U.S. DEPARTMENT OF ENERGY
CONTRACT AND PROJECT MANAGEMENT
ROOT CAUSE ANALYSIS

CORRECTIVE ACTION PLAN

CORRECTIVE MEASURE 2

CONTRACT AND PROJECT MANAGEMENT

STAFFING STUDY

SUMMARY REPORT

JULY 2009

Executive Summary

In April 2008 the Department of Energy (DOE) published the *U.S. Department of Energy Contract and Project Management Root Cause Analysis,* and then subsequently published the *U.S. Department of Energy Contract and Project Management Root Cause Analysis Corrective Action Plan* in July 2008. The root cause analysis identified the most significant challenges impeding the improvement of DOE contract and project management. One of the most significant issues identified was that, in many cases, DOE did not have an adequate number of federal personnel with the appropriate skills to plan, direct and oversee project execution. A summary of the corrective measure addressing this issue is included in Appendix A.

As an integral part of the DOE Corrective Action Plan, the Department established a cross-functional team in March 2008 to specifically address the corrective measure dealing with an inadequate number of federal staff with the appropriate skills. The cross-functional team included representatives from the three major Departmental Program Offices (the National Nuclear Security Administration, the Office of Science, and the Office of Environmental Management) in addition to representatives from Headquarters program support organizations. The primary responsibilities of the team members included: establishing and issuing the staffing study data call; reviewing and evaluating the data responses; developing the staffing algorithm and model; and developing a preliminary list of resource alternatives.

Unlike other federal entities, the Department has never had an agency-wide staffing model, a tool to facilitate personnel staffing decisions in support of project execution oversight. Early on, it was recognized that a prudent course of action is to benchmark federal agencies and professional organizations that had staffing models, learn from those models, and, based on inherent differences, establish a DOE model to be used as a guide that would highlight personnel requirements in support of project oversight. While the results of the model would provide a point estimate, it was recognized that given numerous intangible factors (the quality of the staff, the cohesiveness of the project team, and more), the point estimate would serve as the center of a range (plus or minus 20 percent) of the ideal staffing requirements. This model would help identify personnel deficiencies early on, as well as serve as a tool in support of budget formulation.

The information contained within this document is a summary of the accomplishments to date resulting from the initiatives of the corrective measure team, including conducting an analysis of the federal staffing of current projects, evaluating the staffing approaches undertaken by other federal agencies, developing a workload-based staffing model, applying the model to current projects, estimating current staffing gaps, and identifying preliminary resource alternatives to address resource shortages.

In September 2008, the Department conducted an analysis of 92 DOE projects to determine the level of federal staffing associated with each project. The projects represented work within each of the three major Departmental Program Offices (the National Nuclear Security Administration, the Office of Science, and the Office of Environmental Management). The following project types were evaluated: capital asset line item construction, major item of equipment, decontamination and decommissioning, and environmental remediation. The analysis confirmed the Root Cause Analysis finding. In general, the level of federal staff overseeing DOE projects is small, particularly given the number of unique and complex projects within the Department's portfolio. The analysis also revealed that there is a lack of consistency among and within DOE Program Offices. Specifically, the level of federal staffing and the methodology used to determine project staffing levels differed throughout DOE.

The corrective measure team interviewed personnel and reviewed documentation from other federal agencies including: the Naval Facilities Engineering Command, the United States Army Corps of Engineers, and the General Services Administration Public Building Services. While each agency used a different federal staffing approach for its projects, there were some common characteristics. Despite different missions and executing work using different business models, the common elements included: project size, project type, project complexity, and project difficulty. These agencies each used these project-specific factors, along with other characteristics, to determine their required levels of federal staffing.

Based upon all the information collected from the Department and other federal agencies, the corrective measure team developed a DOE workload-based staffing model. The model incorporates several project characteristics. Collectively, these characteristics derive the recommended staffing levels for specific projects. These characteristics include: the project's annual value of work to be executed, the type of project, the complexity of the project, the manner in which the project is being executed, the project phase, the level of regulatory involvement, the degree of external influence, the uniqueness of the project, and the type of contract used to procure the project's goods and services. The DOE staffing model incorporates each of these characteristics to account for the range of projects executed by the Department.

The corrective measure team applied the model to the 92 DOE projects in the staffing study. Results indicate that the level of DOE federal staffing is low and that the unique nature and characteristics associated with DOE projects are not adequately addressed.

In addition, the team assembled an initial list of resource alternatives to consider when addressing the shortage in federal staff. The list of resource alternatives includes: delaying new project starts for which an adequate number of federal staff are not available; reallocating personnel within one Program Office; reallocating personnel among Program Offices; increasing federal staffing through increased DOE funding; funding federal staffing and oversight from the project budget (i.e., the U.S. Army Corps

of Engineers' Model); acquiring federal staffing resources from other federal agencies; transferring work to other federal agencies; augmenting federal staffing levels with support service contractors; and maintaining or increasing reliance on DOE site or field office's prime contractors. Each of the resource alternatives contains both positive and negative attributes. These alternatives are not mutually exclusive and more than one alternative is likely to be exercised to address federal personnel needs across Programs. Further evaluation of resource alternatives is required.

A critical component to evaluating the need for additional federal staff and the most appropriate resource alternative to implement includes establishing clear delineation and separation of roles and responsibilities to be performed by federal and contractor personnel. There are clearly some activities that cannot and should not be delegated to contractors such as approving critical decision documents that comprise the DOE acquisition management process. A more detailed analysis of the roles and responsibilities associated with contract and project management is ongoing. When complete, there should be a clear definition and breakdown of roles and responsibilities most appropriately performed by federal and contractor personnel.

The work of the corrective measure team is just a beginning. While the first version of the model is done, more is left to be completed. The results of this work need to be codified within the Department's directives system. Specifically, a new DOE 413.3 Guide needs to be established. This Guide will highlight the recommended method this new staffing model would use to identify project federal staffing needs. It will also serve as the basis for support of Independent Project Reviews (IPRs) and External Independent Reviews (EIRs). Other tasks include: clarification of contract and project management roles, responsibilities, and accountability; performance of competency assessments (personnel quality checks); and enhancements of training programs. Future refinement of the model must continue as it gets wider use and more is learned. The new model serves as a decision making tool for improved contract and project management and ultimately to improved DOE project execution performance.

Contents

Chapter 1
Introduction

1.1 BACKGROUND

The Department of Energy (DOE) conducted a contract and project management root cause analysis (RCA) between September 2007 and March 2008. The RCA identified and analyzed the difficulties and challenges of planning and managing DOE projects. In April 2008, DOE published the *U.S. Department of Energy Contract and Project Management Root Cause Analysis* summarizing the most significant issues and underlying causes impeding contract and project management improvement. One of the top 10 key issues impacting DOE project planning and management is the DOE does not have an adequate number of federal contracting and project management personnel with the appropriate skills to plan, direct, and oversee project execution. In addition, an inadequate number or insufficient qualifications of federal personnel was identified as a root cause in 7 of the remaining 9 top issues. The Department's RCA revealed that among other things, increasing the number and improving the qualifications of federal staff is instrumental to improving DOE contract and project management performance.

To remedy the most significant issues and underlying root causes identified in the RCA, the Department developed and published the *U.S. Department of Energy Contract and Project Management Root Cause Analysis Corrective Action Plan* in July 2008. The focus of the DOE corrective action plan (CAP) was to identify and develop corrective measures that successfully address the deficiencies identified in the RCA to improve contract and project management performance. A total of eight corrective measures were established, including a corrective measure solely dedicated to improving federal staffing levels. The improvement in federal staffing levels corrective measure reads as follows: "Develop and implement a comprehensive federal staffing plan, with an associated resource plan, to recruit, develop, and retain the optimum contract and project management federal workforce."

To implement the federal staffing improvement corrective measure, the Department organized a cross-functional team to develop and implement detailed action plans with milestones. The corrective measure team included representatives from the following DOE organizations: the Office of

Engineering and Construction Management, the Office of Science, the Office of Environmental Management, the National Nuclear Security Administration, the Office of the Chief Human Capital Officer, the Office of Procurement and Management Assistance, and the Office of Energy Efficiency and Renewable Energy.

1.2 OBJECTIVES

The overall outcome of the federal staffing corrective measure is for the Department to have a fully staffed, right-sized federal contract and project management organization. The development and implementation of a comprehensive federal staffing plan, with an associated resource plan, to recruit, develop, and retain the optimum contract and project management federal workforce requires the following specific objectives:

- Assess the current federal staffing levels of DOE projects;
- Evaluate the federal staffing of projects in other federal agencies;
- Develop a DOE workload-based federal staffing model;
- Apply the staffing model to determine DOE federal staffing gaps; and
- Develop resource alternatives to address DOE federal staffing needs.

The corrective measure team incorporated each of the aforementioned objectives into the development and implementation of the approach to improve contract and project management federal staffing levels.

1.3 APPROACH

The approach used by the corrective measure team involved collecting data through document reviews and personnel interviews, analyzing the data, developing a federal project staffing model, applying the staffing model to DOE projects, and establishing alternatives to satisfy the need for additional personnel resources.

The approach included the following specific steps:

- **Step 1—Assess Current Federal Staffing Levels of DOE Projects.** Based on the findings from the Department's contract and project management RCA, and the content of the associated CAP, the corrective measure team assessed the current federal staffing levels of DOE projects. The level of federal staffing was collected by developing and

issuing a data call, and receiving project and staffing data on DOE projects from Program Offices.

- **Step 2—Evaluate Federal Project Staffing Models in Other Federal Agencies.** Data was also gathered on other federal agencies to determine their respective approaches to federal staffing of projects. Corrective measure team members conducted interviews with other federal agency personnel as well as performed document reviews summarizing federal agency methods, policies, and initiatives to address federal project staffing.

- **Step 3—Develop a DOE Workload-Based Federal Staffing Model.** Based on the data collected from other federal agencies and within DOE, the corrective measure team developed a workload based staffing model to be applied to DOE projects to determine the optimal federal staffing levels.

- **Step 4—Apply the Staffing Model to Determine DOE Federal Staffing Shortages.** The staffing model will be applied to determine the need for additional DOE federal personnel. The staffing model will continue to be reviewed by the major DOE Program Offices and their respective sites, and it will be updated to incorporate any recommended revisions.

- **Step 5—Develop Resource Alternatives to Address the DOE Federal Staffing Shortages.** To address the need for additional federal personnel, the corrective measure team will finalize a series of alternatives to be considered and implemented to address federal staffing shortages. The corrective measure team established a preliminary list of resource alternatives.

- **Step 6—Implement Select Alternatives, as Appropriate, to Satisfy Personnel Needs.** Depending on the specific project and site conditions, location, and situation associated with the need for additional federal staffing, one or more of the alternatives identified will be implemented by the Department to satisfy the need for increased federal personnel.

The contents of this report represent completed activity through the first three steps. The corrective measure team also initiated application of the model to DOE projects and development of preliminary resource alternatives. More work is required in both of these areas. Subsequent Departmental efforts should focus on refinement of the model over time, continued application of the staffing model to DOE projects, determination of federal staffing shortages, and implementation of resource alternatives to address federal staffing needs.

Chapter 2
Data Collection and Findings

2.1 PROJECT STAFFING STUDY DATA CALL

The information contained in the following sections is a summary of the contract and project management data collected from a total of 92 projects in the following DOE Program Offices: the National Nuclear Security Administration (NNSA), the Office of Science (SC), and the Office of Environmental Management (EM). This data was collected through the following means: the development of a data call by the corrective measure team; the submittal of the data call by DOE Headquarters Program Offices to Site and Field Offices; and the completion of the project and staffing data by Headquarters, Site and Field Office personnel. The 92 projects were taken from the Department's July 2008 Monthly Project Status Report. These projects need to comply with the DOE Order 413.3A, have a total estimated project cost greater than $20 million, and were in various critical decision (CD) phases.

The corrective measure team initiated development of a staffing study data call in August 2008. The purpose of the staffing study data call was to collect DOE project and staffing data to determine current project staffing by various functional areas. The following summarizes the project and staffing data included in the data call.

- **Project Data**
  - **Program Office**: Identifies which DOE Headquarters Program Office provides program management and oversight for the specific project.
  - **Site or Field Office**: Identifies which DOE Site or Field Office is responsible for providing the contract administration and project management for the specific project.
  - **Project Title**: Identifies the title of the project.
  - **Project Type**: Identifies the type of project according to one of four categories—capital asset line item construction project, major item of equipment project, decontamination and decommissioning project, or environmental remediation project.

- **Project Execution**: Identifies the arrangement for procuring and organization responsible executing the project work. One of three methods: DOE direct, management and operating (M&O) contractor, or M&O subcontractor.
- **Contract Type**: Identifies the type of contract used to procure the majority of the goods and services for the project. One of seven contract types—fixed price (firm, no incentive), fixed price (with economic price adjustment, no incentive), cost reimbursement, incentive (fixed price), incentive (cost reimbursement), indefinite delivery, or time and materials.
- **Project Stage**: Identifies the latest approved critical decision (CD). One of four stages—CD-0, CD-1, CD-2, or CD-3.
- **Estimated Total Project Cost**: Identifies the pre CD-2 high end project cost estimate or the post CD-2 total project cost (TPC) depending on the project stage.
- **Fiscal Year 2008 Estimated Expenditure**: Identifies the estimated expenditures for the project in fiscal year 2008 (FY08).

❖ **Staffing Data (associated with each project)**

- **Functional Area/Critical Skill**[1]: Identifies the functional area and associated critical skills that are supporting the project. Each functional area has several critical skills associated with them. The ten functional areas include:
  - contracting, subcontracting and property management;
  - program and project planning, control and management;
  - science, engineering and design support;
  - construction oversight and management;
  - quality assurance;
  - environment, safety and health;
  - finance and administration;
  - safeguards and security;
  - operations oversight; and
  - public affairs and stakeholder relations.

[1] Functional areas and critical skills were adopted from NNSA and EM IPT survey initiatives.

- **Job Sponsor**: Identifies the individual's job sponsor that is supporting the project. One of four choices—DOE employee, support service contractor, site prime contractor, or other federal agency employee.
- **Job Series**: Identifies the job series for the DOE employee and other federal agency employee (if known). Not applicable to support service contractors and site prime contractors.
- **Grade Level**: Identifies the grade level of the individual if the job sponsor is a DOE employee. Include the grade level for other federal agency employees (if known).
- **Full Time Equivalent Level of Effort by Project Phase**: Identifies the level of effort provided or being provided for each stage of the project. Assigned in increments of 10 percent up to 100 percent. May include overtime in 10 percent increments.

Subsequent to completing development of the data call in September 2008, the three major DOE Headquarters Programs Offices issued the data call to their respective Site and Field Offices listing the projects included in this DOE project staffing study. In October 2008, the project and staffing data were completed and returned to the corrective measure team for review and analysis. The following sections summarize the data received from each DOE Program Office, including a summary analysis of preliminary findings.

2.2 OFFICE OF SCIENCE

The Department's review and analysis of federal project staffing included 17 SC projects. Of the 17 SC projects reviewed, 9 were capital asset line item construction projects, 7 were major item of equipment projects, and 1 was a decontamination and decommissioning project. A total of 7 sites were represented and included: the Berkeley Site Office; the Brookhaven Site Office; the Fermi Site Office; the Oak Ridge Office; the Pacific Northwest Site Office; the Stanford Linear Accelerator Office; and the Thomas Jefferson Site Office. A summary of the 17 SC projects evaluated is included in Table 2.2–1, Office of Science Projects.

Table 2.2-1
Office of Science Projects

Office	Site	Project Title	Project Type	Phase	Total Project Cost ($M)	FY08 ($M)	Actual Federal FTE
SC	Berkeley	ALS User Support Building (USB)	Const	CD-3	35.1	5.0	0.3
SC	Berkeley	Building 51 and Bevatron D&D	D&D	CD-3	50.0	8.7	0.8
SC	Berkeley	Seismic Safety Phase 2	Const	CD-0	98.3	2.0	0.8
SC	Berkeley	Transmission Electron Aberration–Corrected Microscope (TEAM)	MIE	CD-3	27.1	4.0	0.3
SC	Brookhaven	Interdisciplinary Science Building – Phase I	Const	CD-0	66.8	0.5	0.5
SC	Brookhaven	National Synchrotron Light Source (NSLS – II)	Const	CD-2	912.0	44.0	2.9
SC	Fermi	Ground – Based Dark Energy Experiment (GBDEE) (DES)	MIE	CD-2	35.2	5.5	0.3
SC	Fermi	NUMI Off – Axis Neutrino (v) Appearance (NOvA)	MIE	CD-1	293.0	11.6	2.4
SC	Oak Ridge	Modernization of Laboratory Facilities	Const	CD-1	96.3	9.3	0.5
SC	Oak Ridge	SING II	MIE	CD-1	60.0	6.0	0.5
SC	Oak Ridge	SNS Instruments (SING)	MIE	CD-3	68.5	15.2	0.4
SC	Oak Ridge	SNS Power Upgrade (07PUP)	MIE	CD-0	160.0	0.3	0.6
SC	Pacific Northwest	Physical Sciences Facility (PSF)	Const	CD-3	224.0	24.8	2.3
SC	Stanford Linear Accelerator	LCLS Ultrafast Science Instruments (LUSI)	MIE	CD-1	60.0	6.0	0.9
SC	Stanford Linear Accelerator	Linac Coherent Light Source (LCLS)	Const	CD-3	420.0	50.9	2.0
SC	Thomas Jefferson	12 GeV CEBAF Upgrade	Const	CD-2	310.0	11.3	1.6
SC	Thomas Jefferson	Technology and Engineering Development Facility (TEDF)	Const	CD-0	75.0	0.3	1.1

2.3 NATIONAL NUCLEAR SECURITY ADMINISTRATION

The Department's review and analysis of federal staffing levels included a total of 25 NNSA projects. All 25 NNSA projects were capital asset line item construction projects. A total of 7 large sites were represented including: the Livermore Site Office; the Los Alamos Site Office; the Nevada Site Office; the Pantex Site Office; the Sandia Site Office; the Savannah River Site Office; and the Y-12 Site Office. A summary of the 25 NNSA projects evaluated is included in Table 2.3–1, National Nuclear Security Administration Projects.

Table 2.3-1
National Nuclear Security Administration Projects

Office	Site	Project Title	Project Type	Phase	Total Project Cost ($M)	FY08 ($M)	Actual Federal FTE
NNSA	Livermore	National Ignition Facility (NIF)	Const	CD-3	3,502.3	36.0	5.4
NNSA	Los Alamos	Chemistry & Metallurgy Research Facility Replacement (CMRR)	Const	CD-3	975.0	92.4	9.4
NNSA	Los Alamos	Los Alamos Neutron Science Center Refurbishment	Const	CD-0	238.0	9.0	2.1
NNSA	Los Alamos	NMSSUP (Phase II)	Const	CD-1	300.0	59.1	6.4
NNSA	Los Alamos	Replace Radioactive Liquid Waste Treatment Plant	Const	CD-2	104.0	27.6	3.8
NNSA	Los Alamos	TA-55 Infrastructure Reinvestment Project, TRP II	Const	CD-1	70.0	1.2	2.2
NNSA	Los Alamos	TA-55 Infrastructure Reinvestment, TRP 1	Const	CD-2	26.7	6.9	2.3
NNSA	Los Alamos	TRU Waste Facility Project	Const	CD-0	65.0	0.9	4.1
NNSA	Nevada	Criticality Experiments Facility (formerly TA-18 Mission Relocation)	Const	CD-3	149.6	40.0	3.7
NNSA	Nevada	Replace Fire Stations #1 and #2	Const	CD-3	31.9	6.6	1.5
NNSA	Office Site Engineering and Construction Management	Mixed Oxide Fuel Fabrication Facility (MOX)	Const	CD-3	4,810.0	259.0	14.6
NNSA	Pantex	High Explosive Pressing Facility	Const	CD-3	80.6	17.7	1.4
NNSA	Pantex	High Pressure Fire Loop, Zone 12	Const	CD-2	35.0	7.0	2.6
NNSA	Pantex	Weapons Surveillance Facility	Const	CD-0	135.0	2.0	2.3
NNSA	Sandia	Heating System Modernization, TA-1	Const	CD-3	61.3	13.3	0.8
NNSA	Sandia	Ion Beam Laboratory	Const	CD-3	39.6	9.9	1.8
NNSA	Sandia	Test Capabilities Revitalization (Phase II)	Const	CD-3	74.3	2.5	3.1
NNSA	Savannah River	Pit Disassembly and Conversion Facility (PDCF)	Const	CD-2	3,200.0	50.7	6.9
NNSA	Savannah River	Waste Solidification Building (WSB)	Const	CD-3	330.0	30.1	6.6
NNSA	Y-12	Beryllium Capability (BeC) Project	Const	CD-3	36.1	11.7	2.2
NNSA	Y-12	Highly Enriched Uranium Materials Facility	Const	CD-3	549.1	156.0	5.9
NNSA	Y-12	Potable Water System Upgrade	Const	CD-3	62.6	22.5	3.5
NNSA	Y-12	Security Improvements	Const	CD-1	95.6	6.0	2.2
NNSA	Y-12	Steam Plant Life Extension	Const	CD-3	61.5	14.1	3.4
NNSA	Y-12	Uranium Processing Facility	Const	CD-1	3,500.0	20.3	9.8

2.4 OFFICE OF ENVIRONMENTAL MANAGEMENT

The Department's review and analysis of federal staffing levels included a total of 50 EM projects. Of the 50 projects reviewed, 5 were capital asset line item construction projects, 15 were decontamination and decommissioning projects, and 30 were environmental remediation projects. A total of 7 large sites were represented including: the Carlsbad Field Office, the Idaho Operations Office, the Oak Ridge Office, the Office of River Protection, the Portsmouth Paducah Project Office, the Richland Operations Office, and the Savannah River Site Office. In addition, projects were also evaluated from the following 8 smaller sites: Brookhaven, Knolls Atomic Power Laboratory, Livermore, Los Alamos, Nevada, Oakland, Pantex, and Sandia. A summary of all 50 EM projects reviewed is included in Table 2.4-1, Office of Environmental Management Projects.

Table 2.4-1
Office of Environmental Management Projects

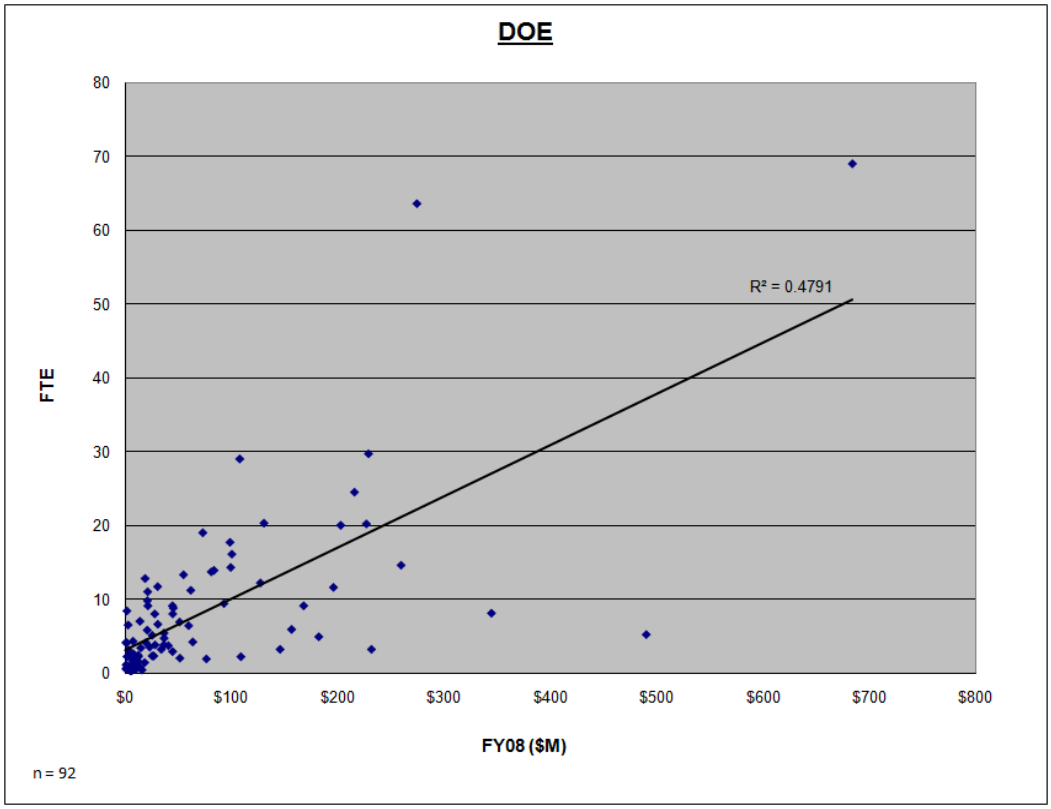
Office	Site	Project Title	Project Type	Phase	Total Project Cost ($M)	FY08 ($M)	Actual Federal FTE
EM	Brookhaven	Nuclear Facility D&D – Brookhaven Graphite Research Reactor	D&D	CD-3	$53.8	24.8	5.1
EM	Carlsbad	Operate Waste Disposal Facility	ER	CD-3	$742.9	130.0	20.3
EM	Carlsbad	Transportation – WIPP	ER	CD-3	$177.5	30.0	11.7
EM	Idaho	Non – Nuclear Facility D&D – INL	D&D	CD-3	$43.4	0.1	4.1
EM	Idaho	Nuclear Facility D&D – INL	D&D	CD-3	$753.0	63.0	4.2
EM	Idaho	Nuclear Material Stabilization and Disposition	ER	CD-3	$35.4	2.2	6.5
EM	Idaho	Radioactive Liquid Tank Waste Stabilization and Disposition 2012	ER	CD-2	$750.5	181.6	4.9
EM	Idaho	SNF Stabilization and Disposition 2012	ER	CD-3	$327.4	35.8	3.8
EM	Idaho	Sodium Bearing Waste Treatment (SBWT)	Const	CD-3	$550.0	344.1	8.1
EM	Idaho	Soil and Water Remediation 2012	ER	CD-3	$742.7	126.6	12.2
EM	Idaho	Solid Waste Stabilization and Disposition	ER	CD-3	$1,656.7	195.4	11.6
EM	Knolls Atomic Power Lab SPRU	Nuclear Facility D&D – Separations Process Research Unit (SPRU)	D&D	CD-3	$300.0	13.3	7.0
EM	Livermore	Soil and Water Remediation – LLNL, Site 300	ER	CD-3	$49.0	8.7	1.2
EM	Los Alamos	Nuclear Facility D&D – Defense, LANL	D&D	CD-3	$237.0	33.4	3.2
EM	Los Alamos	Soil and Water Remediation – LANL	ER	CD-3	$1,910.0	202.2	20.0
EM	Los Alamos	Solid Waste Stabilization and Disposition – LANL Legacy	ER	CD-3	$565.0	145.2	3.2
EM	Nevada	Operate Waste Disposal Facility – Nevada	ER	CD-3	$114.5	20.2	5.8
EM	Nevada	Soil and Water Remediation – NTS	ER	CD-3	$396.6	61.1	11.2
EM	Nevada	Solid Waste Stabilization and Disposition – NTS	ER	CD-3	$29.9	18.9	4.1
EM	Oak Ridge	Downblend of U–233 in Building 3019	ER	CD-3	$384.8	44.2	8.0

Office	Site	Project Title	Project Type	Phase	Total Project Cost ($M)	FY08 ($M)	Actual Federal FTE
EM	Oak Ridge	Nuclear Facility D&D – East Tennessee Technology Park	D&D	CD-3	$1,698.5	228.4	29.7
EM	Oak Ridge	Nuclear Facility D&D – Oak Ridge National Laboratory	D&D	CD-3	$488.9	54.3	13.3
EM	Oak Ridge	Nuclear Facility D&D Y–12	D&D	CD-3	$337.8	20.6	11.0
EM	Oak Ridge	Soil and Water Remediation – Melton Valley	ER	CD-3	$360.9	6.8	4.3
EM	Oak Ridge	Solid Waste Stabilization and Disposition – Oak Ridge	ER	CD-3	$597.8	80.4	13.7
EM	Oakland	Nuclear Facility D&D – Energy Technology Engineering Center	D&D	CD-3	$45.6	18.2	12.8
EM	Office of River Protection	Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	ER	CD-3	$2,454.0	273.9	63.6
EM	Office of River Protection	WTP – Analytical Laboratory	Const	CD-3	$12,263	683.7	69.0
EM	Pantex	Soil and Water Remediation – Pantex	ER	CD-3	$182.0	26.3	2.3
EM	Portsmouth/Paducah	Depleted Uranium Hexafluoride 6 Conversion (DUF6)	Const	CD-2	$429.6	43.9	9.1
EM	Portsmouth/Paducah	Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	D&D	CD-3	$1,062.8	167.4	9.1
EM	Portsmouth/Paducah	Solid Waste Stabilization and Disposition – LPP – Portsmouth	ER	CD-3	$185.6	44.6	8.8
EM	Portsmouth/Paducah	Solid Waste Stabilization and Disposition – Paducah	ER	CD-3	$97.2	27.2	8.0
EM	Richland	NM Stabilization and Disposition – PFP	D&D	CD-3	$1,149.4	98.0	17.7
EM	Richland	Nuclear Facility D&D – Fast Flux Test Facility	D&D	CD-3	$117.2	20.8	9.1
EM	Richland	Nuclear Facility D&D – Remainder of Hanford	D&D	CD-3	$562.3	98.8	14.3
EM	Richland	Nuclear Facility D&D – River Corridor Closure Project (RCCP)	D&D	CD-3	$3,909.9	215.2	24.5
EM	Richland	SNF Stabilization and Disposition (K Basin Closure – KBC)	ER	CD-3	$199.6	99.8	16.1
EM	Richland	Soil and Water Remediation – Groundwater/Vadose Zone	ER	CD-3	$1,144.0	72.4	19.0
EM	Richland	Solid Waste Stabilization and Disposition – 200 Area	ER	CD-3	$931.2	226.3	20.2
EM	Sandia	Soil and Water Remediation – Sandia	ER	CD-3	$235.2	2.5	0.7
EM	Savannah River	Balance of Nuclear Materials	ER	CD-3	$816.0	108.3	2.2
EM	Savannah River	Enriched Uranium Disposition Project	ER	CD-3	$1,955.0	231.2	3.2
EM	Savannah River	Nuclear Facility D&D – SRS	D&D	CD-3	$108.0	6.0	1.9
EM	Savannah River	Plutonium Disposition Project	Const	CD-1	$500.0	1.0	8.4
EM	Savannah River	Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	ER	CD-3	$4,395.0	489.8	5.2
EM	Savannah River	Salt Waste Processing Facility (SWPF)	Const	CD-2	$900.0	107.2	29.0
EM	Savannah River	Soil and Water Remediation – SRS	ER	CD-3	$87.0	75.8	1.9
EM	Savannah River	Solid Waste Stabilization and Disposition – SRS	ER	CD-3	$419.0	83.0	13.9
EM	UMTRA	Soil and Water Remediation – Moab	ER	CD-3	$849.0	36.0	4.7

2.5 ANALYSIS OF FEDERAL STAFFING OF PROJECTS

The Department used linear regression to analyze the relationship between the federal staffing of projects in relation to the FY08 project value by Program Office and by project type. The results indicate that there is minimal relationship between the FY08 project value and the associated level of federal staffing. The relationship is weak and inconsistent among Program Offices, sites, and project types. Figure 2.5-1, Regression Analysis of 92 DOE Projects reveals that the coefficient of determination (R^2) is 0.48. This means that, overall, for the 92 projects reviewed and analyzed, roughly 48 percent of the time, the relationship between FY08 federal staffing and FY08 project value is explainable and 52 percent of the time it is unexplainable. In general, coefficient of determination values greater than 0.75 represent that a strong relationship exists between variables and values less than 0.50 are indicative of weak relationships.

Figure 2.5-1
Regression Analysis Summary of the 92 DOE Projects



When the corrective measure team analyzed the R^2 within Program Offices, there were varying ranges. Table 2.5-1, Coefficient of Determination Values by Program Offices lists the SC, NNSA and EM coefficients of determination.

Table 2.5-1
Coefficient of Determination (R^2) Values by Program Offices

Departmental Program	Coefficient of Determination (R^2)	Number of Projects
National Nuclear Security Administration	0.63	25
Office of Science	0.54	17
Office of Environmental Management	0.40	50

In addition, the corrective measure team also analyzed the relationship between the federal staffing and the FY08 project value by project type. The strongest relationship exists in capital asset line item construction and decontamination and decommissioning projects. Table 2.5-2, Coefficient of Determination Values by Project Type, provides a summary of the coefficients of determination for each of the four project types.

Table 2.5-2
Coefficient of Determination (R^2) Values by Project Type

Project Type	Coefficient of Determination (R^2)	Number of Projects
Capital Asset Line Item Construction	0.75	39
Decontamination and Decommissioning	0.67	16
Major Item of Equipment	0.13	7
Environmental Remediation	0.13	30

A complete listing of all regression analyses conducted by the corrective measure team is included in Appendix B. Based upon these results the Department recognizes the need to establish a more consistent approach in the federal staffing of projects while taking into consideration the unique nature and diversity of DOE projects. Prior to establishing the basis for a more uniform staffing approach, the corrective measure team identified and evaluated the federal staffing approaches taken by other federal agencies. A summary of these approaches is in Chapter 3.

Chapter 3
Federal Agency Workload Staffing Approaches

Inadequate project oversight has been a criticism levied on DOE for several years. Unlike other federal organizations such as the Naval Facilities Engineering Command and the U.S. Army Corps of Engineers, who have a history of making staffing decisions using well-developed models, DOE has had no such model and therefore lacked an objective basis for making staffing decisions. Therefore, prior to the development of a workload-based approach for the federal staffing of DOE projects, the corrective measure team contacted and visited with other federal agencies to collect information on their respective approaches to federal project staffing. The information contained in the following sections is a summary of the approaches to federal project staffing used by the following federal agencies: the Naval Facilities Engineering Command, the U.S. Army Corps of Engineers, and the General Services Administration Public Building Services. Additionally, the Department contacted the Construction Industry Institute for information regarding staffing model use outside of the Federal Government and that information is outlined below.

