59K savings. The SNL documentation shows that \$59K in costs was not incurred in FY 2005.	John Valdez
Reduction of Personnel to Manage Travel Strip Acct	150	Reduction in Strip Account Users--Analysis based on the June figures show a reduction in T&T workload of 1320 hours per year. Another assessment will be done in October to provide further savings details. It was anticipated that a savings of two personnel (\$150K) would be achieved with elimination of most account users from 5000 to about 300.	John Valdez
Contract for Cisco Network equipment modified	350	Contract modified to partially self-insure resulting in Savings of \$350K. Documentation shows original contract amount by line items which amounts to \$849,203 versus the same contract amount by line items with items being dropped from contract at \$499,178, resulting in a cost savings of \$350K (\$849,203-\$499,178).	John Valdez
Closure of Coronado Club	900	SNL closed the Coronado Club at the start of FY 2005 resulting in a cost savings of \$900,000	John Valdez

**Trends in Total Support Cost by Functional Categories**  
**Savannah River/Westinghouse & Wackenhut (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	1,477,045	1,503,323	1,593,028	1,531,255	1,597,448	120,403	8.2%
<b>Capital Construction</b>	196,684	183,300	161,509	104,796	68,871	-127,813	-65.0%
<b>Total Costs Less Construction</b>	1,280,361	1,320,023	1,431,519	1,426,459	1,528,577	248,216	19.4%
<b>Total Support Costs</b>	690,810	740,484	786,185	802,684	870,063	179,253	25.9%
<b>Mission Direct Operation</b>	589,551	579,539	645,334	623,775	658,514	68,963	11.7%
<b>Mission Direct Operation as % of Total Cost</b>	39.9%	38.6%	40.5%	40.7%	41.2%		
<b>Capital Construction as % of Total Cost</b>	13.3%	12.2%	10.1%	6.8%	4.3%		
<b>Total Support Cost as % of Total Cost</b>	46.8%	49.3%	49.4%	52.4%	54.5%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	46.8%	49.3%	49.4%	52.4%	54.5%		
<b>TOTAL SUPPORT COST</b>	690,810	740,484	786,185	802,684	870,063	179,253	25.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	11.3%	11.5%	11.4%	11.0%	13.5%		
<b>TOTAL GENERAL SUPPORT</b>	167,112	172,990	181,502	168,899	215,593	48,481	29.0%
EXECUTIVE DIRECTION	7,039	8,186	7,133	7,095	7,361	322	4.6%
HUMAN RESOURCES	13,096	13,051	13,462	13,778	13,669	573	4.4%
CFO	13,306	13,379	14,180	13,205	13,353	47	0.4%
PROCUREMENT	13,299	13,719	14,861	11,711	15,158	1,859	14.0%
LEGAL	5,742	4,205	6,089	4,222	3,626	-2,116	-36.9%
CENTRAL ADMIN SERVICES	17,793	18,334	20,417	18,799	19,123	1,330	7.5%
PROGRAM/PROJECT CONTROL	35,743	37,681	37,366	37,819	41,920	6,177	17.3%
INFORMATION OUTREACH	5,344	5,381	4,072	5,073	5,607	263	4.9%
INFORMATION SERVICES	55,758	56,040	59,190	48,312	47,256	-8,502	-15.2%
OTHER	-8	3,014	4,732	8,885	48,520	48,528	606,600.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	31.3%	32.5%	32.0%	33.2%	33.7%		
<b>TOTAL MISSION SUPPORT</b>	461,833	489,303	509,105	508,494	538,724	76,891	16.6%
ENVIRONMENTAL	26,126	26,430	27,340	24,972	21,673	-4,453	-17.0%
SAFETY AND HEALTH	116,805	125,613	114,215	110,972	126,978	10,173	8.7%
FACILITIES MANAGEMENT	33,894	35,288	45,227	41,137	39,318	5,424	16.0%
MAINTENANCE	105,434	109,168	120,135	123,801	133,417	27,983	26.5%
UTILITIES	42,828	43,359	45,700	45,437	46,521	3,693	8.6%
SAFEGUARDS AND SECURITY	64,791	74,830	81,536	86,495	87,924	23,133	35.7%
LOGISTICS SUPPORT	19,665	21,957	23,602	21,828	28,307	8,642	43.9%
QUALITY ASSURANCE	27,658	25,788	21,719	24,552	24,182	-3,476	-12.6%
LABORATORY/TECHNICAL SUPPORT	24,632	26,870	29,631	29,300	30,404	5,772	23.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	4.2%	5.2%	6.0%	8.2%	7.2%		
<b>TOTAL SITE SPECIFIC</b>	61,865	78,191	95,578	125,291	115,746	53,881	87.1%
MANAGEMENT/INCENTIVE FEE	61,894	78,191	95,505	124,870	115,746	53,852	87.0%
TAXES	-29	0	73	421	0	29	100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

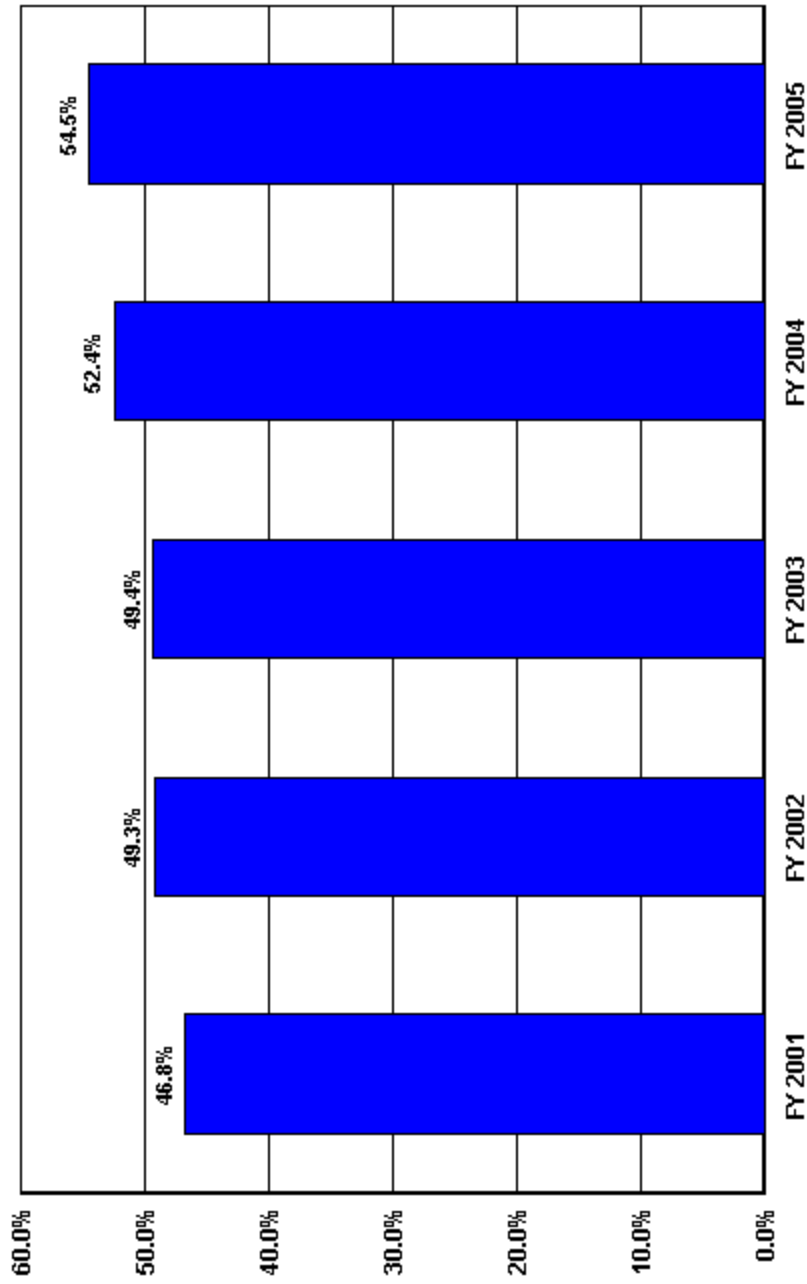
**US Department of Energy**  
**Total Functional Support**  
 Savannah River/Westinghouse & Wackenhut



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	690,810	740,484	786,185	802,684	870,063

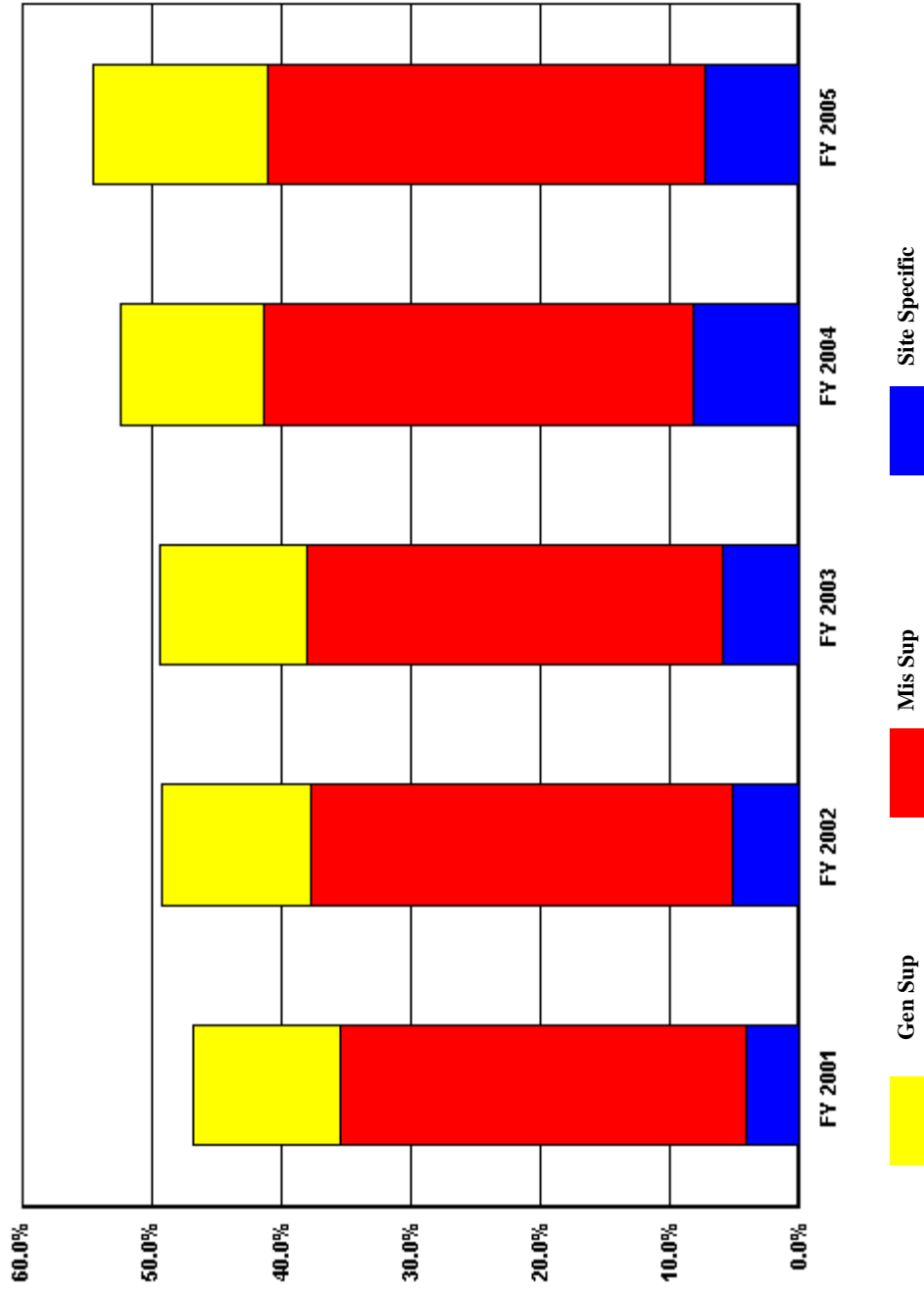
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Savannah River/Westinghouse & Wackenhut**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>46.8%</b>	<b>49.3%</b>	<b>49.4%</b>	<b>52.4%</b>	<b>54.5%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	11.3%	11.5%	11.4%	11.0%	13.5%
Mis Sup	31.3%	32.5%	32.0%	33.2%	33.7%
Site Specific	4.2%	5.2%	6.0%	8.2%	7.2%

---

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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 the Pit Disassembly and Conversion Facility.

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.

During the past three years, the DOE Office of Environmental Management has prioritized mission activities and provided contractor incentives to accelerate closure and cleanup goals. Emphasis is placed on:

- consolidation of materials and operations,
- elimination of hazards with high control costs,
- reduction of "hotel loads" associated with maintaining the operational status of nuclear facilities with redundant capabilities, and
- reduction of landlord infrastructure not needed to support current or future site missions.

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 1950s to produce basic materials used in nuclear weapons, primarily tritium and plutonium-239.

At FY05 year-end, 11,199 full time equivalent (FTEs) personnel were employed on site. This included 9,707 FTEs for WSRC (includes the four major contractors) and 854 WSI FTEs.

Current Line Item activity includes the following:



---

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

---

- Tritium Extraction Facility (TEF) — will provide for extraction capabilities for both the Commercial Light Water Reactor and Accelerated Production of Tritium concepts (LI 98-D-125).
- Pit Disassembly and Conversion Facility - provides support to LANL A/E on Government Furnished Design for infrastructure design, construction planning, and acquisition planning support for the project (LI 99-D-141).
- Mixed Oxide Fuel Fabrication Facility (MOX FFF) — will 1) mix surplus weaponsgrade plutonium oxide from the pit disassembly and conversion process with depleted uranium oxide, 2) form MOX fuel pellets, 3) fabricate MOX fuel assemblies (MOX fuel), and 4) ship completed fuel assemblies to existing domestic commercial nuclear reactors for irradiation (99-D-143).
- Glass Waste Storage Building #2 — provides a structure containing four safety class underground vaults and facilities for the storage of high level waste canisters. The Glass Waste Storage Building vaults and canister supports are safety class and the vaults are also safety significant as defined by DOE nuclear design requirements. This is a DOE managed project with the Krog Company as the prime contractor. WSRC provides support to this Line Item such as engineering, operational tie-ins, readiness, etc.
- 3013 Container Surveillance and Storage Capability - provides long-term capability for surveillance of 3013 containers in accordance with the DOESTD-3013, including the ability to re-stabilize and re-package any off-normal materials detected during surveillance.

## **II. HIGHLIGHTS OF TRENDS**

The SRS Functional Support Cost Report combines costs for Westinghouse Savannah River Company (WSRC) and Wackenhut Services, Incorporated (WSI) into an integrated report. Total Functional Support Costs for WSRC from FY01 to FY05 increased by \$157.3M or 25.3%. WSRC entered into a Workforce Restructuring program during FY05, required to realign and reduce the workforce due to EM mission changes. The Workforce Restructuring program reflected an anticipated reduction of up to 2,000 Full Service Employees over FY05 and FY06. Of this total, approximately 1,200 reductions occurred in FY05. This had a significant effect on the General Support category, since Workforce Restructuring costs are reflected in this area under “Other”. The total impact for FY05 due to this action alone was approximately \$47M, with additional costs to be reflected in this category in FY06 for the final phase of the Workforce Restructuring plan.

---

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

---

Mission Support cost increases occurred in two primary areas — Maintenance and Safeguards & Security. In FY04, a change was implemented based on recommendations by DOE and approved by Congress to fund EM projects providing extension of life expectancy until cleanup was completed from operating rather than capital. This resulted in many activities being categorized as maintenance when funded with operating funds rather than Mission Direct when previously funded from capital. In addition, the emphasis on Safeguards & Security as a result of 9/11 has resulted in significant increases in this functional cost category.

Since FY01, WSRC's required pension contributions have risen steadily. FY01 required no contribution, FY02, FY03, FY04 and FY05 contributions were \$16M, \$68M, \$84M and \$110M respectively. The FY06 pension contribution forecast is \$141M. This cost is included in all functional cost categories and results in increases across the board from FY01 to FY05. Finally, a new contract, negotiated in FY03, has resulted in WSRC taking on significant risk with accelerated cleanup activities which is reflected in the revised fee structure.

After adjusting for the extraordinary costs of Work Force Restructuring, required pension contributions, changes in fee structure, and other noted changes, WSRC's core Functional Support Costs held steady from FY01 to FY05. This compares to an increase in the consumer price index of 14.3% over the same period. With WSI included, the Total Functional Support Costs reflected an increase of \$179.3M or 25.9%.

During FY03, WSRC underwent a major reorganization to focus emphasis on accelerated cleanup and projectized site activities. WSRC worked closely with the customer to eliminate and/or reduce requirements to streamline and improve operations. This is evident by the positive trend for Mission Direct which increased by \$69M (11.7%).

Overall, the FY05 actual costs (excluding Workforce Restructuring) are within 3% of plan. The trend analysis follows:

General Support

The overall change from FY01 to FY05 was an increase of \$48M (29%). This net increase reflects the issues discussed above and a combination of other increases and decreases with significant changes highlighted.

1. Other (\$48.5M) FY01-FY05 trends show the significant increase in cost associated with workforce restructuring increased inventory write-offs associated with the Decontamination & Decommissioning (D&D) Program.

---

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

---

2. Program/Project Planning & Control (\$6M) shows the impact of classification changes recommended by the FY05 Peer Review and costs associated with Waste Incidental to Reprocessing (WIR) and the Salt Program. Due to the WIR and Waste Determination process, a planning organization was established to ensure the effective coordination of these activities, increasing this category of Functional Cost.

Mission Support

This area reflected an upward trend from FY01 to FY05 of \$76.9M (16.6%). 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. Maintenance (\$28M) reflected a 26.5% increase caused primarily by a change in the requirements for capital projects. In FY04, Congress and DOE agreed that certain capital projects in Closure were only providing extensions of life expectancy for buildings/facilities until cleanup could be completed and should be changed to operating projects. Some Closure projects that were formerly capital are now categorized as operating. Some of the effort that was once considered and captured in the Capital/Construction category has now been identified as Maintenance. This change evolved as projects initiated under the old rules were completed and new projects were started. In addition some increases were caused by classification changes recommended by the FY05 Peer Review
2. In total Safeguards & Security (\$23.1M) reflected a 35.7% increase. The WSI increase was \$19.2M and the WSRC increase was \$3.9M. These increases are primarily due to increased staffing associated with K Area Material Storage (KAMS), Heightened Security, FB-Line, and PU Stabilization. In addition to the increased staffing, WSI-SRS entered into a new Collective Bargaining Unit Agreement with the Union in FY02.
3. Logistics (\$8.6M) reflected an increase of 44.0%. The primary driver for the increase in logistics support is related to WSRC's efforts to reduce the site footprint and accelerate 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 increased also. Additionally Logistics shows the impact of classification changes recommended by the FY05 Peer Review.
4. Laboratory/Technical Support (\$5.8M) reflected a significant increase of 23.4% due to increases in analytical services, sampling analyses and technical support services for accelerated cleanup

---

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

---

and mission activities.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**PROCUREMENT**

In FY05, GAO requested a Peer Review of functional cost to ensure consistency across the complex for reporting of functional cost. The procurement increase of \$3.5M or 29.4% reflects the impact of classification changes of: contract admin accountability from executive cost to procurement; strategic sourcing groups from logistic to procurement; procurement engineering management to procurement.