3.1 NAVAL FACILITIES ENGINEERING COMMAND

The Naval Facilities Engineering Command (NAVFAC) is the designated responsible agent for acquisition execution of facility requirements for the Navy and Marine Corps. NAVFAC is also a design and construction agent for the United States Air Force and other Department of Defense entities for specific geographical areas and facility disciplines. Facilities acquisition efforts include acquisition support services associated with the execution of repair, maintenance, minor construction, major construction, environmental compliance and remediation services, and other facility-type actions. Acquisition support services include contract and project management, construction inspection, supervision and overhead efforts, as well as the review and administration of contract submittals for design, construction, and facility support contracts.

The current NAVFAC staffing model uses a construction contracting cell concept and template to provide work force size recommendation for field offices. The concept and template incorporates the annual cost of construction work and a productivity factor (annual dollars managed per federal full time equivalent - FTE) and accounts for the increased difficulty of renova-

tion work versus new construction work by applying a factor of 2 to 1, respectively. The productivity factor used by NAVFAC ranges between $3M and $5M per FTE. The construction contracting cell concept also includes a skills mix recommendation to drive consistency in team capability and process execution. The cell concept skills mix allocation includes: project management and engineering (40%); quality assurance and construction management (30%); contract administration (20%); and administration (10%). For each of the four skills mix areas, the NAVFAC construction contracting cell concept includes a series of well-defined field team roles and responsibilities matrices.

NAVFAC regional headquarters offices make the actual construction team staffing decisions using the construction contracting cell template as a starting point. There is flexibility in the process by these regional offices, and the use of judgment is applied based on local factors. The key attributes that make the process function effectively are: ownership of the process by the offices, employee accountability by accounting for their time to specific projects, and established procedures for maintaining an accurate on board count of the existing functions and series mix for each field office.

NAVFAC recovers the funding for federal project staffing of supervision, inspection and overhead (SIOH) services through the application of a fixed SIOH rate. The SIOH rate is typically a fixed rate based on the contract action; however, it varies by contract action depending on the source of contract action funding, the type of contract action and the location of the contract action. In 2009, the SIOH rate was 5.7% of the project construction cost and it is assigned as a project cost.

3.2 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) is responsible for the design and construction of facilities to support the Department of Defense. It is also responsible through its Directorate of Civil Works, for planning, design, and construction of civil works projects.

The USACE obtains manpower allocations from the Department of Army Headquarters. Requirements are determined with the aid of a computer model that looks at past experience and current workload. The USACE approach to the federal staffing of projects is comprised of three interrelated manpower models/systems:

- Integrated Manning Document—Inventory of USACE staff by position and function and updated every 2 weeks.

- Corps of Engineers Manpower Requirements System (CEMRS)—Uses information (projects, work breakdown structure, activities, schedules, resource estimates) from project management system that focuses on current year and budget year.

- Workload and Workforce Planning—Used for out-year planning with a 5-year planning horizon.

The models evaluate past experience and current workload to determine staffing allocation. Specific staffing algorithms are used for construction projects as well as environmental remediation projects. Subsequent staff quantities and skills for specific projects are identified and established in project quality assurance plans.

The USACE provides construction management services for a wide variety of projects. These services are charged to and financed by the individual project through application of a construction supervision and administration (S&A) charge. Normally, S&A is charged on a flat rate basis that conforms to the general type of project and the location. The construction S&A represents activities performed and costs incurred which are generally considered government construction management and contract administration responsibilities. Most of the construction S&A represents construction quality services, including contract management. The other portions include project payment and funds management, and post-construction completion and closeout management. In 2009 the S&A rate was 5.7% of the total project construction cost.

3.3 General Services Administration Public Building Services

The corrective measure team collected and reviewed documentation from the General Services Administration Public Building Services (GSA PBS) to ascertain information regarding the organization's approach to facility design and construction federal staffing. All GSA PBS human capital assets are deployed in two fundamental areas:

- Space acquisition through new construction or leasing. This is a project management activity that translates customer agency's space needs into discrete requirements, marshals resources necessary to fulfill the requirements and manages the execution of the project.

- Lifecycle asset management of the acquired space. This includes: physical supervision of the building, fulfilling contractual obliga-

tions, ensuring continuity of operations, and determining prudent investments in maintaining the property.

Through its Design and Construction Excellence programs, GSA PBS uses private sector architects, construction managers, and engineers to design and build courthouses, border stations, federal office buildings, laboratories, and data processing centers.

GSA PBS is organized into 10 regions and each region operates autonomously and independently with regard to staffing decisions. The GSA PBS Headquarters organization includes a Human Capital Asset Management Division that maintains a Center for Workforce Planning that delivers an array of services including workforce capacity modeling and scenarios. One particular product is the development and use of a staffing algorithm to assist in determining staffing needs and gaps for public building construction and repair activities. The primary factors used in the staffing algorithm include:

- **Types of Projects**
  - New Construction
  - Major Renovation and Repairs
  - Modifications
- **Levels of Complexity**
  - No Design—vendor able to develop, design, and construct with specifications only
  - Simple Design—design with 1 or 2 disciplines (e.g., architect and electrical); two phases: development/design and construction
  - Complex Design—design with 3 or more disciplines (e.g., architect, mechanical, electrical, civil/structural); typically three phases: development, design, and construction

In addition, project phase and regional factors are also used to determine staffing levels. Despite the development of the staffing algorithm to assist regions in determining the appropriate staffing of projects, the application and use of the algorithm and the subsequent staffing levels are not always consistent from one region to another.

3.4 CONSTRUCTION INDUSTRY INSTITUTE

The Department also contacted the Construction Industry Institute (CII) to collect comparable benchmarking data. While CII did not have specific staffing model algorithms or approaches used by owner representatives to staff projects, CII did provide information regarding the number of owner's representative personnel associated with project planning and execution versus the total project costs. In general, owner representatives provided approximately one FTE for every $5 million annual project costs or a productivity factor of approximately $5 million per FTE in a fiscal year.

Chapter 4
DOE Workload-Based Staffing Approach

Based on the information collected from other federal agencies and discussions and input within DOE, the corrective measure team identified key project attributes that influence DOE federal staffing levels. These attributes were organized into a workload-based staffing algorithm and subsequently used to develop a staffing model. While the DOE model incorporates elements of the NAVFAC, USACE and GSA PBS models, the DOE model is tailored to address the unique characteristics of DOE projects as well as the management and operations (M&O) model used to execute many of DOE's projects. The following sections contain information regarding the project attributes influencing the federal project staffing levels, the workload-based staffing algorithm, and the staffing model.

4.1 PROJECT ATTRIBUTES INFLUENCING STAFFING LEVELS

Subsequent to interviews and document reviews, the corrective measure team identified key project attributes which influence the level of federal staffing. These project attributes, some of which are common across other federal agencies and others unique to DOE, are identified and summarized in Table 4.1-1, Project Attributes Influencing Federal Staffing Levels.

Table 4.1-1
Project Attributes Influencing Federal Staffing Levels

Project Attribute	Description
1. Project Value (PV)	The value of the project in terms of the dollars to be executed by fiscal year influence the number of federal staff needed to plan, direct and oversee project execution.
2. Productivity Factor (PF)	Productivity factor in this context refers to the reasonable amount of project dollars that a single federal full time equivalent can effectively manage in a fiscal year.
3. Project Type (PT)	The type of project (capital asset line item construction, major item of equipment, decontamination & decommissioning, or environmental remediation) influences federal staffing.
4. Project Complexity (PC)	The project complexity, based on hazard categories (DOE STD 1027-92), safeguard categories (DOE M 470.4-6), and the technology level and maturity affects federal staffing.

Project Attribute	Description
5. Project Execution (PE)	The method of project execution (DOE direct contracting, site M&O execution, or site M&O subcontractor execution) influences federal staffing.
6. Project Phase (PP)	The project phase (CD-0, CD-1, CD-2, or CD-3) impacts the level of federal staffing, particularly in early planning stages to improve front-end planning.
7. Regulatory Involvement (RI)	The satisfactory compliance to various regulations influences the amount of federal staffing. The greater the project's regulatory involvement, the greater the federal staffing resources.
8. External Influence (EI)	The degree of external influence on a project influences federal staffing. The greater the external influence, the more federal staff resources required to manage the project.
9. Project Uniqueness (PU)	The uniqueness of a project in terms of whether it is a first of a kind impacts staffing levels. Unique or first-of-a-kind projects typically require increased federal staffing.
10. Contract Type (CT)	The type of contract used to procure the project's goods and services (fixed price, cost reimbursement, or time and materials) influences federal staffing.

Each of these project attributes have been organized into a workload-based staffing algorithm, which is depicted in the next section.

4.2 WORKLOAD-BASED STAFFING ALGORITHM

Each of the project attributes identified above were incorporated into the development of the DOE workload-based staffing algorithm. The algorithm is comprised of three steps: establish the project's unadjusted staffing, adjust project staffing based on project characteristics, and allocate the project's adjusted project staffing to contract and project management functions. These steps and the associated algorithm are depicted in Figure 4.2-1, DOE Workload-Based Staffing Algorithm.

Figure 4.2-1
DOE Workload-Based Staffing Algorithm

Step 1: Establish the Project's Unadjusted Staffing

$$\frac{PV}{PF} = PS_{(Unadjusted)}$$

Step 2: Adjust the Project's Staffing Based on Project Characteristics

$$PS_{(Unadjusted)} + PS_{(Unadjusted)}(PT + PC + PE + PP + RI + EI + PU + CT) = PS_{(Adjusted)}$$

Step 3: Allocate the Project's Adjusted Project Staffing to Contract and Project Management Functions

$$PS_{(Adjusted)} \times FAP = SA$$

Variable Acronyms

PV = Project Value
PF = Productivity Factor
PS = Project Staffing
PT = Project Type
PC = Project Complexity
PE = Project Execution
PP = Project Phase
RI = Regulatory Involvement
EI = External Influence
PU = Project Uniqueness
CT = Contract Type
FAP = Functional Area Percentages
SA = Staff Allocation for Associated Functional Area

4.3 STAFFING MODEL

The corrective measure team developed the DOE staffing model in a Microsoft Excel spreadsheet format. The staffing model includes the following sections: factor values, current projects, planned projects, functional area percentages, projected full-time equivalents, FY08 baseline staffing vs. model projections, and FY08 staffing model results.

Factor Values

The staffing model section on factor values includes a summary of the variables incorporated into the staffing model and their associated numerical values used to adjust the recommended staffing level. Figure 4.3-1, Staffing Model Factor Values, identifies the factor values associated with each variable that are incorporated into the staffing model.

Each of the factors influences the level of federal staffing. However, the productivity factor carries significant weight. The average productivity factor all 92 projects evaluated was approximately $14 million/full time equivalent (M/FTE). An initial benchmark of $12.5 M/FTE was established based on a graded approach to improving the ratio of federal staff to dollars managed. However, different productivity factors may be applicable to various projects and Program Offices depending upon who is responsible for project execution. For example, in the case of Office of Science projects which are managed by non-profit organizations, a higher productivity factor may be appropriate. In these instances, the non-profit organization is acting on behalf of the Department and performing many of the contract and project management functions. In other Departmental Program Offices such as NNSA and EM where for-profit organizations are responsible for executing projects, more federal oversight is warranted necessitating a lower productivity factor. As DOE increases the federal staffing of its projects, the annual dollars managed by a single federal FTE will go down. With the exception of oversight on non-profit entities, the goal is to achieve a productivity factor between $5 and $10 M/FTE by FY2012. This goal recognizes the $5M/FTE benchmark used by most other federal entities and industry while acknowledging the unique M&O business model prevalent within DOE. A complete sensitivity analysis was conducted for each Program Office project in the staffing study. This sensitivity analysis included productivity factors ranging from $5M/FTE to $20M/FTE and included increments of $2.5M/FTE. A total of seven scenarios were evaluated. The results of the sensitivity analysis are included in Appendix C.

Figure 4.3-1
Staffing Model Factor Values

Project Type	Value
Environmental Remediation (ER)	0.075
Decontamination & Decommissioning (D&D)	0.050
Construction (Const)	0.025
Major Items of Equipment (MIE)	0.000
Productivity Factor	**Value**
Project $M managed/FTE – Initial Benchmark (FY09)	12.5
Project $M managed/FTE – Target (FY10)	10.0
Project $M managed/FTE – Target (FY11)	7.5
Project $M managed/FTE – Goal (FY12)	5.0
Project Complexity	**Value**
High	0.2
Med	0.1
Low	0.0
Project Execution	**Value**
DOE Direct	0.5
DOE M&O	0.2
DOE M&O (non-profit)	0.1
DOE M&O (Sub)	0.0
Project Phase	**Value**
CD – 0	2.0
CD – 1	1.0
CD – 2	0.5
CD – 3	0.0
Contract Type	**Value**
Fixed-price (firm, no incentive)	0.0
Fixed-price (price adjustments, no incentive)	0.0
Cost-reimbursement	0.1
Incentive (fixed-price)	0.0
Incentive (cost-reimbursement)	0.1
Indefinite-delivery	0.2
T&M	0.2
Project Uniqueness	**Value**
First-Of-A-Kind	0.1
Not First of a Kind	0.0
Regulatory Involvement	**Value**
High	0.10
Medium	0.05
Low	0.00
External Influence	**Value**
High	0.10
Medium	0.05
Low	0.00

Current Projects

The staffing model section on current projects includes data on all of the projects in the staffing study. The project information is organized by DOE Program Office and then aligned by Site or Field Office where the projects

are being managed and/or executed. The project data included in the current projects section includes the specific variables associated with each specific project as well as the fiscal year funding for the project. A representative sample of the data contained in the current projects section of the staffing model is included in Figure 4.3-2, Staffing Model Current Projects.

Figure 4.3-2
Staffing Model Current Projects

Program / Site Office / Project Title	Factor							Project Value ($M)	Project Phase
	Project Type	Project Complexity	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence		
Livermore								**$36.0**	
National Ignition Facility (NIF)	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	36.0	3
Los Alamos								**$197**	
Chemistry & Metallurgy Research Facility Replacement	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	92.4	3
Los Alamos Neutron Science Center Reburbishment	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	9.0	0
NMSSUP (Phase II)	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	59.1	1
Replace Radioactive Liquid Waste Treatment Plant	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	27.6	2
TA – 55 Infrastructure Reinvestment Project, TRP II	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	1.2	1
TA-55 Infrastructure Reinvestment, TRP 1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	6.9	2
TRU Waste Facility Project	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	0.9	0
Nevada								**$47**	
Criticality Experiments Facility (formerly TA-18 Mission	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	40.0	3
Replace Fire Stations #1 and #2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	6.6	3
Pantex								**$27**	
High Explosive Pressing Facility	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	17.7	3
High Pressure Fire Loop, Zone 12	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	7.0	2
Weapons Surveillance Facility	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	2.0	0
Sandia								**$26**	
Heating System Modernization, TA-1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	13.3	3
Ion Beam Laboratory	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	9.9	3
Test Capabilities Revitalization (Phase II)	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	2.5	3
Office of Site Engineering and Construction Management NA-262								**$259**	
Mixed Oxide Fuel Fabrication Facility (MOX)	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	259.0	3
Savannah River								**$81**	
Pit Disassembly and Conversion Facility (PDCF)	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	50.7	2
Waste Solidification Building (WSB)	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	30.1	3
Y-12								**$231**	
Beryllium Capability (BeC) Project	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	11.7	3
Highly Enriched Uranium Materials Facility	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	156.0	3
Potable Water System Upgrade	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	22.5	3
Security Improvements	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	6.0	1
Steam Plant Life Extension	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	14.1	3
Uranium Processing Facility	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	20.3	1

Planned Projects

The staffing model section on planned projects includes an opportunity for the Department to incorporate new projects as identified. The project data captured for planned projects are exactly the same as the data included for current projects.

Functional Area Percentages

The staffing model section on functional area percentages identifies the suggested allocation of project staffing across a total of 10 functions depending on the type of the project and the phase of the project. Figure 4.3-3, Functional Area Percentages, is a representative example of the percentage distribution for each type of project. Each type of project has a unique distribution and allocation of staff by function as determined by input from DOE Program Offices.

Figure 4.3-3
Staffing Model Functional Area Percentages by Project Type

Function	Construction			
	CD-0	CD-1	CD-2	CD-3
Contracting, Subcontracting, and Property Management	15%	5%	5%	20%
Program and Project Planning, Control and Management	25%	20%	20%	20%
Science, Engineering, and Design Support	25%	40%	25%	20%
Construction Oversight and Management	0%	0%	0%	5%
Quality Assurance	0%	0%	9%	5%
Environment, Safety, and Health	20%	20%	20%	10%
Finance and Administration	5%	5%	5%	5%
Safeguards and Security	5%	5%	5%	4%
Operations Oversight	0%	0%	10%	10%
Public Affairs and Stakeholder Relations	5%	5%	1%	1%
Total	**100%**	**100%**	**100%**	**100%**

Function	Major Items of Equipment			
	CD-0	CD-1	CD-2	CD-3
Contracting, Subcontracting, and Property Management	25%	15%	25%	8%
Program and Project Planning, Control and Management	30%	38%	35%	35%
Science, Engineering, and Design Support	15%	15%	17%	15%
Construction Oversight and Management	0%	0%	0%	5%
Quality Assurance	0%	0%	5%	5%
Environment, Safety, and Health	3%	5%	5%	15%
Finance and Administration	22%	20%	10%	10%
Safeguards and Security	0%	2%	3%	3%
Operations Oversight	0%	0%	0%	4%
Public Affairs and Stakeholder Relations	5%	5%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**

Function	Environmental Remediation			
	CD-0	CD-1	CD-2	CD-3
Contracting, Subcontracting, and Property Management	30%	15%	15%	20%
Program and Project Planning, Control and Management	15%	30%	30%	20%
Science, Engineering, and Design Support	20%	20%	15%	7%
Construction Oversight and Management	0%	0%	0%	5%
Quality Assurance	0%	0%	7%	5%
Environment, Safety, and Health	10%	15%	15%	20%
Finance and Administration	15%	12%	5%	8%
Safeguards and Security	5%	3%	3%	5%
Operations Oversight	0%	0%	5%	5%
Public Affairs and Stakeholder Relations	5%	5%	5%	5%
Total	**100%**	**100%**	**100%**	**100%**

Function	Decontamination & Decommissioning			
	CD-0	CD-1	CD-2	CD-3
Contracting, Subcontracting, and Property Management	30%	15%	15%	20%
Program and Project Planning, Control and Management	15%	30%	30%	20%
Science, Engineering, and Design Support	20%	20%	15%	10%
Construction Oversight and Management	0%	0%	0%	5%
Quality Assurance	0%	0%	6%	5%
Environment, Safety, and Health	10%	15%	15%	20%
Finance and Administration	15%	12%	8%	8%
Safeguards and Security	5%	5%	5%	5%
Operations Oversight	0%	0%	5%	5%
Public Affairs and Stakeholder Relations	5%	3%	1%	2%
Total	**100%**	**100%**	**100%**	**100%**

Within each of the functions associated with project types and project phases, there are roles and responsibilities that are more appropriate for federal personnel and others that can and are delegated to contractors. An analysis of the appropriate roles and responsibilities within these functions to be performed by federal and contractor personnel is currently being conducted. However, there are certain responsibilities that federal personnel cannot delegate to contractors including the review, approval and acceptance of work products associated with DOE's acquisition management and critical decision process. The Department's review and approval of such documents and work products is central to its role of project owner. When complete, the breakdown of contract and project management roles and responsibilities should provide DOE with a clear definition and delineation of activities performed by federal and contractor personnel.

Projected Full-Time Equivalents

The staffing model section on projected full-time equivalents includes the recommended staffing for each project by function based on the project data provided. Similar to the manner in which the current projects section is organized, the projected full-time equivalents section is organized by DOE Program Office and then aligned by Site or Field Office where the projects are being managed and/or executed. A representative sample is included in Figure 4.3-4, Staffing Model Projected Full-Time Equivalents.

Figure 4.3-4
Staffing Model Projected Full-Time Equivalents

Program/Site Office/Project/Function	FY08
NNSA	**119.1**
Livermore	**3.5**
National Ignition Facility (NIF)	**3.5**
Contracting, Subcontracting, and Property Management	0.7
Program and Project Planning, Control and Management	0.7
Science, Engineering, and Design Support	0.7
Construction Oversight and Management	0.2
Quality Assurance	0.2
Environment, Safety, and Health	0.4
Finance and Administration	0.2
Safeguards and Security	0.1
Operations Oversight	0.4
Public Affairs and Stakeholder Relations	0.0
Los Alamos	**28.5**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	**9.1**
Contracting, Subcontracting, and Property Management	1.8
Program and Project Planning, Control and Management	1.8
Science, Engineering, and Design Support	1.8
Construction Oversight and Management	0.5
Quality Assurance	0.5
Environment, Safety, and Health	0.9
Finance and Administration	0.5
Safeguards and Security	0.4
Operations Oversight	0.9
Public Affairs and Stakeholder Relations	0.1

FY08 Staffing Baseline vs. Model Projections

The staffing model section on FY08 staffing baseline vs. model projections includes a comparison between the actual project staffing submitted by Site or Field Offices and the projections based upon application of the model to specific projects with the associated variables and factor values incorporated. Figure 4.3-5, FY08 Staffing Baseline vs. Model Projections, provides a representative example of the comparison between existing project staffing levels and recommended project staffing levels using the model.

Figure 4.3-5
FY08 Staffing Baseline vs. Model Projections

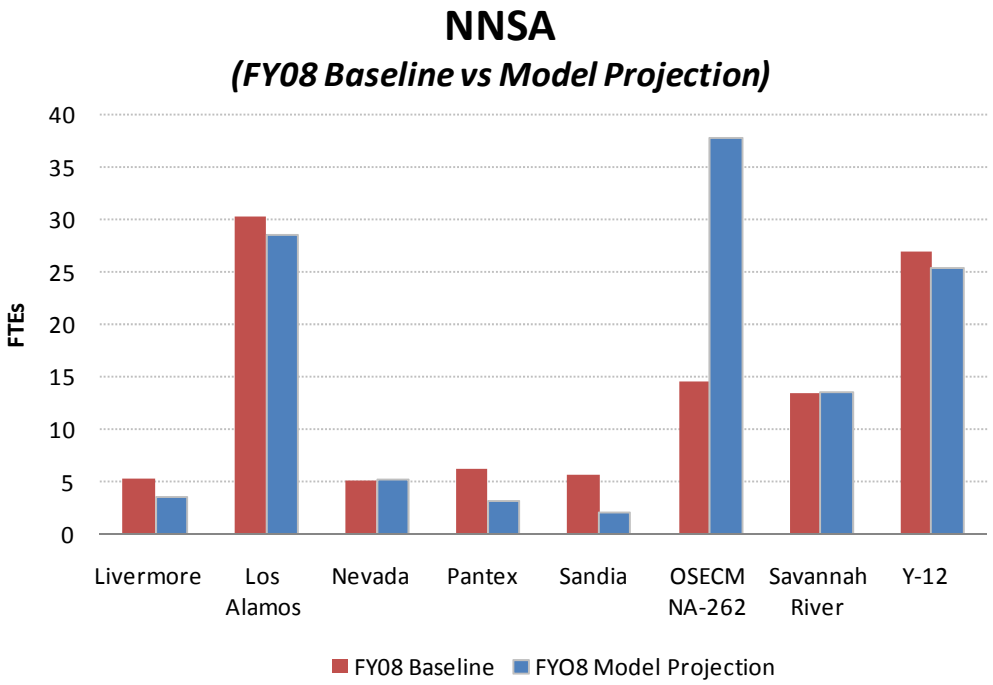
Program/Site Office/Project	FY08 $M	FY08 Fed FTEs	PF (FY08$/ FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	**$205**	**18.2**	**11.3**	**23.6**	**5.43**	**30%**
Berkeley	$20	2.2	9.0	2.0	(0.18)	-8%
Brookhaven	$45	3.4	13.1	5.8	2.44	72%
Fermi	$17	2.7	6.3	2.5	(0.18)	-7%
Oak Ridge	$31	2.0	15.4	3.9	1.92	96%
Pacific Northwest	$25	2.3	10.8	2.2	(0.07)	-3%
Stanford Linear Accelerator	$57	2.9	19.6	5.6	2.69	93%
Thomas Jefferson	$12	2.7	4.3	1.5	(1.18)	-44%

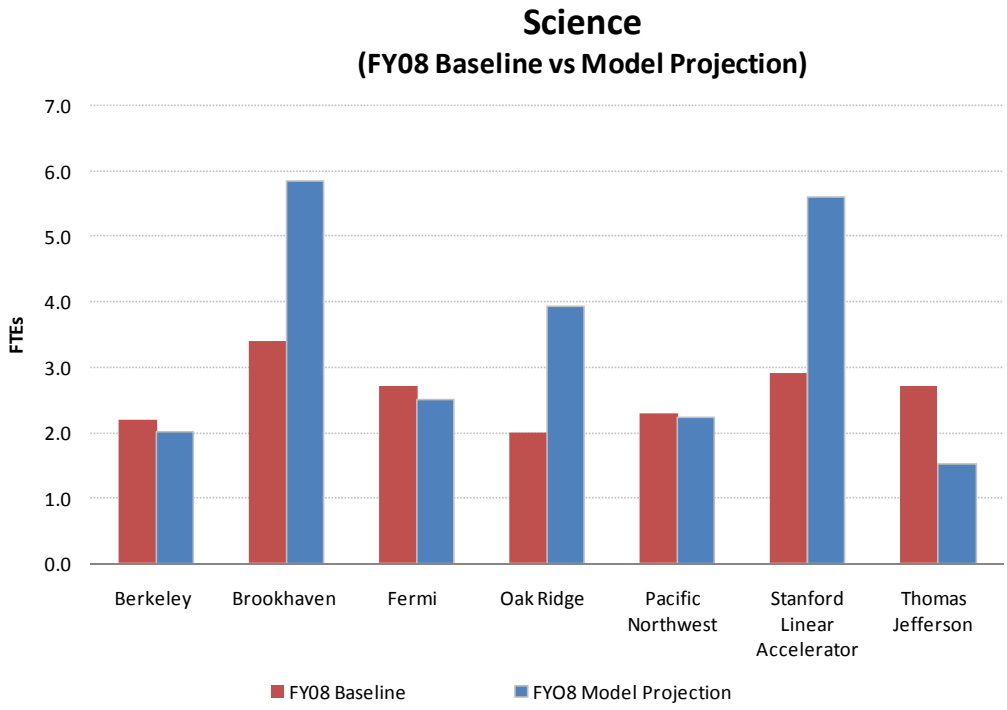
FY08 Staffing Model Results

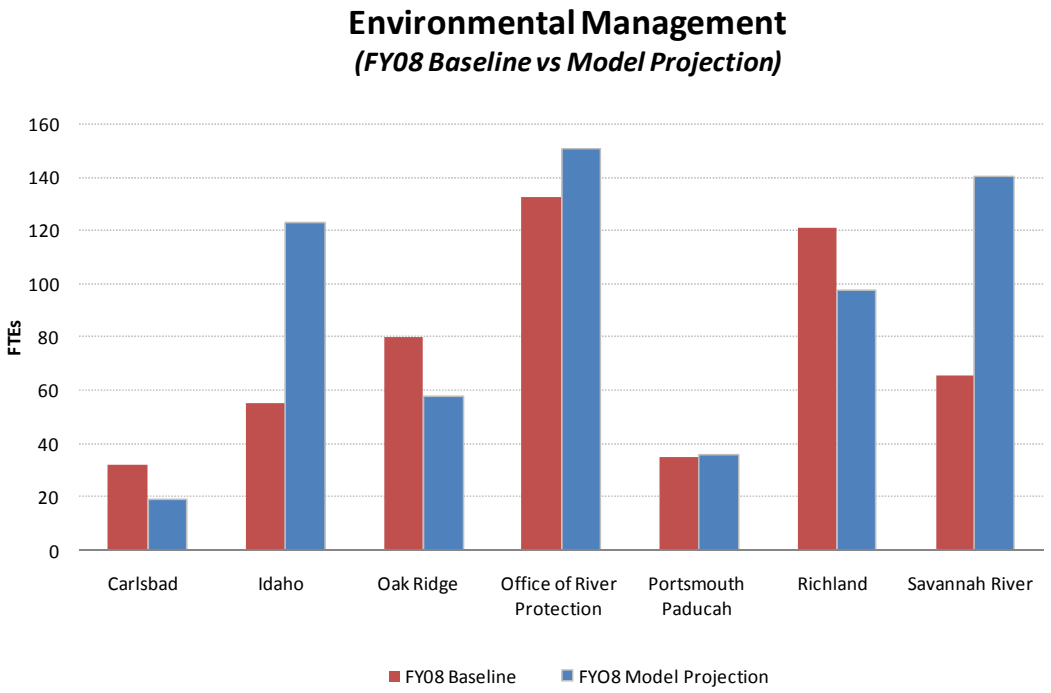
Lastly, the staffing model section on FY08 staffing model results provides a graphic summary of the results based on the application of the variables and factor values in the staffing model and project data submitted. Figure 4.3-6, FY08 Staffing Model Results, depicts a representative sample of the output.

Figure 4.3-6
FY08 Staffing Model Results

Area	DOE	NNSA	SC	EM
Baseline FTE	729.1	108.0	18.2	602.9
Model FTE	839.2	119.1	23.6	696.4
Gap FTE	110.1	11.1	5.4	93.5


NNSA
(FY08 Baseline vs Model Projection)
FTEs
40
35
30
25
20
15
10
5
0
Livermore
Los Alamos
Nevada
Pantex
Sandia
OSECM NA-262
Savannah River
Y-12
FY08 Baseline
FYO8 Model Projection


Science
(FY08 Baseline vs Model Projection)
FTEs
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Berkeley
Brookhaven
Fermi
Oak Ridge
Pacific Northwest
Stanford Linear Accelerator
Thomas Jefferson
FY08 Baseline
FYO8 Model Projection



Each of the seven sections mentioned above are interrelated and collectively comprise the DOE workload-based staffing model. The corrective measure team has developed the model to maximize functionality. While the draft model identifies a point estimate, a plus or minus 10 – 20 percent of the point estimate is intended to establish the recommended range for the staffing of specific projects. This plus or minus percentage increases the Federal Project Director's flexibility to increase or decrease staffing based upon the project's performance. In addition, the recommended staffing range may require further adjustment based upon the current performance of the project. Projects performing with red assessment or yellow assessment trending towards red may warrant additional federal staffing.

The staffing model is the Department's first to establish a workload-based staffing model to be used to identify the proper amount and type of federal personnel required to oversee projects of certain type and amount. Subsequent activities are recommended to continue to mature and refine the model and are identified in Chapter 6, Summary and Next Steps.

Chapter 5
Preliminary Resource Alternatives

The following section identifies a list of preliminary alternatives available to the Department to address the shortage in federal staffing. These alternatives are not mutually exclusive. Depending on the specific project and site conditions, one or more of these alternatives may be used to optimize federal project staffing.

5.1 PRELIMINARY RESOURCE ALTERNATIVES

To address the need for additional federal resources, the corrective measure team has identified the following preliminary resource alternatives:

- Reduce the Demand for Additional Federal Staffing by Delaying Some New Project Starts
  - Delay the start of new projects until adequate federal staff are available to provide the necessary oversight
- Address the Demand for Additional Federal Staffing by Reallocating Personnel within One Program
  - Transfer or temporarily assign personnel from within a single Program Office for an established period of time to focus on projects of greatest need
- Address the Demand for Additional Federal Staffing by Reallocating Personnel Among Program Offices
  - Transfer or temporarily assign personnel among Program Offices for an established period of time to focus on projects of greatest need
- Increase Federal Staffing Levels Through Increased DOE Funding and FTEs
  - Request additional Departmental funding to be specifically used to hire additional federal personnel to provide contract and project management oversight

- ❖ Increase Federal Staffing Levels by Funding Additional Federal Oversight Personnel from Project Budgets
  - Pay for additional federal oversight personnel from existing project budgets either funded by an individual project or from combined funding from multiple Program projects (i.e., the USACE and NAVFAC models)
- ❖ Acquire Federal Staffing Resources from Other Federal Agencies as an Augment
  - Secure contract and project management services and personnel for DOE projects from other federal agencies
- ❖ Assign or Transfer Contract and Project Management Activities to Other Federal Agencies
  - Transfer the authority and responsibility for contract and project management functions to other federal agencies
- ❖ Augment Federal Staffing Levels with Support Service Contractors
  - Increase DOE contract and project management oversight capability by augmenting federal staff with support service contractors
- ❖ Maintain or Increase Reliance on DOE Site M&O Contractors
  - Continue to rely on DOE site M&O contractors to provide the necessary contract and project management personnel and services

5.2 RESOURCE ALTERNATIVES – BENEFITS AND CHALLENGES

Each of the resource alternatives contains both positive (benefits) and negative (challenges) consequences. Table 5.2-1 and Table 5.2-2 identify the resource alternatives benefits and challenges, respectively. For each of the nine resource alternatives identified, a checkmark indicates that the benefit or challenge applies to the specific resource alternative.

Table 5.2-1 Resource Alternatives – Benefits

Key Benefits of Resource Alternatives	**RESOURCE ALTERNATIVES**								
	Delay New Project Starts	Reallocate Personnel within One Program	Reallocate Personnel Among Programs	Increase DOE Staff Funding	Fund Federal Over-sight from Project Budget	Acquire Staff from Other Federal Agencies	Transfer Work to Federal Agencies	Augment Staff with Contract Support	Rely on DOE Site Contractor
Requires No New Budget Resources	✓	✓	✓		✓				✓
Controls Staffing Levels to Funding	✓	✓	✓		✓				✓
Eliminates Costs of Hiring Addi-tional Staff	✓	✓	✓			✓	✓	✓	✓
Meet Exist-ing and New Requirements		✓	✓	✓	✓	✓	✓	✓	✓
Quick Solu-tion to Ad-dress Staffing Needs	✓	✓	✓			✓	✓	✓	✓
Flexibility to Changes in Demand		✓	✓			✓	✓	✓	✓
Reduces DOE Staffing Needs	✓	✓	✓			✓	✓	✓	✓
Grows Organic Capability				✓	✓				

Table 5.2-2 Resource Alternatives – Challenges

Challenges of Resource Alternatives	RESOURCE ALTERNATIVES								
	Delay New Project Starts	Reallocate Personnel within One Program	Reallocate Personnel Among Programs	Increase DOE Staff Funding	Fund Federal Oversight from Project Budget	Acquire Staff from Other Federal Agencies	Transfer Work to Federal Agencies	Augment Staff with Contract Support	Rely on DOE Site Contractor
Inability to Meet Regulatory Milestones					✓				
Complicates Project Portfolio Management	✓	✓	✓		✓		✓		
Limited Mobility of Federal Staff		✓	✓						
Increases Lifecycle Project Costs		✓			✓				
Lack of Available Budget Resources				✓		✓	✓	✓	
Inability to Hire Required Skilled Staff				✓	✓				
Failure to Develop DOE Federal Skills						✓	✓	✓	✓

In addition, there are overarching issues such as physical space needs for the additional personnel and potential contract changes to improve the management of contractors. However, once a documented need for additional federal resources is established, one or more of the identified alternatives is likely to be exercised to address and satisfy the need.

5.3 PROGRAM OFFICE RESOURCE ALTERNATIVES

The corrective measure team has identified the preferred resource alternatives by Program Office. The following is a list of potential alternatives to be used by respective Program Offices to address the need for additional personnel resources to improve federal oversight.

Office of Science

- **Continue reliance on DOE site M&O contractors**
  - SC site M&O contractors are non-profit organizations
  - SC holds the M&O accountable for meeting the performance baseline. To date, the performance of the M&Os has been good
  - SC provides "checks and balances" of the M&O by conducting regular peer reviews of projects. Peer reviews also ensure projects are executed according to plan
  - Reduces SC need for additional federal staff and provides flexibility to changes in demand
- **Reallocate personnel to focus on areas/projects of greatest need**
  - Transfer/assign SC personnel to specific projects for an established period of time
  - If SC personnel are not available, consider transfer/assignment of personnel from other Program Offices

National Nuclear Security Administration

- **Delay new project starts**
  - Wait to initiate projects until adequate resources are available to provide the necessary oversight; assign more personnel to fewer projects
- **Reallocate personnel to focus on areas/projects of greatest need**
  - Transfer/assign NNSA personnel to specific projects for an established period of time
  - If NNSA personnel are not available, consider transfer/assignment of personnel from other Program Offices

- **Fund federal oversight from project budget either by individual project or from a pooled funding from several Program projects**
  - Applicable to NNSA sites with multiple ongoing large projects
  - Appropriate for large projects with high total project costs and longer schedules
- **Augment NNSA federal personnel with support service contractors**
  - Provides for a quick solution to address staffing needs in specific areas
  - Reduces NNSA need for additional federal staff and provides flexibility to changes in demand
- **Consider acquiring federal personnel resources from other federal agencies such as USACE or NAVFAC**
  - Expands on existing practices of employing other federal agencies to provide specific project management services (USACE at Savannah River – PDCF)

Office of Environmental Management

- **Delay new project starts**
  - Wait to initiate projects until adequate resources are available to provide the necessary oversight; assign more personnel to fewer projects
- **Reallocate personnel to focus on areas/projects of greatest need**
  - Transfer/assign EM personnel to specific projects for an established period of time
  - If EM personnel are not available, consider transfer/assignment of personnel from other Program Offices

- **Fund federal oversight from project budget either by individual project or from a pooled funding from several Program projects**
  - Applicable to EM sites with multiple ongoing large projects
  - Appropriate for large projects with high total project costs and longer schedules
- **Augment EM federal personnel with support service contractors**
  - Provides for a quick solution to address staffing needs in specific areas
  - Reduces EM need for additional federal staff and provides flexibility to changes in demand
- **Consider acquiring federal personnel resources from other federal agencies such as USACE and NAVFAC**
  - Expands on existing practices of employing other federal agencies to provide specific project management services (USACE at Savannah River – PDCF)

More detailed analysis and planning is required, particularly in NNSA and EM, in order to implement several of these resource alternatives. Addressing the need to improve both the number (and qualifications) of federal personnel will involve implementation of several of these alternatives. Success will require building upon the already effective programs such as the Project Management Career Development Program (PMCDP) and the Acquisition Career Development Program (ACDP). Expanding the core principles of both these programs to include Integrated Project Teams (IPTs) will be further evaluated. These programs, as well as their associated performance incentives, are crucial to the continuous improvement of DOE contract and project management performance.

These alternatives are not mutually exclusive. Depending on the specific project and site conditions, one or more of these alternatives may be used to optimize federal project staffing. While some of these alternatives are not optimal and may not fully address previously identified concerns regarding DOE's federal oversight of projects, they represent immediate, incremental steps towards improving DOE contract and project management and oversight and therefore deserve consideration.

Chapter 6
Summary and Next Steps

For the past several years DOE has been criticized for a lack of federal oversight regarding contract and project management. For the first time in the Department's history, using input received from other federal agencies with decades of experience, DOE has developed a staffing model to identify more appropriate levels of federal oversight and to objectively defend recommended levels. The DOE staffing model has been developed by considering the specific characteristics unique to DOE projects as well as the Departmental business model of relying on site management and operating contractors (some of which are non-profit organizations) to execute projects. As a result, the DOE-developed model varies from the staffing models used by NAVFAC and USACE.

The efforts described herein are another set of activities in a long list of initiatives to improve DOE contract and project management. The initiative undertaken by the corrective measure team represented an aggressive schedule and timeline. More activities will be conducted to improve the federal staffing levels of DOE projects. The following sections identify some of the observations from the corrective measure team and recommended actions to continue the progress to date.

6.1 OBSERVATIONS

The following section represents some of the observations from the corrective measure team in reviewing DOE and other federal agency project staffing approaches. These observations are based on how DOE is currently determining the federal staffing of projects as well as the methods used by other federal agencies. Improving the federal staffing of DOE projects requires changes in a number of areas.

- More predictability in the federal staffing of DOE projects requires more consistency in project funding. The Department does not have significant flexibility in staffing of projects; therefore, more predictable funding improves the planning and staffing of projects.

- There needs to be less reliance on subjective judgment and more workload-based federal staffing of projects. This significantly increases the Department's credibility on resource allocation.

- There needs to be improved alignment between the discussion of how DOE projects should be staffed and how they are actually being staffed. A control mechanism needs to be implemented to ensure recommended staffing levels are being adequately addressed.

- Improved clarification of DOE Headquarters, Site or Field Office, and contractor roles and responsibilities and adherence to the defined roles and responsibilities can improve staffing decisions. Also, a more consistent determination and application of functions identified as most appropriately performed by federal personnel is essential.

- A more uniform staffing of the Integrated Project Team (IPT) by established functional areas with clearly defined roles and responsibilities improves the Department's leadership and ownership role for the project.

- An integrated personnel system that provides a comprehensive inventory of personnel resources by function and capability is essential. A Department-wide inventory by function and skills is required in addition to the inventory by job series. This aligns and integrates critical skills gap analyses, optimal contract and project management staffing, competencies and training, and succession planning taking into account attrition and loss of critical skills through retirements.

- A more robust financial system that captures personnel resources that are applied to specific work and projects is necessary. Not only does this improve accountability, but it advances the projectization of DOE work and provides a means to capture important data for future analysis.

Real, measurable, and sustainable improvement in project performance and federal project staffing requires considering the above observations.

6.2 RECOMMENDED ACTIONS

The following is a list of recommended actions to further develop and improve the federal staffing of DOE projects.

- Begin to use the staffing model (or an acceptable substitute) across the DOE complex. Use the staffing model to enhance ownership and further improve the resulting staffing levels recommended for projects.

- Continued dialogue with NAVFAC, USACE, and the Construction Industry Institute for the purposes of gathering additional information and data for future model refinement will strengthen ongoing activities.

- Continue to review and assess the model and use the results to forecast the projected staffing. Compare and contrast the projections with existing personnel resources on successful and challenging projects and make adjustments as necessary.

- Evaluate the resource alternatives to optimize the federal staffing of projects. Work with OMB, Congress, and other stakeholders to establish the effective implementation of selected alternatives.

- Based on their annual volume of work, conduct further in depth analysis for appropriate NNSA and EM resource plans, including funding federal oversight through the project budget.

- Use the model in independent project reviews and external independent reviews to benchmark staffing. Compare actual to recommended staffing ranges for projects reviewed and highlight findings.

The DOE staffing model is complete. As a result, the Department can do a more effective review of project execution plans and the associated federal staffing levels of projects of varying type, size and complexity. The newly established staffing model will initially be used in independent project reviews (IPRs) by Program Offices and external independent reviews (EIRs) by the Office of Engineering and Construction Management to evaluate and compare the level and composition of federal staffing on projects. Subsequent use of the model will include recommended federal staffing levels in support of future Program and project budget requests.

These actions, along with the progress to date, should go a long way towards improving the federal staffing of DOE projects, improving the oversight of these projects, and ultimately improving the contract and project management performance of the projects which remains the primary goal.

Appendix A
Corrective Measure 2 Summary

<table>
<tr><td colspan="2"><u>CORRECTIVE MEASURE 2</u>
Develop and implement a comprehensive federal staffing plan, with an associated resource plan, to recruit, develop, and retain the optimum contract and project management federal workforce.</td></tr>
<tr><td><u>Issue:</u>
DOE does not have an adequate number of federal contracting and project management personnel with the appropriate skills (e.g., cost estimating, scheduling, risk management, and technical) to plan, direct, and oversee project execution.</td><td><u>Root Causes:</u>
▪ Insufficient budget resources
▪ Conflicting and competing priorities
▪ Inferior federal government compensation compared to the private sector
▪ Inadequate roles and responsibilities definition
▪ Inadequate training</td></tr>
<tr><td><u>Organizational Sponsor:</u>
Pete Check
Deputy Director
Office of Engineering and Construction Management
Office of Management</td><td><u>Supporting Organizations:</u>
Office of Environmental Management
National Nuclear Security Administration
Office of Human Capital Management
Office of Chief Financial Officer
Office of Under Secretary or Other Program Office Rep (e.g., RW, EE, NE, FE)
Office of Procurement and Assistance Management</td></tr>
<tr><td colspan="2"><u>Description:</u> The following elements are some of the core components of this corrective measure:
▪ Baseline existing contract and project management personnel and organization.
▪ Benchmark contract and project management functions and personnel in other federal agencies.
▪ Conduct a contract and project management personnel resources needs assessment.
▪ Conduct a gap analysis between federal benchmarks, results of needs assessment, and current baseline.
▪ Identify the number, qualifications, and skills required of additional personnel by organization.
▪ Develop a resource plan to acquire additional federal personnel, if applicable.
▪ Review appropriate personnel compensation incentives and encourage their use, where appropriate.
▪ Analyze and recommend revisions to the existing contract and project management staffing structure.
▪ Clearly define and document the roles, responsibilities, authority, and accountability for all contract and project management personnel.
▪ Identify and implement contract and project management training in specific areas of need.
▪ Garner input and approval of implementation plan from appropriate stakeholders and senior leadership.</td></tr>
<tr><td colspan="2"><u>Impediments/Challenges:</u>
▪ Competing Departmental priorities and change in Administration
▪ Re-allocation of necessary budget and personnel resources
▪ Organizational culture and resistance to change</td></tr>
<tr><td><u>Accomplishments to Date:</u>
▪ EM “Best in Class” initiative; an EM initiative to improve EM contract and project management
▪ DOE Acquisition Career Management Program for certifying contract managers and contracting officer’s representative (COR)
▪ Project Management Career Development Program</td><td><u>Some Remaining Near-Term Actions:</u>
▪ Benchmarking and Gap Analysis
▪ Recruit additional federal staff, as needed
▪ Enhancement to training programs
▪ Re-allocation of resources, as appropriate
▪ Stakeholders support and approval</td></tr>
</table>

CORRECTIVE MEASURE 2 **Develop and implement a comprehensive federal staffing plan, with an associated resource plan, to recruit, develop, and retain the optimum contract and project management federal workforce.**	
▪ Contracting competency/resource gap analyses across the complex ▪ Targeted training delivered across the complex	
Expected Outcomes/Key Success Measures: ▪ Outcome: Fully staffed, right-sized federal contract and project management organization. ▪ Metric: By the end of FY 2011 and 2012, 90% of DOE capital asset line item projects and 90% of EM cleanup projects, respectively, will meet their overall performance baseline goals. ▪ Metric: By the end of FY 2011, federal contract and project management positions (based on new model) are staffed at 80% of the desired level. ▪ Metric: By the end of FY 2011, 95% of projects have certified FPDs no later than CD-1. ▪ Metric: By the end of FY 2011, 90% of projects have FPDs certified at the appropriate level assigned to projects no later than CD-3. ▪ Metric: By the end of FY 2011, 85% of the 1102 contracting series will be certified.	

Appendix B
Regression Analyses

The corrective measure team conducted a series of regression analyses on the staffing data submitted for the 92 projects. The regression analyses conducted included the relationship between federal full time equivalent (FTE) staffing and fiscal year 2008 (FY08) project value based on specific project factors. The following summarizes the regressions analyses performed.

- Regression analysis for all 92 projects in the staffing study
- Regression analysis by Program Office
- Regression analysis by project type
- Regression analysis by Program Office and project type
- Regression analysis by project complexity
- Regression analysis by project value
- Regression analysis by project phase
- Regression analysis by project type and project phase

Each of these regression analyses is included in this Appendix with summary tables followed by regression charts. Several of the regressions included sample sizes (n values) of less than 20 which typically is not representative.

Regression Analysis For All 92 Projects In The Staffing Study		
Grouping	**n**	**R^2**
All 92 DOE Projects	92	0.48

Regression Analysis By Program Office		
Grouping	**n**	**R^2**
NNSA	25	0.63
SC	17	0.54
EM	50	0.40

Regression Analysis By Project Type		
Grouping	**n**	**R^2**
Construction	39	0.75
MIE	7	0.13
D&D	16	0.67
ER	30	0.13

Regression Analysis By Program Office And Project Type		
Grouping	**n***	**R^2**
NNSA – Construction	25	0.63
Science – Construction	9	0.67
EM – Construction	5	0.67
Science – MIE	7	0.13
EM – ER	30	0.13
EM – D&D	15	0.66

** Total equals 91 because there was only one Science – D&D Project and it was not included.*

Regression Analysis By Project Complexity		
Grouping	**n**	**R^2**
Low	60	0.61
Medium	28	0.10
High	4	0.93

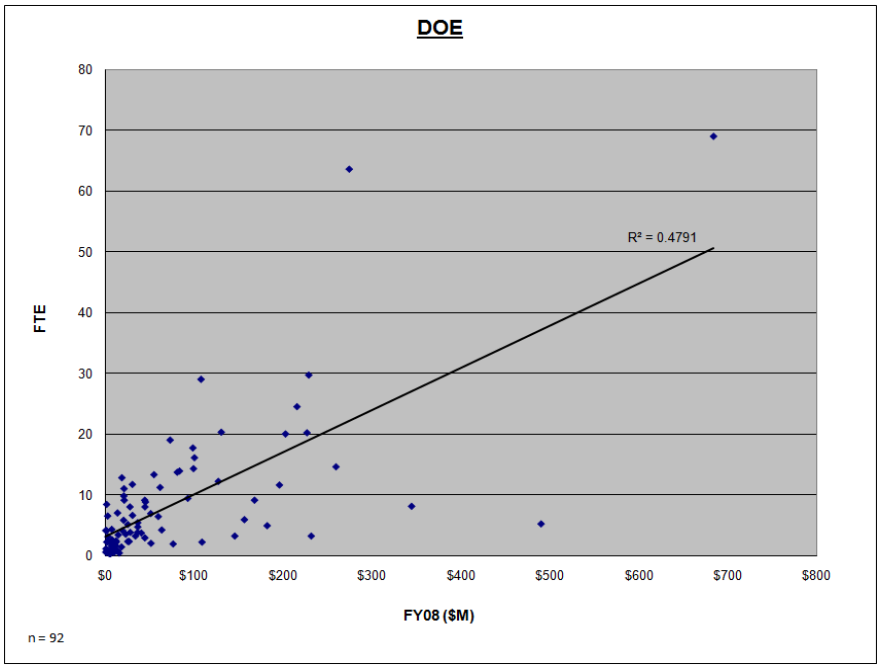
Regression Analysis By Project Value		
Grouping	**n**	**R^2**
Small	28	0.08
Small-Medium	31	0.06
Medium-Large	19	0.07
Large	12	0.09
X-Large	2	1

Regression Analysis By Project Phase		
Grouping	**n**	**R^2**
CD-0	7	0.04
CD-1	11	0.21
CD-2	10	0.22
CD-3	64	0.47
CD-2 & CD-3	74	0.46

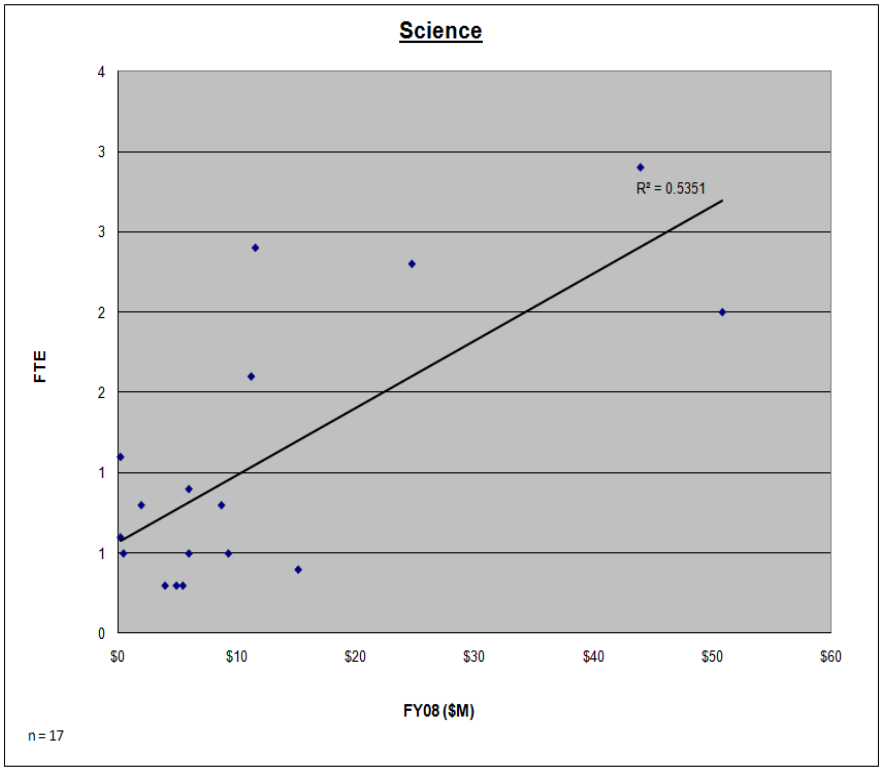
Regression Analysis By Project Type And Project Phase		
Grouping	**n***	**R^2**
Construction – CD-0	6	0.01
Construction – CD-1	8	0.12
Construction – CD-2	8	0.87
Construction – CD-3	17	0.84
MIE – CD-1	3	0.96
D&D – CD-3	16	0.67
ER – CD-3	29	0.13

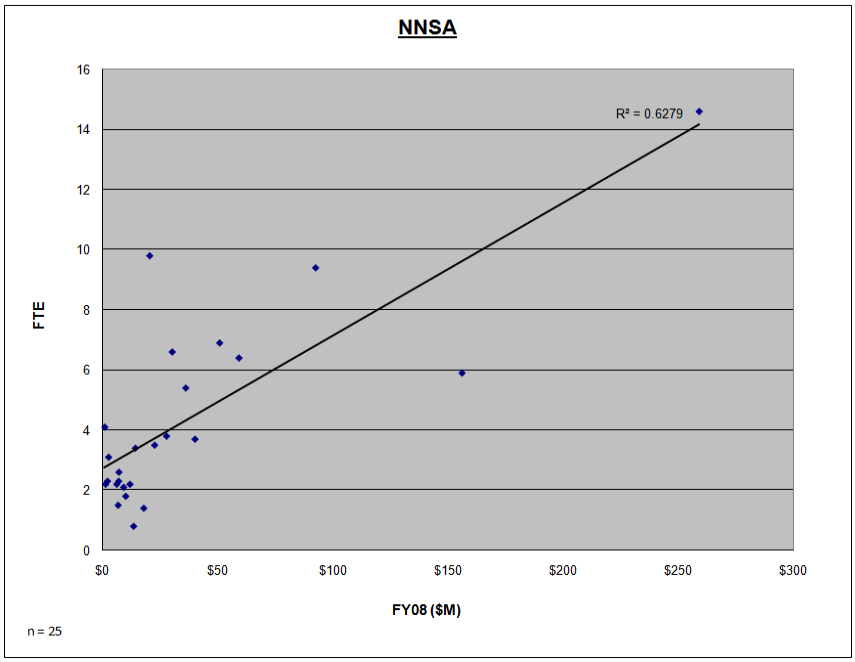
** Total equals 87 because there were five Groupings with only one project each.*

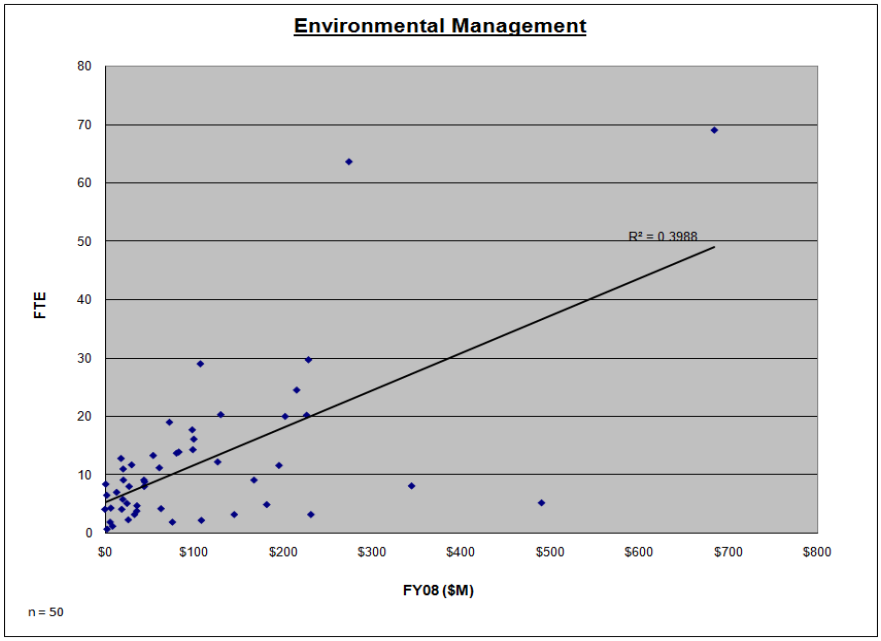
Regression Analysis for All 92 Projects in the Staffing Study