**OTHER**

The majority of the 39.6M increase or 446.1% was caused by SR had a workforce restructure that occurred in May and Sep of FY05. Additional costs were incurred for inventory write-offs that was associated with Decontamination and Decommissioning during the year.

**LOGISTICS SUPPORT**

In FY05, GAO requested a Peer Review of functional cost to ensure consistency across the complex for reporting of functional cost. Increase of 3.5M or 5.9% Fuel from Safety & Health or Mission Direct to Logistics.

**MANAGEMENT/INCENTIVE FEE**

WSRC's contract has gone through a significant evolution since FY01. The most recent changes, completed in FY03, resulted in increased fee opportunities as a result of the contractor accepting significantly increased risk associated with clean up activities.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

Adminsitration	1,600	<ul style="list-style-type: none"> <li>• Automate the Remote Scanning Notification, Routing and Approval Process Streamline Nuclear Material Management (NMM) Procedure Revision Process</li> <li>• Streamline Site Fire Protection (SFP) Procedure Revision Process</li> <li>• Design Services Required Reading Process</li> <li>• Reduce Training Documentation</li> <li>• Automate the WSRC Number Issuance Database (5-FILE)</li> <li>• Six Sigma Program Performance Tracking</li> <li>• Consolidated Assessment Process (CAP) - Standardization of Objectives</li> <li>• Proactive Reduction of Classified Removable Electronic Media</li> <li>• Administration of Written Exams – Defense Waste Processing Facility (DWPF)</li> <li>• Reduce DWPF Schedule change Implementation Form (SCIF) Review and Approval Time</li> <li>• Streamlining the Substance Abuse Testing with DOE Orders and Federal Regulations</li> <li>• Optimize Oracle instances</li> <li>• Customer Response Center Staffing Analysis</li> <li>• Streamline the Laboratory Department Training and Procedure Process</li> <li>• Reduce Information Technology (IT) Support of PassPort</li> <li>• Reduce the Cycle Time for the Scientific &amp; Technical Information Process</li> <li>• Reduction of Mircrostation Software licenses</li> <li>• Improve Defense Programs (DP) Operations Procedure Quality</li> <li>• Administration of Operational Evaluations</li> <li>• Right-sizing DP Self Assessment Program</li> <li>• Liquid Waste Disposition (LWD) Self - Assessment Improvement</li> </ul>	Dave Cook
----------------	-------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

Construction	6,000	<ul style="list-style-type: none"> <li>• Reduce Component Location Identifier (CLI) Processing Cycle Time</li> <li>• Construction-Design Interface (CDI) Process, Construction</li> <li>• Reduce Cost of Radiography</li> <li>• Pipe Bends vs. Fittings</li> <li>• Improve Process for Managing &amp; Staging Construction Field Materials</li> <li>• Improve Shop Order process efficiency</li> <li>• Jumper Fabrication Process Improvement</li> <li>• Reduce the Radiological Adjustment Factors for Construction Work Activities</li> <li>• Construction Preventive Maintenance (PM) Program Cost Reduction</li> <li>• Reduce the Percentage of Solvent-Based Coatings</li> <li>• Reduce the Cost of Ice/Water Services</li> </ul>	Dave Cook
Design	4,000	<ul style="list-style-type: none"> <li>• Reduce Total Installed Costs (TIC) of Hanger Supports</li> <li>• Waste Solidification Design Optimization</li> <li>• Construction-Design Interface (CDI) Process, Design</li> <li>• Increase Division-Managed Modification (DMM) Design Amendments Incorporated using Computer Aided Drawing Design (CADD) Files</li> <li>• Jumper Design Process Improvement</li> <li>• Operations Business Unit (OBU) Design Optimization #01</li> <li>• Design Optimization – Actinide Removal Process (ARP) Enhancement at 241-96H</li> <li>• Design Optimization - Waste Removal Projects</li> <li>• Design Optimization – Modular Caustic Side Solvent Extraction Unit (MCU) Organic Solvents</li> <li>• DWPF Actinide Sludge Receipt Tank (ASRT) Project Design Optimization</li> </ul>	Dave Cook

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

<p>Closure &amp; Environmental Restoration</p>	<p>13,800</p>	<ul style="list-style-type: none"> <li>• Decommissioning End Points for Pits, Basements, and Basins</li> <li>• F Closure Deactivation Environmental Process</li> <li>• Area Completion</li> <li>• Improvements to the Map Production Process for the Resource Conservation and Recovery Act (RCRA) Corrective Action Reports</li> <li>• Reducing the Remediation Cost of the X-001 Outfall Drainage Ditch</li> <li>• Soil &amp; Groundwater Engineering Reorganization</li> <li>• Evaluation of RCRA-"Listed" Status on Monitoring Wells at the Mixed Waste Management Facility (MWMF)</li> <li>• Reducing the Remediation Cost of the TNX Outfall Delta</li> <li>• Soil and Groundwater Closure Project (SGCP) Functional &amp; Support Restructuring</li> <li>• L-Area Southern Groundwater Characterization</li> <li>• Reduction of P Reactor Groundwater Analytical Data Verification and Validation</li> <li>• Process Improvements in the RCRA Permitting Process - GSA Projects</li> <li>• Optimization of Site D&amp;D and SGCP Work Scope</li> <li>• Reduce Costs of Facility &amp; Project Specific Environmental Compliance Support</li> </ul>	<p>Dave Cook</p>
<p>Radiological Control (RadCon), Safety &amp; Health</p>	<p>400</p>	<ul style="list-style-type: none"> <li>• Reduce RadCon Habitability surveys in L-Area</li> <li>• Safety Documentation Streamlining</li> <li>• Preventive Maintenance (PM) Reduction to Safety Lights/Exit Signs based on observed reliability</li> <li>• Contamination Area Roll Back</li> <li>• Glovebox Glove changeout</li> </ul>	<p>Dave Cook</p>

**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

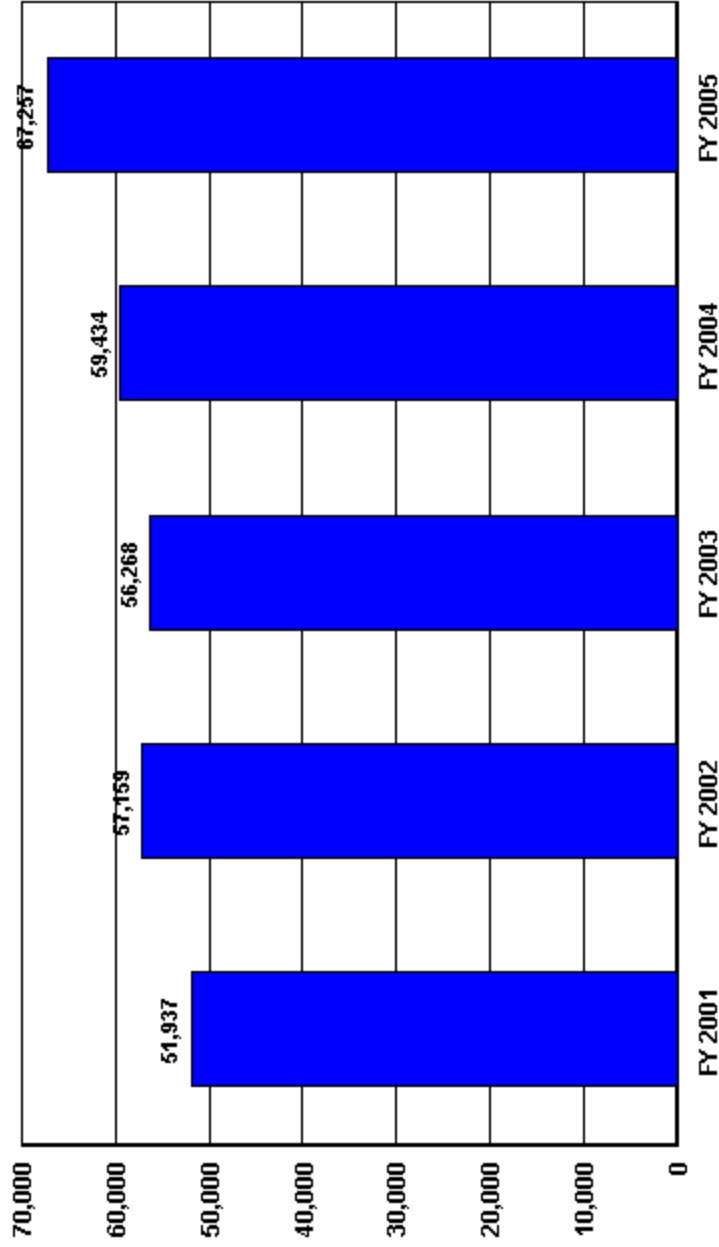
Operations	7,800	<ul style="list-style-type: none"> <li>• Competitive Services Study – Laboratory Services Department (LSD) Non-Nuclear Operations &amp; Maintenance</li> <li>• Reduce Cycle Time for Oxide Processing in the F Button (FB) Line</li> <li>• Reduce High-Efficiency Particulate Air (HEPA) Filter Monthly Surveillance</li> <li>• DWPF Request for Engineering Assistance (REA) Process</li> <li>• Liquid Waste Evaporator Overheads Pulse Height Analyzer (PHA) Sampling Reduction</li> <li>• Cost Reduction and Production Improvements for the General Separations Area (GSA) Corrective Action Reports (CARs)</li> <li>• Optimize Productivity in Tank Farms to Meet Salt Min Gate Schedule</li> <li>• High Liquid Level Conductivity Probe (HLLCP) Alarm Setpoints Process Improvement</li> <li>• Liquid Waste Disposition Project (LWDP) Instrument Scaling and Setpoint Control Program</li> <li>• Design Transuranic (TRU) Waste drum liquid disposition process – Design For Six Sigma (DFSS)</li> <li>• Stack Monitoring PM Reductions</li> <li>• Optimize the process and resources for Shielded Cells Operations</li> </ul>	Dave Cook
Procurement	3,800	<ul style="list-style-type: none"> <li>• Streamlining and Improving the External Supplier Audit Process</li> <li>• Reduce the Number of Supplier Surveillance Representative Trips</li> <li>• Portable Equipment Commodity Management Center (PECMC) Excessing Process</li> <li>• Right-sizing PECMC Forklifts Pool</li> <li>• Optimize 234-H Noncommercial Packaging &amp; Shipping Process</li> <li>• Real Property Asset Management Implementation – Design For Six Sigma (DFSS)</li> </ul>	Dave Cook



**Trends in Total Support Cost by Functional Categories**  
**Stanford Linear Accelerator Center/Stanford Univ. (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	209,673	235,352	238,531	263,766	269,840	60,167	28.7%
<b>Capital Construction</b>	41,414	46,418	55,195	63,028	65,295	23,881	57.7%
<b>Total Costs Less Construction</b>	168,259	188,934	183,336	200,738	204,545	36,286	21.6%
<b>Total Support Costs</b>	51,937	57,159	56,268	59,434	67,257	15,320	29.5%
<b>Mission Direct Operation</b>	116,322	131,775	127,068	141,304	137,288	20,966	18.0%
<b>Mission Direct Operation as % of Total Cost</b>	55.5%	56.0%	53.3%	53.6%	50.9%		
<b>Capital Construction as % of Total Cost</b>	19.8%	19.7%	23.1%	23.9%	24.2%		
<b>Total Support Cost as % of Total Cost</b>	24.8%	24.3%	23.6%	22.5%	24.9%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	24.8%	24.3%	23.6%	22.5%	24.9%		
<b>TOTAL SUPPORT COST</b>	51,937	57,159	56,268	59,434	67,257	15,320	29.5%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	11.4%	10.9%	10.7%	10.1%	10.2%		
<b>TOTAL GENERAL SUPPORT</b>	23,968	25,735	25,590	26,693	27,626	3,658	15.3%
EXECUTIVE DIRECTION	2,955	2,910	2,759	2,898	3,013	58	2.0%
HUMAN RESOURCES	1,982	2,330	2,168	2,455	2,555	573	28.9%
CFO	3,503	3,555	4,205	4,565	5,057	1,554	44.4%
PROCUREMENT	1,918	2,053	1,974	1,802	1,980	62	3.2%
LEGAL	94	98	99	102	104	10	10.6%
CENTRAL ADMIN SERVICES	736	927	619	730	768	32	4.3%
PROGRAM/PROJECT CONTROL	1,171	1,293	1,284	1,259	1,075	-96	-8.2%
INFORMATION OUTREACH	2,082	2,841	2,793	3,123	3,147	1,065	51.2%
INFORMATION SERVICES	6,702	6,773	6,414	6,404	6,289	-413	-6.2%
OTHER	2,825	2,955	3,275	3,355	3,638	813	28.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	13.3%	13.4%	12.9%	12.4%	14.7%		
<b>TOTAL MISSION SUPPORT</b>	27,969	31,424	30,678	32,741	39,631	11,662	41.7%
ENVIRONMENTAL	2,718	2,163	2,235	3,559	2,876	158	5.8%
SAFETY AND HEALTH	5,205	5,802	5,330	5,775	7,609	2,404	46.2%
FACILITIES MANAGEMENT	2,134	2,312	1,980	2,182	2,334	200	9.4%
MAINTENANCE	5,976	6,374	6,346	7,040	7,097	1,121	18.8%
UTILITIES	8,189	10,619	10,533	8,964	14,641	6,452	78.8%
SAFEGUARDS AND SECURITY	1,690	1,859	1,922	2,023	2,121	431	25.5%
LOGISTICS SUPPORT	1,895	2,086	2,153	3,005	2,759	864	45.6%
QUALITY ASSURANCE	162	209	179	193	194	32	19.8%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	0.0%	0.0%	0.0%	0.0%	0.0%		
<b>TOTAL SITE SPECIFIC</b>	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%

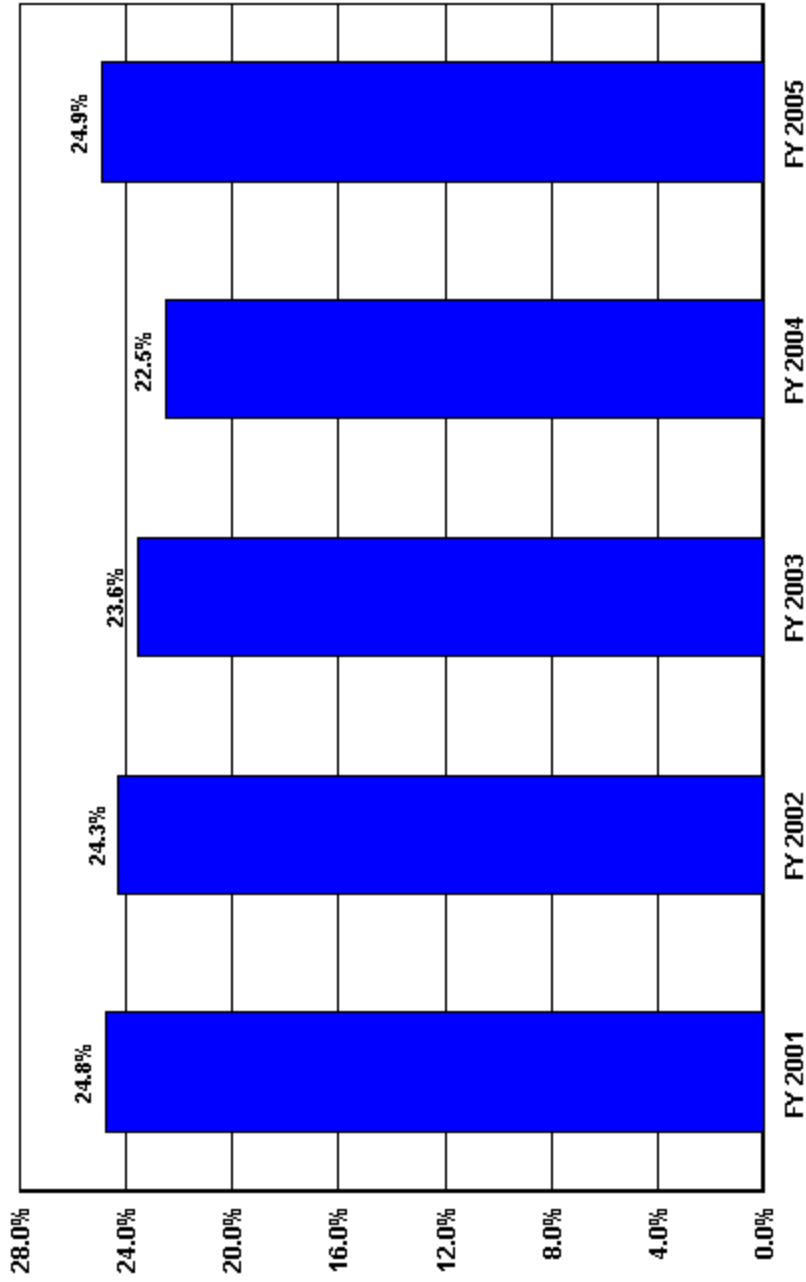
**US Department of Energy**  
**Total Functional Support**  
 Stanford Linear Accelerator Center/Stanford Univ.



■ Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>51,937</b>	<b>57,159</b>	<b>56,268</b>	<b>59,434</b>	<b>67,257</b>

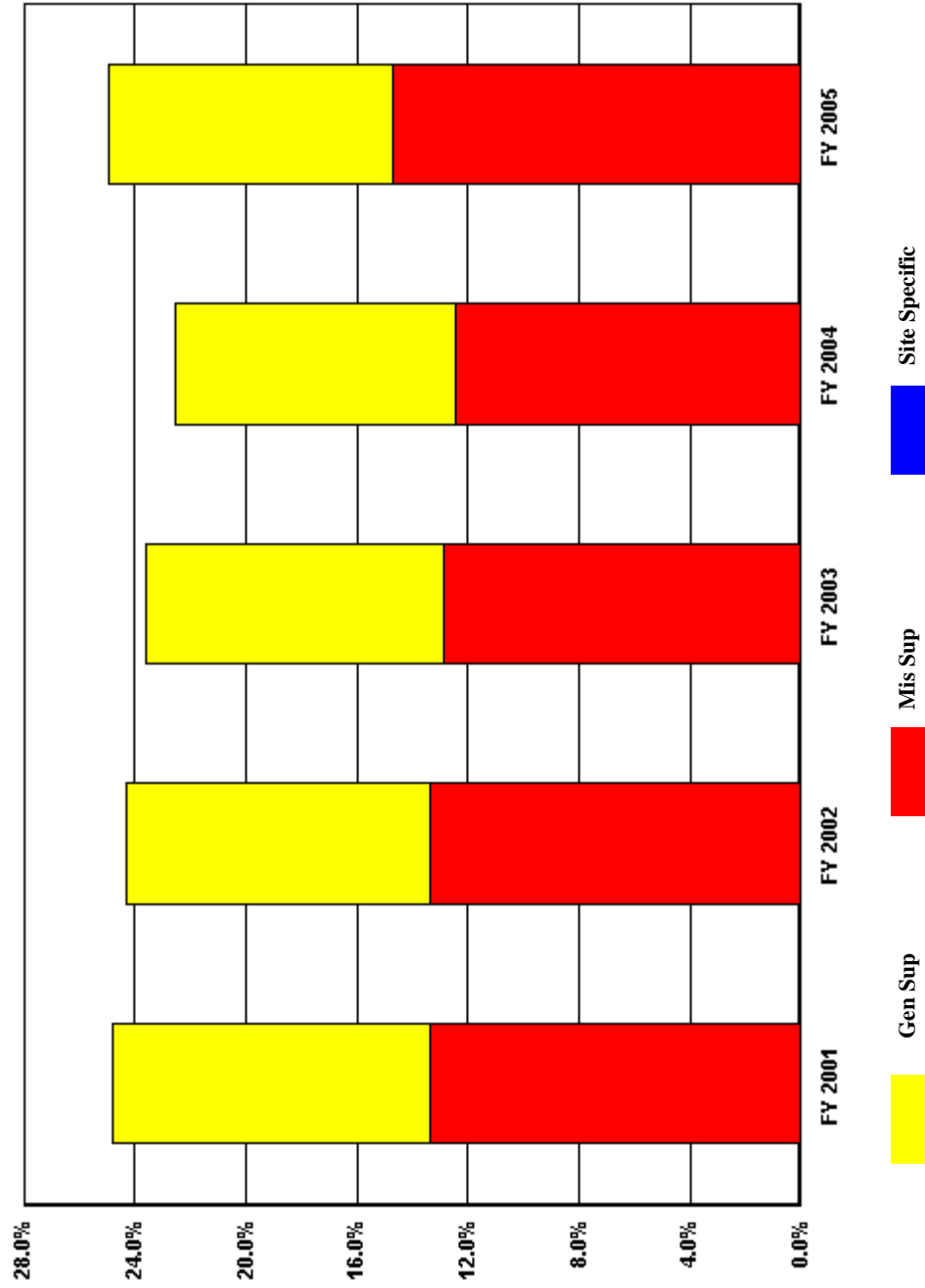
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Stanford Linear Accelerator Center/Stanford Univ.**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>24.8%</b>	<b>24.3%</b>	<b>23.6%</b>	<b>22.5%</b>	<b>24.9%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	11.4%	10.9%	10.1%	10.1%	10.2%
Mis Sup	13.3%	12.9%	12.4%	12.4%	14.7%
Site Specific	0.0%	0.0%	0.0%	0.0%	0.0%

---

**SITE PROFILE**  
**Stanford Linear Accelerator Center/Stanford Univ.**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**I. Background**

The Stanford Linear Accelerator Center was founded in 1962 as a national user facility for high energy physics using electron beams in a two-mile linear accelerator. SLAC is dedicated to research in photon science, particle physics and particle astrophysics. About 3000 scientists from universities, industry, and other research institutions around the world are active in the using the research facilities at SLAC. The DOE Office of Science provides almost all of SLAC's funding. SLAC is operated for the DOE by Stanford University under a Management and Operating Contract. SLAC is located on the San Francisco Peninsula in Menlo Park, California, west of the main Stanford campus. The SLAC site occupies 426 acres leased by DOE from Stanford University at no fee. There are about 150 buildings and structures on site. At the end of FY2005, staffing level at SLAC was about 1,550.

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

- The world's largest linear accelerator (Linac), delivering 50 billion volts (50 GeV) electron (including polarized electron) and positron beams;
- The PEP-II B Factory, a state-of-the-art asymmetric electron-positron collider and associated particle detector for the production and research of B mesons;
- A 3 GeV electron storage ring (SPEAR3), 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;
- Two major accelerator physics R&D facilities testing subsystems and features for future accelerators.
- The Sub-Picosecond Pulse Source (SPPS) producing <100 femtosecond pulses of spontaneous x-ray radiation
- Under construction: the world's first x-ray free electron laser, the Linac Coherent Light Source (LCLS), to be operational in 2009.

Mission: Discovery, Training, Safety

- Photon Science Discoveries  
To make discoveries in photon science at the frontiers of the ultrasmall and ultrafast in a wide spectrum of physical and life sciences
- Particle and Particle Astrophysics Discoveries  
To make discoveries in particle and astroparticle physics to redefine humanity's understanding of what the universe is made of and the forces that control it
- Operate Safely; Train the Best  
To operate a safe laboratory that employs and trains the best and brightest, helping to ensure the future economic strength and security of the nation

---

**SITE PROFILE**  
**Stanford Linear Accelerator Center/Stanford Univ.**

---

**II. Trends**

Functional Support Costs increased 30% between FY 2001 and FY 2005 and 13% between FY 2004 and FY 2005. The ratio of Functional Support Cost to Total Site Cost was decreasing annually from FY2000 through FY2004, but increased from 22.5% in FY2004 to 24.9% in FY2005. The primary cause of the higher ratio was a significant (71%) increase in the cost of electrical power, from \$8.1M in FY2004 to \$13.8M in FY2005, without a commensurate increase in funding from the Office of Science programs. As a result, to maintain operations of the research facilities, there had to be an involuntary layoff of about 70 staff in 2005, primarily in the High Energy Physics program area.

Although power rates have steadily increased over the years, the expiration of favorable long term electrical power contracts at the end of calendar year 2004 caused the FY2005 power rates to be more than double those of FY2004. The average power rate for SLAC in FY2006 is expected to be higher by another 15%. DOE procures power for the 3-Lab consortium (SLAC, LBNL, LLNL) through competitive bids. More than 90% of the electrical power consumption at SLAC is “process” power for the operation of the experimental facilities for scientific research. Annual electrical power consumption is heavily dependent on the experimental facilities that are in operation and the duration of experimental runs during the fiscal year. As a result of the SPEAR3 upgrade with operation at higher current and the PEP-II B-Factory luminosity upgrade, electrical power consumption will continue to increase during the next few years. Based on the current experimental program plans, the FY2006 power costs are estimated to be \$22M, 60% higher than FY2005. Therefore, the “Utilities” Functional Cost will continue to increase significantly and it will have an adverse impact on the ratio of Functional Support Cost to Total Site Cost.

Another Functional Cost area with an increasing trend at SLAC is Safety and Health. SLAC is in the midst of completing the corrective actions associated with the OSHA Audit of February 2004. In addition, other items to enhance worker safety are continually being identified and implemented.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**SAFETY AND HEALTH**

In FY 2005, Safety and Health costs have risen \$1,832K or 32% from FY 2004. The increase was associated with OSHA Audit corrections and other worker safety enhancements (+\$600K), the new chemical management services subcontract (\$330K), increased training, development of a corrective action tracking system, and recategorization of safety and health costs from the Executive Direction and Program/Project Planning and Control categories.

---

**SITE PROFILE**  
**Stanford Linear Accelerator Center/Stanford Univ.**

---

**UTILITIES**

The Utilities cost in FY 2005 was \$5,677K or 63% higher than in FY 2004. The dominant component (94%) is electrical power used to run the accelerators and associated facilities for the experimental research programs. Natural gas, water, sewer and sanitary waste disposal costs are also included. Power costs increased \$5,695K. Details are discussed in Section II, Trends.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

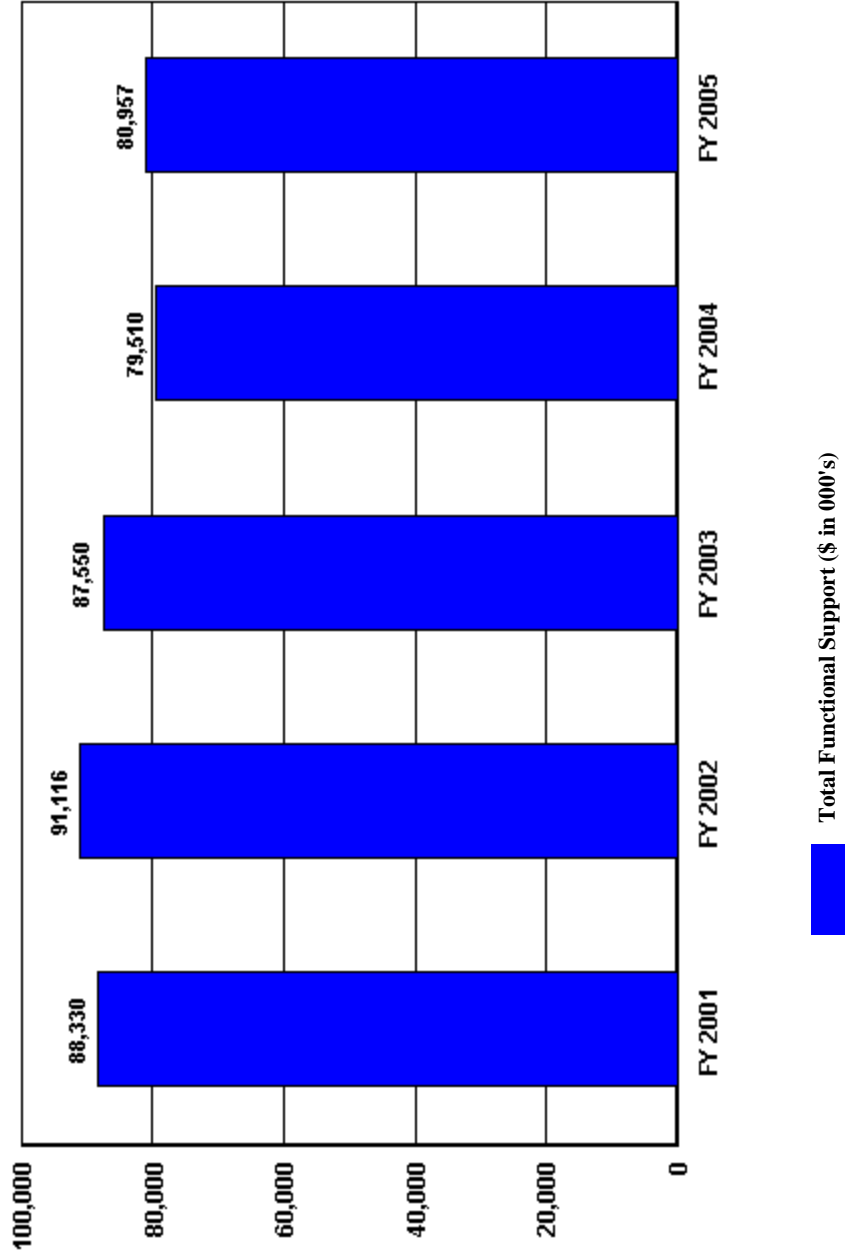
INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	125,370	135,079	138,423	114,956	105,331	-20,039	-16.0%
<b>Capital Construction</b>	0	0	0	0	0	0	0.0%
<b>Total Costs Less Construction</b>	125,370	135,079	138,423	114,956	105,331	-20,039	-16.0%
<b>Total Support Costs</b>	88,330	91,116	87,550	79,510	80,957	-7,373	-8.3%
<b>Mission Direct Operation</b>	37,040	43,963	50,873	35,446	24,374	-12,666	-34.2%
<b>Mission Direct Operation as % of Total Cost</b>	29.5%	32.5%	36.8%	30.8%	23.1%		
<b>Capital Construction as % of Total Cost</b>	0.0%	0.0%	0.0%	0.0%	0.0%		
<b>Total Support Cost as % of Total Cost</b>	70.5%	67.5%	63.2%	69.2%	76.9%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	70.5%	67.5%	63.2%	69.2%	76.9%		
<b>TOTAL SUPPORT COST</b>	88,330	91,116	87,550	79,510	80,957	-7,373	-8.3%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	20.5%	17.1%	16.9%	19.6%	18.8%		
<b>TOTAL GENERAL SUPPORT</b>	25,731	23,113	23,372	22,496	19,803	-5,928	-23.0%
EXECUTIVE DIRECTION	294	260	434	357	325	31	10.5%
HUMAN RESOURCES	1,336	1,259	1,196	1,159	1,657	321	24.0%
CFO	1,969	1,797	1,922	1,737	1,811	-158	-8.0%
PROCUREMENT	1,918	1,957	1,945	1,495	1,503	-415	-21.6%
LEGAL	754	532	611	657	418	-336	-44.6%
CENTRAL ADMIN SERVICES	993	698	760	610	572	-421	-42.4%
PROGRAM/PROJECT CONTROL	4,748	4,930	5,072	4,516	4,040	-708	-14.9%
INFORMATION OUTREACH	2,362	1,852	2,467	1,927	842	-1,520	-64.4%
INFORMATION SERVICES	11,357	9,828	8,965	10,038	8,599	-2,758	-24.3%
OTHER	0	0	0	0	36	36	100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	44.3%	44.8%	40.5%	43.1%	51.9%		
<b>TOTAL MISSION SUPPORT</b>	55,596	60,539	55,998	49,516	54,654	-942	-1.7%
ENVIRONMENTAL	2,213	2,350	2,410	2,203	2,386	173	7.8%
SAFETY AND HEALTH	3,138	2,500	2,694	2,499	2,915	-223	-7.1%
FACILITIES MANAGEMENT	716	1,015	1,437	1,158	728	12	1.7%
MAINTENANCE	29,464	27,410	25,106	20,473	22,012	-7,452	-25.3%
UTILITIES	2,903	2,600	2,159	2,975	5,416	2,513	86.6%
SAFEGUARDS AND SECURITY	11,824	19,988	18,288	16,904	17,928	6,104	51.6%
LOGISTICS SUPPORT	3,679	2,955	2,294	2,197	2,171	-1,508	-41.0%
QUALITY ASSURANCE	1,659	1,721	1,610	1,107	1,098	-561	-33.8%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	5.6%	5.5%	5.9%	6.5%	6.2%		
<b>TOTAL SITE SPECIFIC</b>	7,003	7,464	8,180	7,498	6,500	-503	-7.2%
MANAGEMENT/INCENTIVE FEE	7,003	7,316	7,970	7,295	6,203	-800	-11.4%
TAXES	0	148	210	203	297	297	100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

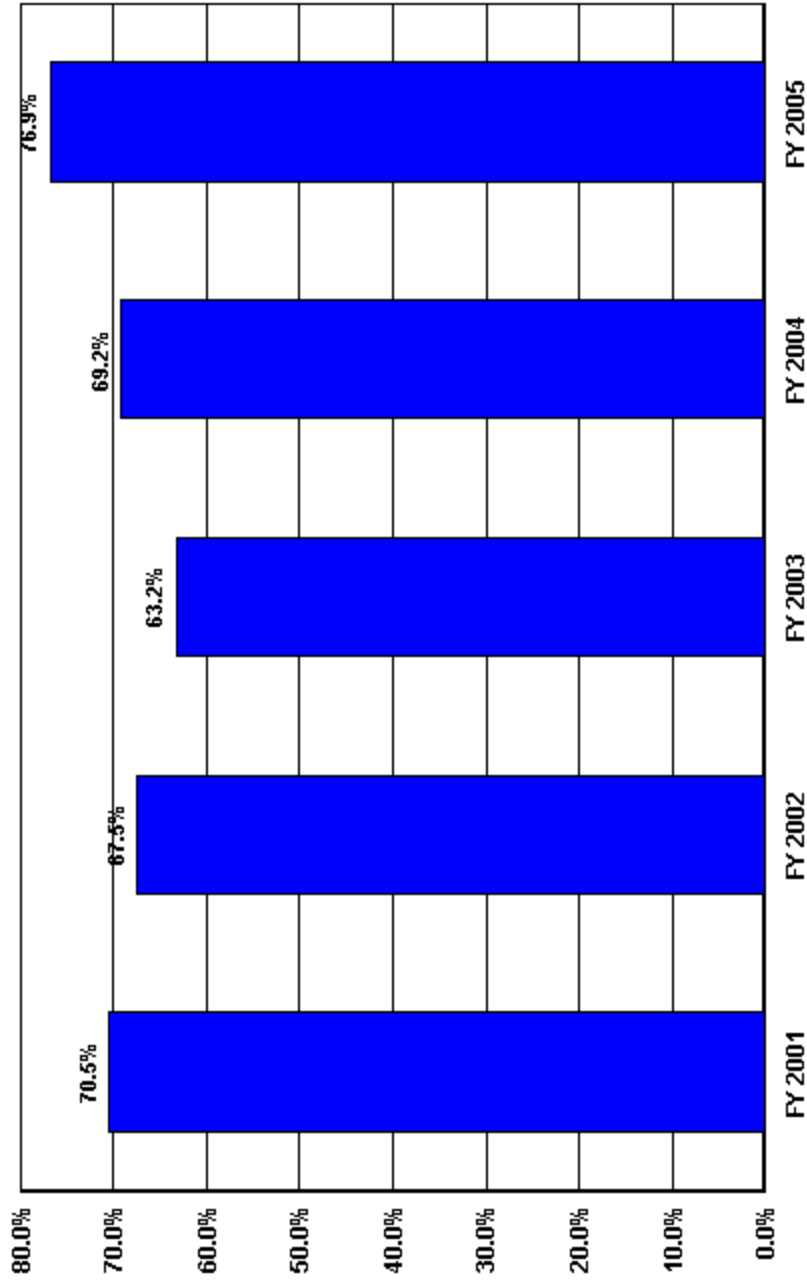


**US Department of Energy**  
**Total Functional Support**  
 Strategic Petroleum Reserve/DynMcDermott Petroleum



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>88,330</b>	<b>91,116</b>	<b>87,550</b>	<b>79,510</b>	<b>80,957</b>