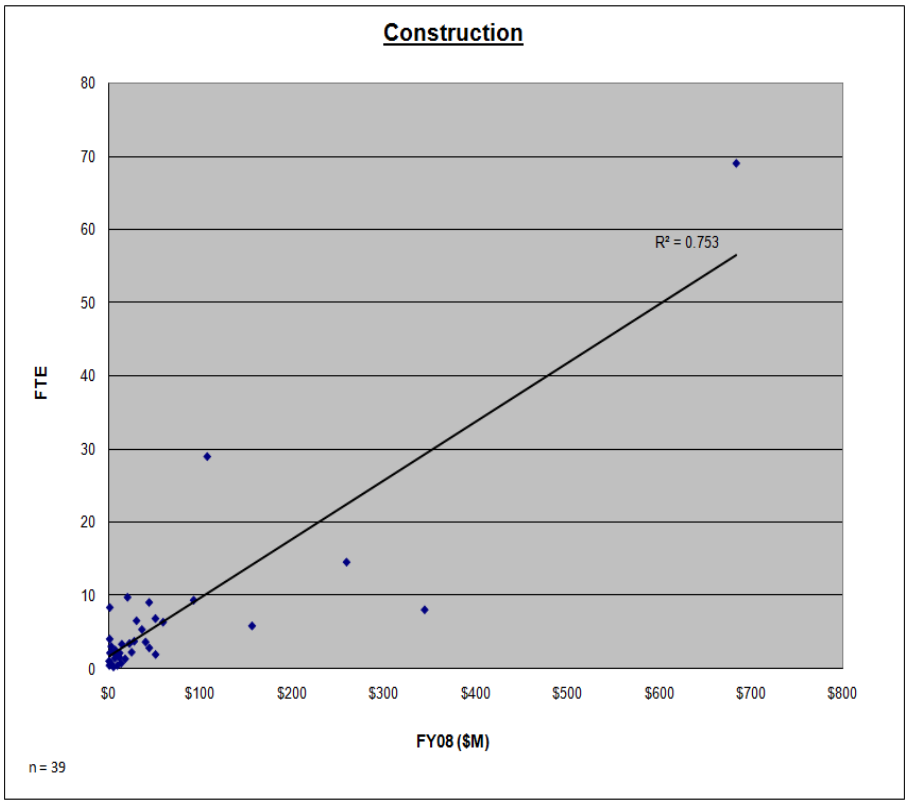
Regression Analysis by Program Office

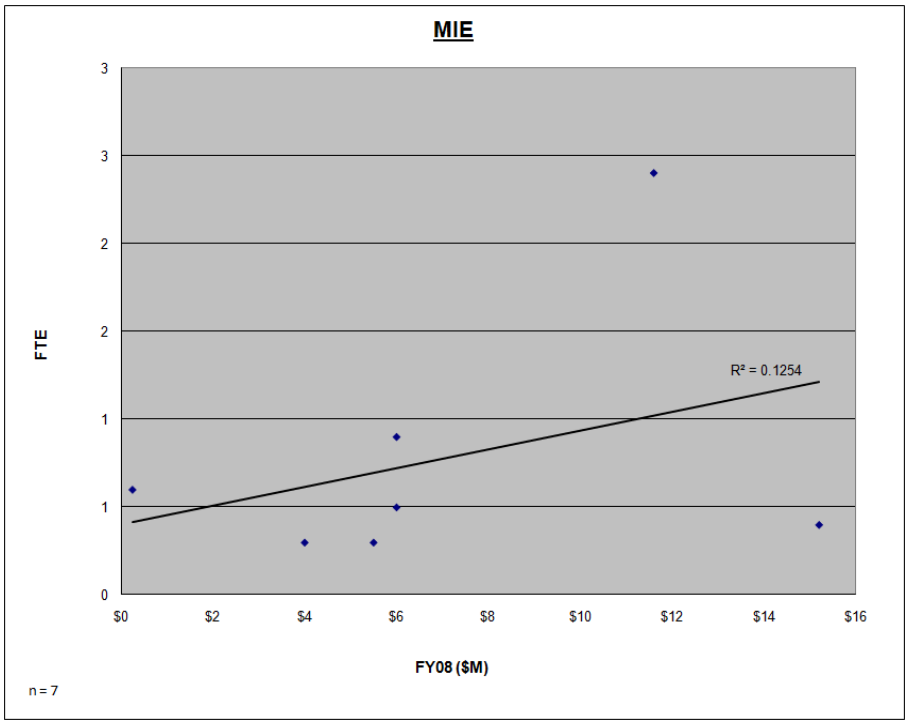


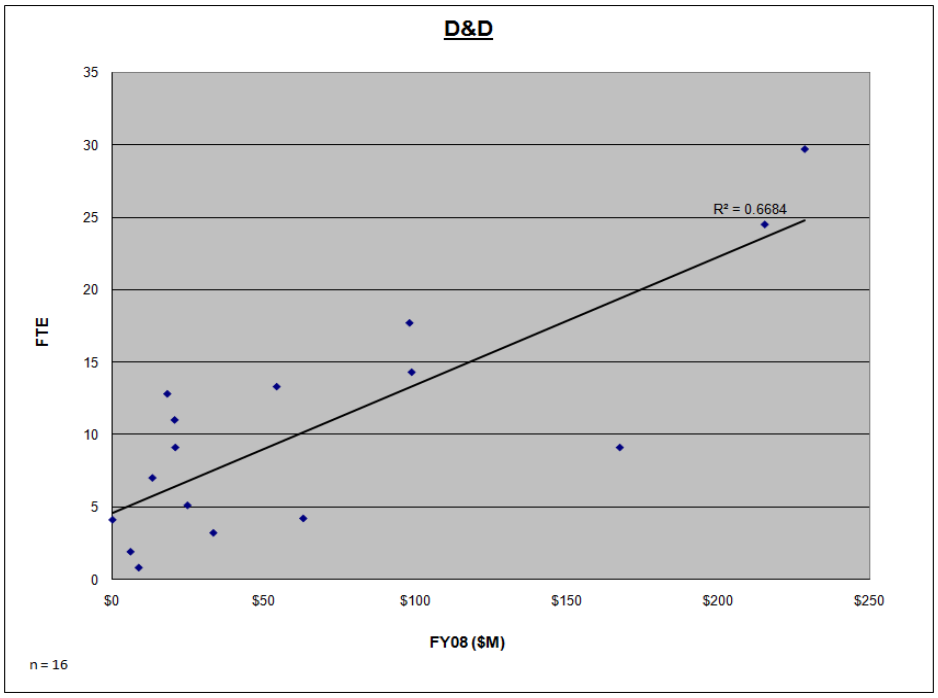

NNSA
R² = 0.6279
FTE
FY08 ($M)
n = 25

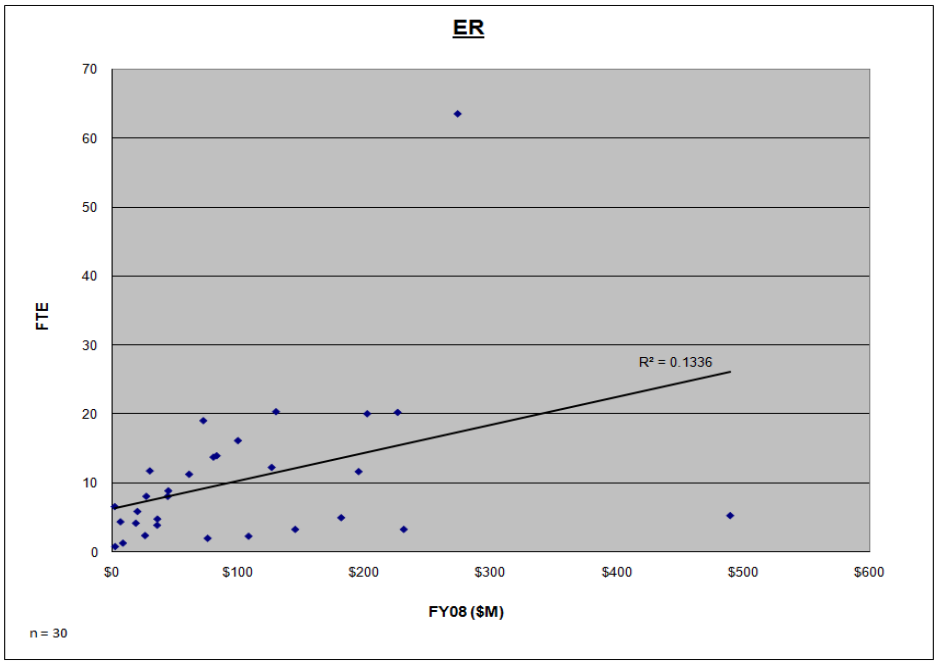

Environmental Management
R² = 0.3988
FTE
FY08 ($M)
n = 50

Regression Analysis by Project Type

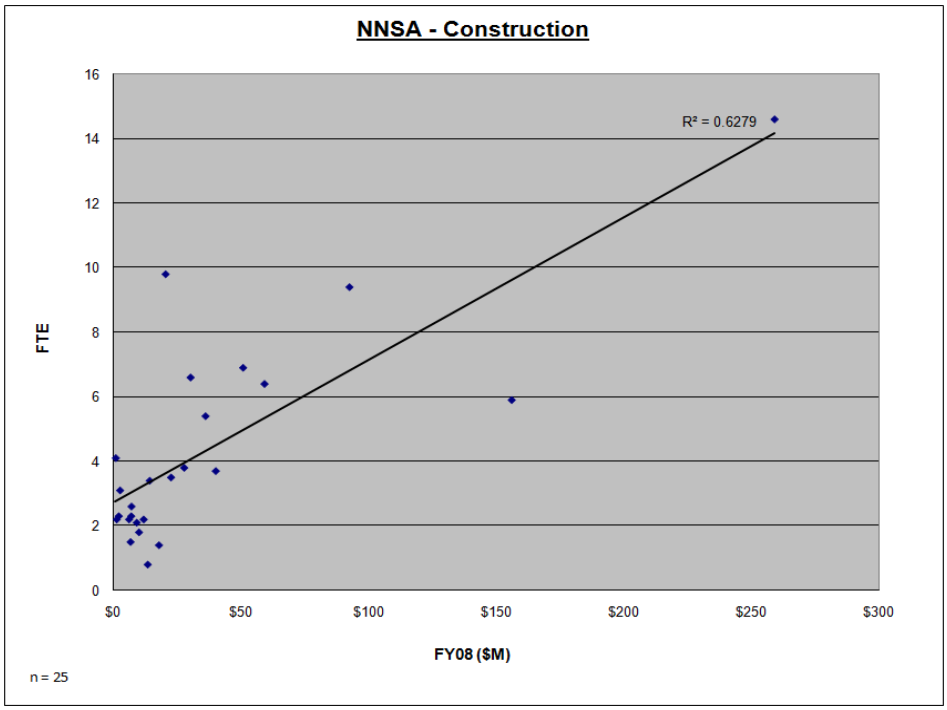


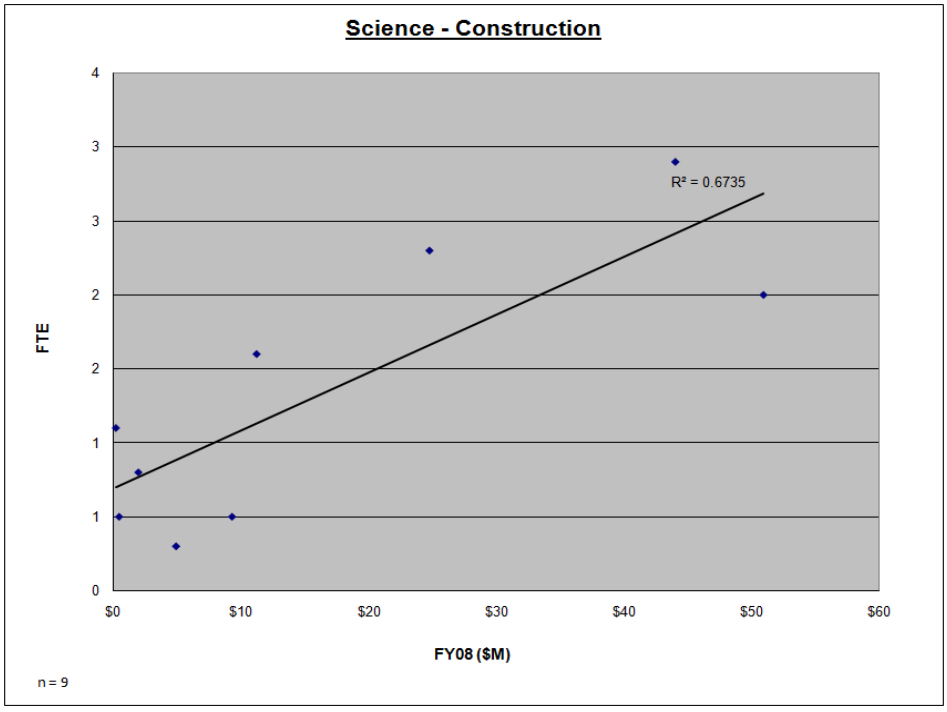


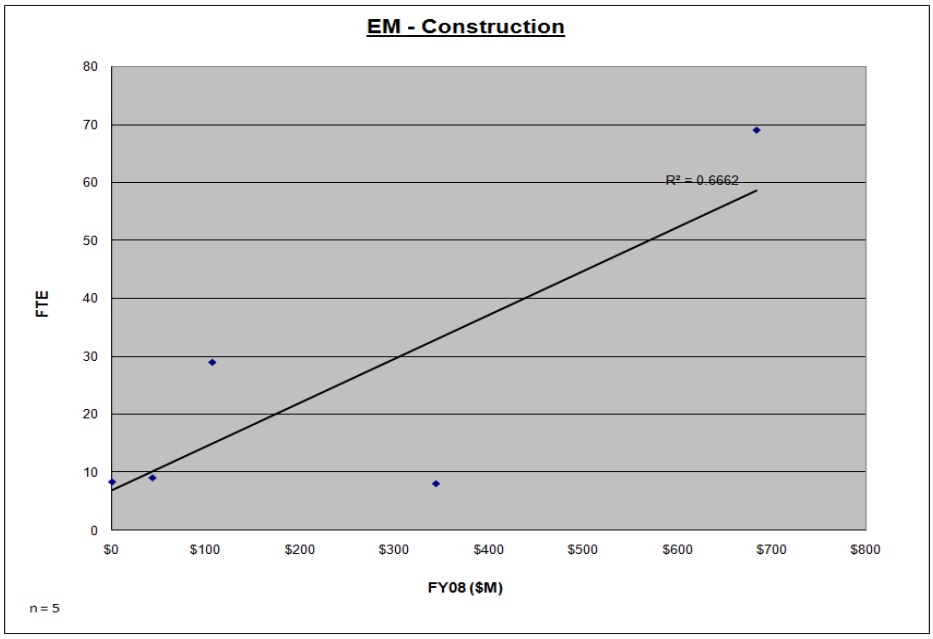

D&D
35
30
25
20
15
10
5
0
FTE
R² = 0.6684
$0
$50
$100
$150
$200
$250
FY08 ($M)
n = 16

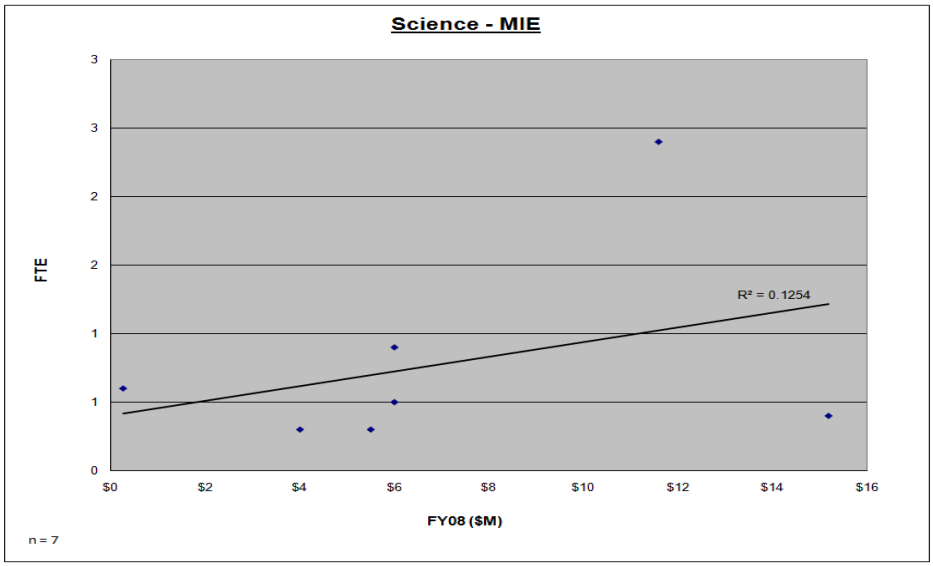

ER
70
60
50
40
30
20
10
0
FTE
R² = 0.1336
$0
$100
$200
$300
$400
$500
$600
FY08 ($M)
n = 30

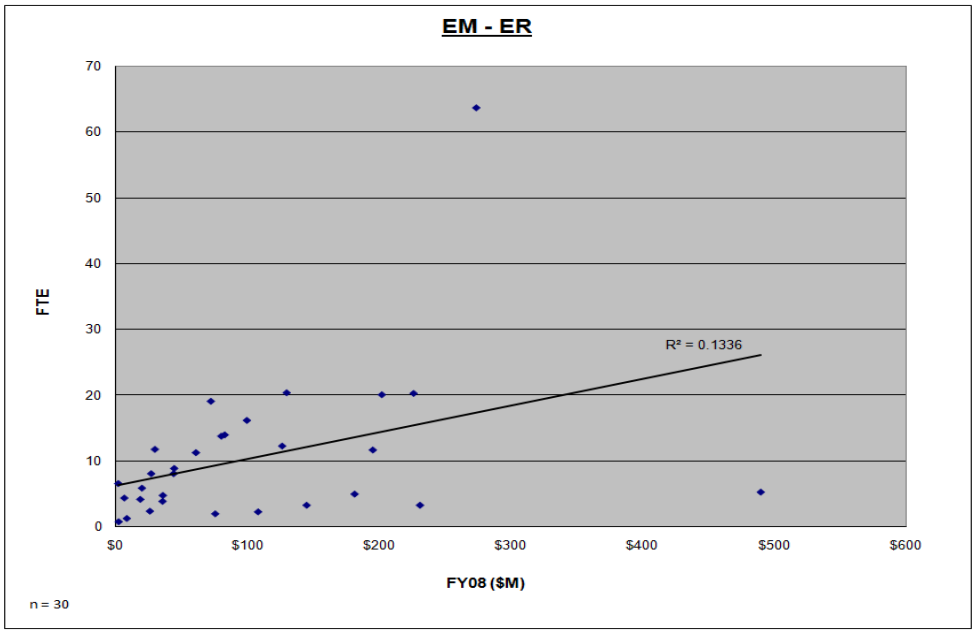
Regression Analysis by Program Office and Project Type

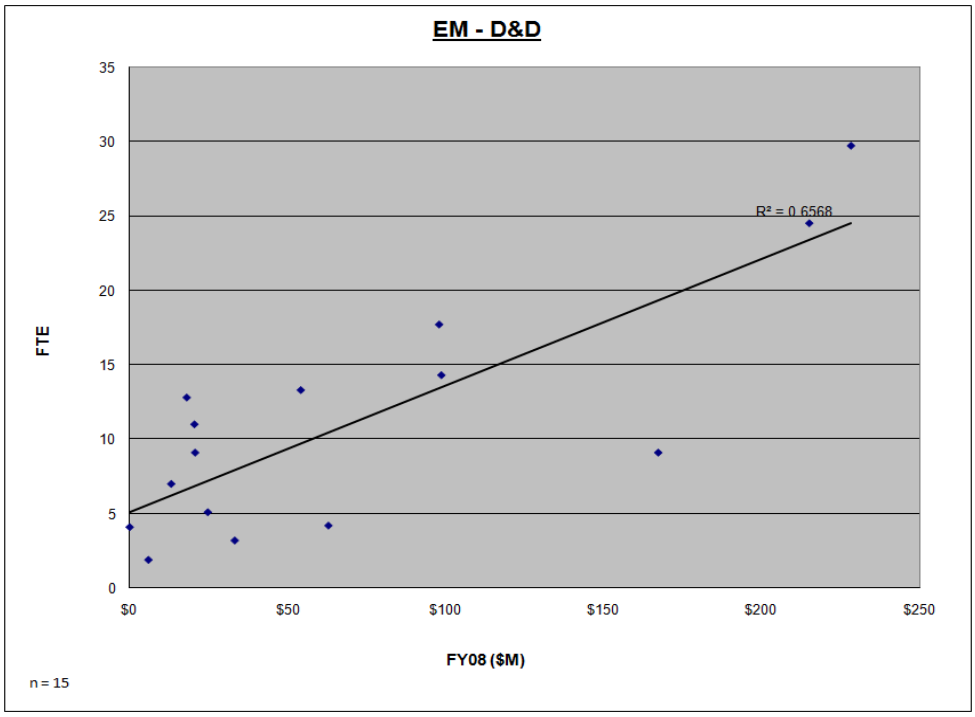




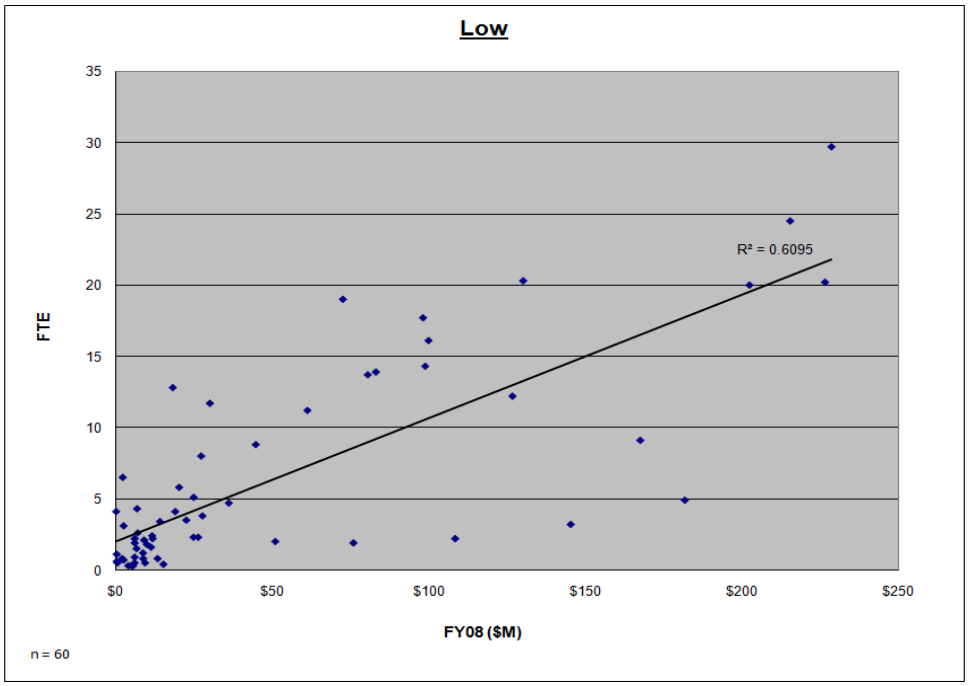

EM - Construction
80
70
60
50
40
30
20
10
0
FTE
R² = 0.6662
$0
$100
$200
$300
$400
$500
$600
$700
$800
FY08 ($M)
n = 5

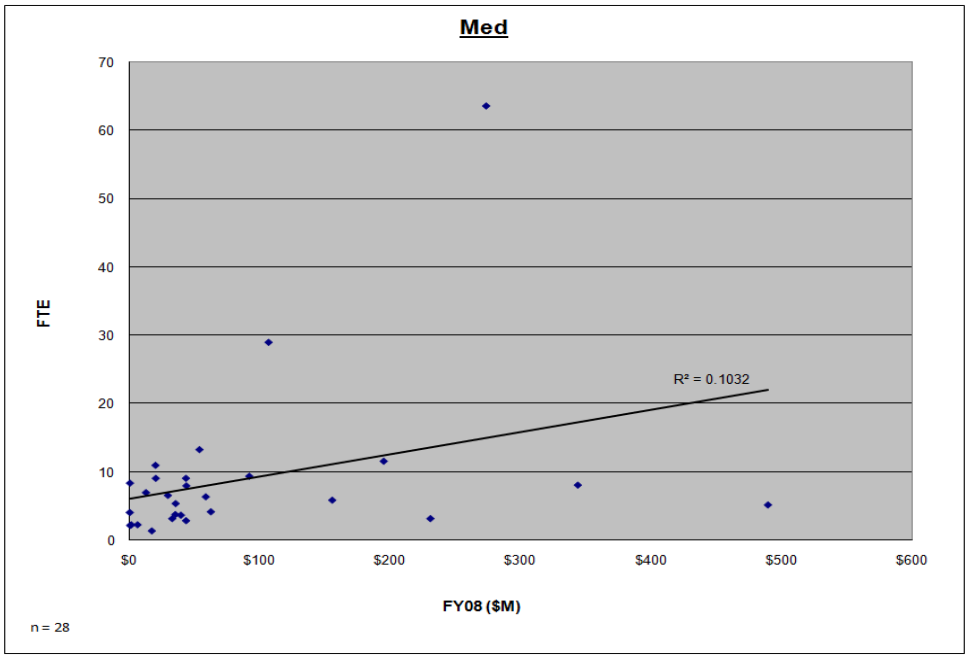

Science - MIE
3
3
2
2
1
1
0
FTE
R² = 0.1254
$0
$2
$4
$6
$8
$10
$12
$14
$16
FY08 ($M)
n = 7

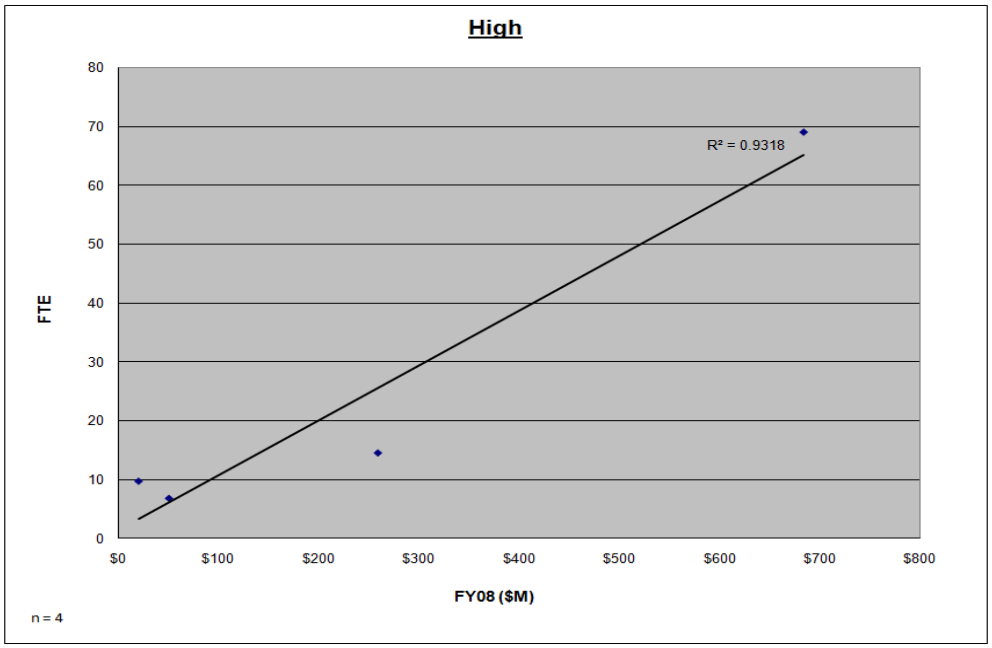

EM - ER
70
60
50
40
30
20
10
0
FTE
R² = 0.1336
$0
$100
$200
$300
$400
$500
$600
FY08 ($M)
n = 30


EM - D&D
35
30
25
20
15
10
5
0
FTE
R² = 0.6568
$0
$50
$100
$150
$200
$250
FY08 ($M)
n = 15

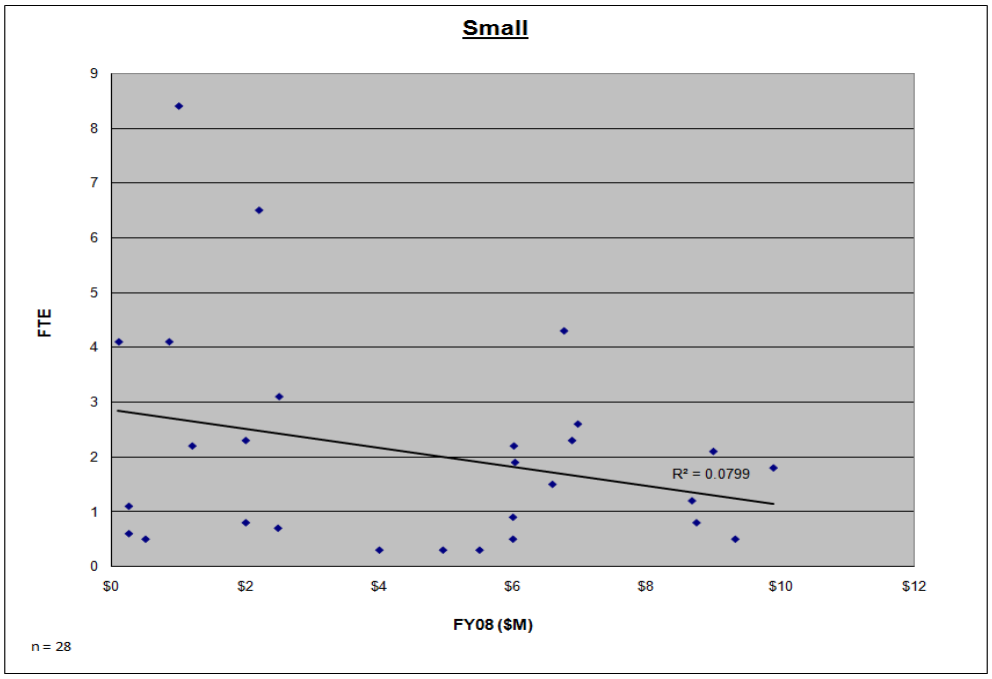
Regression Analysis by Project Complexity

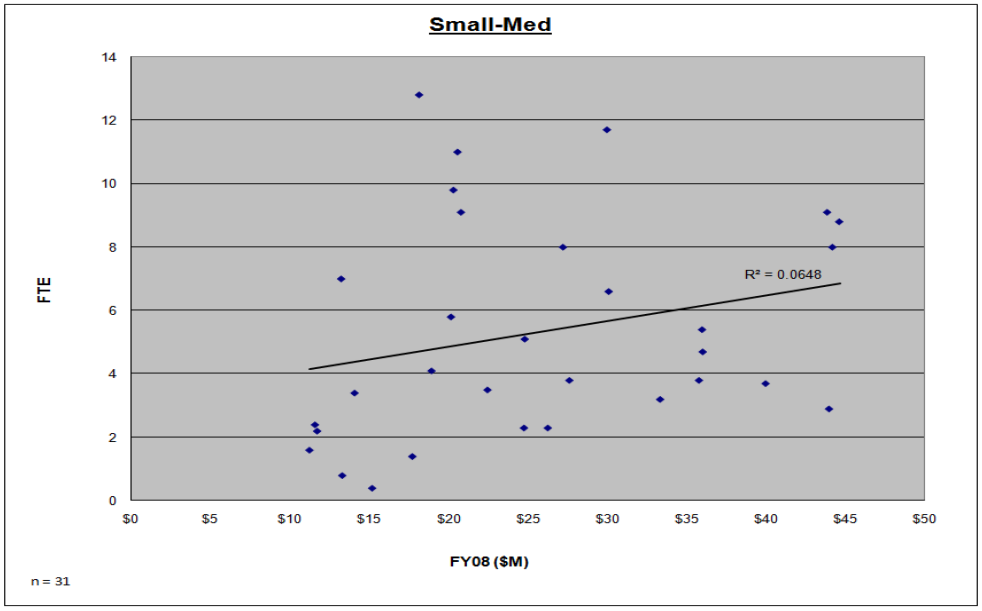


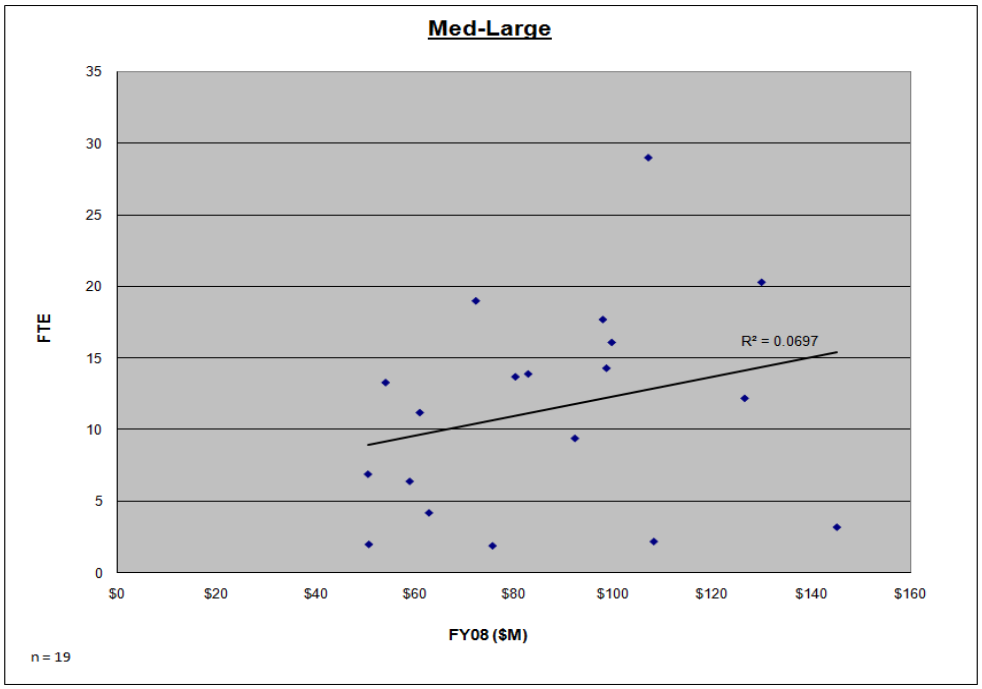


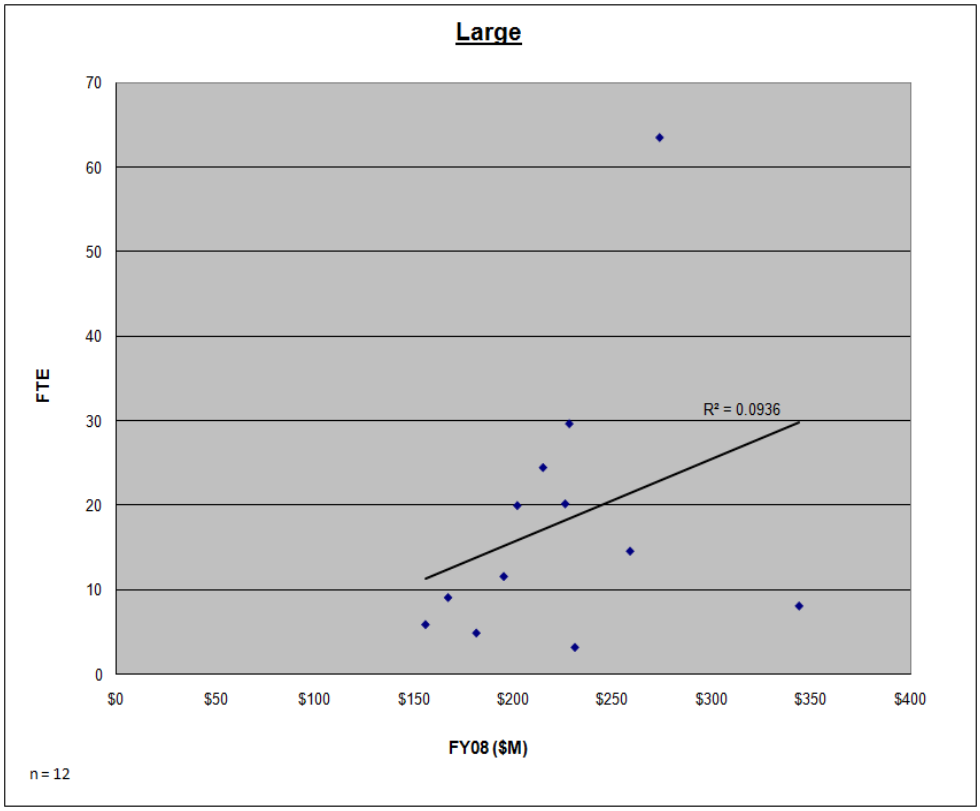

High
80
70
60
50
40
30
20
10
0
FTE
R² = 0.9318
$0
$100
$200
$300
$400
$500
$600
$700
$800
FY08 ($M)
n = 4

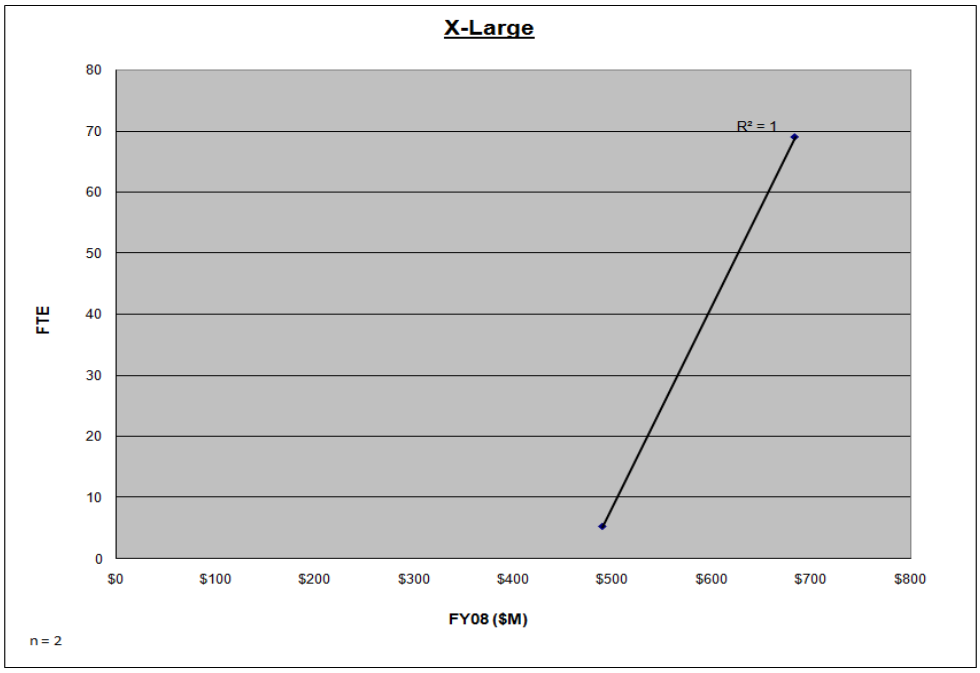
Regression Analysis by Project Value



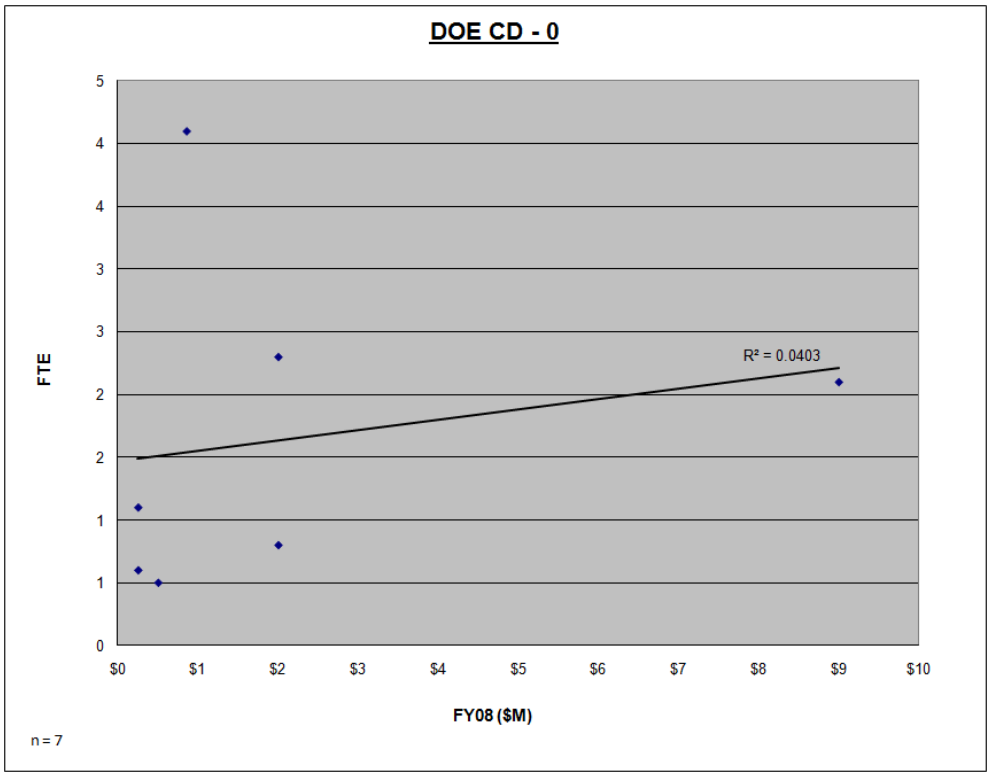


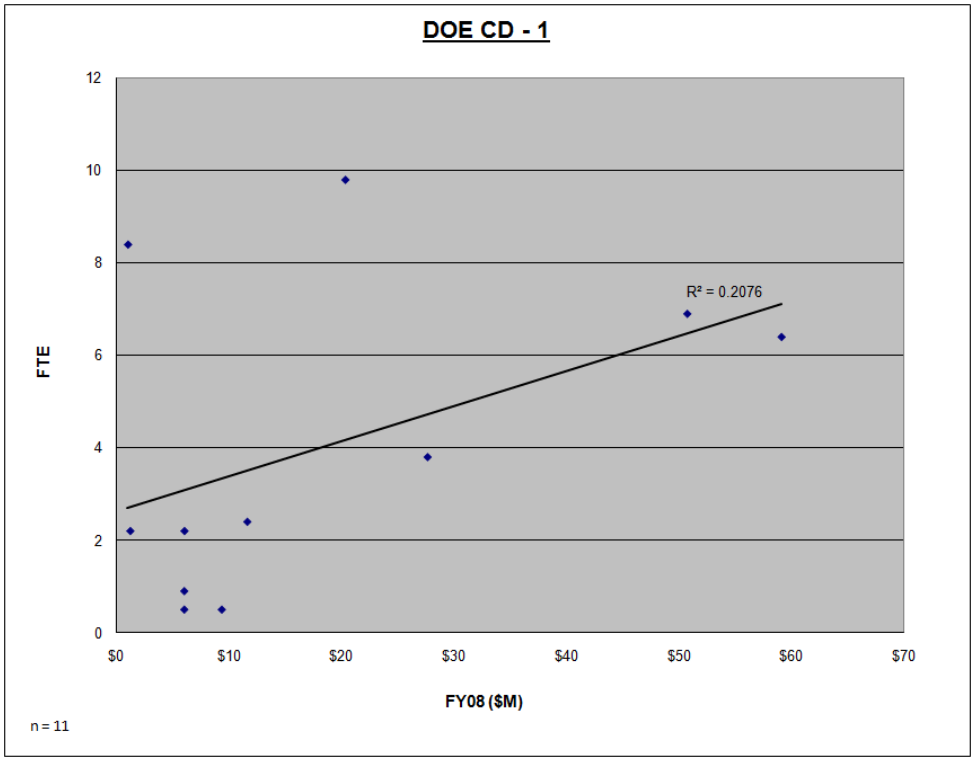

Med-Large
35
30
25
20
15
10
5
0
FTE
R² = 0.0697
$0
$20
$40
$60
$80
$100
$120
$140
$160
FY08 ($M)
n = 19

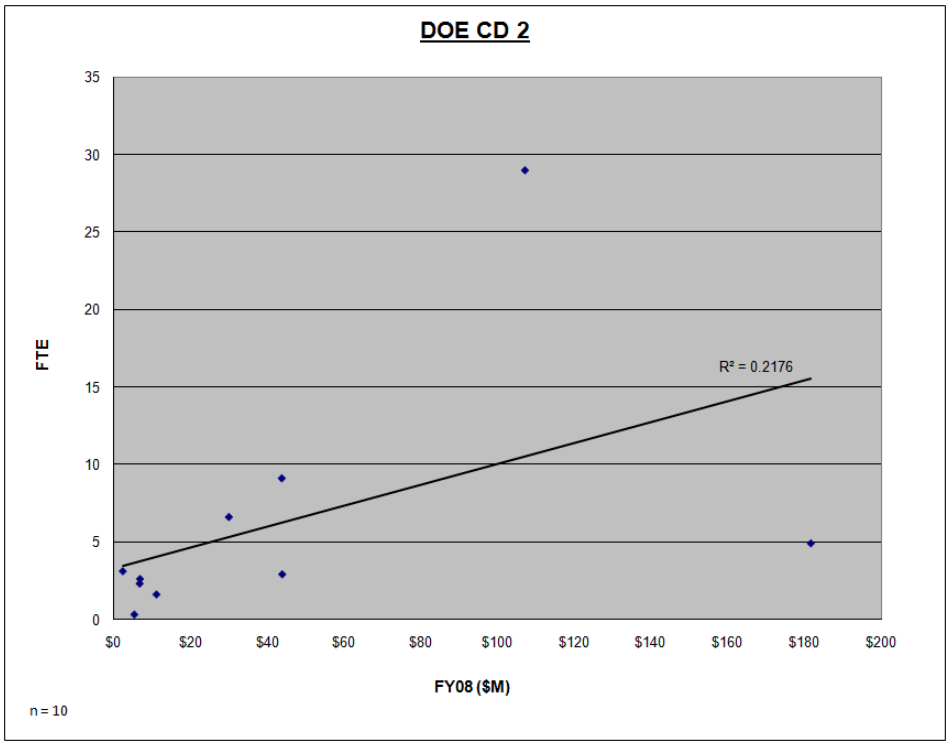

Large
70
60
50
40
30
20
10
0
FTE
R² = 0.0936
$0
$50
$100
$150
$200
$250
$300
$350
$400
FY08 ($M)
n = 12

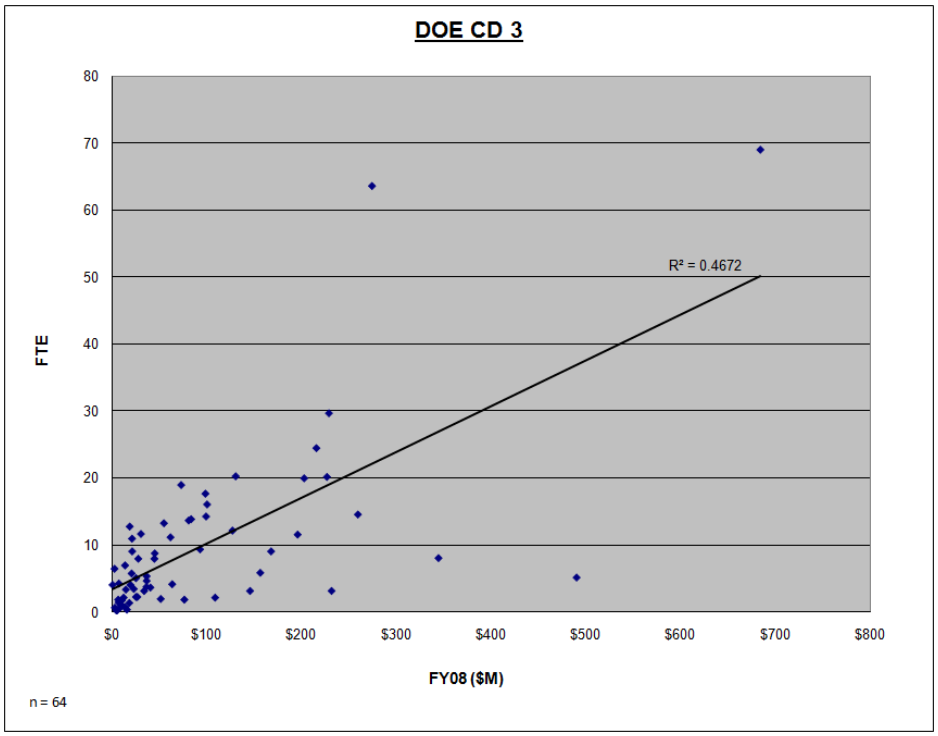

X-Large
80
70
60
50
40
30
20
10
0
FTE
$0
$100
$200
$300
$400
$500
$600
$700
$800
FY08 ($M)
R² = 1
n = 2

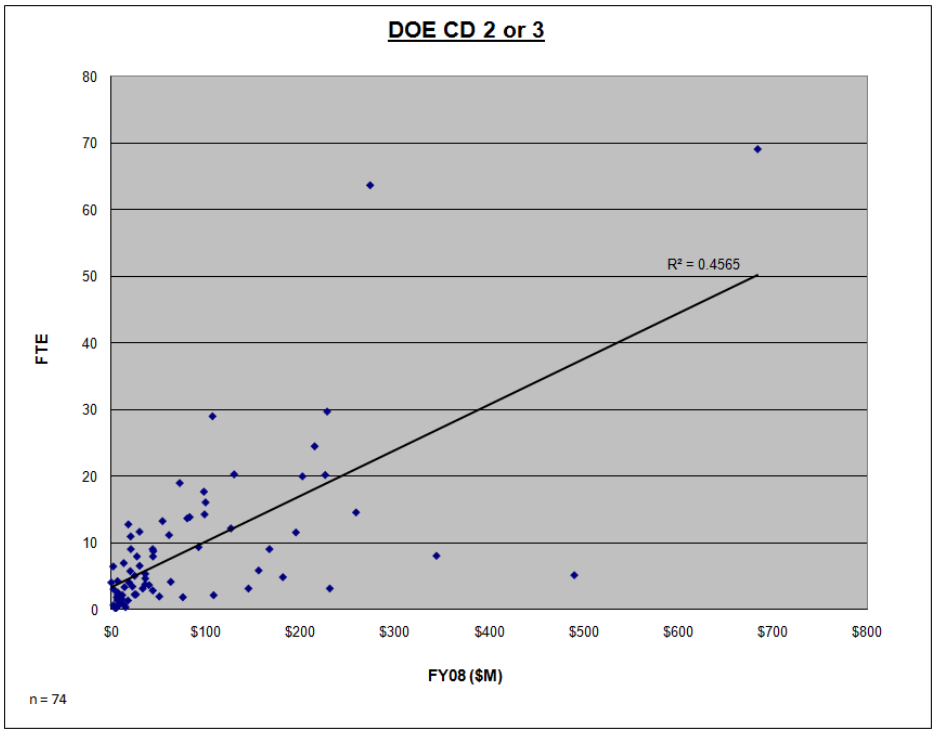
Regression Analysis by Project Phase



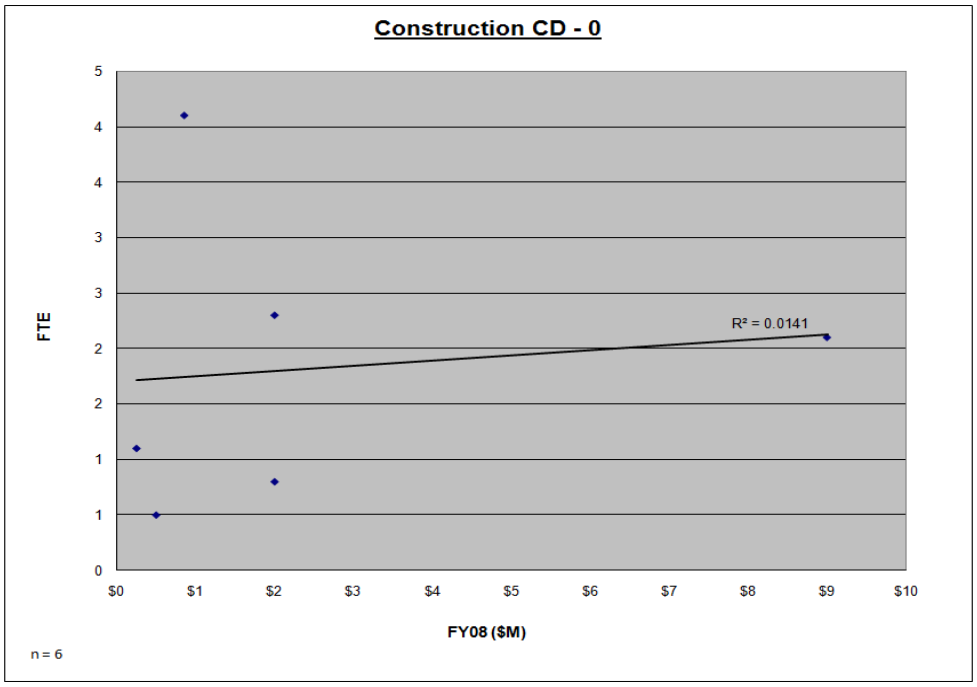


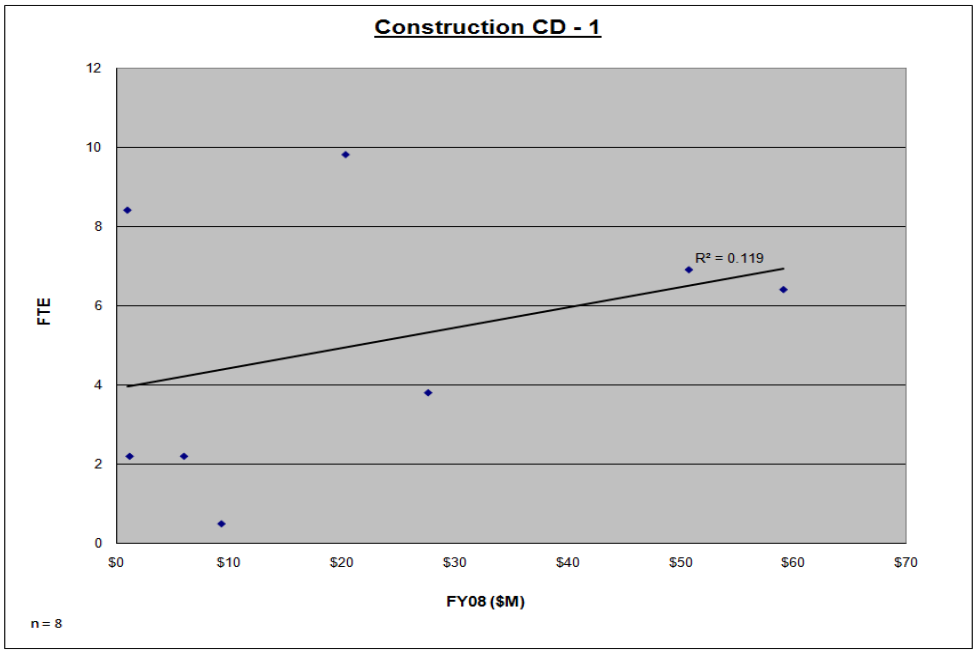

DOE CD 2
FTE
FY08 ($M)
R² = 0.2176
n = 10

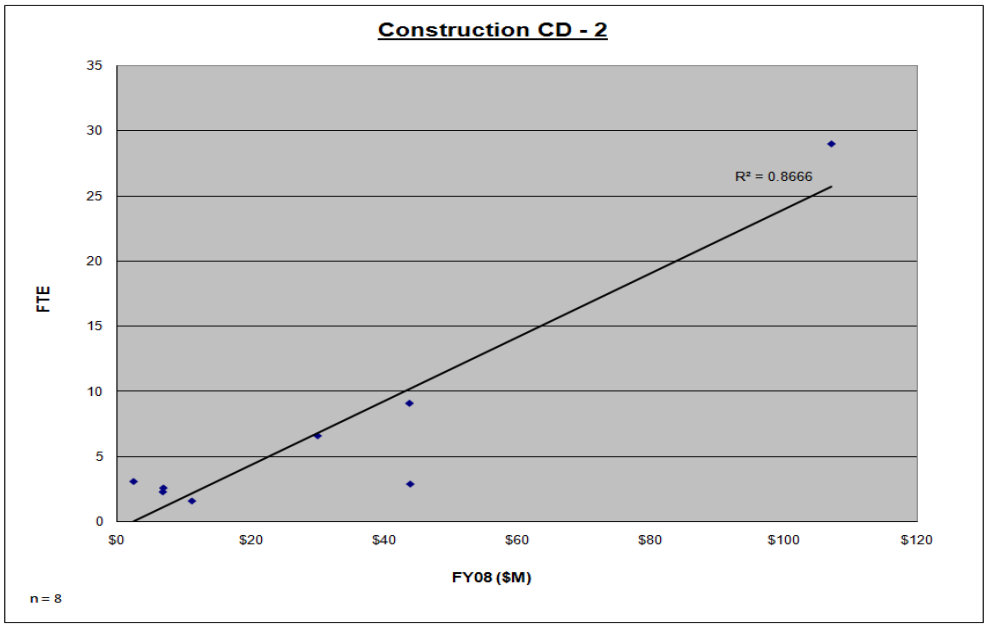

DOE CD 3
FTE
FY08 ($M)
R² = 0.4672
n = 64

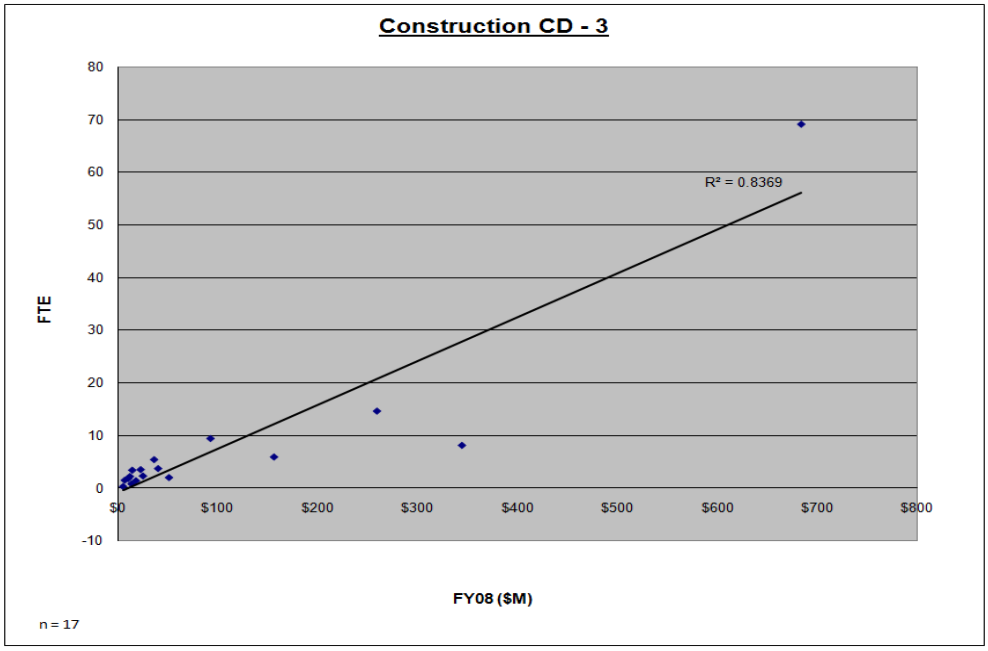

DOE CD 2 or 3
80
70
60
50
40
30
20
10
0
FTE
R² = 0.4565
$0
$100
$200
$300
$400
$500
$600
$700
$800
FY08 ($M)
n = 74

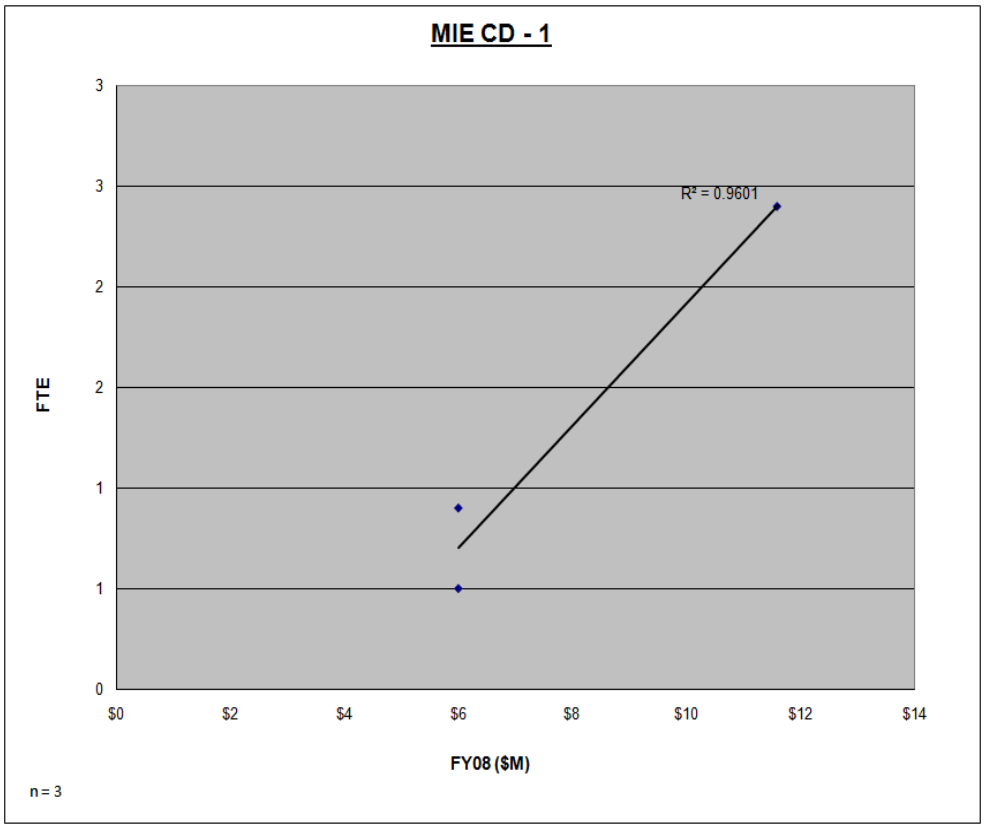
Regression Analysis by Project Type and Project Phase

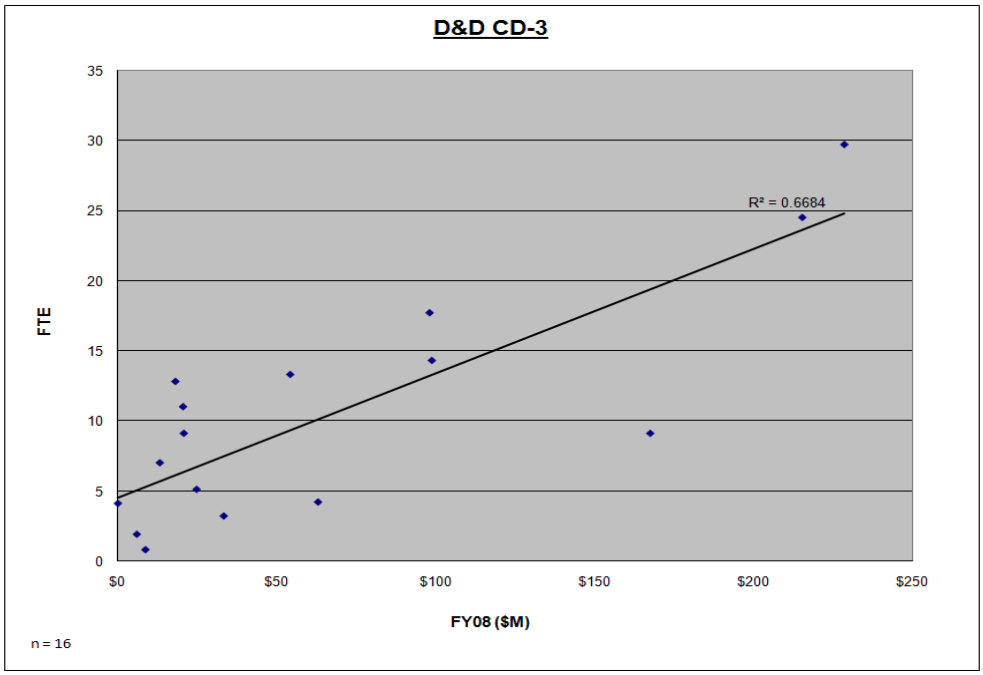


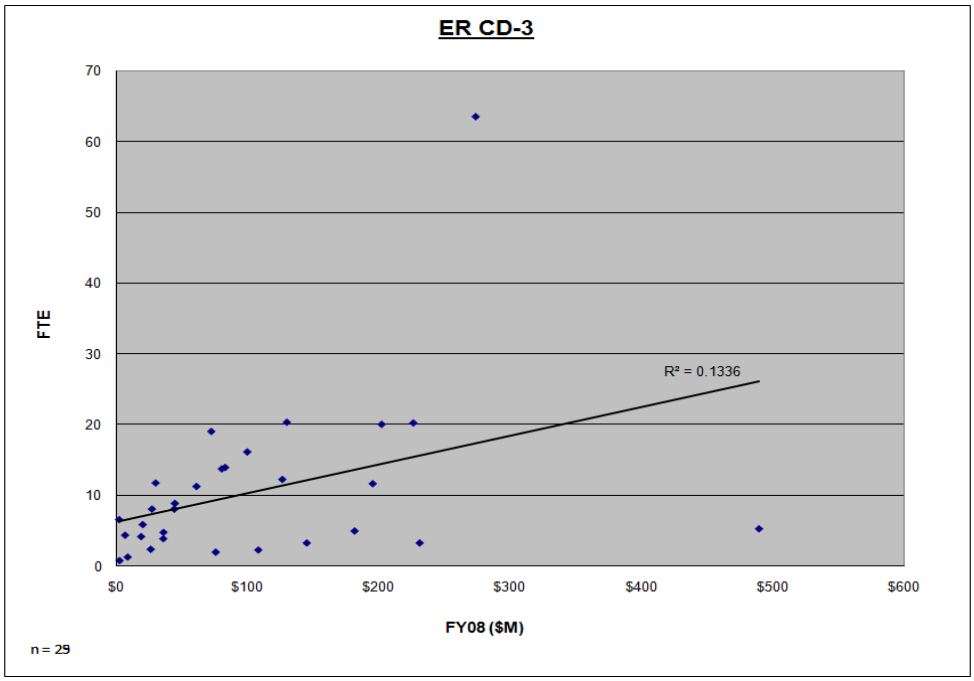



Construction CD - 2
35
30
25
20
15
10
5
0
FTE
R² = 0.8666
$0
$20
$40
$60
$80
$100
$120
FY08 ($M)
n = 8


Construction CD - 3
80
70
60
50
40
30
20
10
0
-10
FTE
R² = 0.8369
$0
$100
$200
$300
$400
$500
$600
$700
$800
FY08 ($M)
n = 17


MIE CD - 1
R² = 0.9601
FTE
FY08 ($M)
n = 3


D&D CD-3
R² = 0.6684
FTE
FY08 ($M)
n = 16


ER CD-3
70
60
50
40
30
20
10
0
FTE
R² = 0.1336
$0
$100
$200
$300
$400
$500
$600
FY08 ($M)
n = 29

Appendix C
Staffing Model Sensitivity Analyses

A sensitivity analysis was conducted for each Program Office project in the staffing study. This sensitivity analysis included productivity factors ranging from $5M/FTE to $20M/FTE in increments of $2.5M/FTE. A total of seven scenarios were evaluated at the site level for each of the three Program Offices, and at the project level within the three Program Offices.

The factors outlined in Figure 4.3-1 of report were used as input to the model. Using the FY08 funding numbers associated with each project (from the data call), the productivity factor was varied to gauge the sensitivity.

SUMMARY RESULTS

Summary Model Results – Without Gap Displayed

Program	DOE Federal FTE From Data Call	Staffing Model Projection For Various Productivity Factor ($M/FTE)						
		5.0	7.5	10.0	12.5	15.0	17.5	20.0
NNSA	108.0	297.8	198.6	148.9	119.1	99.3	85.1	74.5
SC	18.2	59.1	39.4	29.5	23.6	19.7	16.9	14.8
EM	602.9	1,741.1	1,160.7	870.5	696.4	580.4	497.5	435.3

Program	DOE Federal & Support Contractor FTE From Data Call	Staffing Model Projection For Various Productivity Factor ($M/FTE)						
		5.0	7.5	10.0	12.5	15.0	17.5	20.0
NNSA	116.4	297.8	198.6	148.9	119.1	99.3	85.1	74.5
SC	21.2	59.1	39.4	29.5	23.6	19.7	16.9	14.8
EM	788.6	1,741.1	1,160.7	870.5	696.4	580.4	497.5	435.3

Summary Model Results – With Gap Displayed

Program	DOE Federal FTE From Data Call	Staffing Model Projection For Various Productivity Factor ($M/FTE)													
		5.0		7.5		10.0		12.5		15.0		17.5		20.0	
		FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap
NNSA	108.0	297.8	189.8	198.6	90.6	148.9	40.9	119.1	11.1	99.3	(8.7)	85.1	(22.9)	74.5	(33.5)
SC	18.2	59.1	40.9	39.4	21.2	29.5	11.3	23.6	5.4	19.7	1.5	16.9	(1.3)	14.8	(3.4)
EM	602.9	1,741.1	1,138.2	1,160.7	557.8	870.5	267.6	696.4	93.5	580.4	(22.5)	497.5	(105.4)	435.3	(167.6)

Program	DOE Federal & Support Contractor FTE From Data Call	Staffing Model Projection For Various Productivity Factor ($M/FTE)													
		5.0		7.5		10.0		12.5		15.0		17.5		20.0	
		FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap	FTE	Gap
NNSA	116.4	297.8	181.4	198.6	82.2	148.9	32.5	119.1	2.7	99.3	(17.1)	85.1	(31.3)	74.5	(41.9)
SC	21.2	59.1	37.9	39.4	18.2	29.5	8.3	23.6	2.4	19.7	(1.5)	16.9	(4.3)	14.8	(6.4)
EM	788.6	1,741.1	952.5	1,160.7	372.1	870.5	81.9	696.4	(92.2)	580.4	(208.2)	497.5	(291.1)	435.3	(353.3)

APPLICATION OF THE STAFFING MODEL TO FY2008 DATA AT VARYING PRODUCTIVITY FACTORS

Productivity Factor At $20.0M/FTE

Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	525.1	(204.0)	-28%
NNSA	$902.6	108.0	8.4	74.5	(33.54)	-31%
Livermore	$36	5.4	6.7	2.2	(3.20)	-59%
Los Alamos	$197	30.3	6.5	17.8	(12.50)	-41%
Nevada	$47	5.2	9.0	3.2	(1.98)	-38%
Pantex	$27	6.3	4.2	2.0	(4.32)	-69%
Sandia	$26	5.7	4.5	1.3	(4.38)	-77%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	23.6	9.03	62%
Savannah River	$81	13.5	6.0	8.5	(5.01)	-37%
Y-12	$231	27.0	8.5	15.8	(11.18)	-41%
SC	$205	18.2	11.3	15.4	(2.81)	-15%
Berkeley	$20	2.2	9.0	1.3	(0.89)	-41%
Brookhaven	$45	3.4	13.1	3.7	0.25	7%
Fermi	$17	2.7	6.3	1.6	(1.13)	-42%
Oak Ridge	$31	2.0	15.4	2.6	0.56	28%
Pacific Northwest	$25	2.3	10.8	1.5	(0.78)	-34%
Stanford Linear Accelerator	$57	2.9	19.6	3.8	0.88	30%
Thomas Jefferson	$12	2.7	4.3	1.0	(1.69)	-63%
EM	$5,329	602.9	8.8	435.3	(167.63)	-28%
Brookhaven	$25	5.1	4.9	1.8	(3.30)	-65%
Carlsbad	$160	32.0	5.0	11.8	(20.20)	-63%
Idaho	$949	55.4	17.1	76.8	21.37	39%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.0	(5.97)	-85%
Livermore	$9	1.2	7.2	0.6	(0.56)	-47%
Los Alamos	$381	26.4	14.4	28.2	1.81	7%
Nevada	$100	21.1	4.8	7.4	(13.71)	-65%
Oak Ridge	$435	80.0	5.4	36.0	(43.98)	-55%
Oakland	$18	12.8	1.4	1.3	(11.48)	-90%
Office of River Protection	$958	132.6	7.2	94.2	(38.39)	-29%
Pantex	$26	2.3	11.4	1.9	(0.36)	-16%
Portsmouth/Paducah	$283	35.0	8.1	22.5	(12.46)	-36%
Richland	$831	120.9	6.9	60.9	(60.02)	-50%
Sandia	$2	0.7	3.5	0.2	(0.52)	-74%
Savannah River	$1,102	65.7	16.8	87.9	22.20	34%
UMTRA	$36	4.7	7.7	2.7	(2.04)	-43%

Productivity Factor At $17.5M/FTE

Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	600.1	(129.0)	-18%
NNSA	$902.6	108.0	8.4	85.1	(22.90)	-21%
Livermore	$36	5.4	6.7	2.5	(2.88)	-53%
Los Alamos	$197	30.3	6.5	20.3	(9.96)	-33%
Nevada	$47	5.2	9.0	3.7	(1.52)	-29%
Pantex	$27	6.3	4.2	2.3	(4.04)	-64%
Sandia	$26	5.7	4.5	1.5	(4.19)	-74%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	27.0	12.41	85%
Savannah River	$81	13.5	6.0	9.7	(3.79)	-28%
Y-12	$231	27.0	8.5	18.1	(8.92)	-33%
SC	$205	18.2	11.3	17.6	(0.61)	-3%
Berkeley	$20	2.2	9.0	1.5	(0.71)	-32%
Brookhaven	$45	3.4	13.1	4.2	0.77	23%
Fermi	$17	2.7	6.3	1.8	(0.90)	-33%
Oak Ridge	$31	2.0	15.4	2.9	0.92	46%
Pacific Northwest	$25	2.3	10.8	1.7	(0.57)	-25%
Stanford Linear Accelerator	$57	2.9	19.6	4.3	1.42	49%
Thomas Jefferson	$12	2.7	4.3	1.2	(1.55)	-57%
EM	$5,329	602.9	8.8	497.5	(105.45)	-17%
Brookhaven	$25	5.1	4.9	2.1	(3.04)	-60%
Carlsbad	$160	32.0	5.0	13.5	(18.51)	-58%
Idaho	$949	55.4	17.1	87.7	32.33	58%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.2	(5.83)	-83%
Livermore	$9	1.2	7.2	0.7	(0.47)	-39%
Los Alamos	$381	26.4	14.4	32.2	5.83	22%
Nevada	$100	21.1	4.8	8.5	(12.65)	-60%
Oak Ridge	$435	80.0	5.4	41.2	(38.84)	-49%
Oakland	$18	12.8	1.4	1.5	(11.30)	-88%
Office of River Protection	$958	132.6	7.2	107.7	(24.93)	-19%
Pantex	$26	2.3	11.4	2.2	(0.09)	-4%
Portsmouth/Paducah	$283	35.0	8.1	25.8	(9.24)	-26%
Richland	$831	120.9	6.9	69.6	(51.32)	-42%
Sandia	$2	0.7	3.5	0.2	(0.49)	-70%
Savannah River	$1,102	65.7	16.8	100.5	34.75	53%
UMTRA	$36	4.7	7.7	3.0	(1.66)	-35%

Productivity Factor At $15.0M/FTE

Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	700.2	(28.9)	-4%
NNSA	$902.6	108.0	8.4	99.3	(8.72)	-8%
Livermore	$36	5.4	6.7	2.9	(2.46)	-46%
Los Alamos	$197	30.3	6.5	23.7	(6.57)	-22%
Nevada	$47	5.2	9.0	4.3	(0.91)	-17%
Pantex	$27	6.3	4.2	2.6	(3.67)	-58%
Sandia	$26	5.7	4.5	1.8	(3.94)	-69%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	31.5	16.91	116%
Savannah River	$81	13.5	6.0	11.3	(2.18)	-16%
Y-12	$231	27.0	8.5	21.1	(5.91)	-22%
SC	$205	18.2	11.3	20.5	2.32	13%
Berkeley	$20	2.2	9.0	1.7	(0.46)	-21%
Brookhaven	$45	3.4	13.1	4.9	1.47	43%
Fermi	$17	2.7	6.3	2.1	(0.60)	-22%
Oak Ridge	$31	2.0	15.4	3.4	1.41	70%
Pacific Northwest	$25	2.3	10.8	2.0	(0.28)	-12%
Stanford Linear Accelerator	$57	2.9	19.6	5.0	2.14	74%
Thomas Jefferson	$12	2.7	4.3	1.3	(1.35)	-50%
EM	$5,329	602.9	8.8	580.4	(22.54)	-4%
Brookhaven	$25	5.1	4.9	2.4	(2.70)	-53%
Carlsbad	$160	32.0	5.0	15.7	(16.27)	-51%
Idaho	$949	55.4	17.1	102.4	46.96	85%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.4	(5.63)	-80%
Livermore	$9	1.2	7.2	0.9	(0.35)	-29%
Los Alamos	$381	26.4	14.4	37.6	11.21	42%
Nevada	$100	21.1	4.8	9.9	(11.24)	-53%
Oak Ridge	$435	80.0	5.4	48.0	(31.98)	-40%
Oakland	$18	12.8	1.4	1.8	(11.04)	-86%
Office of River Protection	$958	132.6	7.2	125.6	(6.98)	-5%
Pantex	$26	2.3	11.4	2.6	0.28	12%
Portsmouth/Paducah	$283	35.0	8.1	30.0	(4.95)	-14%
Richland	$831	120.9	6.9	81.2	(39.73)	-33%
Sandia	$2	0.7	3.5	0.2	(0.46)	-65%
Savannah River	$1,102	65.7	16.8	117.2	51.50	78%
UMTRA	$36	4.7	7.7	3.5	(1.16)	-25%

Productivity Factor At $12.5M/FTE

Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	840.2	111.1	15%
NNSA	$902.6	108.0	8.4	119.1	11.14	10%
Livermore	$36	5.4	6.7	3.5	(1.87)	-35%
Los Alamos	$197	30.3	6.5	28.5	(1.82)	-6%
Nevada	$47	5.2	9.0	5.2	(0.05)	-1%
Pantex	$27	6.3	4.2	3.2	(3.14)	-50%
Sandia	$26	5.7	4.5	2.1	(3.59)	-63%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	37.8	23.21	159%
Savannah River	$81	13.5	6.0	13.6	0.09	1%
Y-12	$231	27.0	8.5	25.3	(1.69)	-6%
SC	$205	18.2	11.3	24.6	6.42	35%
Berkeley	$20	2.2	9.0	2.1	(0.11)	-5%
Brookhaven	$45	3.4	13.1	5.8	2.44	72%
Fermi	$17	2.7	6.3	2.5	(0.18)	-7%
Oak Ridge	$31	2.0	15.4	4.1	2.09	105%
Pacific Northwest	$25	2.3	10.8	2.4	0.13	6%
Stanford Linear Accelerator	$57	2.9	19.6	6.0	3.14	108%
Thomas Jefferson	$12	2.7	4.3	1.6	(1.08)	-40%
EM	$5,329	602.9	8.8	696.4	93.54	16%
Brookhaven	$25	5.1	4.9	2.9	(2.22)	-44%
Carlsbad	$160	32.0	5.0	18.9	(13.12)	-41%
Idaho	$949	55.4	17.1	122.8	67.43	122%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.6	(5.36)	-77%
Livermore	$9	1.2	7.2	1.0	(0.18)	-15%
Los Alamos	$381	26.4	14.4	45.1	18.73	71%
Nevada	$100	21.1	4.8	11.8	(9.27)	-44%
Oak Ridge	$435	80.0	5.4	57.6	(22.37)	-28%
Oakland	$18	12.8	1.4	2.1	(10.69)	-84%
Office of River Protection	$958	132.6	7.2	150.7	18.14	14%
Pantex	$26	2.3	11.4	3.1	0.80	35%
Portsmouth/Paducah	$283	35.0	8.1	36.1	1.06	3%
Richland	$831	120.9	6.9	97.4	(23.49)	-19%
Sandia	$2	0.7	3.5	0.3	(0.41)	-58%
Savannah River	$1,102	65.7	16.8	140.6	74.94	114%
UMTRA	$36	4.7	7.7	4.3	(0.45)	-10%