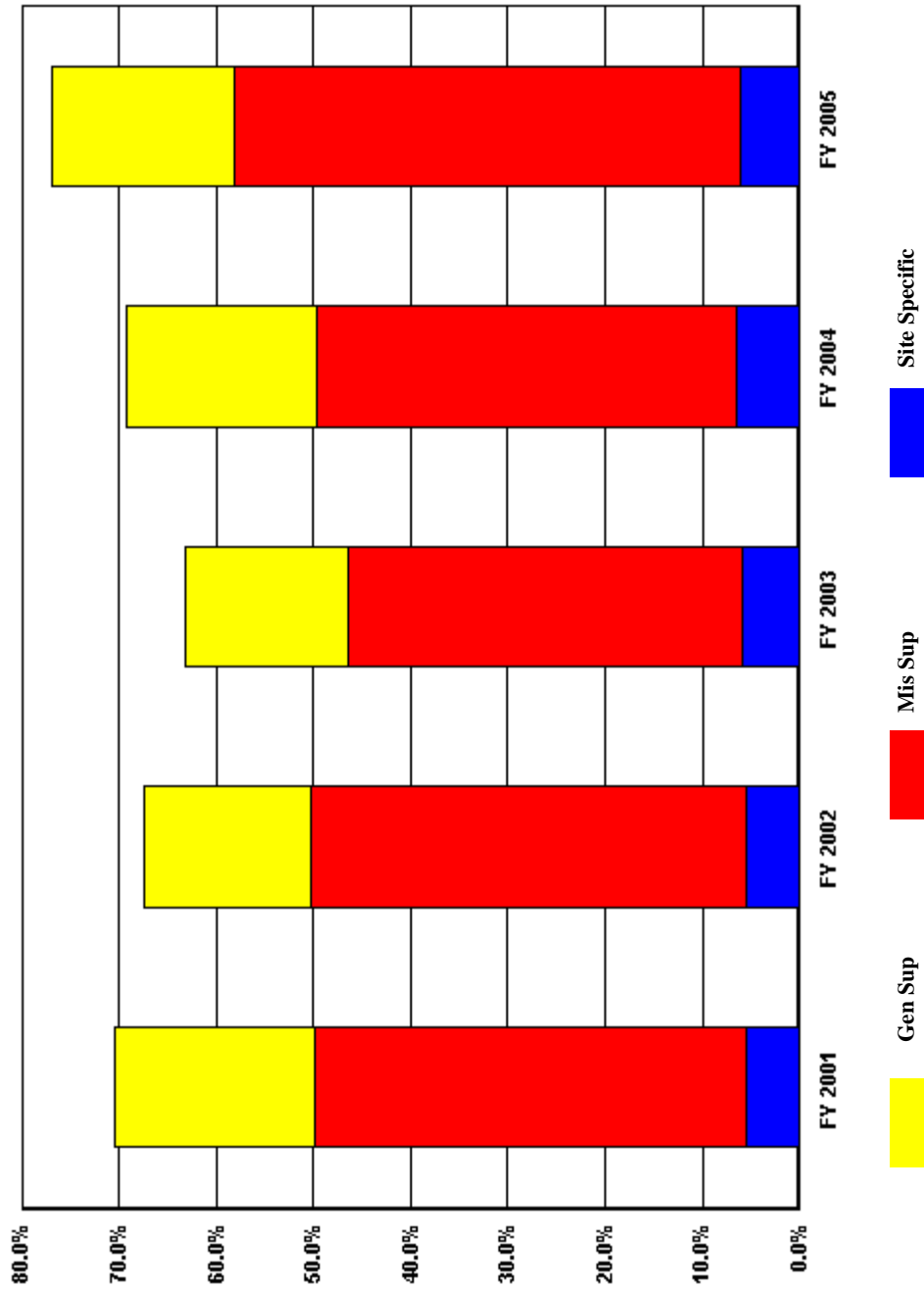
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Strategic Petroleum Reserve/DynMcDermott Petroleum**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	70.5%	67.5%	63.2%	69.2%	76.9%

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	20.5%	17.1%	16.9%	19.6%	18.8%
Mis Sup	44.3%	44.8%	40.5%	43.1%	51.9%
Site Specific	5.6%	5.5%	6.5%	6.5%	6.2%

---

**SITE PROFILE**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum**

---

**SITE OVERVIEW AND CHARACTERISTIC**

Background

The Strategic Petroleum Reserve (PSR) 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 most important accomplishments during FY 2005 were reaching the 700 million barrel mark and surviving several hurricanes. The SPR has stockpiled 700.7 million barrels of oil and is currently filling the SPR with Royalty-in-Kind oil, which is being diverted to increase the inventory. Additionally, due to recent hurricanes 7.0 million barrels of the current inventory has been lent to oil companies (carried as accounts receivables on SPR books) and will be repaid with interest over the next several months.

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.  
254 million barrels of crude oil can be stored in the site's 20 caverns.  
73 people are employed at the site as of September 2005.  
The site contains 232.1 million barrels of oil in storage as of September 30, 2005.  
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.  
85 people are employed at the site as of September 2005.  
The site contains 168.9 million barrels of oil in storage as of September 30, 2005.  
The site consists of 43 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.

---

**SITE PROFILE**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum**

---

48 people are employed at the site as of September 2005.

The site contains 70.2 million barrels of oil in storage as of September 30, 2005.

The site consists of 30 buildings.

West Hackberry is in Southwest Louisiana near the city of Lake Charles.

227 million barrels of crude oil can be stored in the site's 22 caverns.

86 people are employed at the site as of September 2005 including a traveling workover crew.

The site contains 222.6 million barrels of oil in storage as of September 30, 2005.

The site consists of 30 buildings.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

The FY 2004 Peer Review moved training activities from Information Outreach to Human Resources.

**LEGAL**

The FY 2004 Peer Review moved workers compensation contained in legal in 2004, but distributed to straight time labor for FY 2005.

**INFORMATION OUTREACH**

The FY 2004 Peer Review moved Historically Black Colleges and Universities (HBCU) from Human Resources to Information Outreach. Additionally, HBCU activity was significantly reduced from the FY 2004 activity.

**OTHER**

The FY 2004 Peer Review moved auto liability insurance and liability insurance for the BC parking lot contained in legal in 2004, but moved to General Support - Other in FY 2005.

**FACILITIES MANAGEMENT**

The NO warehouse was moved to Stennis at a significant reduction in rental cost.

**UTILITIES**

The FY 2004 Peer Review identified Bryan Mound power paid by DOE as a cost that should be included in the DM Functional Cost Report, which was done in FY 2005.

**TAXES**

DM has received unearned revenue and is paying state income and franchise taxes for the multi-year cost reduction.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

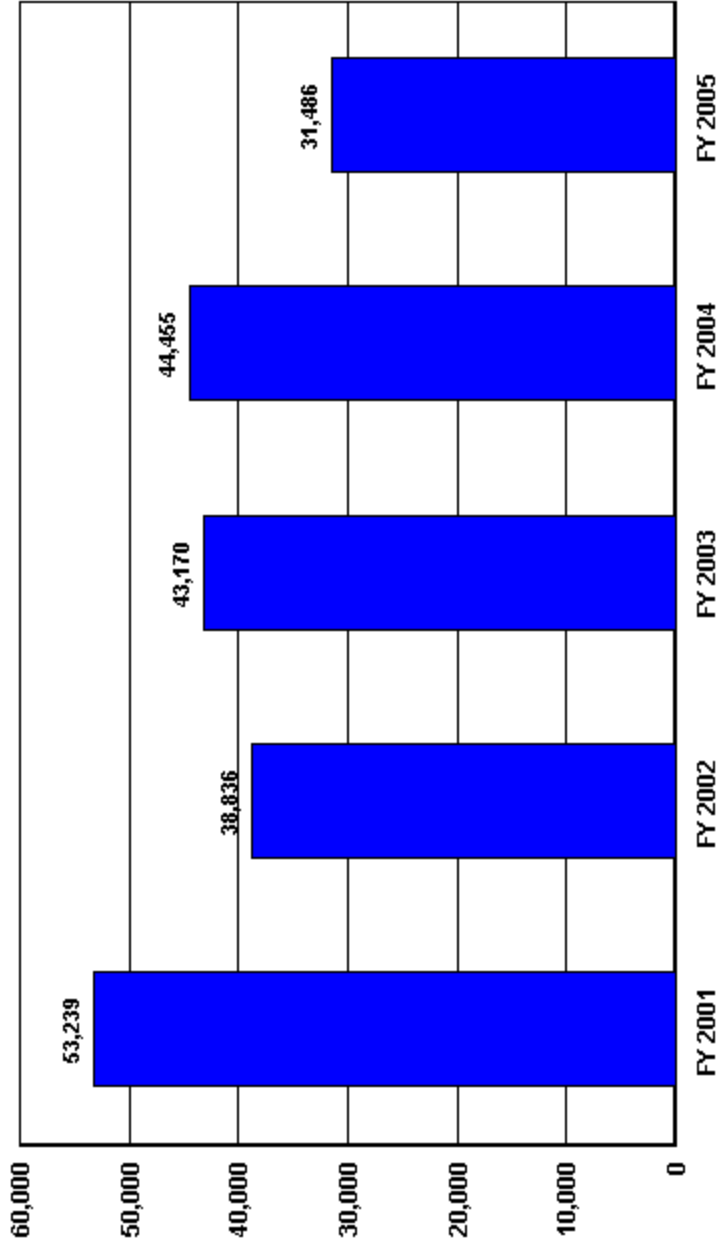
**SITE PROFILE**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum**

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
Guard Force	973	The guard force contract was re-competed in FY 2005 at a lower rate.	Sheron Lee
Eliminate Mail Room Contractor	41	It was determined that the effort required to man the mail room could be provided within the current headcount while still providing the same services.	Sheron Lee
ISO Lead Auditor Training	41	An approved DM instructor will provide the ISO Lead Auditor Training using site training facilities and the test will be graded and monitored by an authorized vendor. Once the DM employee becomes certified, there will be no need to send employees to vendor provided training. This eliminates the need for related travel and associated expenses.	Sheron Lee
Eliminate Site Mercury Bulbs	57	Achieve a lighting upgrade and reap benefits of reduced energy consumption, reduced waste and significant cost avoidance. This innovative pollution prevention/energy efficient project significantly reduced a waste stream, increased mercury-containing product recycling, incorporated "reuse", afforded cost avoidance, and benefited our community outreach program.	Sheron Lee

**Trends in Total Support Cost by Functional Categories**  
**West Valley/West Valley Nuclear Services (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	112,039	81,817	103,616	103,586	70,786	-41,253	-36.8%
<b>Capital Construction</b>	0	0	0	0	0	0	0.0%
<b>Total Costs Less Construction</b>	112,039	81,817	103,616	103,586	70,786	-41,253	-36.8%
<b>Total Support Costs</b>	53,239	38,836	43,170	44,455	31,486	-21,753	-40.9%
<b>Mission Direct Operation</b>	58,800	42,981	60,446	59,131	39,300	-19,500	-33.2%
<b>Mission Direct Operation as % of Total Cost</b>	52.5%	52.5%	58.3%	57.1%	55.5%		
<b>Capital Construction as % of Total Cost</b>	0.0%	0.0%	0.0%	0.0%	0.0%		
<b>Total Support Cost as % of Total Cost</b>	47.5%	47.5%	41.7%	42.9%	44.5%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	47.5%	47.5%	41.7%	42.9%	44.5%		
<b>TOTAL SUPPORT COST</b>	53,239	38,836	43,170	44,455	31,486	-21,753	-40.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	17.1%	13.9%	11.4%	9.7%	10.3%		
<b>TOTAL GENERAL SUPPORT</b>	19,198	11,352	11,809	10,060	7,296	-11,902	-62.0%
EXECUTIVE DIRECTION	723	536	497	468	371	-352	-48.7%
HUMAN RESOURCES	2,029	1,867	2,035	1,538	952	-1,077	-53.1%
CFO	1,274	1,290	1,436	1,193	934	-340	-26.7%
PROCUREMENT	1,276	1,167	1,009	1,002	834	-442	-34.6%
LEGAL	328	192	299	244	162	-166	-50.6%
CENTRAL ADMIN SERVICES	1,189	628	624	653	604	-585	-49.2%
PROGRAM/PROJECT CONTROL	1,157	1,388	1,678	1,237	766	-391	-33.8%
INFORMATION OUTREACH	1,143	1,221	1,563	1,453	955	-188	-16.4%
INFORMATION SERVICES	4,683	3,063	2,668	2,272	1,718	-2,965	-63.3%
OTHER	5,396	0	0	0	0	-5,396	-100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	21.2%	25.0%	22.9%	22.1%	24.5%		
<b>TOTAL MISSION SUPPORT</b>	23,796	20,493	23,677	22,903	17,331	-6,465	-27.2%
ENVIRONMENTAL	1,851	1,679	1,328	1,485	1,047	-804	-43.4%
SAFETY AND HEALTH	7,181	6,490	7,552	7,621	5,620	-1,561	-21.7%
FACILITIES MANAGEMENT	1,786	1,605	2,260	1,353	1,110	-676	-37.8%
MAINTENANCE	4,025	4,011	4,773	4,717	3,703	-322	-8.0%
UTILITIES	3,037	2,011	2,340	2,074	2,052	-985	-32.4%
SAFEGUARDS AND SECURITY	1,484	1,293	1,666	1,591	1,104	-380	-25.6%
LOGISTICS SUPPORT	1,031	942	952	1,177	730	-301	-29.2%
QUALITY ASSURANCE	1,646	916	936	895	709	-937	-56.9%
LABORATORY/TECHNICAL SUPPORT	1,755	1,546	1,870	1,990	1,256	-499	-28.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	9.1%	8.5%	7.4%	11.1%	9.7%		
<b>TOTAL SITE SPECIFIC</b>	10,245	6,991	7,684	11,492	6,859	-3,386	-33.1%
MANAGEMENT/INCENTIVE FEE	10,026	6,780	7,571	11,478	6,859	-3,167	-31.6%
TAXES	219	211	113	14	0	-219	-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**

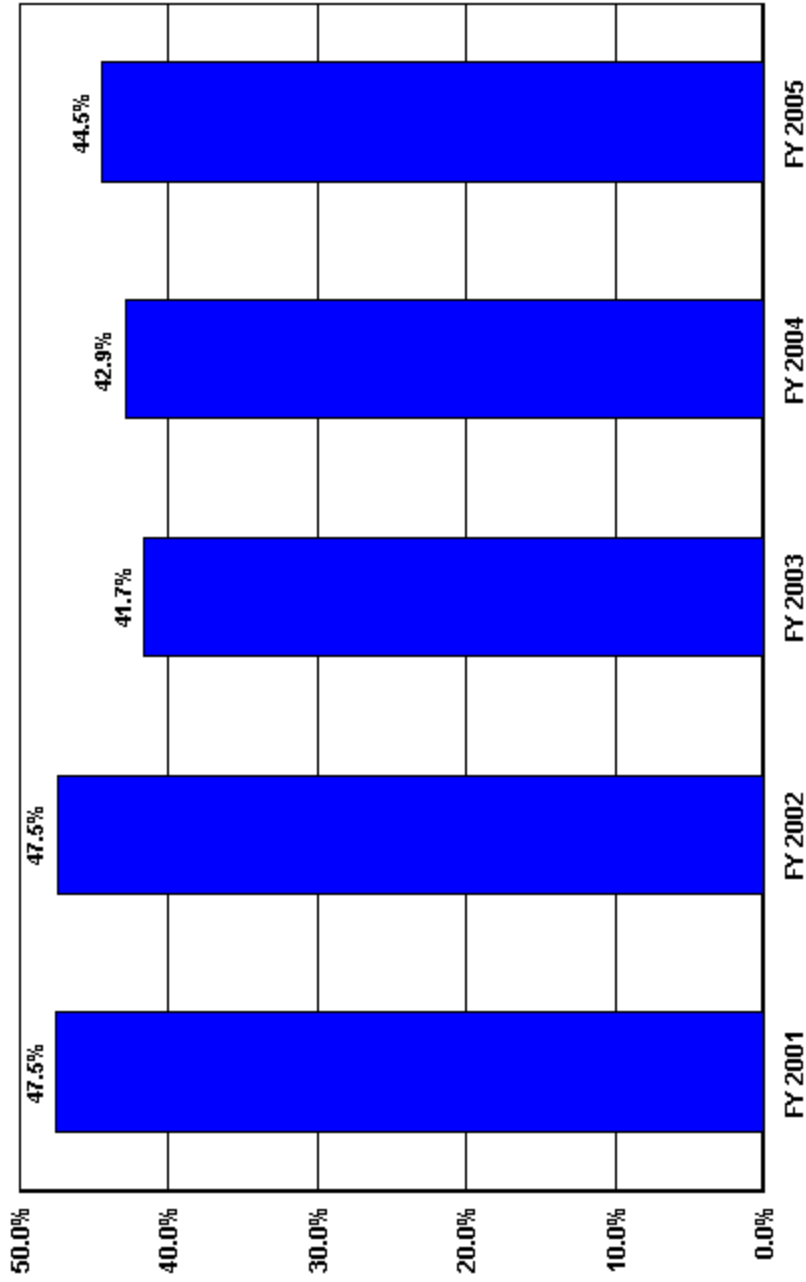


Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>53,239</b>	<b>38,836</b>	<b>43,170</b>	<b>44,455</b>	<b>31,486</b>