Productivity Factor At $10.0M/FTE

Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	1,050.2	321.1	44%
NNSA	$902.6	108.0	8.4	148.9	40.92	38%
Livermore	$36	5.4	6.7	4.4	(0.99)	-18%
Los Alamos	$197	30.3	6.5	35.6	5.30	17%
Nevada	$47	5.2	9.0	6.4	1.24	24%
Pantex	$27	6.3	4.2	4.0	(2.35)	-37%
Sandia	$26	5.7	4.5	2.6	(3.06)	-54%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	47.3	32.67	224%
Savannah River	$81	13.5	6.0	17.0	3.49	26%
Y-12	$231	27.0	8.5	31.6	4.63	17%
SC	$205	18.2	11.3	30.8	12.58	69%
Berkeley	$20	2.2	9.0	2.6	0.41	19%
Brookhaven	$45	3.4	13.1	7.3	3.90	115%
Fermi	$17	2.7	6.3	3.1	0.45	16%
Oak Ridge	$31	2.0	15.4	5.1	3.11	156%
Pacific Northwest	$25	2.3	10.8	3.0	0.73	32%
Stanford Linear Accelerator	$57	2.9	19.6	7.6	4.65	160%
Thomas Jefferson	$12	2.7	4.3	2.0	(0.68)	-25%
EM	$5,329	602.9	8.8	870.5	267.64	44%
Brookhaven	$25	5.1	4.9	3.6	(1.50)	-29%
Carlsbad	$160	32.0	5.0	23.6	(8.40)	-26%
Idaho	$949	55.4	17.1	153.5	98.13	177%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	2.1	(4.95)	-71%
Livermore	$9	1.2	7.2	1.3	0.08	7%
Los Alamos	$381	26.4	14.4	56.4	30.01	114%
Nevada	$100	21.1	4.8	14.8	(6.31)	-30%
Oak Ridge	$435	80.0	5.4	72.0	(7.96)	-10%
Oakland	$18	12.8	1.4	2.6	(10.17)	-79%
Office of River Protection	$958	132.6	7.2	188.4	55.83	42%
Pantex	$26	2.3	11.4	3.9	1.58	68%
Portsmouth/Paducah	$283	35.0	8.1	45.1	10.07	29%
Richland	$831	120.9	6.9	121.8	0.86	1%
Sandia	$2	0.7	3.5	0.4	(0.33)	-48%
Savannah River	$1,102	65.7	16.8	175.8	110.10	168%
UMTRA	$36	4.7	7.7	5.3	0.62	13%

Productivity Factor At $7.5M/FTE

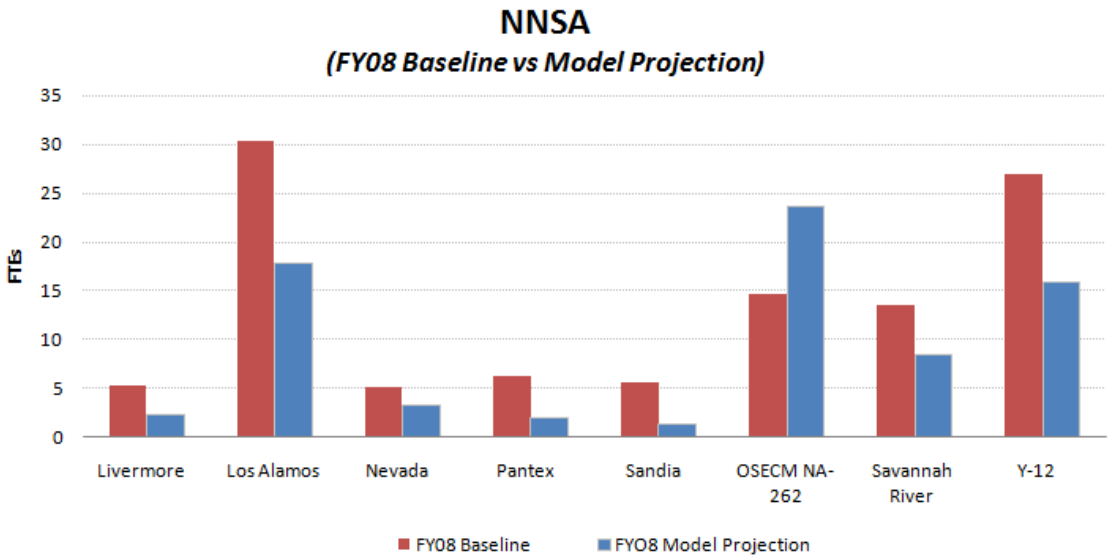
Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	1,400.3	671.2	92%
NNSA	$902.6	108.0	8.4	198.6	90.56	84%
Livermore	$36	5.4	6.7	5.9	0.48	9%
Los Alamos	$197	30.3	6.5	47.5	17.16	57%
Nevada	$47	5.2	9.0	8.6	3.39	65%
Pantex	$27	6.3	4.2	5.3	(1.03)	-16%
Sandia	$26	5.7	4.5	3.5	(2.19)	-38%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	63.0	48.42	332%
Savannah River	$81	13.5	6.0	22.6	9.15	68%
Y-12	$231	27.0	8.5	42.2	15.18	56%
SC	$205	18.2	11.3	41.0	22.84	125%
Berkeley	$20	2.2	9.0	3.5	1.28	58%
Brookhaven	$45	3.4	13.1	9.7	6.34	186%
Fermi	$17	2.7	6.3	4.2	1.49	55%
Oak Ridge	$31	2.0	15.4	6.8	4.82	241%
Pacific Northwest	$25	2.3	10.8	4.0	1.75	76%
Stanford Linear Accelerator	$57	2.9	19.6	10.1	7.17	247%
Thomas Jefferson	$12	2.7	4.3	2.7	(0.00)	0%
EM	$5,329	602.9	8.8	1,160.7	557.83	93%
Brookhaven	$25	5.1	4.9	4.8	(0.30)	-6%
Carlsbad	$160	32.0	5.0	31.5	(0.53)	-2%
Idaho	$949	55.4	17.1	204.7	149.31	270%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	2.7	(4.26)	-61%
Livermore	$9	1.2	7.2	1.7	0.51	42%
Los Alamos	$381	26.4	14.4	75.2	48.81	185%
Nevada	$100	21.1	4.8	19.7	(1.38)	-7%
Oak Ridge	$435	80.0	5.4	96.0	16.05	20%
Oakland	$18	12.8	1.4	3.5	(9.29)	-73%
Office of River Protection	$958	132.6	7.2	251.2	118.64	89%
Pantex	$26	2.3	11.4	5.2	2.87	125%
Portsmouth/Paducah	$283	35.0	8.1	60.1	25.10	72%
Richland	$831	120.9	6.9	162.3	41.44	34%
Sandia	$2	0.7	3.5	0.5	(0.21)	-30%
Savannah River	$1,102	65.7	16.8	234.4	168.69	257%
UMTRA	$36	4.7	7.7	7.1	2.39	51%

Productivity Factor At $5.0M/FTE

Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
DOE	$6,436.4	729.1	8.8	2,100.5	1,371.4	188%
NNSA	$902.6	108.0	8.4	297.8	189.84	176%
Livermore	$36	5.4	6.7	8.8	3.42	63%
Los Alamos	$197	30.3	6.5	71.2	40.89	135%
Nevada	$47	5.2	9.0	12.9	7.68	148%
Pantex	$27	6.3	4.2	7.9	1.60	25%
Sandia	$26	5.7	4.5	5.3	(0.43)	-8%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	94.5	79.94	548%
Savannah River	$81	13.5	6.0	34.0	20.47	152%
Y-12	$231	27.0	8.5	63.3	36.27	134%
SC	$205	18.2	11.3	61.6	43.36	238%
Berkeley	$20	2.2	9.0	5.2	3.02	137%
Brookhaven	$45	3.4	13.1	14.6	11.20	329%
Fermi	$17	2.7	6.3	6.3	3.59	133%
Oak Ridge	$31	2.0	15.4	10.2	8.23	411%
Pacific Northwest	$25	2.3	10.8	6.1	3.77	164%
Stanford Linear Accelerator	$57	2.9	19.6	15.1	12.21	421%
Thomas Jefferson	$12	2.7	4.3	4.0	1.34	50%
EM	$5,329	602.9	8.8	1,741.1	1,138.19	189%
Brookhaven	$25	5.1	4.9	7.2	2.10	41%
Carlsbad	$160	32.0	5.0	47.2	15.20	48%
Idaho	$949	55.4	17.1	307.1	251.67	454%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	4.1	(2.89)	-41%
Livermore	$9	1.2	7.2	2.6	1.36	113%
Los Alamos	$381	26.4	14.4	112.8	86.42	327%
Nevada	$100	21.1	4.8	29.6	8.48	40%
Oak Ridge	$435	80.0	5.4	144.1	64.07	80%
Oakland	$18	12.8	1.4	5.3	(7.53)	-59%
Office of River Protection	$958	132.6	7.2	376.9	244.26	184%
Pantex	$26	2.3	11.4	7.8	5.45	237%
Portsmouth/Paducah	$283	35.0	8.1	90.1	55.15	158%
Richland	$831	120.9	6.9	243.5	122.61	101%
Sandia	$2	0.7	3.5	0.7	0.03	5%
Savannah River	$1,102	65.7	16.8	351.6	285.89	435%
UMTRA	$36	4.7	7.7	10.6	5.93	126%

NNSA: APPLICATION OF STAFFING MODEL TO FY2008 DATA AT VARYING PRODUCTIVITY FACTORS

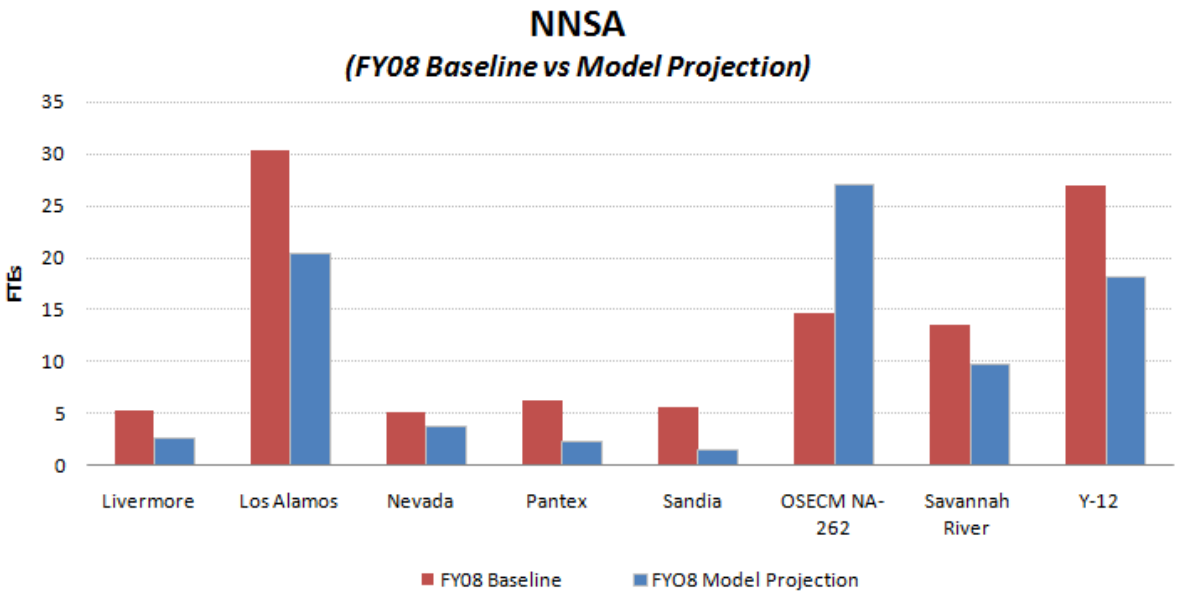
Productivity Factor At $20.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	74.5	(33.54)	-31%
Livermore	$36	5.4	6.7	2.2	(3.20)	-59%
Los Alamos	$197	30.3	6.5	17.8	(12.50)	-41%
Nevada	$47	5.2	9.0	3.2	(1.98)	-38%
Pantex	$27	6.3	4.2	2.0	(4.32)	-69%
Sandia	$26	5.7	4.5	1.3	(4.38)	-77%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	23.6	9.03	62%
Savannah River	$81	13.5	6.0	8.5	(5.01)	-37%
Y-12	$231	27.0	8.5	15.8	(11.18)	-41%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									**$902.6**	**108.0**	**8.4**	**74.5**	**(33.54)**	**-31%**
Livermore									**$36**	**5.4**	**6.7**	**2.2**	**(3.20)**	**-59%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	2.2	(3.20)	-59%
Los Alamos									**$197**	**30.3**	**6.5**	**17.8**	**(12.50)**	**-41%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	**$92**	9.4	9.8	5.7	(3.74)	-40%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	**$9**	2.1	4.3	1.5	(0.60)	-29%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	**$59**	6.4	9.2	7.2	0.77	12%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	**$28**	3.8	7.3	2.5	(1.28)	-34%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	**$1**	2.2	0.5	0.1	(2.05)	-93%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	**$7**	2.3	3.0	0.7	(1.64)	-71%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	**$1**	4.1	0.2	0.1	(3.95)	-96%
Nevada									**$47**	**5.2**	**9.0**	**3.2**	**(1.98)**	**-38%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	2.9	(0.85)	-23%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	0.4	(1.13)	-75%
Pantex									**$27**	**6.3**	**4.2**	**2.0**	**(4.32)**	**-69%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	1.1	(0.31)	-22%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	0.6	(2.03)	-78%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	0.3	(1.98)	-86%
Sandia									**$26**	**5.7**	**4.5**	**1.3**	**(4.38)**	**-77%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	0.7	(0.12)	-15%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	0.5	(1.29)	-72%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.1	(2.97)	-96%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**23.6**	**9.03**	**62%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	23.6	9.03	62%
Savannah River									**$81**	**13.5**	**6.0**	**8.5**	**(5.01)**	**-37%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	5.9	(1.00)	-15%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	2.6	(4.00)	-61%
Y-12									**$231**	**27.0**	**8.5**	**15.8**	**(11.18)**	**-41%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	0.8	(1.42)	-65%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	9.6	3.66	62%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	1.5	(2.01)	-57%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	0.7	(1.50)	-68%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	0.9	(2.47)	-73%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	2.4	(7.44)	-76%

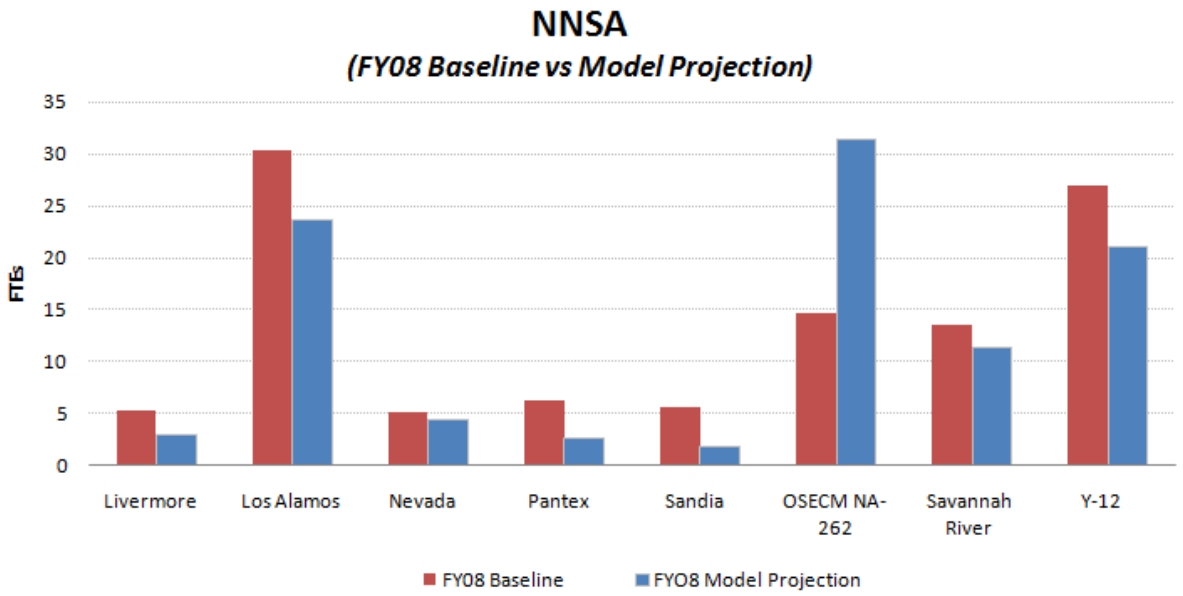
Productivity Factor At $17.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	85.1	(22.90)	-21%
Livermore	$36	5.4	6.7	2.5	(2.88)	-53%
Los Alamos	$197	30.3	6.5	20.3	(9.96)	-33%
Nevada	$47	5.2	9.0	3.7	(1.52)	-29%
Pantex	$27	6.3	4.2	2.3	(4.04)	-64%
Sandia	$26	5.7	4.5	1.5	(4.19)	-74%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	27.0	12.41	85%
Savannah River	$81	13.5	6.0	9.7	(3.79)	-28%
Y-12	$231	27.0	8.5	18.1	(8.92)	-33%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									$902.6	108.0	8.4	85.1	(22.90)	-21%
Livermore									**$36**	**5.4**	**6.7**	**2.5**	**(2.88)**	**-53%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	2.5	(2.88)	-53%
Los Alamos									**$197**	**30.3**	**6.5**	**20.3**	**(9.96)**	**-33%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$92	9.4	9.8	6.5	(2.93)	-31%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$9	2.1	4.3	1.7	(0.39)	-19%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$59	6.4	9.2	8.2	1.79	28%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$28	3.8	7.3	2.9	(0.92)	-24%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	2.2	0.5	0.2	(2.03)	-92%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$7	2.3	3.0	0.8	(1.54)	-67%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	4.1	0.2	0.2	(3.93)	-96%
Nevada									**$47**	**5.2**	**9.0**	**3.7**	**(1.52)**	**-29%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	3.3	(0.44)	-12%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	0.4	(1.08)	-72%
Pantex									**$27**	**6.3**	**4.2**	**2.3**	**(4.04)**	**-64%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	1.2	(0.16)	-11%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	0.6	(1.95)	-75%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	0.4	(1.93)	-84%
Sandia									**$26**	**5.7**	**4.5**	**1.5**	**(4.19)**	**-74%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	0.8	(0.02)	-2%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	0.6	(1.22)	-68%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.1	(2.95)	-95%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**27.0**	**12.41**	**85%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	27.0	12.41	85%
Savannah River									**$81**	**13.5**	**6.0**	**9.7**	**(3.79)**	**-28%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	6.7	(0.16)	-2%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	3.0	(3.63)	-55%
Y-12									**$231**	**27.0**	**8.5**	**18.1**	**(8.92)**	**-33%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	0.9	(1.31)	-60%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	10.9	5.02	85%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	1.7	(1.80)	-51%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	0.8	(1.40)	-64%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	1.1	(2.33)	-69%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	2.7	(7.10)	-72%

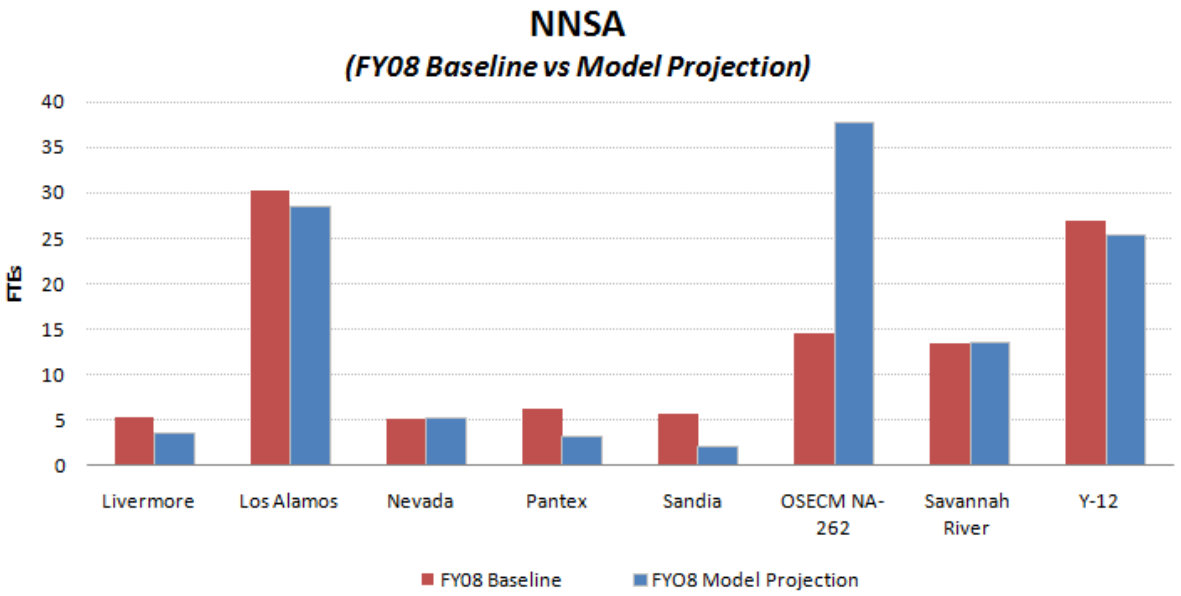
Productivity Factor At $15.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	99.3	(8.72)	-8%
Livermore	$36	5.4	6.7	2.9	(2.46)	-46%
Los Alamos	$197	30.3	6.5	23.7	(6.57)	-22%
Nevada	$47	5.2	9.0	4.3	(0.91)	-17%
Pantex	$27	6.3	4.2	2.6	(3.67)	-58%
Sandia	$26	5.7	4.5	1.8	(3.94)	-69%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	31.5	16.91	116%
Savannah River	$81	13.5	6.0	11.3	(2.18)	-16%
Y-12	$231	27.0	8.5	21.1	(5.91)	-22%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									$902.6	108.0	8.4	99.3	(8.72)	-8%
Livermore									**$36**	**5.4**	**6.7**	**2.9**	**(2.46)**	**-46%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	2.9	(2.46)	-46%
Los Alamos									**$197**	**30.3**	**6.5**	**23.7**	**(6.57)**	**-22%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$92	9.4	9.8	7.5	(1.85)	-20%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$9	2.1	4.3	2.0	(0.11)	-5%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$59	6.4	9.2	9.6	3.15	49%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$28	3.8	7.3	3.4	(0.44)	-12%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	2.2	0.5	0.2	(2.01)	-91%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$7	2.3	3.0	0.9	(1.42)	-62%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	4.1	0.2	0.2	(3.90)	-95%
Nevada									**$47**	**5.2**	**9.0**	**4.3**	**(0.91)**	**-17%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	3.8	0.10	3%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	0.5	(1.01)	-67%
Pantex									**$27**	**6.3**	**4.2**	**2.6**	**(3.67)**	**-58%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	1.4	0.05	3%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	0.8	(1.84)	-71%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	0.4	(1.87)	-81%
Sandia									**$26**	**5.7**	**4.5**	**1.8**	**(3.94)**	**-69%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	0.9	0.11	14%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	0.7	(1.12)	-62%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.2	(2.93)	-94%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**31.5**	**16.91**	**116%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	31.5	16.91	116%
Savannah River									**$81**	**13.5**	**6.0**	**11.3**	**(2.18)**	**-16%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	7.9	0.96	14%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	3.5	(3.14)	-48%
Y-12									**$231**	**27.0**	**8.5**	**21.1**	**(5.91)**	**-22%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	1.0	(1.16)	-53%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	12.7	6.84	116%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	2.0	(1.52)	-43%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	0.9	(1.27)	-58%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	1.2	(2.15)	-63%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	3.2	(6.65)	-68%

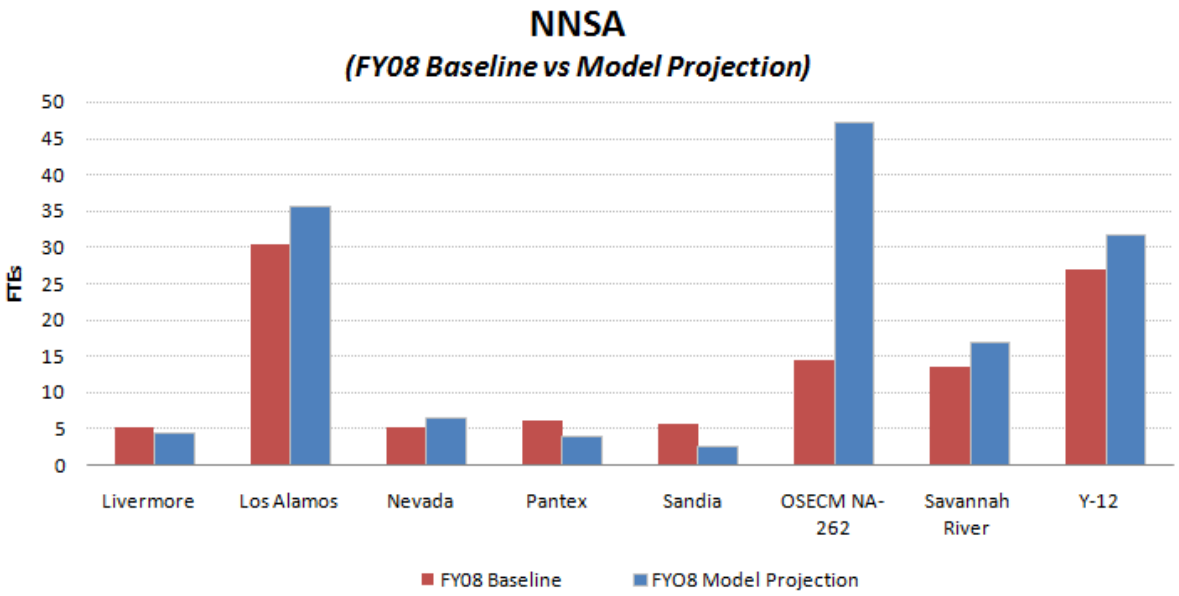
Productivity Factor At $12.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	119.1	11.14	10%
Livermore	$36	5.4	6.7	3.5	(1.87)	-35%
Los Alamos	$197	30.3	6.5	28.5	(1.82)	-6%
Nevada	$47	5.2	9.0	5.2	(0.05)	-1%
Pantex	$27	6.3	4.2	3.2	(3.14)	-50%
Sandia	$26	5.7	4.5	2.1	(3.59)	-63%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	37.8	23.21	159%
Savannah River	$81	13.5	6.0	13.6	0.09	1%
Y-12	$231	27.0	8.5	25.3	(1.69)	-6%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									$902.6	108.0	8.4	119.1	11.14	10%
Livermore									**$36**	**5.4**	**6.7**	**3.5**	**(1.87)**	**-35%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	3.5	(1.87)	-35%
Los Alamos									**$197**	**30.3**	**6.5**	**28.5**	**(1.82)**	**-6%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$92	9.4	9.8	9.1	(0.34)	-4%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$9	2.1	4.3	2.4	0.29	14%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$59	6.4	9.2	11.5	5.07	79%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$28	3.8	7.3	4.0	0.23	6%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	2.2	0.5	0.2	(1.97)	-89%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$7	2.3	3.0	1.1	(1.24)	-54%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	4.1	0.2	0.2	(3.87)	-94%
Nevada									**$47**	**5.2**	**9.0**	**5.2**	**(0.05)**	**-1%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	4.6	0.86	23%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	0.6	(0.91)	-60%
Pantex									**$27**	**6.3**	**4.2**	**3.2**	**(3.14)**	**-50%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	1.7	0.34	24%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	0.9	(1.69)	-65%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	0.5	(1.78)	-78%
Sandia									**$26**	**5.7**	**4.5**	**2.1**	**(3.59)**	**-63%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	1.1	0.29	37%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	0.8	(0.99)	-55%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.2	(2.90)	-93%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**37.8**	**23.21**	**159%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	37.8	23.21	159%
Savannah River									**$81**	**13.5**	**6.0**	**13.6**	**0.09**	**1%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	9.4	2.53	37%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	4.2	(2.44)	-37%
Y-12									**$231**	**27.0**	**8.5**	**25.3**	**(1.69)**	**-6%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	1.2	(0.96)	-43%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	15.3	9.39	159%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	2.4	(1.12)	-32%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	1.1	(1.08)	-49%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	1.5	(1.91)	-56%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	3.8	(6.02)	-61%

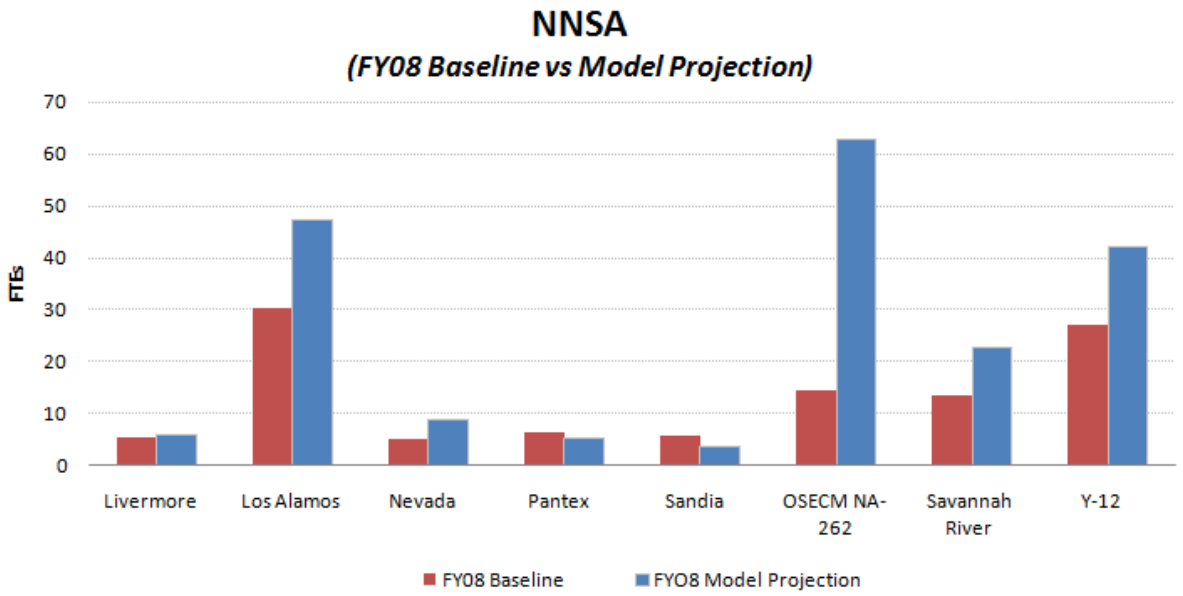
Productivity Factor At $10.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	148.9	40.92	38%
Livermore	$36	5.4	6.7	4.4	(0.99)	-18%
Los Alamos	$197	30.3	6.5	35.6	5.30	17%
Nevada	$47	5.2	9.0	6.4	1.24	24%
Pantex	$27	6.3	4.2	4.0	(2.35)	-37%
Sandia	$26	5.7	4.5	2.6	(3.06)	-54%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	47.3	32.67	224%
Savannah River	$81	13.5	6.0	17.0	3.49	26%
Y-12	$231	27.0	8.5	31.6	4.63	17%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									$902.6	108.0	8.4	148.9	40.92	38%
Livermore									**$36**	**5.4**	**6.7**	**4.4**	**(0.99)**	**-18%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	4.4	(0.99)	-18%
Los Alamos									**$197**	**30.3**	**6.5**	**35.6**	**5.30**	**17%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$92	9.4	9.8	11.3	1.92	20%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$9	2.1	4.3	3.0	0.89	43%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$59	6.4	9.2	14.3	7.93	124%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$28	3.8	7.3	5.0	1.24	33%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	2.2	0.5	0.3	(1.91)	-87%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$7	2.3	3.0	1.3	(0.97)	-42%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	4.1	0.2	0.3	(3.81)	-93%
Nevada									**$47**	**5.2**	**9.0**	**6.4**	**1.24**	**24%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	5.7	2.00	54%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	0.7	(0.76)	-51%
Pantex									**$27**	**6.3**	**4.2**	**4.0**	**(2.35)**	**-37%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	2.2	0.77	55%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	1.1	(1.47)	-56%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	0.6	(1.66)	-72%
Sandia									**$26**	**5.7**	**4.5**	**2.6**	**(3.06)**	**-54%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	1.4	0.57	71%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	1.0	(0.79)	-44%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.3	(2.84)	-92%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**47.3**	**32.67**	**224%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	47.3	32.67	224%
Savannah River									**$81**	**13.5**	**6.0**	**17.0**	**3.49**	**26%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	11.8	4.89	71%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	5.2	(1.41)	-21%
Y-12									**$231**	**27.0**	**8.5**	**31.6**	**4.63**	**17%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	1.6	(0.65)	-29%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	19.1	13.21	224%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	3.0	(0.52)	-15%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	1.4	(0.80)	-36%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	1.9	(1.53)	-45%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	4.7	(5.07)	-52%