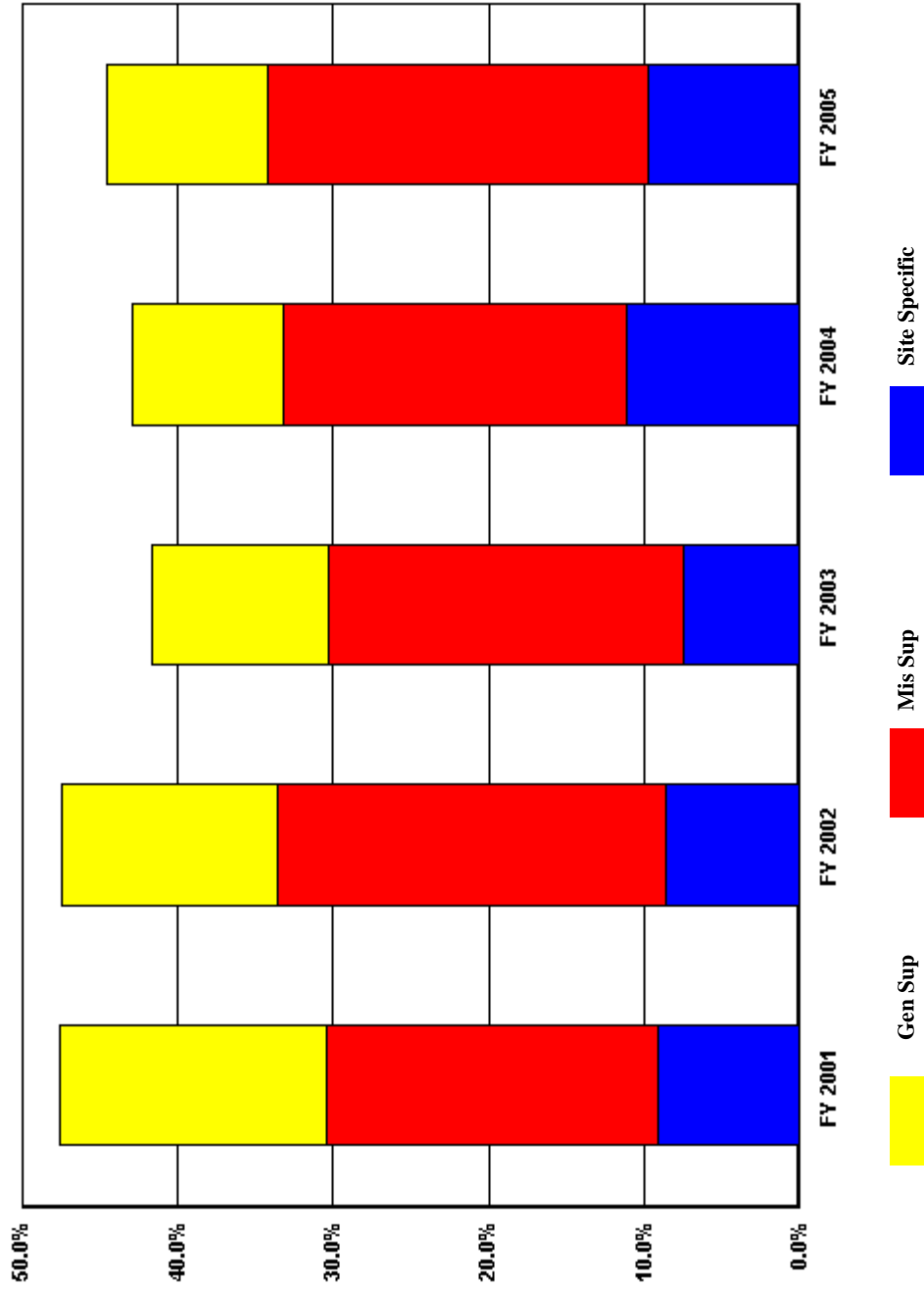
**US Department of Energy  
Total Functional Support as a % of Total Costs  
West Valley/West Valley Nuclear Services**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>47.5%</b>	<b>47.5%</b>	<b>41.7%</b>	<b>42.9%</b>	<b>44.5%</b>

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



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	17.1%	13.9%	11.4%	9.7%	10.3%
Mis Sup	21.2%	22.9%	22.1%	24.5%	24.5%
Site Specific	9.1%	8.5%	11.1%	9.7%	9.7%

---

**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

---

**SITE OVERVIEW AND CHARACTERISTIC**

**I. Site Characteristics**

The West Valley Demonstration Project (WVDP) Act chartered the Department of Energy (DOE) with, among other mandates, the task of solidifying the liquid high level waste (HLW) at the Western New York Nuclear Service Center (WNYNSC). The site is owned by New York State (NYS) and administered through its agency, the New York State Energy Research and Development Authority (NYSERDA). The WNYNSC is a 3,300 acre site located approximately 35 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 then 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.

---

**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

---

**Mission**

The prime management and operating contractor for the WVDP is the West Valley Nuclear Services Company (WVNSCO), which manages the facility according to a performance based contract. During the time period encompassed by the Functional Cost Report (FY2001 to FY2005), the Project will have evolved from HLW waste processing engineering and final HLW treatment/vitrification processing, through system deactivation, to the current decontamination, dismantlement and waste management phase. There are significant challenges being managed in order to assure the Project has the required disciplines to support this evolutionary risk reduction process.

**II. Highlights of Trends**

The actual current year dollars spent for functional costs decreased by approximately 41% from \$53,240K in FY2001 to \$31,490K in FY2005. As the work scope has evolved during the functional cost reporting period from HLW processing to post-processing decontamination, dismantlement, and waste management scopes, the site has experienced significant fluctuations in non-labor Mission related expenditures. In addition, direct employment levels have decreased from 695 full time equivalents (FTEs) in FY2001 to 352 FTEs by the end of FY2005 as labor resource requirements evolved with the changing mission. Total Project expenditures decreased 37% from \$112,040K in FY2001 to \$78,780K in FY2005. This decrease reflects the overall trend and the evolution to the Project's current facility decontamination, dismantlement, and waste management mission.

During FY2005, the Project continued the evolution to a decontamination / waste management oriented mission as evidenced by continued waste processing in the Remote Handled Waste Facility, the removal of contaminated equipment from the vitrification facility and contaminated cells in the former spent fuel process building, and a significant increase in processing, shipping and disposing of legacy low level radioactive waste.

In FY2005, \$1,420K of New York State Sales and Use tax was included as a part of the respective functional cost categories, a decrease of \$880K from the FY2004 total of \$2,300K which included the settlement of the New York State Department of Taxation and Finance tax audit finding regarding the Remote Handled Waste Facility construction contract for \$700K.

The FY2005 WVDP total functional cost decreased from \$44,460K in FY2004 to \$31,490K, a 29% reduction.

**III. Analysis of Change in Support Costs from Prior Years**

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 to Total DOE EM functional cost data. The DOE EM mission

---

**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

---

direct expenditure percentage is 57.0% as compared to 55.5% for WVDP Mission direct expenditures. While the General and Mission Support Categories percentages are slightly higher than last year, the project was experiencing a 32% reduction in funding prior to receiving approval for workforce reduction actions.

Commensurate with the overall site funding reduction as the work-scope resource requirements have evolved, WVNSCO has proactively been able to significantly reduce costs through re-organization, direct and subcontractor workforce restructuring, and consolidation, while maintaining safe compliance with DOE Orders and operational parameters.

**IV. Cost Savings Initiatives**

In addition to the overall reductions due to the evolution of the mission and subsequent restructuring, in FY2005, the WVNSCO Project Control system recognized approximately \$1,440K of cost savings through budget management documentation. The cost savings were primarily associated with planned activities detailed below.

**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
Sodium Bearing Waste Treatment System	340	Operations labor savings realized by modifying design parameters of skid mounted waste treatment system utilized to solidify radioactive sodium bearing liquid waste.	
Environmental Compliance and Laboratory Analysis	403	Proactive negotiations with DOE and Subcontract environmental services contractor (URS) eliminated \$403K of expected expenditures.	
Waste Containers and Characterization	350	Returned \$200K of budget for procurement of new waste containers as repackaging efforts generated containers which could be reused for new waste streams. Re-engineering of in-house waste characterization methodology eliminated \$150K of planned subcontract characterization labor.	

---

**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

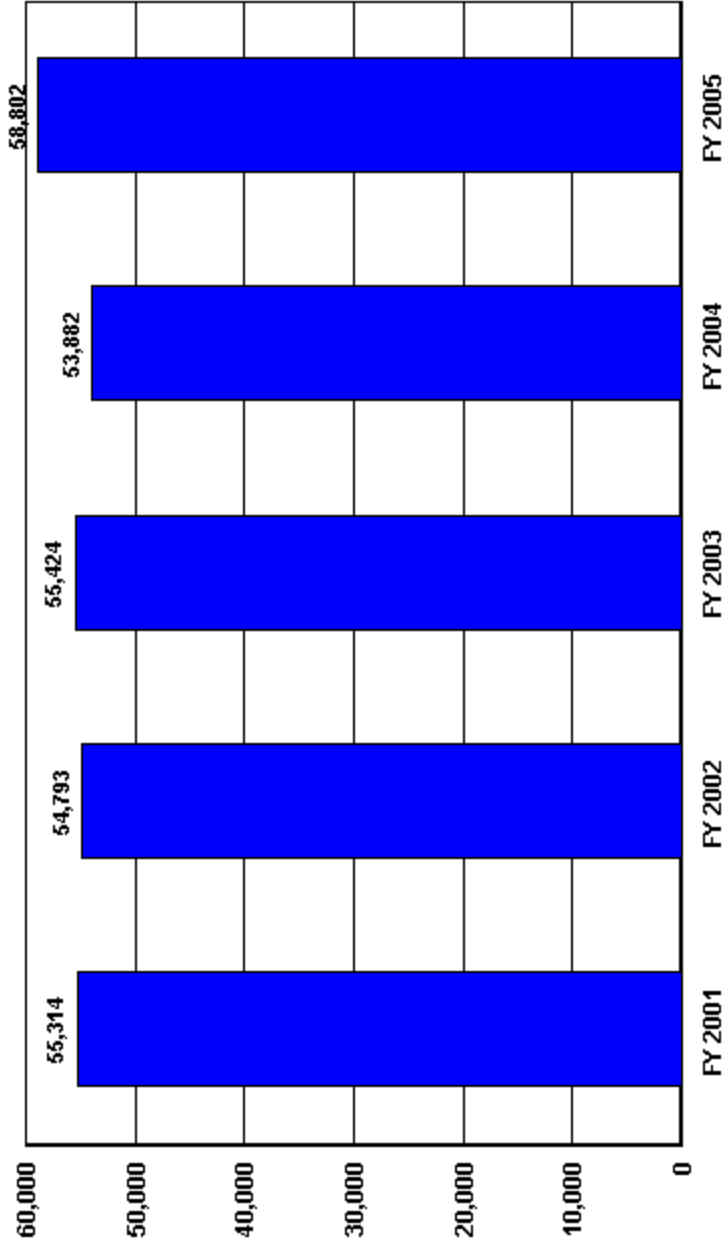
---

Safeguard and Security	345	Elimination of inspection stations and installation of video surveillance capability allowed subcontract guard force restructuring for a reduction of \$345K.	
------------------------	-----	---------------------------------------------------------------------------------------------------------------------------------------------------------------	--

**Trends in Total Support Cost by Functional Categories**  
**WIPP/Westinghouse (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	112,935	116,634	130,941	148,344	153,927	40,992	36.3%
<b>Capital Construction</b>	7,018	2,366	918	419	2,293	-4,725	-67.3%
<b>Total Costs Less Construction</b>	105,917	114,268	130,023	147,925	151,634	45,717	43.2%
<b>Total Support Costs</b>	55,314	54,793	55,424	53,882	58,802	3,488	6.3%
<b>Mission Direct Operation</b>	50,603	59,475	74,599	94,043	92,832	42,229	83.5%
<b>Mission Direct Operation as % of Total Cost</b>	44.8%	51.0%	57.0%	63.4%	60.3%		
<b>Capital Construction as % of Total Cost</b>	6.2%	2.0%	0.7%	0.3%	1.5%		
<b>Total Support Cost as % of Total Cost</b>	49.0%	47.0%	42.3%	36.3%	38.2%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	49.0%	47.0%	42.3%	36.3%	38.2%		
<b>TOTAL SUPPORT COST</b>	55,314	54,793	55,424	53,882	58,802	3,488	6.3%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	20.1%	19.6%	16.7%	11.5%	9.3%		
<b>TOTAL GENERAL SUPPORT</b>	22,672	22,845	21,871	17,102	14,354	-8,318	-36.7%
EXECUTIVE DIRECTION	939	1,340	531	679	476	-463	-49.3%
HUMAN RESOURCES	4,121	3,661	3,666	2,940	2,668	-1,453	-35.3%
CFO	2,648	1,747	1,886	1,970	1,456	-1,192	-45.0%
PROCUREMENT	1,421	1,289	1,376	1,005	1,079	-342	-24.1%
LEGAL	1,084	1,137	1,002	909	915	-169	-15.6%
CENTRAL ADMIN SERVICES	3,303	3,211	3,113	2,561	1,772	-1,531	-46.4%
PROGRAM/PROJECT CONTROL	2,118	1,829	1,828	2,149	1,661	-457	-21.6%
INFORMATION OUTREACH	2,911	2,593	2,036	1,271	1,133	-1,778	-61.1%
INFORMATION SERVICES	4,127	6,038	6,433	3,398	3,194	-933	-22.6%
OTHER	0	0	0	220	0	0	0.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	18.1%	18.4%	17.8%	15.1%	16.1%		
<b>TOTAL MISSION SUPPORT</b>	20,417	21,471	23,334	22,357	24,801	4,384	21.5%
ENVIRONMENTAL	2,075	2,201	1,883	1,645	1,686	-389	-18.7%
SAFETY AND HEALTH	3,711	3,442	5,177	5,363	5,308	1,597	43.0%
FACILITIES MANAGEMENT	1,487	1,637	1,792	1,245	1,315	-172	-11.6%
MAINTENANCE	6,457	7,260	7,543	6,612	8,054	1,597	24.7%
UTILITIES	195	11	-21	730	1,207	1,012	519.0%
SAFEGUARDS AND SECURITY	2,571	2,892	3,150	3,007	3,532	961	37.4%
LOGISTICS SUPPORT	1,413	1,443	1,312	1,046	1,198	-215	-15.2%
QUALITY ASSURANCE	1,990	1,770	2,498	2,709	2,501	511	25.7%
LABORATORY/TECHNICAL SUPPORT	518	815	0	0	0	-518	-100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	10.8%	9.0%	7.8%	9.7%	12.8%		
<b>TOTAL SITE SPECIFIC</b>	12,225	10,477	10,219	14,423	19,647	7,422	60.7%
MANAGEMENT/INCENTIVE FEE	6,679	5,256	6,215	8,871	14,315	7,636	114.3%
TAXES	5,546	5,221	4,004	5,552	5,332	-214	-3.9%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

US Department of Energy  
 Total Functional Support  
 WIPP/Westinghouse

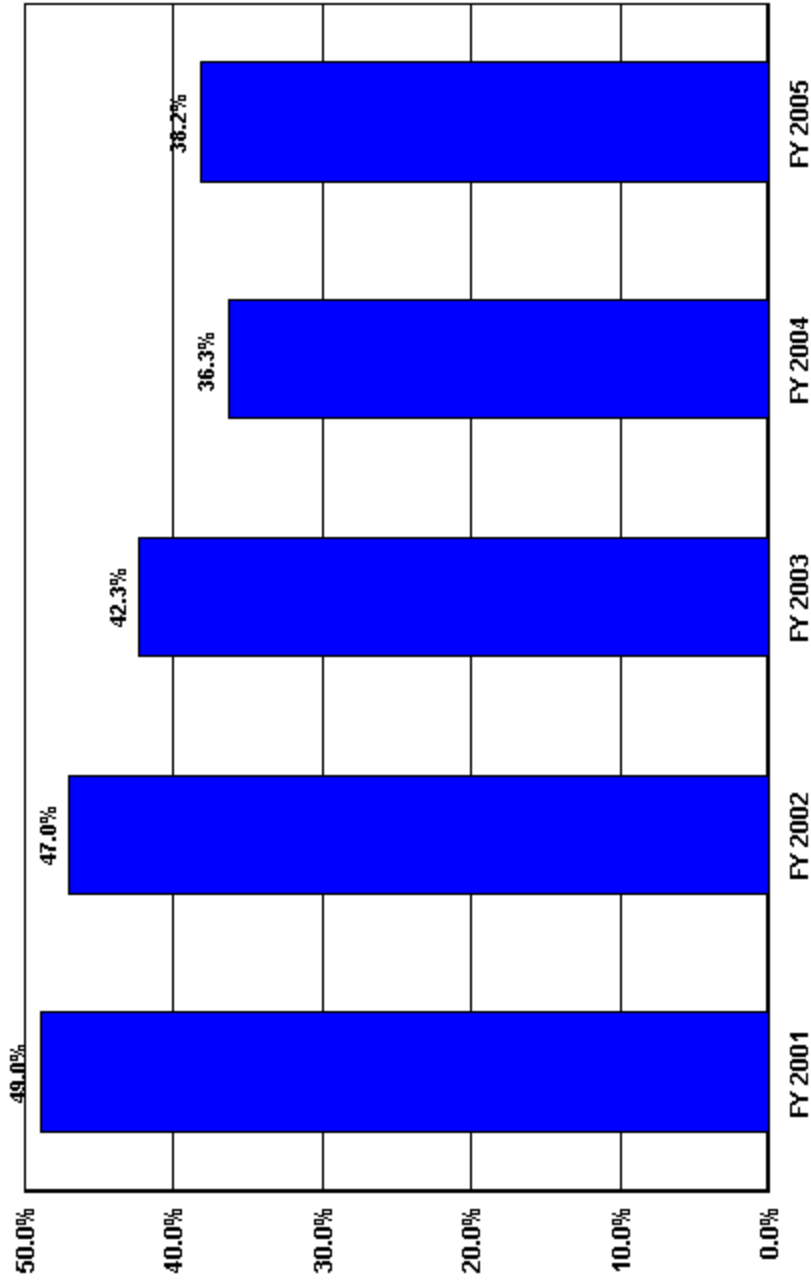


Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	55,314	54,793	55,424	53,882	58,802



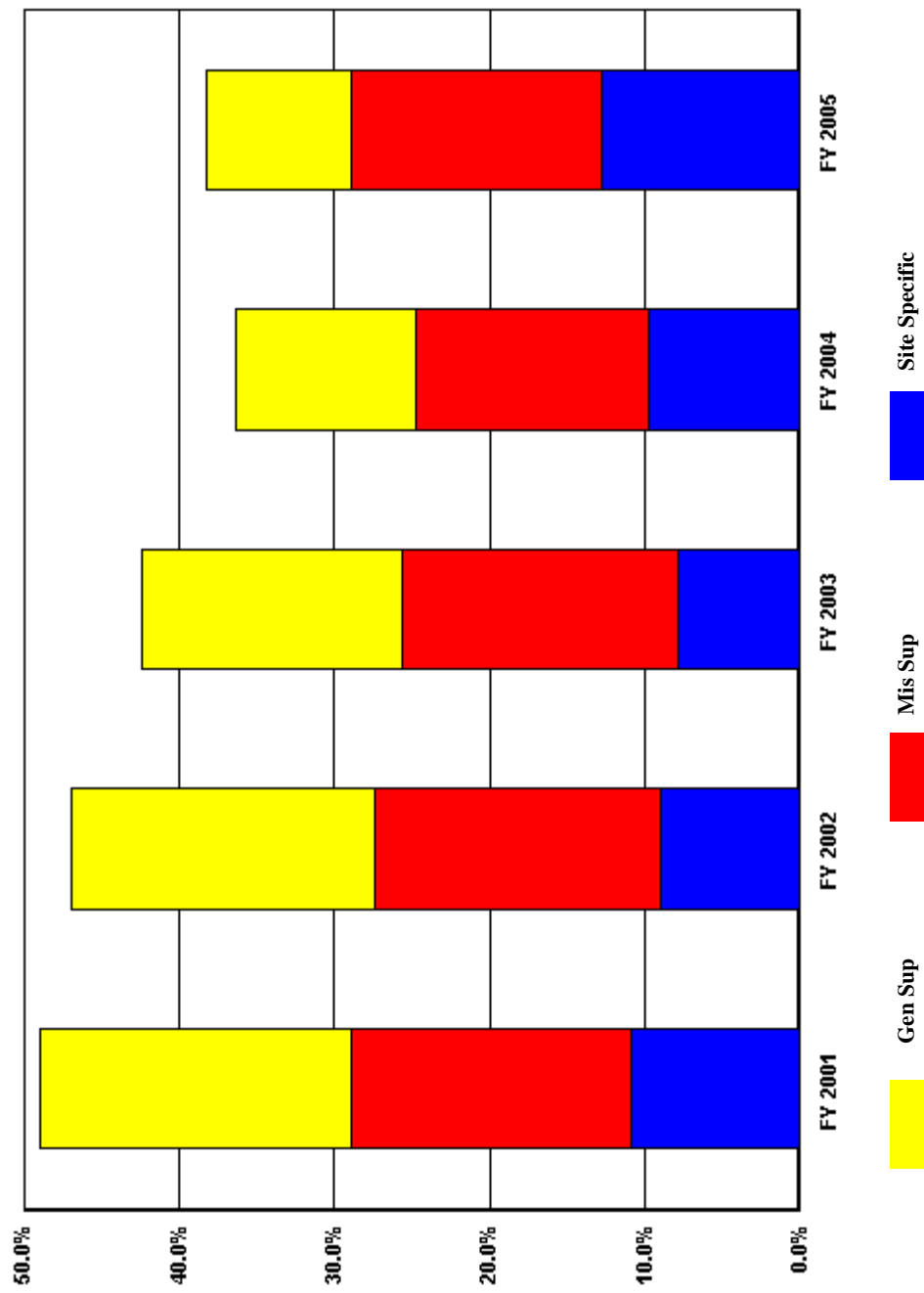
**US Department of Energy  
Total Functional Support as a % of Total Costs  
WIPP/Westinghouse**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>49.0%</b>	<b>47.0%</b>	<b>42.3%</b>	<b>36.3%</b>	<b>38.2%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
WIPP/Westinghouse**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	20.1%	19.6%	16.7%	11.5%	9.3%
Mis Sup	18.1%	18.4%	17.8%	15.1%	16.1%
Site Specific	10.8%	9.0%	7.8%	9.7%	12.8%

---

**SITE PROFILE**  
**WIPP/Westinghouse**

---

**SITE OVERVIEW AND CHARACTERISTIC**

The Waste Isolation Pilot Plant, or WIPP, is the world's first underground repository licensed to safely and permanently dispose of transuranic radioactive waste left from the research and production of nuclear weapons. After more than 20 years of scientific study, public input, and regulatory struggles, WIPP began operations on March 26, 1999.

Located in the remote Chihuahuan Desert of Southeastern New Mexico, project facilities include disposal rooms mined 2,150 feet underground in a 2,000-foot thick salt formation that has been stable for more than 200 million years. Transuranic waste is currently stored at sites nationwide. From these sites waste is transported in NRC approved containers to the WIPP sites where it is unloaded, processed and disposed of in the mine.

Washington TRU Solutions, as the M&O contractor, is responsible for operations at the Waste Isolation Pilot Plant (WIPP) and for integration, characterization, and disposal of legacy defense transuranic (TRU) waste for the National TRU Waste Program. WTS participates in a coordinated approach to waste retrieval, characterization, transportation, and disposal activities at the associated generator sites throughout the Department of Energy (DOE) complex. WTS employs the Central Characterization Project (CCP) throughout the complex to assist in the efficient characterization, certification, and transportation of legacy TRU to WIPP.

At the end of Fiscal Year 2005, WIPP has been in operation for 6 ½ years since March 1999. Nearly 4000 shipments have been received with 31,726 m<sup>3</sup> or 70,651 containers of TRU waste emplaced in the facility. More than 4 million miles have been traveled safely transporting waste throughout the United States. Twelve DOE sites have been cleaned up of legacy TRU waste.

WTS recognizes that there are objectives associated with the DOE vision that will be considered in the management, integration, and operation of WIPP and in conducting legacy defense TRU waste activities. These objectives are:

- (i) Safety and Environmental Management Excellence — Protection of the employees, the public and the environment;
- (ii) Operational Efficiencies — Pursue efficiencies in waste retrieval, characterization, transportation and disposal;
- (iii) Support to Small Quantity Sites (SQS) — Support the removal and disposal of TRU waste from each SQS;

---

**SITE PROFILE**  
**WIPP/Westinghouse**

---

- (iv) Standardization Efficiencies — Develop a standardized and certified characterization approach;

Through these objectives, the WTS contract goal is to ship and dispose of 70% or 54,300 m3 of the legacy TRU waste in the DOE complex by 2010.

Trends:

WTS total costs for FY05 in support of the above mission were \$154M. WTS spent 61.8% or \$95.1M in mission-direct activities. Mission-support activities represented 16.11% or \$24.8M. An increase in mission support activities percentage from FY04 is due to higher safeguards and security costs as WIPP began classified waste disposal and due to increased maintenance and utility costs as waste disposal throughputs increased. WTS continued to reduce General Support costs which represented 9.32% or \$14.35M. Site Specific Support represented the remaining 12.76% or \$19.6M which increased due to a change to an incentive based contract which rewarded increased throughput. Therefore, total support costs were 38.2% of the total costs.

Cost Savings Initiatives:

Cost savings have resulted from WTS aggressively reducing administrative support costs which resulted in 2.2% or \$2.7M reduction in general support costs.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**COST SAVINGS INITIATIVES**

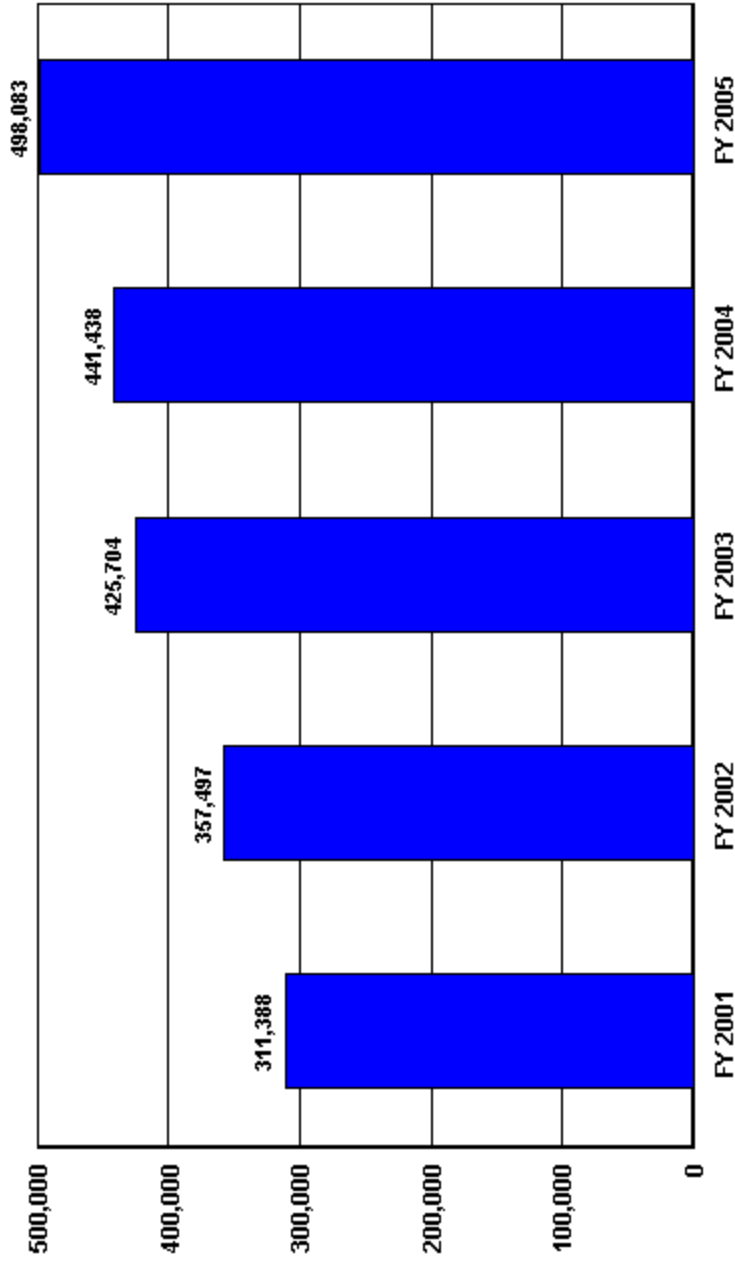
(\$ in 000's)

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

**Trends in Total Support Cost by Functional Categories**  
**Y-12/BWXT (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	612,775	639,618	725,690	739,880	823,985	211,210	34.5%
<b>Capital Construction</b>	9,945	22,194	83,199	75,863	97,529	87,584	880.7%
<b>Total Costs Less Construction</b>	602,830	617,424	642,491	664,017	726,456	123,626	20.5%
<b>Total Support Costs</b>	311,388	357,497	425,704	441,438	498,083	186,695	60.0%
<b>Mission Direct Operation</b>	291,442	259,927	216,787	222,579	228,373	-63,069	-21.6%
<b>Mission Direct Operation as % of Total Cost</b>	47.6%	40.6%	29.9%	30.1%	27.7%		
<b>Capital Construction as % of Total Cost</b>	1.6%	3.5%	11.5%	10.3%	11.8%		
<b>Total Support Cost as % of Total Cost</b>	50.8%	55.9%	58.7%	59.7%	60.4%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	50.8%	55.9%	58.7%	59.7%	60.4%		
<b>TOTAL SUPPORT COST</b>	311,388	357,497	425,704	441,438	498,083	186,695	60.0%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	11.9%	12.0%	12.4%	13.1%	15.2%		
<b>TOTAL GENERAL SUPPORT</b>	72,655	76,904	89,909	96,766	125,423	52,768	72.6%
EXECUTIVE DIRECTION	4,636	1,950	2,424	2,437	6,493	1,857	40.1%
HUMAN RESOURCES	6,784	5,772	13,503	16,787	23,907	17,123	252.4%
CFO	10,152	9,530	9,704	9,543	9,331	-821	-8.1%
PROCUREMENT	3,146	3,524	4,550	5,613	7,428	4,282	136.1%
LEGAL	1,982	2,489	3,393	2,901	3,801	1,819	91.8%
CENTRAL ADMIN SERVICES	7,299	8,724	12,661	12,977	11,581	4,282	58.7%
PROGRAM/PROJECT CONTROL	5,996	12,389	16,538	19,657	21,265	15,269	254.7%
INFORMATION OUTREACH	1,461	1,717	2,223	2,463	3,447	1,986	135.9%
INFORMATION SERVICES	29,092	28,747	23,727	24,752	37,005	7,913	27.2%
OTHER	2,107	2,062	1,186	-364	1,165	-942	-44.7%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	36.1%	40.1%	42.3%	43.2%	40.8%		
<b>TOTAL MISSION SUPPORT</b>	221,164	256,386	307,095	319,970	335,843	114,679	51.9%
ENVIRONMENTAL	8,547	6,072	8,381	7,191	9,743	1,196	14.0%
SAFETY AND HEALTH	42,543	43,139	49,487	52,232	44,860	2,317	5.4%
FACILITIES MANAGEMENT	6,140	8,759	14,367	16,963	20,970	14,830	241.5%
MAINTENANCE	49,797	62,211	85,061	83,915	82,168	32,371	65.0%
UTILITIES	38,129	39,654	40,321	41,918	41,981	3,852	10.1%
SAFEGUARDS AND SECURITY	48,981	64,945	75,049	85,050	98,509	49,528	101.1%
LOGISTICS SUPPORT	3,064	4,211	7,340	5,562	7,266	4,202	137.1%
QUALITY ASSURANCE	10,263	14,040	12,334	12,227	11,195	932	9.1%
LABORATORY/TECHNICAL SUPPORT	13,700	13,355	14,755	14,912	19,151	5,451	39.8%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	2.9%	3.8%	4.0%	3.3%	4.5%		
<b>TOTAL SITE SPECIFIC</b>	17,569	24,207	28,700	24,702	36,817	19,248	109.6%
MANAGEMENT/INCENTIVE FEE	16,346	18,102	24,000	20,691	29,450	13,104	80.2%
TAXES	1,223	4,690	2,069	10	2,263	1,040	85.0%
LDRD / PDRD / SDRD	0	1,415	2,631	4,001	5,104	5,104	100.0%

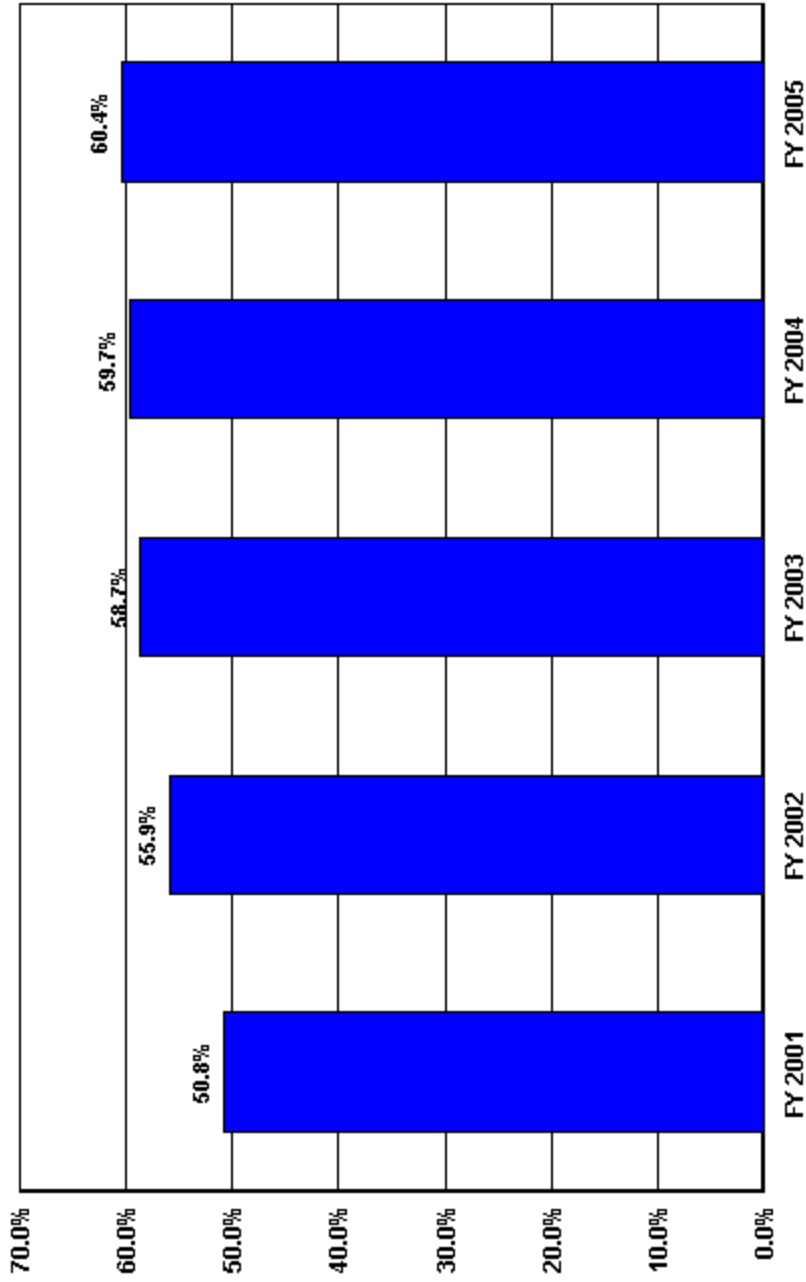
US Department of Energy  
 Total Functional Support  
 Y-12/BWXT



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	311,388	357,497	425,704	441,438	498,083

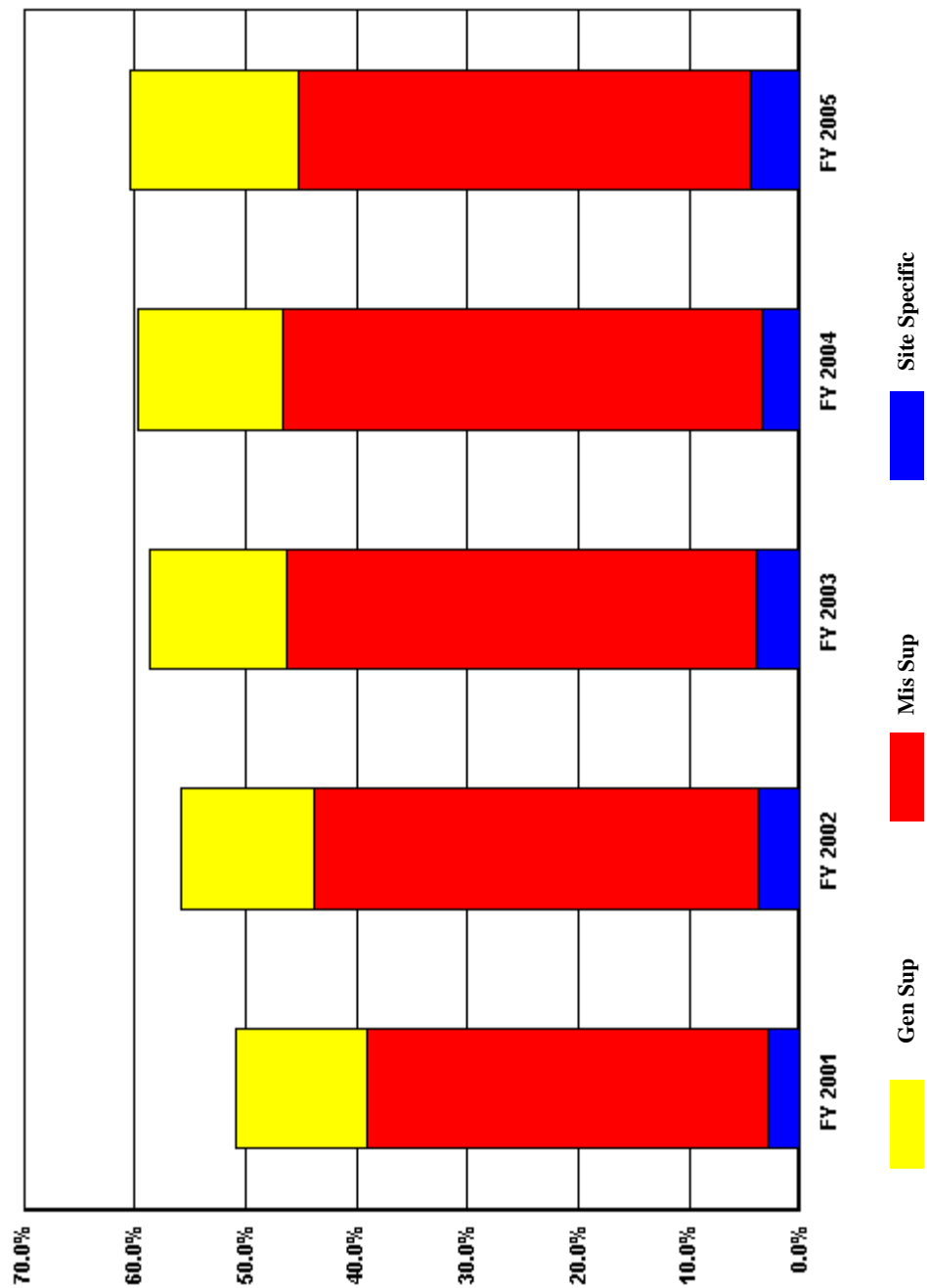
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Y-12/BWXT**



■ Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>50.8%</b>	<b>55.9%</b>	<b>58.7%</b>	<b>59.7%</b>	<b>60.4%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
Y-12/BWXT**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	11.9%	12.0%	12.4%	13.1%	15.2%
Mis Sup	36.1%	42.3%	43.2%	40.8%	40.8%
Site Specific	2.9%	3.8%	3.3%	3.3%	4.5%



---

## 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 2004 to FY 2005 shows a slight increase in the value of functional costs as percent of total costs from 59.7% to 60.4%. 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 decreased to 58.8%. The following is an analysis of change in support costs from the prior year.