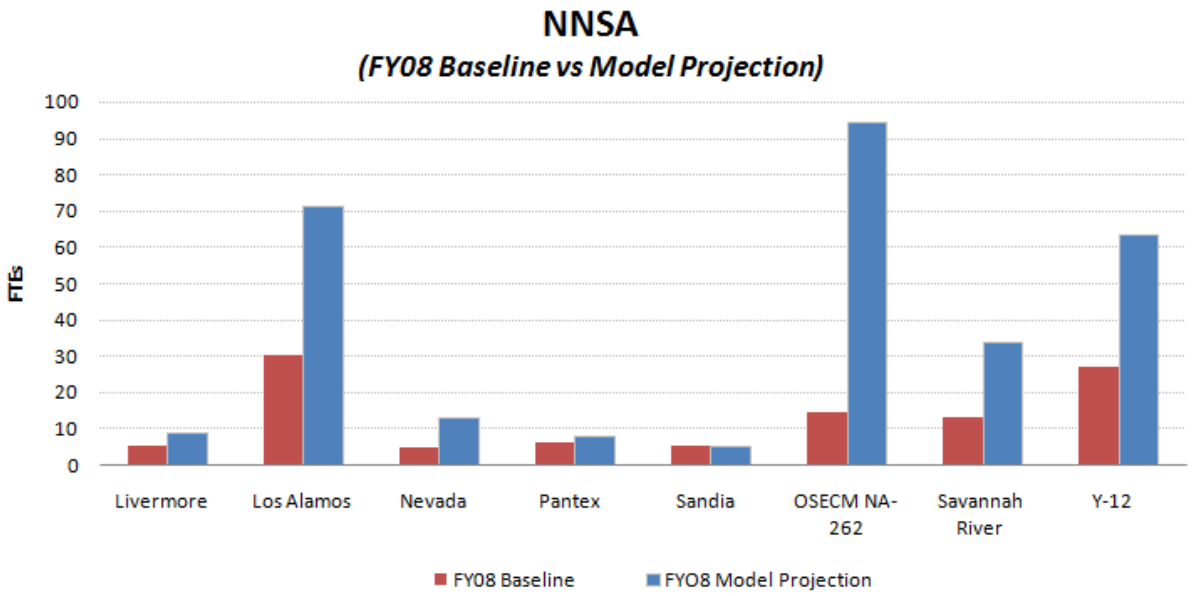
Productivity Factor At $7.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	198.6	90.56	84%
Livermore	$36	5.4	6.7	5.9	0.48	9%
Los Alamos	$197	30.3	6.5	47.5	17.16	57%
Nevada	$47	5.2	9.0	8.6	3.39	65%
Pantex	$27	6.3	4.2	5.3	(1.03)	-16%
Sandia	$26	5.7	4.5	3.5	(2.19)	-38%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	63.0	48.42	332%
Savannah River	$81	13.5	6.0	22.6	9.15	68%
Y-12	$231	27.0	8.5	42.2	15.18	56%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									**$902.6**	**108.0**	**8.4**	**198.6**	**90.56**	**84%**
Livermore									**$36**	**5.4**	**6.7**	**5.9**	**0.48**	**9%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	5.9	0.48	9%
Los Alamos									**$197**	**30.3**	**6.5**	**47.5**	**17.16**	**57%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$92	9.4	9.8	15.1	5.69	61%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$9	2.1	4.3	4.0	1.89	90%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$59	6.4	9.2	19.1	12.71	199%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$28	3.8	7.3	6.7	2.92	77%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	2.2	0.5	0.4	(1.81)	-82%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$7	2.3	3.0	1.8	(0.53)	-23%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	4.1	0.2	0.4	(3.71)	-90%
Nevada									**$47**	**5.2**	**9.0**	**8.6**	**3.39**	**65%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	7.6	3.90	105%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	1.0	(0.51)	-34%
Pantex									**$27**	**6.3**	**4.2**	**5.3**	**(1.03)**	**-16%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	2.9	1.50	107%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	1.5	(1.09)	-42%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	0.9	(1.44)	-63%
Sandia									**$26**	**5.7**	**4.5**	**3.5**	**(2.19)**	**-38%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	1.8	1.02	128%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	1.4	(0.45)	-25%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.3	(2.76)	-89%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**63.0**	**48.42**	**332%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	63.0	48.42	332%
Savannah River									**$81**	**13.5**	**6.0**	**22.6**	**9.15**	**68%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	15.7	8.82	128%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	6.9	0.33	5%
Y-12									**$231**	**27.0**	**8.5**	**42.2**	**15.18**	**56%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	2.1	(0.13)	-6%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	25.5	19.58	332%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	4.0	0.47	13%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	1.9	(0.34)	-15%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	2.5	(0.91)	-27%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	6.3	(3.50)	-36%

Productivity Factor At $5.0M/FTE

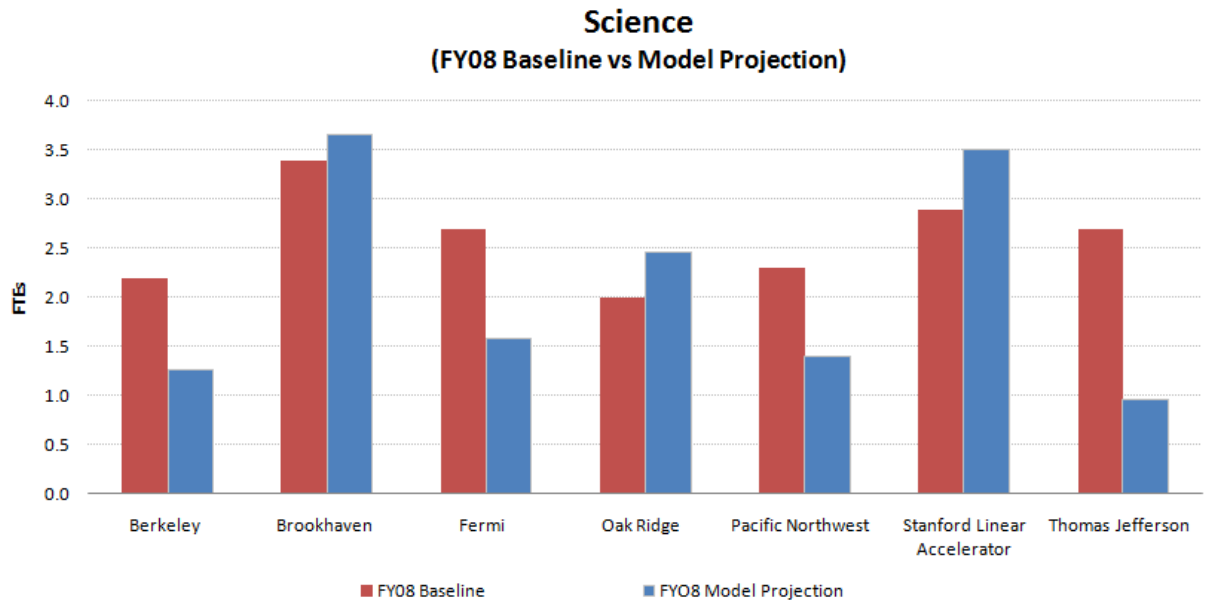


Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA	$902.6	108.0	8.4	297.8	189.84	176%
Livermore	$36	5.4	6.7	8.8	3.42	63%
Los Alamos	$197	30.3	6.5	71.2	40.89	135%
Nevada	$47	5.2	9.0	12.9	7.68	148%
Pantex	$27	6.3	4.2	7.9	1.60	25%
Sandia	$26	5.7	4.5	5.3	(0.43)	-8%
Office of Site Engineering and Construction Management NA-262	$259	14.6	17.7	94.5	79.94	548%
Savannah River	$81	13.5	6.0	34.0	20.47	152%
Y-12	$231	27.0	8.5	63.3	36.27	134%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
NNSA									$902.6	108.0	8.4	297.8	189.84	176%
Livermore									**$36**	**5.4**	**6.7**	**8.8**	**3.42**	**63%**
National Ignition Facility (NIF)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$36	5.4	6.7	8.8	3.42	63%
Los Alamos									**$197**	**30.3**	**6.5**	**71.2**	**40.89**	**135%**
Chemistry & Metallurgy Research Facility Replacement (CMRR)	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$92	9.4	9.8	22.6	13.24	141%
Los Alamos Neutron Science Center Reburbishment	0	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$9	2.1	4.3	6.0	3.89	185%
NMSSUP (Phase II)	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$59	6.4	9.2	28.7	22.26	348%
Replace Radioactive Liquid Waste Treatment Plant	2	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$28	3.8	7.3	10.1	6.29	165%
TA – 55 Infrastructure Reinvestment Project, TRP II	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	2.2	0.5	0.6	(1.62)	-74%
TA-55 Infrastructure Reinvestment, TRP 1	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$7	2.3	3.0	2.7	0.35	15%
TRU Waste Facility Project	0	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$1	4.1	0.2	0.6	(3.51)	-86%
Nevada									**$47**	**5.2**	**9.0**	**12.9**	**7.68**	**148%**
Criticality Experiments Facility (formerly TA-18 Mission Relocation)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$40	3.7	10.8	11.4	7.70	208%
Replace Fire Stations #1 and #2	3	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	1.5	4.4	1.5	(0.02)	-1%
Pantex									**$27**	**6.3**	**4.2**	**7.9**	**1.60**	**25%**
High Explosive Pressing Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$18	1.4	12.7	4.3	2.95	210%
High Pressure Fire Loop, Zone 12	2	Const	Low	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$7	2.6	2.7	2.3	(0.33)	-13%
Weapons Surveillance Facility	0	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$2	2.3	0.9	1.3	(1.01)	-44%
Sandia									**$26**	**5.7**	**4.5**	**5.3**	**(0.43)**	**-8%**
Heating System Modernization, TA-1	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$13	0.8	16.6	2.7	1.93	241%
Ion Beam Laboratory	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$10	1.8	5.5	2.0	0.23	13%
Test Capabilities Revitalization (Phase II)	3	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$3	3.1	0.8	0.5	(2.59)	-83%
Office of Site Engineering and Construction Management NA-262									**$259**	**14.6**	**17.7**	**94.5**	**79.94**	**548%**
Mixed Oxide Fuel Fabrication Facility (MOX)	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$259	14.6	17.7	94.5	79.94	548%
Savannah River									**$81**	**13.5**	**6.0**	**34.0**	**20.47**	**152%**
Pit Disassembly and Conversion Facility (PDCF)	2	Const	High	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$51	6.9	7.4	23.6	16.68	242%
Waste Solidification Building (WSB)	3	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Low	Low	$30	6.6	4.6	10.4	3.79	57%
Y-12									**$231**	**27.0**	**8.5**	**63.3**	**36.27**	**134%**
Beryllium Capability (BeC) Project	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$12	2.2	5.3	3.1	0.91	41%
Highly Enriched Uranium Materials Facility	3	Const	Med	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$156	5.9	26.4	38.2	32.32	548%
Potable Water System Upgrade	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$22	3.5	6.4	6.0	2.45	70%
Security Improvements	1	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$6	2.2	2.7	2.8	0.60	27%
Steam Plant Life Extension	3	Const	Low	DOE M&O	Incentive (cost-reimbursement)	No	Low	Low	$14	3.4	4.1	3.7	0.34	10%
Uranium Processing Facility	1	Const	High	DOE M&O (Sub)	Incentive (cost-reimbursement)	No	Low	Low	$20	9.8	2.1	9.5	(0.35)	-4%

SCIENCE: APPLICATION OF STAFFING MODEL TO FY2008 DATA AT VARYING PRODUCTIVITY FACTORS

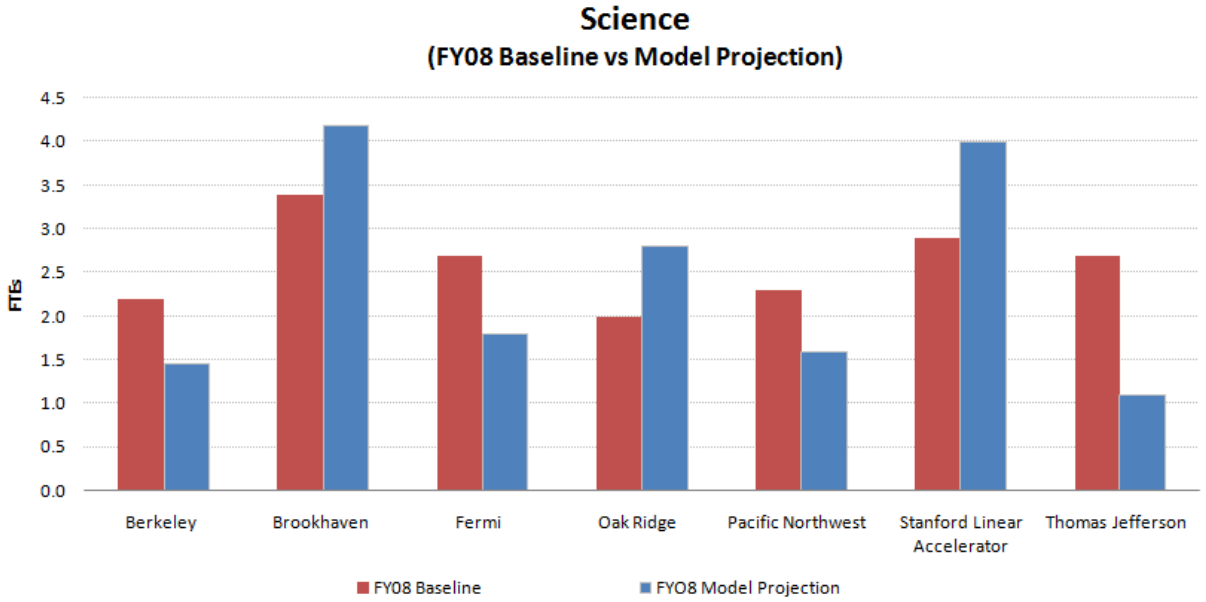
Productivity Factor At $20.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	14.8	(3.43)	-19%
Berkeley	**$20**	**2.2**	**9.0**	**1.3**	**(0.94)**	**-43%**
Brookhaven	**$45**	**3.4**	**13.1**	**3.7**	**0.25**	**7%**
Fermi	**$17**	**2.7**	**6.3**	**1.6**	**(1.13)**	**-42%**
Oak Ridge	**$31**	**2.0**	**15.4**	**2.4**	**0.45**	**22%**
Pacific Northwest	**$25**	**2.3**	**10.8**	**1.4**	**(0.91)**	**-39%**
Stanford Linear Accelerator	**$57**	**2.9**	**19.6**	**3.5**	**0.59**	**20%**
Thomas Jefferson	**$12**	**2.7**	**4.3**	**1.0**	**(1.75)**	**-65%**

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	14.8	(3.43)	-19%
Berkeley									**$20**	**2.2**	**9.0**	**1.3**	**(0.94)**	**-43%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	0.5	(0.34)	-43%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	0.3	(0.50)	-62%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.2	(0.08)	-27%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	0.3	(0.02)	-7%
Brookhaven									**$45**	**3.4**	**13.1**	**3.7**	**0.25**	**7%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.1	(0.42)	-85%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	3.6	0.68	23%
Fermi									**$17**	**2.7**	**6.3**	**1.6**	**(1.13)**	**-42%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	0.4	0.11	38%
NUMI Off – Axis Neutrino (ν) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	1.2	(1.24)	-52%
Oak Ridge									**$31**	**2.0**	**15.4**	**2.4**	**0.45**	**22%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	0.9	0.44	89%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	0.6	0.13	26%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	0.8	0.44	109%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.0	(0.56)	-94%
Pacific Northwest									**$25**	**2.3**	**10.8**	**1.4**	**(0.91)**	**-39%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	1.4	(0.91)	-39%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**3.5**	**0.59**	**20%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	0.6	(0.27)	-30%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	2.9	0.86	43%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**1.0**	**(1.75)**	**-65%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	0.9	(0.69)	-43%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.0	(1.06)	-96%

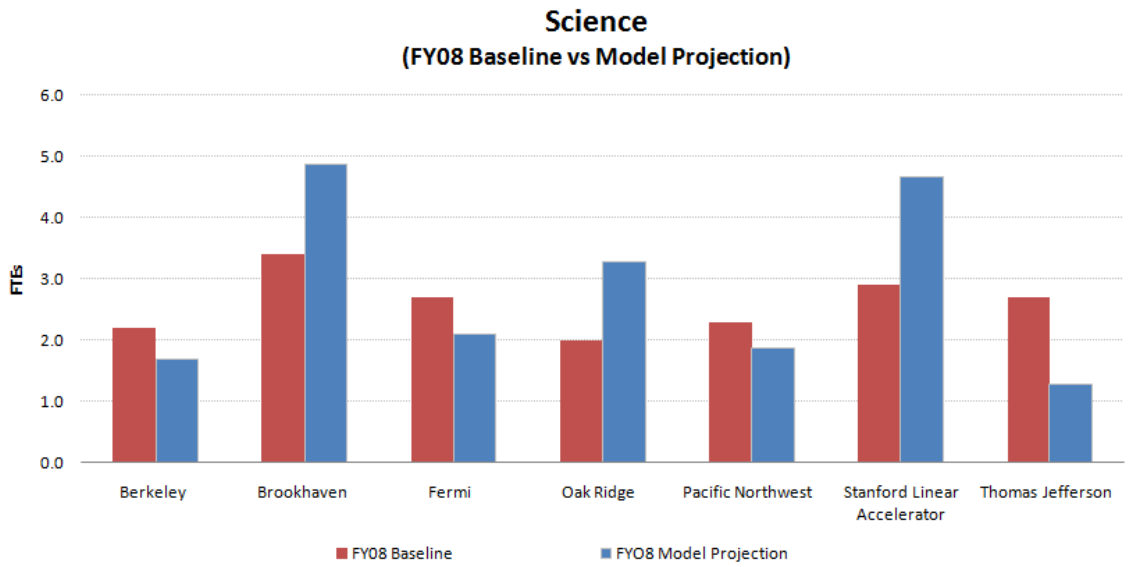
Productivity Factor At $17.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	16.9	(1.32)	-7%
Berkeley	$20	2.2	9.0	1.4	(0.76)	-35%
Brookhaven	$45	3.4	13.1	4.2	0.77	23%
Fermi	$17	2.7	6.3	1.8	(0.90)	-33%
Oak Ridge	$31	2.0	15.4	2.8	0.80	40%
Pacific Northwest	$25	2.3	10.8	1.6	(0.71)	-31%
Stanford Linear Accelerator	$57	2.9	19.6	4.0	1.09	38%
Thomas Jefferson	$12	2.7	4.3	1.1	(1.61)	-60%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	16.9	(1.32)	-7%
Berkeley									**$20**	**2.2**	**9.0**	**1.4**	**(0.76)**	**-35%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	0.5	(0.28)	-34%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	0.3	(0.45)	-57%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.3	(0.05)	-16%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	0.3	0.02	6%
Brookhaven									**$45**	**3.4**	**13.1**	**4.2**	**0.77**	**23%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.1	(0.41)	-83%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	4.1	1.19	41%
Fermi									**$17**	**2.7**	**6.3**	**1.8**	**(0.90)**	**-33%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	0.5	0.17	57%
NUMI Off – Axis Neutrino (v) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	1.3	(1.07)	-45%
Oak Ridge									**$31**	**2.0**	**15.4**	**2.8**	**0.80**	**40%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	1.1	0.58	116%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	0.7	0.22	44%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	1.0	0.56	139%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.0	(0.56)	-93%
Pacific Northwest									**$25**	**2.3**	**10.8**	**1.6**	**(0.71)**	**-31%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	1.6	(0.71)	-31%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**4.0**	**1.09**	**38%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	0.7	(0.18)	-20%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	3.3	1.27	64%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**1.1**	**(1.61)**	**-60%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	1.0	(0.56)	-35%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.0	(1.06)	-96%

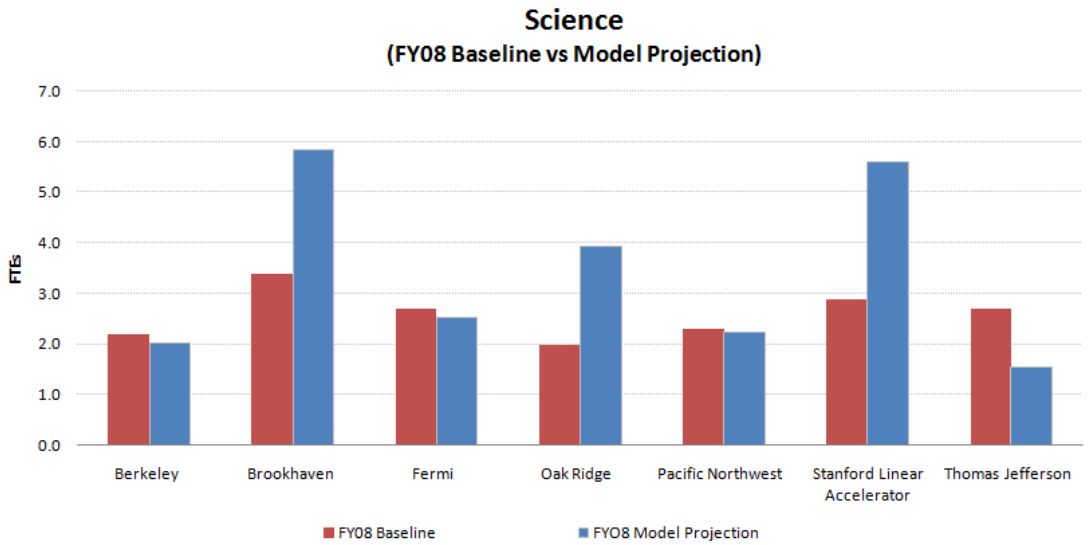
Productivity Factor At $15.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	19.7	1.50	8%
Berkeley	$20	2.2	9.0	1.7	(0.52)	-24%
Brookhaven	$45	3.4	13.1	4.9	1.47	43%
Fermi	$17	2.7	6.3	2.1	(0.60)	-22%
Oak Ridge	$31	2.0	15.4	3.3	1.27	63%
Pacific Northwest	$25	2.3	10.8	1.9	(0.44)	-19%
Stanford Linear Accelerator	$57	2.9	19.6	4.7	1.76	61%
Thomas Jefferson	$12	2.7	4.3	1.3	(1.43)	-53%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	19.7	1.50	8%
Berkeley									**$20**	**2.2**	**9.0**	**1.7**	**(0.52)**	**-24%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	0.6	(0.19)	-23%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	0.4	(0.40)	-50%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.3	(0.01)	-2%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	0.4	0.07	24%
Brookhaven									**$45**	**3.4**	**13.1**	**4.9**	**1.47**	**43%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.1	(0.40)	-80%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	4.8	1.87	64%
Fermi									**$17**	**2.7**	**6.3**	**2.1**	**(0.60)**	**-22%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	0.6	0.25	83%
NUMI Off – Axis Neutrino (v) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	1.5	(0.85)	-36%
Oak Ridge									**$31**	**2.0**	**15.4**	**3.3**	**1.27**	**63%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	1.3	0.76	152%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	0.8	0.34	68%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	1.1	0.71	179%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.1	(0.55)	-91%
Pacific Northwest									**$25**	**2.3**	**10.8**	**1.9**	**(0.44)**	**-19%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	1.9	(0.44)	-19%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**4.7**	**1.76**	**61%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	0.8	(0.06)	-7%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	3.8	1.82	91%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**1.3**	**(1.43)**	**-53%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	1.2	(0.38)	-24%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.1	(1.05)	-95%

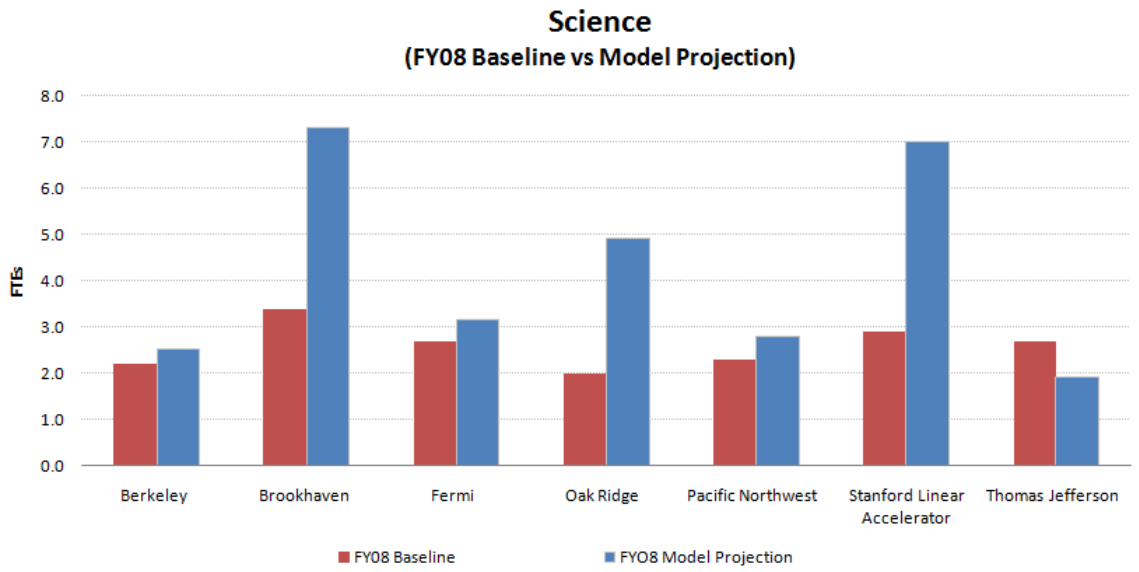
Productivity Factor At $12.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	23.6	5.43	30%
Berkeley	$20	2.2	9.0	2.0	(0.18)	-8%
Brookhaven	$45	3.4	13.1	5.8	2.44	72%
Fermi	$17	2.7	6.3	2.5	(0.18)	-7%
Oak Ridge	$31	2.0	15.4	3.9	1.92	96%
Pacific Northwest	$25	2.3	10.8	2.2	(0.07)	-3%
Stanford Linear Accelerator	$57	2.9	19.6	5.6	2.69	93%
Thomas Jefferson	$12	2.7	4.3	1.5	(1.18)	-44%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	23.6	5.43	30%
Berkeley									**$20**	**2.2**	**9.0**	**2.0**	**(0.18)**	**-8%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	0.7	(0.07)	-8%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	0.5	(0.32)	-40%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.4	0.05	17%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	0.4	0.15	49%
Brookhaven									**$45**	**3.4**	**13.1**	**5.8**	**2.44**	**72%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.1	(0.38)	-76%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	5.7	2.82	97%
Fermi									**$17**	**2.7**	**6.3**	**2.5**	**(0.18)**	**-7%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	0.7	0.36	120%
NUMI Off – Axis Neutrino (v) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	1.9	(0.54)	-23%
Oak Ridge									**$31**	**2.0**	**15.4**	**3.9**	**1.92**	**96%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	1.5	1.01	202%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	1.0	0.51	102%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	1.3	0.94	234%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.1	(0.54)	-90%
Pacific Northwest									**$25**	**2.3**	**10.8**	**2.2**	**(0.07)**	**-3%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	2.2	(0.07)	-3%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**5.6**	**2.69**	**93%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	1.0	0.11	12%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	4.6	2.58	129%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**1.5**	**(1.18)**	**-44%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	1.5	(0.14)	-9%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.1	(1.04)	-94%

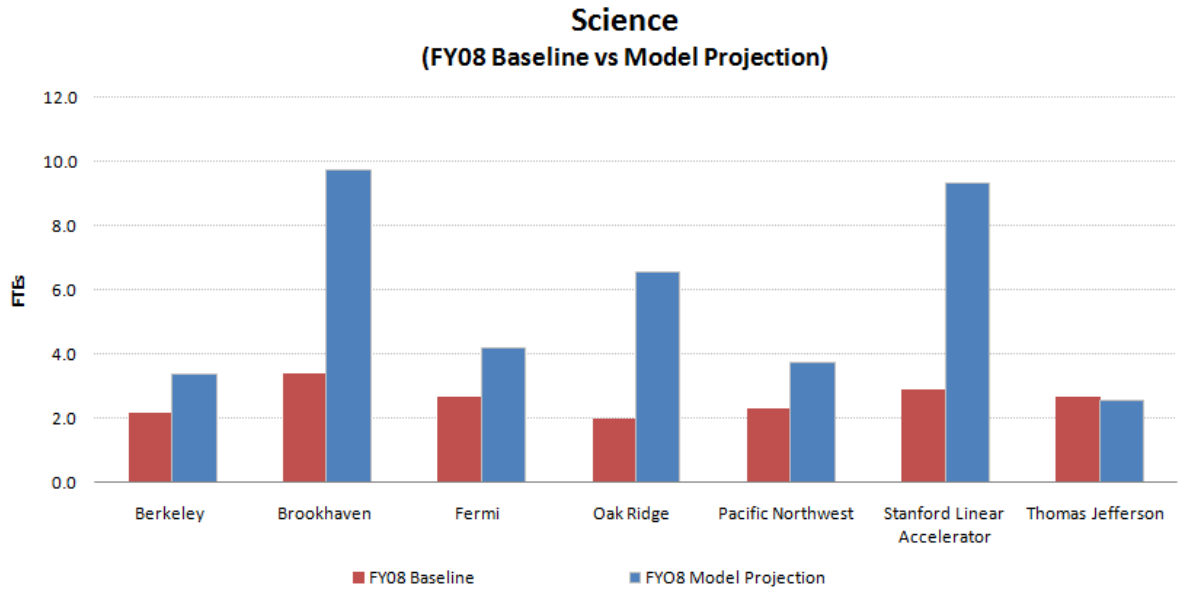
Productivity Factor At $10.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	29.5	11.34	62%
Berkeley	$20	2.2	9.0	2.5	0.32	15%
Brookhaven	$45	3.4	13.1	7.3	3.90	115%
Fermi	$17	2.7	6.3	3.1	0.45	16%
Oak Ridge	$31	2.0	15.4	4.9	2.90	145%
Pacific Northwest	$25	2.3	10.8	2.8	0.49	21%
Stanford Linear Accelerator	$57	2.9	19.6	7.0	4.09	141%
Thomas Jefferson	$12	2.7	4.3	1.9	(0.79)	-29%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	29.5	11.34	62%
Berkeley									**$20**	**2.2**	**9.0**	**2.5**	**0.32**	**15%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	0.9	0.12	15%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	0.6	(0.20)	-24%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.4	0.14	47%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	0.6	0.26	86%
Brookhaven									**$45**	**3.4**	**13.1**	**7.3**	**3.90**	**115%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.2	(0.35)	-70%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	7.2	4.25	147%
Fermi									**$17**	**2.7**	**6.3**	**3.1**	**0.45**	**16%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	0.8	0.53	175%
NUMI Off – Axis Neutrino (v) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	2.3	(0.08)	-3%
Oak Ridge									**$31**	**2.0**	**15.4**	**4.9**	**2.90**	**145%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	1.9	1.39	278%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	1.3	0.76	152%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	1.7	1.27	318%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.1	(0.52)	-87%
Pacific Northwest									**$25**	**2.3**	**10.8**	**2.8**	**0.49**	**21%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	2.8	0.49	21%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**7.0**	**4.09**	**141%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	1.3	0.36	40%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	5.7	3.73	186%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**1.9**	**(0.79)**	**-29%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	1.8	0.23	14%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.1	(1.02)	-93%

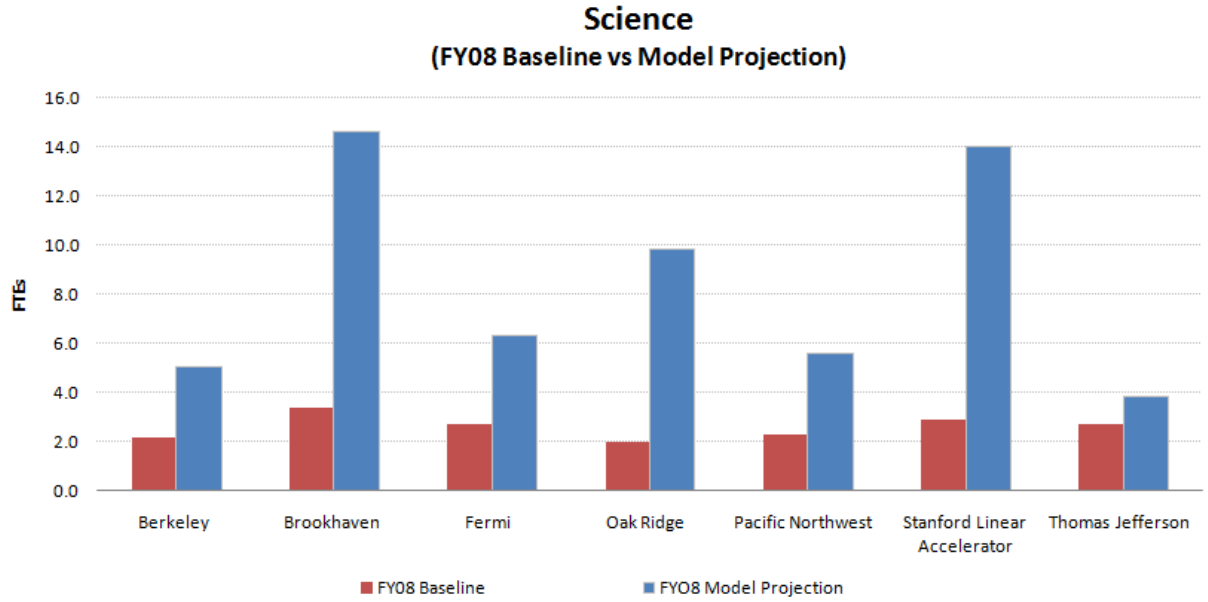
Productivity Factor At $7.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	39.4	21.19	116%
Berkeley	$20	2.2	9.0	3.4	1.16	53%
Brookhaven	$45	3.4	13.1	9.7	6.34	186%
Fermi	$17	2.7	6.3	4.2	1.49	55%
Oak Ridge	$31	2.0	15.4	6.5	4.53	227%
Pacific Northwest	$25	2.3	10.8	3.7	1.42	62%
Stanford Linear Accelerator	$57	2.9	19.6	9.3	6.41	221%
Thomas Jefferson	$12	2.7	4.3	2.5	(0.16)	-6%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	39.4	21.19	116%
Berkeley									**$20**	**2.2**	**9.0**	**3.4**	**1.16**	**53%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	1.2	0.42	53%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	0.8	0.01	1%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.6	0.29	96%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	0.7	0.44	148%
Brookhaven									**$45**	**3.4**	**13.1**	**9.7**	**6.34**	**186%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.2	(0.30)	-60%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	9.5	6.63	229%
Fermi									**$17**	**2.7**	**6.3**	**4.2**	**1.49**	**55%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	1.1	0.80	267%
NUMI Off – Axis Neutrino (v) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	3.1	0.69	29%
Oak Ridge									**$31**	**2.0**	**15.4**	**6.5**	**4.53**	**227%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	2.5	2.02	404%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	1.7	1.18	236%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	2.2	1.83	457%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.1	(0.50)	-83%
Pacific Northwest									**$25**	**2.3**	**10.8**	**3.7**	**1.42**	**62%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	3.7	1.42	62%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**9.3**	**6.41**	**221%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	1.7	0.78	87%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	7.6	5.63	282%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**2.5**	**(0.16)**	**-6%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	2.4	0.84	52%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.1	(1.00)	-91%