In looking at raw data, the functional cost at the Y-12 plant has increased by approximately \$186.7 million since 2001. After factoring escalation into the equation, the 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 more significant of these changes are:

- Fiscal Years 2001 through 2005 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

---

## SITE PROFILE Y-12/BWXT

---

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 by approximately \$50 million from FY 2001 to FY 2005 or approximately 27% of the total increase.

- Consistent with the NNSA overall goals, efforts are underway at Y-12 to stabilize the deferred maintenance backlog. 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 have grown by approximately \$47 million or approximately 25% of the total increase.
- The \$17.1 million increase, or approximately 9% of the total increases, in Human Resources is primarily associated with the cost incurred to support the disposition of legacy workers compensation claims as well as the actual claim payments.
- 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

### DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

#### EXECUTIVE DIRECTION

#### HUMAN RESOURCES

The \$7,100,000 increase in Human Resources is primarily associated with the costs incurred to support the disposition of legacy workers' compensation claims as well as the actual claim payments.

#### LEGAL

Significant increase in Legal attributable to supporting the disposition of legacy workers' compensation claims.

#### INFORMATION SERVICES

Significant increase in Information Services associated with upgrades to the Wide Area Radio System. The upgrades were regulatory driven.

**SITE PROFILE  
Y-12/BWXT**

**OTHER**

FY 2005 costs for Other were consistent with FY 2003. However, an adjustment was required in FY 2004 and this category showed a negative cost in FY 2004.

**MANAGEMENT/INCENTIVE FEE**

The increase in fee is directly proportionate to the increase in total costs.

**TAXES**

The increase in Taxes is attributable to Total Sales and Use Taxes paid in FY 2005. These costs were incurred as a part of material costs.

**CAPITAL CONSTRUCTION**

The significant increase in Capital Construction was driven by external events, evolving requirements and ongoing efforts to provide a modern, recapitalized and efficient operation at Y-12. Over the last 4 years, the Capital Construction program has increased almost fivefold as part of the Y-12 modernization efforts.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Reduction of Protected Area Vehicle Traffic	671	A Six Sigma Black Belt PIP was executed to reduce the number of vehicle entries into the Protected Area by 50% to meet a business imperative. A ticket process was implemented with an assigned numbers of tickets allocated to each division. The reduction in entries also served to reduce the amount of non-productive time people spend waiting in line for access.	
Enhanced Work Planning @ Work Mgmt Centers	234	A Six Sigma Black Belt PIP was executed to improve the initial quality of maintenance work packages and to reduce rework on packages processed by the Work Management Center. The goal was to increase the first time success rate from 60% to 85%. Improvements included improved scope planning, standardization in packages, and relocation of critical supplies.	

**SITE PROFILE  
Y-12/BWXT**

AJHA Cycle Time Reduction -Maintenance/Operation	561	A Six Sigma Black Belt PIP was executed to reduce the cycle time required to issue Maintenance/Operations AJHA's for improved responsiveness. A goal was set to reduce cycle time to five business days from a current median of 9 business days. Trends show an increase in number of completed AJHA's concurrent with a decrease in cycle time.	
Increase Efficiency of Kathabar Systems in 1 Area	281	A Six Sigma Black Belt PIP was executed to improve the efficiency of Kathabars in a Production Area. The project targeted reduction of downtime as a means to increase equipment availability for planned increases in production needs. Improvements established a schedule and criteria for refurbishment of the Kathabars and a plan for scheduled maintenance.	
Graphite Part Manufacturing Reject Reduction	145	A Six Sigma Black Belt PIP was executed to reduce the number of rejected graphite parts obtained from Dimensional Inspection. A goal was established to reduce the number of defects per unit (DPUs) by approximately 50% from the original defect rate of 0.57 DPUs. Implementation of recommendations included modification to an inspection process and an improved process for design to fabrication to inspection communications. Results are projected to reduce the number of defects by approximately 65%.	
AJHA Cycle Time Reduction - Construction	211	A Six Sigma Black Belt PIP was executed to reduce the cycle time required to issue an AJHA for construction/project activities. A goal was set to reduce cycle time to 15 business days from the original average of 52 business days. Initial trends show a significant reduction in cycle time.	

**SITE PROFILE  
Y-12/BWXT**

Reduce Cycle Time for Processing AIS Plans	0	A Six Sigma Black Belt PIP was executed to reduce the cycle time for processing AIS Plans for site level computing projects. Since there was no hard data, this was a Business Imperative PIP to establish a data collection/tracking system and establish a process for pre-planning AIS projects that contributes to timely completion of the plans.	
Packing and Ship Process-Lab Sample	247	A Six Sigma Black Belt PIP was executed to reduce the cycle time of the laboratory sample process by 65% to meet schedule requirements and without increasing required storage space. The primary change involved obtaining authorization to utilize alternate analysis methods to eliminate a single point failure in the process and to reduce cycle time.	
Packing and Ship Process: Production	419	A Six Sigma Black Belt PIP was executed to improve material flow through a process area. The goal was established to reduce the number of material moves to storage areas by 60%. The major change involved moving the laboratory sample collection point upstream to another facility and implementing lean work techniques. The resultant process permitted the targeted reduction in storage movements.	
Reducing Alpha-5E Maintenance Cycle Time	40	A Six Sigma Black Belt PIP was executed to improve the quality and efficiency of creating maintenance work packages created for the 9201-5E machine shop. The goal was to maintain an average of 2.5 grinders available at any given time. Improvements included integrating into the planning through the appropriate Work Management Center, and creating a critical applications items list and stocking them in a West End Stores.	

**SITE PROFILE  
Y-12/BWXT**

Reduction of Technical Procedure Review Time	11	A Six Sigma Black Belt PIP was executed to reduce the amount of time necessary to review technical procedures. This improvement will improve the overall efficiency of manufacturing at Y-12. The goal was to reduce the median number of review days from 17 to 10. Suggested improvements included: creating accountability for reviewers to complete their reviews in the requested time frame; using smaller review teams to eliminate unnecessary comment resolution; suggesting coordinated technical reviews for all new and revised PMRs.	
QE Glovebox Down- Time Reduction	11	A Six Sigma Black Belt PIP was executed to increase the average % equipment availability time for the QE Glovebox (DB-402) to 80%. Major changes to the process include: 1) development and implementation of model work packages, 2) identification and purchase of critical spare parts, 3) preventative maintenance enhancements, 4) upgrades to the lathe power supplies, and 5) installation of scroll pumps for purifiers. The expected primary results are increased optimization of equipment availability to meet critical production milestones.	
Cycle Time Reduction of EEOICPA Office Records	68	A Six Sigma Black Belt PIP was executed to improve the record processing cycle time for the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) office (EO) and five different supporting record centers. Major changes to the process included prioritizing EEOICPA requests, updating the database program, and establishing an EEOICPA database users group. The expectation is to provide responsive, timely processing of requests for records.	

**SITE PROFILE  
Y-12/BWXT**

Reduce Construction Cost	1,631	A Six Sigma Black Belt PIP was executed to reduce construction costs incurred during installation of capital equipment. Improvements identified included measures to improve timely and accurate communication of construction requirements, appropriate development of required construction documentation, and reduction in the number of field changes. Changes implemented were applied to all construction projects as well as capital equipment projects.	
Reduce Maintenance Cost	272	A Six Sigma Black Belt PIP was executed to reduce maintenance costs incurred during installation of capital equipment. Improvements identified included measures to improve timely communication of maintenance requirements, improved quality of information in maintenance requests, and appropriate use of maintenance request systems.	
Increase throughput for CMMs	1,150	A Six Sigma Black Belt PIP was executed to increase the throughput to Coordinate Measurement Machines in a production area to reduce the number of required machines needed for projected production schedules. Improvements included implementation of lean manufacturing controls for continuous throughput. Results of the project indicate that one less CMM will be required than was originally planned.	
Reduce Procurement Cycle Time	53	A Six Sigma Black Belt PIP was executed to reduce the number of procured items not meeting technical specification from entering into the Y-12 Site. A goal was established of no more than 10 items per month not meeting technical specifications from an average of 39 per month. This reduction of introduced inappropriate vendor materials into the Y-12 Site allows for decrease of re-work in the activity of having to repackage material and re-ship back to vendor.	

**SITE PROFILE  
Y-12/BWXT**

Improve HRP Candidate processing	117	A Six Sigma Black Belt PIP was executed to improve the process for HRP Candidate process. The expected primary results are reducing trips to Occupation Health Services by 50% and the time from one month to one day by performing analysis in house. It is also expected that there will be a reduced processing time for the distribution and return of the polygraph letter and reduced number of physicals required for HRP Candidates by 50%.	
HIMS Cycle Time Reduction	4	A Six Sigma Black Belt PIP was executed to improve subcontractor reporting on the use/storage of hazardous materials at the BWXT Y-12 National Security Complex. Based on the baseline of less than 10% of subcontractors reporting, the goal of the PIP was to increase subcontractor reporting to near 100% while reducing the required time for HMIS personnel to track down the information by at least 50%. Feedback from HMIS personnel indicate that significant improvement in subcontractor reporting has been obtained and time required to track down information has been reduced by approximately 50%.	
Reduce backlog for combination changes	0	A Six Sigma Black Belt PIP was executed to reduce the backlog for combination changes for classified repositories. The expected results include the reduction of the backlog to a specified target and closures targets for each different type of classified combination. It is also expected that the backlog will be monitored and maintained at or below the expected limits. The execution of the associated actions allowed for the closure of a finding.	



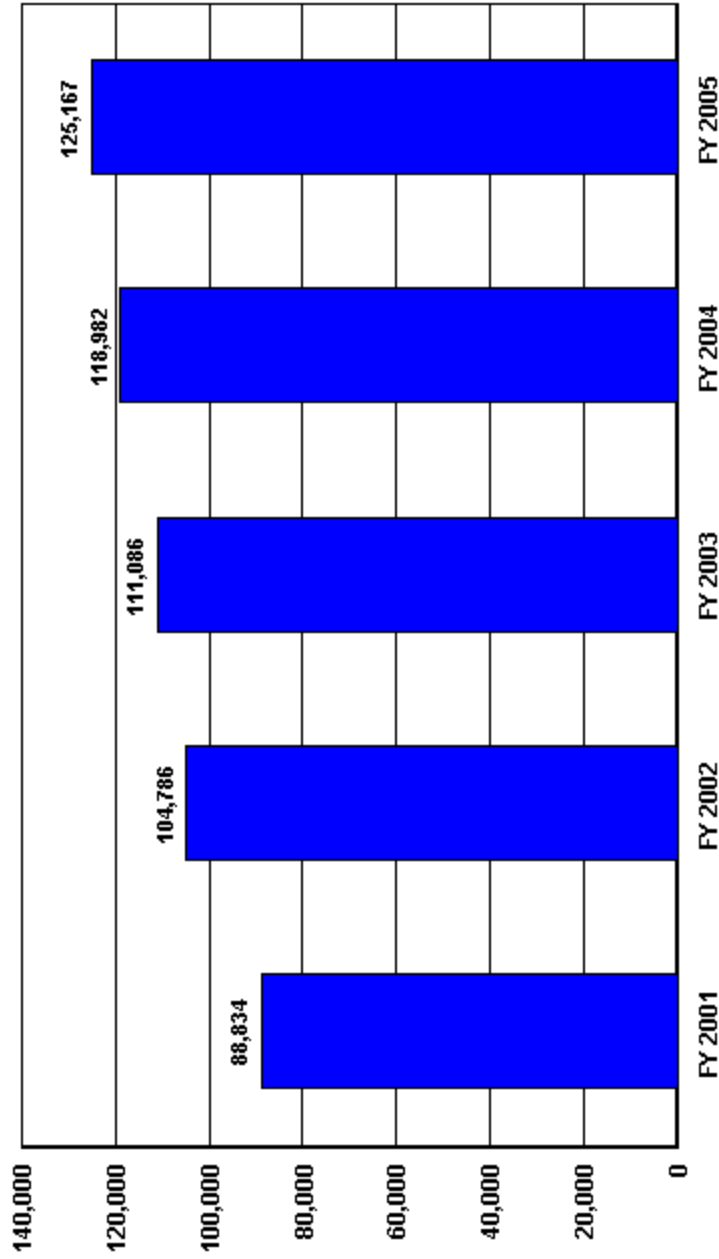
**SITE PROFILE  
Y-12/BWXT**

Improving the LEU Production Process	37	A Black Belt PIP was executed to improve the Low Enriched Uranium (LEU) production process by removing the non-value step of break and shear as well as the handling associated with these steps. The target of the project was to reduce the cost of LEU production overall by 10%. The major improvement suggested was the design of a new mold which would cast small shapes which would not require break and shear. The customer also realizes the additional benefit of less oxide creation during their subsequent processing.	
Engineering Cost Reduction	2,000	A Black Belt PIP was initiated to reduce the Engineering Costs associated with Stockpile Readiness & Campaigns (SRC) projects by a minimum of 15% (Engineering cost). Improvements identified by the team included limiting A/E oversight support to an average of 15% per project., establishing a set level of deliverables for 60% review status, Improving the subcontractor feedback program to ensure expectations are adequately communicated, and limiting as-constructed drawings to only those projects that require them for Configuration Management (CM). The results of the PIP will be a more cost effective way to execute SRC Capital Equipment Projects which will result in cost savings to the customer.	

**Trends in Total Support Cost by Functional Categories**  
**Yucca Mountain/Bechtel-SAIC (\$000)**  
**FY 2005**

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	\$ Change 2001 To FY 2005	% Change 2001 To FY 2005
<b>Total Costs</b>	208,091	220,588	238,599	283,928	266,446	58,355	28.0%
<b>Capital Construction</b>	861	2,800	2,015	2,022	162	-699	-81.2%
<b>Total Costs Less Construction</b>	207,230	217,788	236,584	281,906	266,284	59,054	28.5%
<b>Total Support Costs</b>	88,834	104,786	111,086	118,982	125,167	36,333	40.9%
<b>Mission Direct Operation</b>	118,396	113,002	125,498	162,924	141,117	22,721	19.2%
<b>Mission Direct Operation as % of Total Cost</b>	56.9%	51.2%	52.6%	57.4%	53.0%		
<b>Capital Construction as % of Total Cost</b>	0.4%	1.3%	0.8%	0.7%	0.1%		
<b>Total Support Cost as % of Total Cost</b>	42.7%	47.5%	46.6%	41.9%	47.0%		
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	42.7%	47.5%	46.6%	41.9%	47.0%		
<b>TOTAL SUPPORT COST</b>	88,834	104,786	111,086	118,982	125,167	36,333	40.9%
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	22.9%	22.9%	25.3%	22.3%	22.7%		
<b>TOTAL GENERAL SUPPORT</b>	47,706	50,581	60,271	63,290	60,550	12,844	26.9%
EXECUTIVE DIRECTION	2,440	2,963	5,241	7,069	7,000	4,560	186.9%
HUMAN RESOURCES	4,494	5,105	6,549	5,784	5,374	880	19.6%
CFO	3,392	3,619	3,102	3,138	2,895	-497	-14.7%
PROCUREMENT	2,305	2,515	2,715	2,789	2,698	393	17.0%
LEGAL	192	248	361	1,592	6,411	6,219	3,239.1%
CENTRAL ADMIN SERVICES	7,976	11,866	10,859	12,445	9,926	1,950	24.4%
PROGRAM/PROJECT CONTROL	4,818	6,016	5,741	5,284	3,986	-832	-17.3%
INFORMATION OUTREACH	2,181	3,788	2,442	3,586	3,178	997	45.7%
INFORMATION SERVICES	11,453	14,841	21,146	20,651	16,738	5,285	46.1%
OTHER	8,455	-380	2,115	952	2,344	-6,111	-72.3%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	12.5%	13.0%	14.6%	13.5%	14.7%		
<b>TOTAL MISSION SUPPORT</b>	25,931	28,642	34,894	38,444	39,267	13,336	51.4%
ENVIRONMENTAL	4,738	4,769	3,697	3,900	3,312	-1,426	-30.1%
SAFETY AND HEALTH	3,180	2,160	4,387	4,903	5,310	2,130	67.0%
FACILITIES MANAGEMENT	8,372	9,250	9,822	11,456	9,333	961	11.5%
MAINTENANCE	2,314	2,353	5,393	5,281	6,729	4,415	190.8%
UTILITIES	17	407	399	690	697	680	4,000.0%
SAFEGUARDS AND SECURITY	217	689	1,375	694	2,172	1,955	900.9%
LOGISTICS SUPPORT	2,451	2,525	1,991	2,210	2,803	352	14.4%
QUALITY ASSURANCE	4,642	6,489	7,830	9,310	8,911	4,269	92.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	7.3%	11.6%	6.7%	6.1%	9.5%		
<b>TOTAL SITE SPECIFIC</b>	15,197	25,563	15,921	17,248	25,350	10,153	66.8%
MANAGEMENT/INCENTIVE FEE	15,068	25,381	15,681	17,102	25,248	10,180	67.6%
TAXES	129	182	240	146	102	-27	-20.9%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

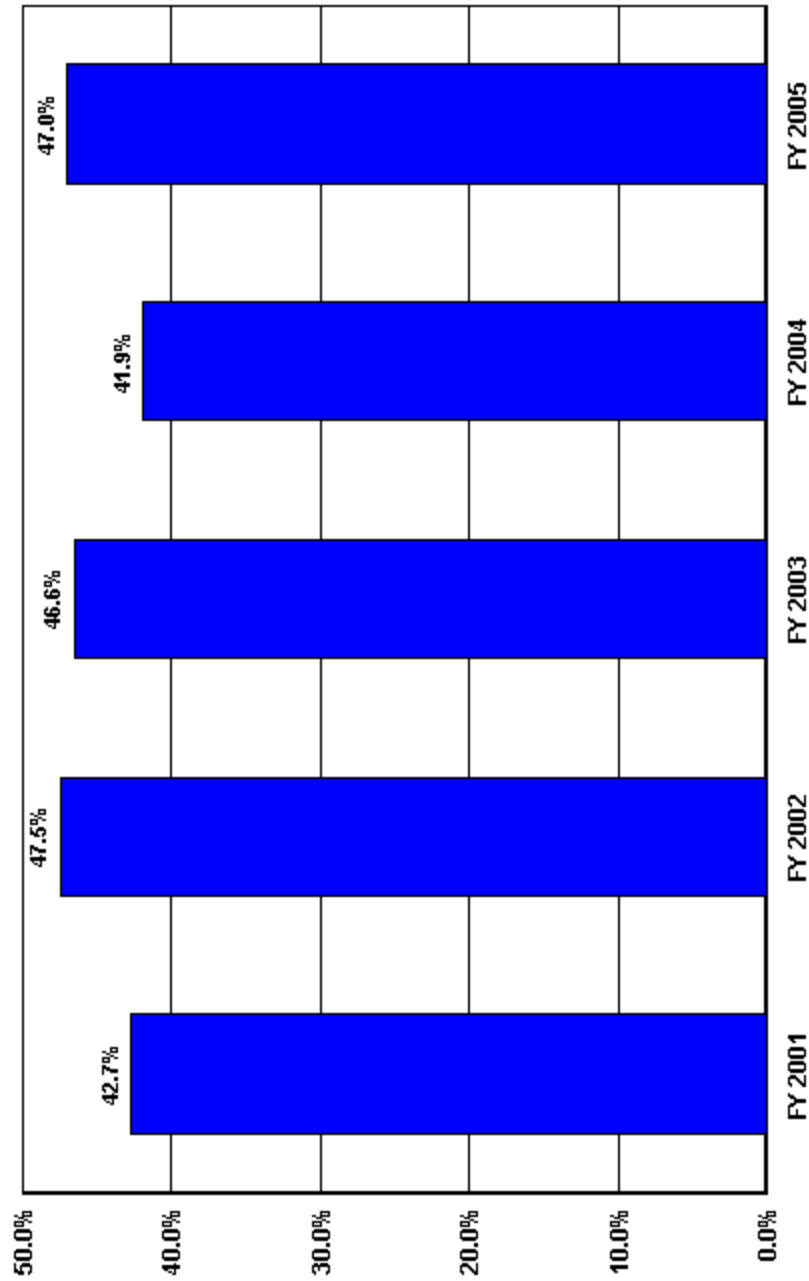
US Department of Energy  
 Total Functional Support  
 Yucca Mountain/Bechtel-SAIC



Total Functional Support (\$ in 000's)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Functional Support	88,834	104,786	111,086	118,982	125,167

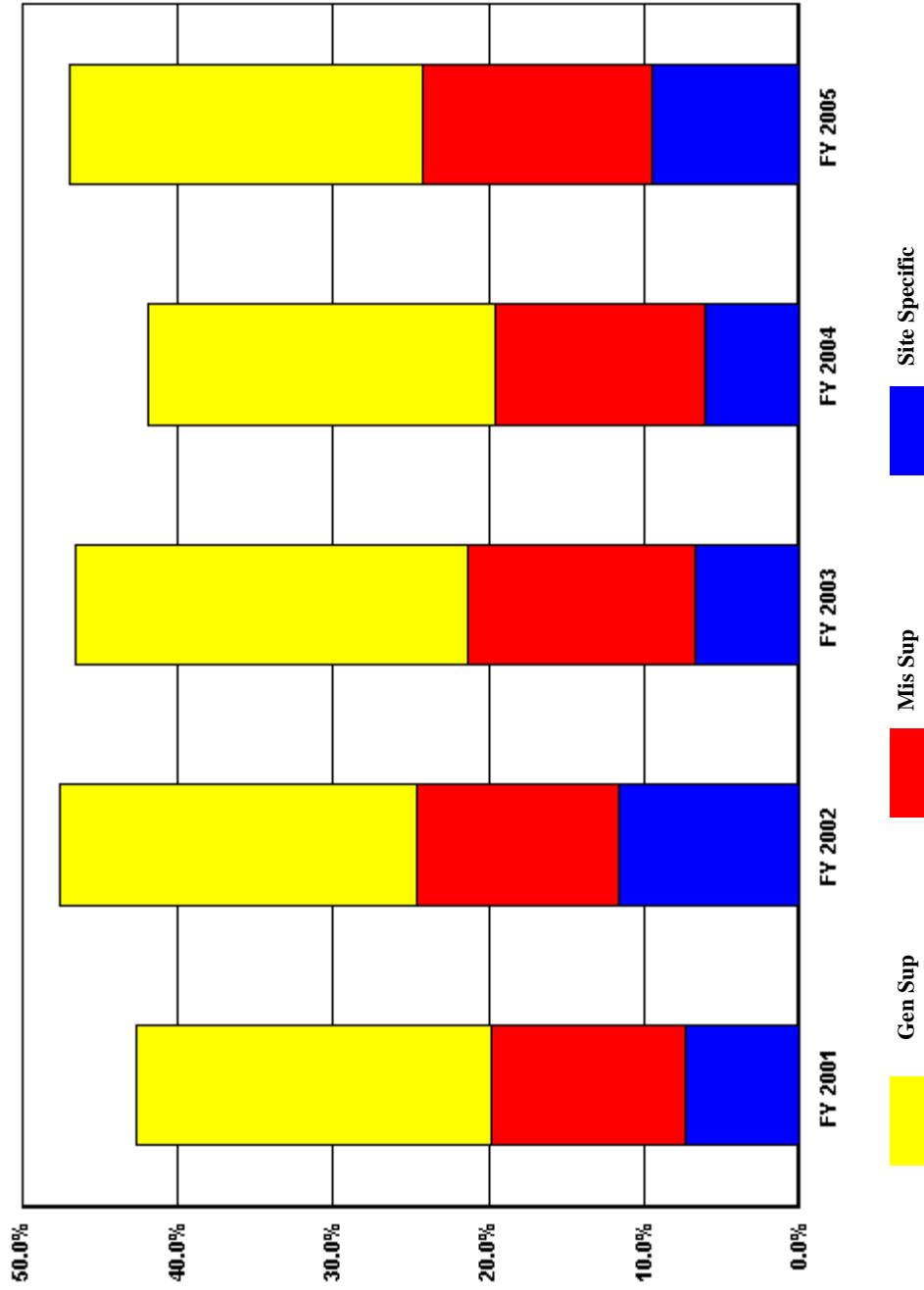
**US Department of Energy  
Total Functional Support as a % of Total Costs  
Yucca Mountain/Bechtel-SAIC**



 Total Functional Support

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
<b>Total Functional Support</b>	<b>42.7%</b>	<b>47.5%</b>	<b>46.6%</b>	<b>41.9%</b>	<b>47.0%</b>

**US Department of Energy  
Percent of Support Category to Total Costs  
Yucca Mountain/Bechtel-SAIC**



	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gen Sup	22.9%	22.9%	25.3%	22.3%	22.7%
Mis Sup	12.5%	13.0%	14.6%	13.5%	14.7%
Site Specific	7.3%	11.6%	6.7%	6.1%	9.5%

---

**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

---

**SITE OVERVIEW AND CHARACTERISTIC**

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, FY2004, and FY2005, 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 comprised 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 not to be based upon and consistent with the findings and recommendation of the National Academy of Sciences. Consequently, the EPA is revising the Yucca Mountain standard to extend the compliance period to cover the time of peak dose, the point in the future when an individual would be at the highest risk from radiation from waste disposed of at Yucca Mountain. The proposed standards retain the protections for the first 10,000 years and add new protections out to 1 million years. EPA's proposed changes were issued in the Federal Register on August 22, 2005 (70 FR 49014). EPA is accepting public comments on the approach until November 21, 2005, and will consider the comments in developing the final revised standards.

DOE is reviewing potential changes to its licensing case based on the draft language in the EPA standards and will make the necessary adjustments once the standard is finalized. DOE has put a temporary hold on finalizing its license application until the potential changes to the design, finalization of the EPA standard, and other issues are addressed.

On October 25, 2005, DOE announced its plan to operate the repository as a primarily non-contaminated facility. The change in direction in design means that spent nuclear fuel would be sent to the repository in a standardized canister that would not require repetitive handling of fuel prior to disposal. As a result of this change in direction, the Department directed BSC to stop work associated with activities that support primarily bare fuel handling at the repository, other than that

---

## SITE PROFILE

### Yucca Mountain/Bechtel-SAIC

---

required for limited bare fuel and off-normal operations. BSC was directed to develop a critical decision package that would reflect the new design direction. The preliminary report is due 30 days from the date of the letter, and the overall revised CD-1 package within 90 days.

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. Scientific studies continue at Yucca Mountain. Internationally recognized experts in the fields of volcanology, geophysics, and geochemistry are evaluating the likelihood of future volcanic activity in the area. Data gathered through aeromagnetic surveying, drilling, and geochemical analyses are being analyzed to reassess the probability of a volcanic event occurring at Yucca Mountain.

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 the OCRWM Web site: [ocrwm.doe.gov](http://ocrwm.doe.gov)

---

**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

---

**Analysis of Change in Support Costs from Prior Fiscal Year**

Between FY 2002 and FY 2003, the focus of the Yucca Mountain Project shifted considerably. Science activities continue, but when Congress and President George W. Bush legally designated Yucca Mountain as an appropriate site, DOE was authorized to prepare and submit a License Application to the NRC. The legal designation ended the formal site characterization period and shifted the focus during FY 2003 and FY2004 to design and licensing activities. During FY2004 and FY2005, OCRWM and BSC have focused on repository design and licensing activities.

**Major Cost Drivers that May Cause Our Costs to Appear Out of Line with Similar Sites**

In 1987, Congress amended the Nuclear Waste Policy Act and directed DOE to study only Yucca Mountain. As a result, Yucca Mountain's activities are unique within the Department's complex. Moreover, annual funding for the Yucca Mountain Project has historically been unpredictable, which has impacted schedules and milestones. The OCRWM and ORD managers frequently have had to change focus and shift gears to respond to the limitations imposed by ongoing funding constraints. For example, as a result of funding reductions, a RIF was implemented in FY 2005 which reduced the work force by approximately 450 employees.

**Other**

Details of costs included in the FY 2004 Other category consists of:

Severance Pay (\$93K), All-Hands Meetings (\$915K) and Prior Year Subcontractor Closeout Cost (-\$56K).

Details of costs included in the FY 2005 Other category consists of:

Severance Pay (\$2,166K), All-Hands Meetings (\$408K) and Prior Year Subcontractor Closeout Cost (-\$230K).

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

The decrease in Human Resources reflects a decrease in labor due to a reduction in force (RIF), along with reduced subcontract support and materials purchases.

**CFO**

The decrease in Chief Financial Officer results from a reduced labor force due to a RIF and from curtailed spending for travel and professional training.



---

**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

---

**LEGAL**

The increase is due to increased legal counsel in support of silicosis litigation defense.

**CENTRAL ADMIN SERVICES**

The decrease is the result of a RIF, which decreased support to activities such as records management, document control, and administrative and technical support

**PROGRAM/PROJECT CONTROL**

The decrease is due to a RIF and re-categorizing the Earned Value Management System process from Project Controls to Civilian and Radioactive Waste.

**INFORMATION OUTREACH**

The decrease in Information/Outreach Activities comes from a RIF that affected support activities such as site tours, educational programs, and public exhibits.

**INFORMATION SERVICES**

The decrease in Information Services resulted from budget reductions which affected staffing and use of staff augmentation support services.

**OTHER**

The increase is primarily due to severance paid in connection with a RIF

**ENVIRONMENTAL**

The decrease in Environmental is due to budget reductions and a RIF resulting in a reduced labor force.

**SAFETY AND HEALTH**

The increase in the Safety and Health category reflects increased oversight and compliance activities in support of site safety upgrades.

**FACILITIES MANAGEMENT**

The decrease in Facility Management is due to the re-negotiation of the Summerlin facilities lease rate, resulting in less cost over the life of the lease. In addition, there were no new renovations or major furniture acquisitions in FY 2005.

**MAINTENANCE**

The increase is due to increased corrective maintenance efforts in accordance with DOE direction to begin resolving deficiency backlog items.

**SAFEGUARDS AND SECURITY**

The increase results from new work scope for physical security and safeguards associated with the Transportation project and an overall heightened awareness at BSC facilities.

---

**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

---

**LOGISTICS SUPPORT**

The increase results from re-classifying Government Services Administration (GSA) fleet as part of Logistics Support.

**MANAGEMENT/INCENTIVE FEE**

The increase is based on a renegotiated contract and change in fee structure

**TAXES**

The decrease is primarily due to decreased sales and use taxes resulting from decreased procurements along with timing differences of tax remittances between fiscal and calendar years

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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

**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

<p>Mechanical Handling Design Process</p>	<p>1,416</p>	<p>A Six Sigma Process Improvement Plan (PIP) was recently implemented that streamlined the Mechanical Handling design process which is part of the Mission Direct, Civilian and Radioactive Waste (RW) activities. For example, development of the schedule logic for inputs to the Plant Design model identified potential redundancies in the inputs from Mechanical Handling. Mechanical Handling was producing multiple process defining documents, i.e., Block Flow Diagrams (BFD) and Mechanical Flow Diagrams (MFD). Also, with two different documents being produced presenting the same information in different formats, the potential existed for discrepancies between the two documents.</p> <p>The PIP eliminated the redundancy of these inputs to the Plan Design Model.</p> <p>As a result, the quantity of documents was reduced by consolidating the best features from both documents into the BFD, thus eliminating further work scheduled and budgeted for the MFD.</p> <p>Associated work hours removed from the budget by eliminating this redundant information resulted in a FY 2005 cost savings of \$1,416,276.</p>	<p>Karl Tobler</p>
-------------------------------------------	--------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------

**U.S. DEPARTMENT OF ENERGY  
FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY  
DEFINITIONS**

**A. General Terms**

1. **Support Cost**: Cost incurred by 28 of our major operating contractors in support of direct mission efforts. These costs do not have a single Departmental sponsor. Support cost includes General Support, Mission Support and Site Specific costs.

2. **Total Cost**: Includes Mission Direct, Construction and Support Costs and is equal to total program costs.

**B. General Support**: Represents cost categories which would exist regardless of the specific mission.

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 and 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 to 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 programs; stakeholder-related outreach; activities contributing to the development of the local/regional economy; 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:
  - 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). Includes pagers and related systems, but not the maintenance of these systems. Also includes computer leases. Does 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.

**C. Mission Support**: Represents cost categories that exist solely due to the unique mission being accomplished.

**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:

**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.)

**Auditing and Evaluation** - These audits are done as a routine mechanism to ensure 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.

**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; and 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; 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; but 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, and 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 the 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.

**D. Site Specific:** Represents cost categories not defined as general support, mission support or construction.

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. The PDRD and SDRD portions reflect costs incurred in accordance with the legislative authority for these activities.

**E. Mission Direct:** Represents costs not identified as support cost or construction. These are costs associated with directly accomplishing the mission.

**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.

## APPENDIX B

### U.S. DEPARTMENT OF ENERGY FY 2005 SUPPORT COST BY FUNCTIONAL ACTIVITY DATA

#### All 28 Submitting Sites & Contractors

Ames Laboratory/Iowa State University  
Argonne National Laboratory/University of Chicago  
Bettis Atomic Power Laboratory/Bechtel  
Brookhaven National Laboratory/Brookhaven Science Associates  
Fermi National Accelerator Laboratory/University Research Associates  
Hanford/Fluor Daniel, Bechtel & CH2M Hill  
Idaho National Lab/Bechtel BWXT Idaho, LLC  
Kansas City Plant/Honeywell, FM&T  
Knolls Atomic Power Laboratory/Lockheed Martin  
Lawrence Berkeley National Laboratory/University of California  
Lawrence Livermore National Laboratory/University of California  
Los Alamos National Laboratory/University of California  
National Renewable Energy Laboratory/Midwest Research Institute  
Nevada/Bechtel Nevada  
Oak Ridge National Laboratory/UT-Battelle, LLC  
Oak Ridge Environmental Management & Enrichment Facility/Bechtel Jacobs  
Pacific Northwest National Laboratory/Battelle 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  
West Valley/West Valley Nuclear Services  
WIPP/Westinghouse  
Y12/BWXT  
Yucca Mountain/Bechtel-SAIC

*This report and additional functional support cost details from the 28 contributing sites are available online at: <http://www.mbe.doe.gov/progliaison/scfa.htm>*