Productivity Factor At $5.0M/FTE

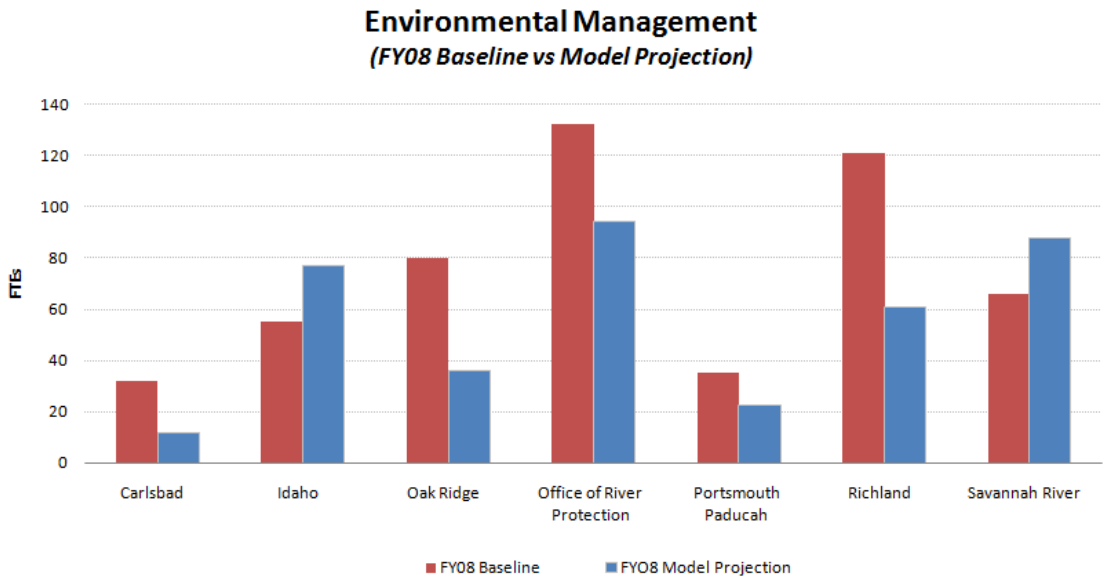


Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC	$205	18.2	11.3	59.1	40.89	225%
Berkeley	$20	2.2	9.0	5.0	2.84	129%
Brookhaven	$45	3.4	13.1	14.6	11.20	329%
Fermi	$17	2.7	6.3	6.3	3.59	133%
Oak Ridge	$31	2.0	15.4	9.8	7.80	390%
Pacific Northwest	$25	2.3	10.8	5.6	3.27	142%
Stanford Linear Accelerator	$57	2.9	19.6	14.0	11.07	382%
Thomas Jefferson	$12	2.7	4.3	3.8	1.11	41%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
SC									$205	18.2	11.3	59.1	40.89	225%
Berkeley									**$20**	**2.2**	**9.0**	**5.0**	**2.84**	**129%**
Building 51 and Bevatron D&D	3	D&D	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.8	10.9	1.8	1.04	130%
Seismic Safety Phase 2	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$2	0.8	2.5	1.2	0.41	51%
Transmission Electron Aberration–Corrected Microscope (TEAM)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$4	0.3	13.3	0.9	0.58	193%
ALS User Support Building (USB)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$5	0.3	16.5	1.1	0.81	272%
Brookhaven									**$45**	**3.4**	**13.1**	**14.6**	**11.20**	**329%**
Interdisciplinary Science Building – Phase I	0	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$1	0.5	1.0	0.3	(0.20)	-40%
National Synchrotron Light Source (NSLS – II)	2	Const	Med	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$44	2.9	15.2	14.3	11.40	393%
Fermi									**$17**	**2.7**	**6.3**	**6.3**	**3.59**	**133%**
Ground – Based Dark Energy Experiement (GBDEE) (DES)	2	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.3	18.3	1.7	1.35	450%
NUMI Off – Axis Neutrino (v) Appearance (NOvA)	1	MIE	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$12	2.4	4.8	4.6	2.24	93%
Oak Ridge									**$31**	**2.0**	**15.4**	**9.8**	**7.80**	**390%**
Modernization of Laboratory Facilities	1	Const	Low	DOE M&O (Sub)	Fixed-price (firm, no incentive)	No	Low	Low	$9	0.5	18.7	3.8	3.28	656%
SING II	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.5	12.0	2.5	2.02	404%
SNS Instruments (SING)	3	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$15	0.4	38.0	3.3	2.94	736%
SNS Power Upgrade (07PUP)	0	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	0.6	0.4	0.2	(0.45)	-74%
Pacific Northwest									**$25**	**2.3**	**10.8**	**5.6**	**3.27**	**142%**
Physical Sciences Facility (PSF)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$25	2.3	10.8	5.6	3.27	142%
Stanford Linear Accelerator									**$57**	**2.9**	**19.6**	**14.0**	**11.07**	**382%**
LCLS Ultrafast Science Instruments (LUSI)	1	MIE	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$6	0.9	6.7	2.5	1.62	180%
Linac Coherent Light Source (LCLS)	3	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$51	2.0	25.4	11.5	9.45	473%
Thomas Jefferson									**$12**	**2.7**	**4.3**	**3.8**	**1.11**	**41%**
12 GeV CEBAF Upgrade	2	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$11	1.6	7.0	3.7	2.06	129%
Technology and Engineering Development Facility (TEDF)	0	Const	Low	DOE M&O (Non-Profit)	Fixed-price (firm, no incentive)	No	Low	Low	$0	1.1	0.2	0.2	(0.94)	-86%

ENVIRONMENTAL MANAGEMENT: APPLICATION OF STAFFING MODEL TO FY2008 DATA AT VARYING PRODUCTIVITY FACTORS

Productivity Factor At $20.0M/FTE



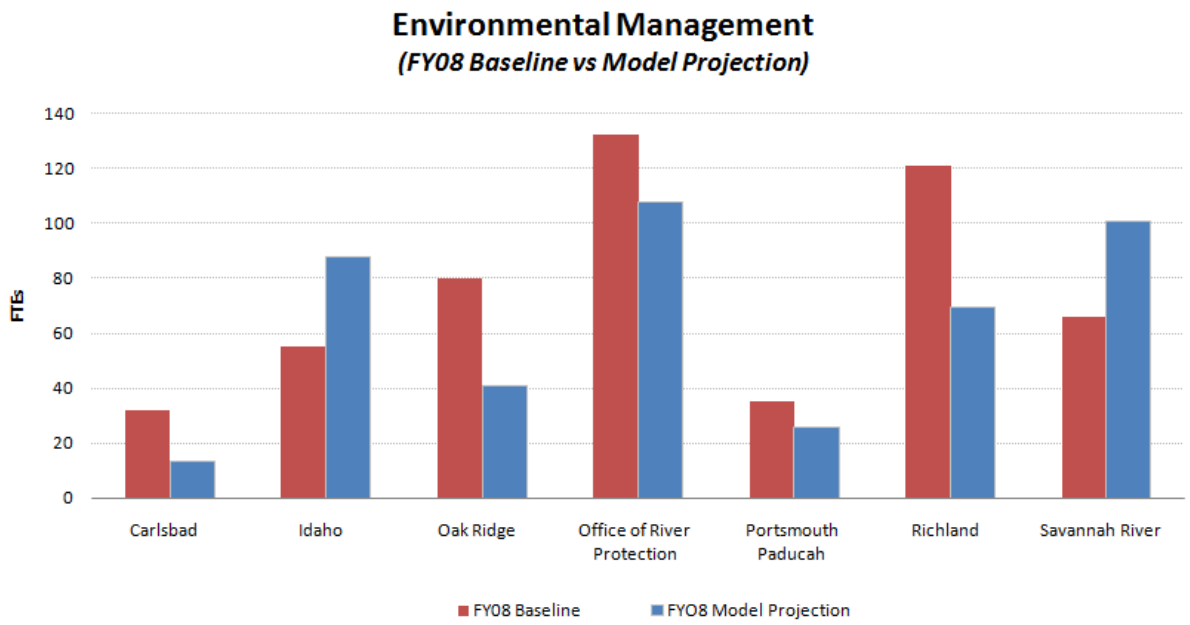
Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	435.3	(167.63)	-28%
Brookhaven	$25	5.1	4.9	1.8	(3.30)	-65%
Carlsbad	$160	32.0	5.0	11.8	(20.20)	-63%
Idaho	$949	55.4	17.1	76.8	21.37	39%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.0	(5.97)	-85%
Livermore	$9	1.2	7.2	0.6	(0.56)	-47%
Los Alamos	$381	26.4	14.4	28.2	1.81	7%
Nevada	$100	21.1	4.8	7.4	(13.71)	-65%
Oak Ridge	$435	80.0	5.4	36.0	(43.98)	-55%
Oakland	$18	12.8	1.4	1.3	(11.48)	-90%
Office of River Protection	$958	132.6	7.2	94.2	(38.39)	-29%
Pantex	$26	2.3	11.4	1.9	(0.36)	-16%
Portsmouth/Paducah	$283	35.0	8.1	22.5	(12.46)	-36%
Richland	$831	120.9	6.9	60.9	(60.02)	-50%
Sandia	$2	0.7	3.5	0.2	(0.52)	-74%
Savannah River	$1,102	65.7	16.8	87.9	22.20	34%
UMTRA	$36	4.7	7.7	2.7	(2.04)	-43%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									$5,329	602.9	8.8	435.3	(167.63)	-28%
Brookhaven									**$25**	**5.1**	**4.9**	**1.8**	**(3.30)**	**-65%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	1.8	(3.30)	-65%
Carlsbad									**$160**	**32.0**	**5.0**	**11.8**	**(20.20)**	**-63%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	9.6	(10.71)	-53%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	2.2	(9.49)	-81%
Idaho									**$949**	**55.4**	**17.1**	**76.8**	**21.37**	**39%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.09)	-100%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	4.9	0.68	16%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.2	(6.34)	-98%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	17.9	13.03	266%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	2.8	(0.98)	-26%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	26.2	18.14	224%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	9.3	(2.86)	-23%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	15.4	3.79	33%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**1.0**	**(5.97)**	**-85%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	1.0	(5.97)	-85%
Livermore									**$9**	**1.2**	**7.2**	**0.6**	**(0.56)**	**-47%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	0.6	(0.56)	-47%
Los Alamos									**$381**	**26.4**	**14.4**	**28.2**	**1.81**	**7%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	2.6	(0.62)	-19%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	14.9	(5.09)	-25%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	10.7	7.51	235%
Nevada									**$100**	**21.1**	**4.8**	**7.4**	**(13.71)**	**-65%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	1.5	(4.31)	-74%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	4.5	(6.69)	-60%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	1.4	(2.70)	-66%
Oak Ridge									**$435**	**80.0**	**5.4**	**36.0**	**(43.98)**	**-55%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	3.7	(4.30)	-54%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	18.8	(10.86)	-37%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	4.5	(8.82)	-66%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	1.7	(9.30)	-85%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	0.6	(3.73)	-87%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	6.7	(6.97)	-51%

[cont]

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**1.3**	**(11.48)**	**-90%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	1.3	(11.48)	-90%
Office of River Protection									**$958**	**132.6**	**7.2**	**94.2**	**(38.39)**	**-29%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	21.6	(42.03)	-66%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	72.6	3.65	5%
Pantex									**$26**	**2.3**	**11.4**	**1.9**	**(0.36)**	**-16%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	1.9	(0.36)	-16%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**22.5**	**(12.46)**	**-36%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	5.1	(4.00)	-44%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	12.1	3.04	33%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	3.3	(5.51)	-63%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	2.0	(5.99)	-75%
Richland									**$831**	**120.9**	**6.9**	**60.9**	**(60.02)**	**-50%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	7.1	(10.59)	-60%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	1.6	(7.49)	-82%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	7.2	(7.14)	-50%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	15.6	(8.90)	-36%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	7.4	(8.74)	-54%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	5.3	(13.66)	-72%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	16.7	(3.51)	-17%
Sandia									**$2**	**0.7**	**3.5**	**0.2**	**(0.52)**	**-74%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.2	(0.52)	-74%
Savannah River									**$1,102**	**65.7**	**16.8**	**87.9**	**22.20**	**34%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	8.0	5.79	263%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	18.2	15.01	469%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	0.4	(1.46)	-77%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.1	(8.27)	-98%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	38.6	33.37	642%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	10.9	(18.15)	-63%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	5.6	3.69	194%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	6.1	(7.78)	-56%
UMTRA									**$36**	**4.7**	**7.7**	**2.7**	**(2.04)**	**-43%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	2.7	(2.04)	-43%

Productivity Factor At $17.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	497.5	(105.45)	-17%
Brookhaven	$25	5.1	4.9	2.1	(3.04)	-60%
Carlsbad	$160	32.0	5.0	13.5	(18.51)	-58%
Idaho	$949	55.4	17.1	87.7	32.33	58%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.2	(5.83)	-83%
Livermore	$9	1.2	7.2	0.7	(0.47)	-39%
Los Alamos	$381	26.4	14.4	32.2	5.83	22%
Nevada	$100	21.1	4.8	8.5	(12.65)	-60%
Oak Ridge	$435	80.0	5.4	41.2	(38.84)	-49%
Oakland	$18	12.8	1.4	1.5	(11.30)	-88%
Office of River Protection	$958	132.6	7.2	107.7	(24.93)	-19%
Pantex	$26	2.3	11.4	2.2	(0.09)	-4%
Portsmouth/Paducah	$283	35.0	8.1	25.8	(9.24)	-26%
Richland	$831	120.9	6.9	69.6	(51.32)	-42%
Sandia	$2	0.7	3.5	0.2	(0.49)	-70%
Savannah River	$1,102	65.7	16.8	100.5	34.75	53%
UMTRA	$36	4.7	7.7	3.0	(1.66)	-35%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									$5,329	602.9	8.8	497.5	(105.45)	-17%
Brookhaven									**$25**	**5.1**	**4.9**	**2.1**	**(3.04)**	**-60%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	2.1	(3.04)	-60%
Carlsbad									**$160**	**32.0**	**5.0**	**13.5**	**(18.51)**	**-58%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	11.0	(9.34)	-46%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	2.5	(9.17)	-78%
Idaho									**$949**	**55.4**	**17.1**	**87.7**	**32.33**	**58%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.09)	-100%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	5.6	1.38	33%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.2	(6.31)	-97%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	20.5	15.59	318%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	3.2	(0.58)	-15%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	30.0	21.89	270%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	10.7	(1.53)	-13%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	17.6	5.99	52%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**1.2**	**(5.83)**	**-83%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	1.2	(5.83)	-83%
Livermore									**$9**	**1.2**	**7.2**	**0.7**	**(0.47)**	**-39%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	0.7	(0.47)	-39%
Los Alamos									**$381**	**26.4**	**14.4**	**32.2**	**5.83**	**22%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	3.0	(0.25)	-8%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	17.0	(2.96)	-15%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	12.2	9.04	282%
Nevada									**$100**	**21.1**	**4.8**	**8.5**	**(12.65)**	**-60%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	1.7	(4.10)	-71%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	5.2	(6.05)	-54%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	1.6	(2.50)	-61%
Oak Ridge									**$435**	**80.0**	**5.4**	**41.2**	**(38.84)**	**-49%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	4.2	(3.77)	-47%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	21.5	(8.17)	-27%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	5.1	(8.18)	-62%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	1.9	(9.06)	-82%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	0.6	(3.65)	-85%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	7.7	(6.00)	-44%

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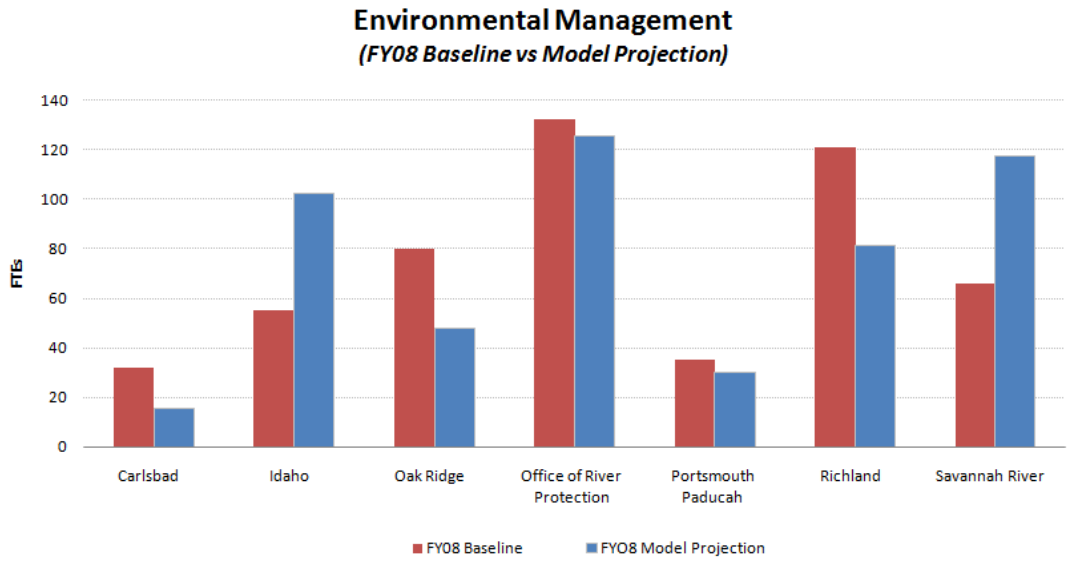
Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**1.5**	**(11.30)**	**-88%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	1.5	(11.30)	-88%
Office of River Protection									**$958**	**132.6**	**7.2**	**107.7**	**(24.93)**	**-19%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	24.6	(38.95)	-61%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	83.0	14.02	20%
Pantex									**$26**	**2.3**	**11.4**	**2.2**	**(0.09)**	**-4%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	2.2	(0.09)	-4%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**25.8**	**(9.24)**	**-26%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	5.8	(3.27)	-36%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	13.9	4.77	52%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	3.8	(5.04)	-57%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	2.3	(5.70)	-71%
Richland									**$831**	**120.9**	**6.9**	**69.6**	**(51.32)**	**-42%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	8.1	(9.58)	-54%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	1.8	(7.26)	-80%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	8.2	(6.12)	-43%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	17.8	(6.67)	-27%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	8.4	(7.69)	-48%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	6.1	(12.89)	-68%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	19.1	(1.12)	-6%
Sandia									**$2**	**0.7**	**3.5**	**0.2**	**(0.49)**	**-70%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.2	(0.49)	-70%
Savannah River									**$1,102**	**65.7**	**16.8**	**100.5**	**34.75**	**53%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	9.1	6.93	315%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	20.8	17.61	550%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	0.5	(1.40)	-74%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.1	(8.26)	-98%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	44.1	38.88	748%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	12.4	(16.60)	-57%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	6.4	4.49	236%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	7.0	(6.91)	-50%
UMTRA									**$36**	**4.7**	**7.7**	**3.0**	**(1.66)**	**-35%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	3.0	(1.66)	-35%

Productivity Factor At $15.0M/FTE



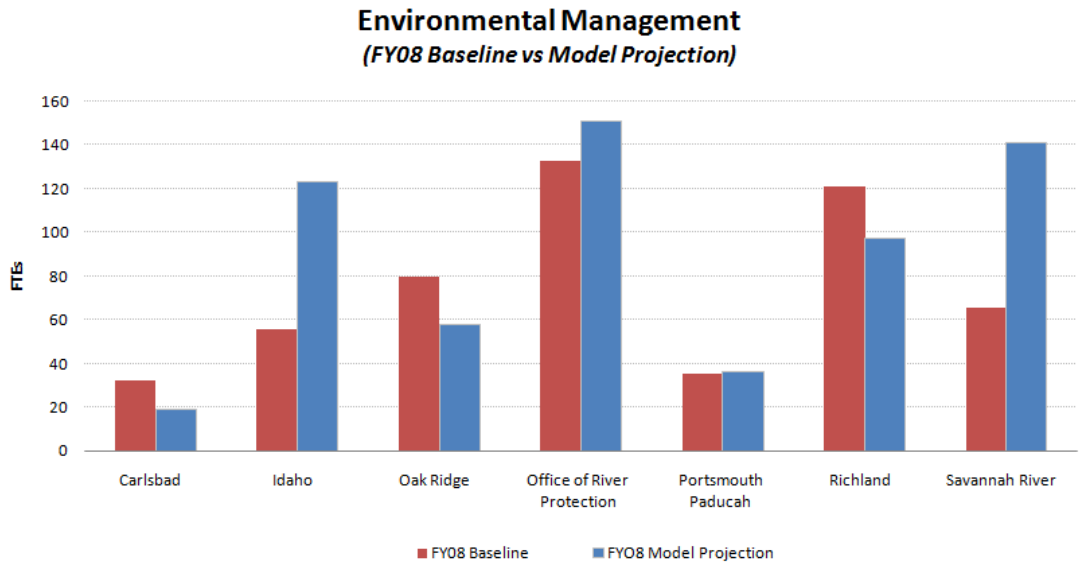
Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	580.4	(22.54)	-4%
Brookhaven	$25	5.1	4.9	2.4	(2.70)	-53%
Carlsbad	$160	32.0	5.0	15.7	(16.27)	-51%
Idaho	$949	55.4	17.1	102.4	46.96	85%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.4	(5.63)	-80%
Livermore	$9	1.2	7.2	0.9	(0.35)	-29%
Los Alamos	$381	26.4	14.4	37.6	11.21	42%
Nevada	$100	21.1	4.8	9.9	(11.24)	-53%
Oak Ridge	$435	80.0	5.4	48.0	(31.98)	-40%
Oakland	$18	12.8	1.4	1.8	(11.04)	-86%
Office of River Protection	$958	132.6	7.2	125.6	(6.98)	-5%
Pantex	$26	2.3	11.4	2.6	0.28	12%
Portsmouth/Paducah	$283	35.0	8.1	30.0	(4.95)	-14%
Richland	$831	120.9	6.9	81.2	(39.73)	-33%
Sandia	$2	0.7	3.5	0.2	(0.46)	-65%
Savannah River	$1,102	65.7	16.8	117.2	51.50	78%
UMTRA	$36	4.7	7.7	3.5	(1.16)	-25%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									$5,329	602.9	8.8	580.4	(22.54)	-4%
Brookhaven									**$25**	**5.1**	**4.9**	**2.4**	**(2.70)**	**-53%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	2.4	(2.70)	-53%
Carlsbad									**$160**	**32.0**	**5.0**	**15.7**	**(16.27)**	**-51%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	12.8	(7.52)	-37%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	3.0	(8.75)	-75%
Idaho									**$949**	**55.4**	**17.1**	**102.4**	**46.96**	**85%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.09)	-100%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	6.5	2.31	55%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.2	(6.28)	-97%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	23.9	19.01	388%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	3.8	(0.04)	-1%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	35.0	26.88	332%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	12.4	0.25	2%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	20.5	8.92	77%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**1.4**	**(5.63)**	**-80%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	1.4	(5.63)	-80%
Livermore									**$9**	**1.2**	**7.2**	**0.9**	**(0.35)**	**-29%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	0.9	(0.35)	-29%
Los Alamos									**$381**	**26.4**	**14.4**	**37.6**	**11.21**	**42%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	3.4	0.25	8%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	19.9	(0.11)	-1%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	14.3	11.08	346%
Nevada									**$100**	**21.1**	**4.8**	**9.9**	**(11.24)**	**-53%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	2.0	(3.82)	-66%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	6.0	(5.19)	-46%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	1.9	(2.24)	-55%
Oak Ridge									**$435**	**80.0**	**5.4**	**48.0**	**(31.98)**	**-40%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	4.9	(3.06)	-38%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	25.1	(4.58)	-15%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	6.0	(7.33)	-55%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	2.3	(8.74)	-79%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	0.8	(3.54)	-82%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	9.0	(4.72)	-34%

[cont]

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**1.8**	**(11.04)**	**-86%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	1.8	(11.04)	-86%
Office of River Protection									**$958**	**132.6**	**7.2**	**125.6**	**(6.98)**	**-5%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	28.8	(34.84)	-55%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	96.9	27.86	40%
Pantex									**$26**	**2.3**	**11.4**	**2.6**	**0.28**	**12%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	2.6	0.28	12%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**30.0**	**(4.95)**	**-14%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	6.8	(2.30)	-25%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	16.2	7.08	78%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	4.4	(4.41)	-50%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	2.7	(5.32)	-67%
Richland									**$831**	**120.9**	**6.9**	**81.2**	**(39.73)**	**-33%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	9.5	(8.22)	-46%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	2.1	(6.95)	-76%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	9.5	(4.75)	-33%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	20.8	(3.70)	-15%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	9.8	(6.28)	-39%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	7.1	(11.88)	-63%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	22.3	2.06	10%
Sandia									**$2**	**0.7**	**3.5**	**0.2**	**(0.46)**	**-65%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.2	(0.46)	-65%
Savannah River									**$1,102**	**65.7**	**16.8**	**117.2**	**51.50**	**78%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	10.7	8.45	384%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	24.3	21.08	659%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	0.6	(1.32)	-69%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.2	(8.23)	-98%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	51.4	46.23	889%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	14.5	(14.53)	-50%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	7.5	5.56	292%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	8.2	(5.74)	-41%
UMTRA									**$36**	**4.7**	**7.7**	**3.5**	**(1.16)**	**-25%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	3.5	(1.16)	-25%

Productivity Factor At $12.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	696.4	93.54	16%
Brookhaven	$25	5.1	4.9	2.9	(2.22)	-44%
Carlsbad	$160	32.0	5.0	18.9	(13.12)	-41%
Idaho	$949	55.4	17.1	122.8	67.43	122%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	1.6	(5.36)	-77%
Livermore	$9	1.2	7.2	1.0	(0.18)	-15%
Los Alamos	$381	26.4	14.4	45.1	18.73	71%
Nevada	$100	21.1	4.8	11.8	(9.27)	-44%
Oak Ridge	$435	80.0	5.4	57.6	(22.37)	-28%
Oakland	$18	12.8	1.4	2.1	(10.69)	-84%
Office of River Protection	$958	132.6	7.2	150.7	18.14	14%
Pantex	$26	2.3	11.4	3.1	0.80	35%
Portsmouth/Paducah	$283	35.0	8.1	36.1	1.06	3%
Richland	$831	120.9	6.9	97.4	(23.49)	-19%
Sandia	$2	0.7	3.5	0.3	(0.41)	-58%
Savannah River	$1,102	65.7	16.8	140.6	74.94	114%
UMTRA	$36	4.7	7.7	4.3	(0.45)	-10%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									**$5,329**	**602.9**	**8.8**	**696.4**	**93.54**	**16%**
Brookhaven									**$25**	**5.1**	**4.9**	**2.9**	**(2.22)**	**-44%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	2.9	(2.22)	-44%
Carlsbad									**$160**	**32.0**	**5.0**	**18.9**	**(13.12)**	**-41%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	15.3	(4.96)	-24%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	3.5	(8.16)	-70%
Idaho									**$949**	**55.4**	**17.1**	**122.8**	**67.43**	**122%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.09)	-100%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	7.8	3.61	86%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.3	(6.24)	-96%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	28.7	23.79	486%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	4.5	0.71	19%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	42.0	33.88	418%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	14.9	2.74	22%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	24.6	13.02	112%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**1.6**	**(5.36)**	**-77%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	1.6	(5.36)	-77%
Livermore									**$9**	**1.2**	**7.2**	**1.0**	**(0.18)**	**-15%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	1.0	(0.18)	-15%
Los Alamos									**$381**	**26.4**	**14.4**	**45.1**	**18.73**	**71%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	4.1	0.94	29%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	23.9	3.86	19%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	17.1	13.93	435%
Nevada									**$100**	**21.1**	**4.8**	**11.8**	**(9.27)**	**-44%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	2.4	(3.42)	-59%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	7.2	(3.98)	-36%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	2.2	(1.86)	-45%
Oak Ridge									**$435**	**80.0**	**5.4**	**57.6**	**(22.37)**	**-28%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	5.9	(2.08)	-26%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	30.1	0.45	2%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	7.2	(6.14)	-46%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	2.7	(8.28)	-75%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	0.9	(3.39)	-79%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	10.8	(2.93)	-21%

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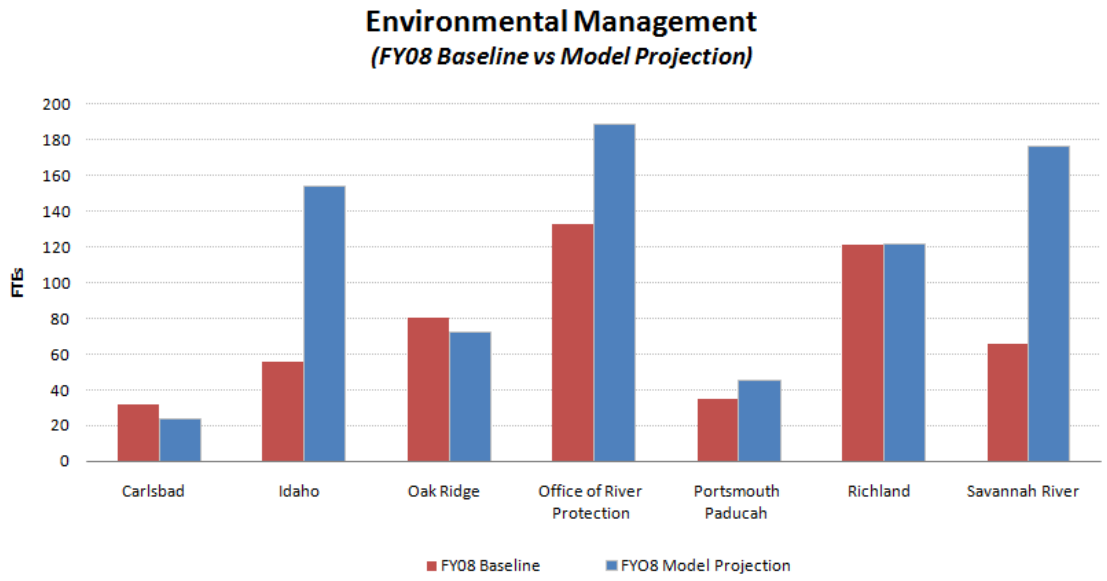
Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**2.1**	**(10.69)**	**-84%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	2.1	(10.69)	-84%
Office of River Protection									**$958**	**132.6**	**7.2**	**150.7**	**18.14**	**14%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	34.5	(29.09)	-46%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	116.2	47.23	68%
Pantex									**$26**	**2.3**	**11.4**	**3.1**	**0.80**	**35%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	3.1	0.80	35%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**36.1**	**1.06**	**3%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	8.2	(0.94)	-10%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	19.4	10.32	113%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	5.3	(3.53)	-40%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	3.2	(4.79)	-60%
Richland									**$831**	**120.9**	**6.9**	**97.4**	**(23.49)**	**-19%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	11.4	(6.33)	-36%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	2.6	(6.52)	-72%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	11.5	(2.84)	-20%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	25.0	0.46	2%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	11.8	(4.32)	-27%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	8.5	(10.45)	-55%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	26.7	6.51	32%
Sandia									**$2**	**0.7**	**3.5**	**0.3**	**(0.41)**	**-58%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.3	(0.41)	-58%
Savannah River									**$1,102**	**65.7**	**16.8**	**140.6**	**74.94**	**114%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	12.8	10.58	481%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	29.1	25.93	810%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	0.7	(1.20)	-63%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.2	(8.20)	-98%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	61.7	56.52	1087%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	17.4	(11.64)	-40%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	8.9	7.05	371%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	9.8	(4.11)	-30%
UMTRA									**$36**	**4.7**	**7.7**	**4.3**	**(0.45)**	**-10%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	4.3	(0.45)	-10%

Productivity Factor At $10.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	870.5	267.64	44%
Brookhaven	$25	5.1	4.9	3.6	(1.50)	-29%
Carlsbad	$160	32.0	5.0	23.6	(8.40)	-26%
Idaho	$949	55.4	17.1	153.5	98.13	177%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	2.1	(4.95)	-71%
Livermore	$9	1.2	7.2	1.3	0.08	7%
Los Alamos	$381	26.4	14.4	56.4	30.01	114%
Nevada	$100	21.1	4.8	14.8	(6.31)	-30%
Oak Ridge	$435	80.0	5.4	72.0	(7.96)	-10%
Oakland	$18	12.8	1.4	2.6	(10.17)	-79%
Office of River Protection	$958	132.6	7.2	188.4	55.83	42%
Pantex	$26	2.3	11.4	3.9	1.58	68%
Portsmouth/Paducah	$283	35.0	8.1	45.1	10.07	29%
Richland	$831	120.9	6.9	121.8	0.86	1%
Sandia	$2	0.7	3.5	0.4	(0.33)	-48%
Savannah River	$1,102	65.7	16.8	175.8	110.10	168%
UMTRA	$36	4.7	7.7	5.3	0.62	13%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									$5,329	602.9	8.8	870.5	267.64	44%
Brookhaven									**$25**	**5.1**	**4.9**	**3.6**	**(1.50)**	**-29%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	3.6	(1.50)	-29%
Carlsbad									**$160**	**32.0**	**5.0**	**23.6**	**(8.40)**	**-26%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	19.2	(1.13)	-6%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	4.4	(7.28)	-62%
Idaho									**$949**	**55.4**	**17.1**	**153.5**	**98.13**	**177%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.09)	-100%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	9.8	5.57	133%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.3	(6.18)	-95%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	35.9	30.97	632%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	5.6	1.84	48%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	52.5	44.38	548%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	18.7	6.47	53%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	30.8	19.18	165%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**2.1**	**(4.95)**	**-71%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	2.1	(4.95)	-71%
Livermore									**$9**	**1.2**	**7.2**	**1.3**	**0.08**	**7%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	1.3	0.08	7%
Los Alamos									**$381**	**26.4**	**14.4**	**56.4**	**30.01**	**114%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	5.2	1.97	62%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	29.8	9.83	49%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	21.4	18.21	569%
Nevada									**$100**	**21.1**	**4.8**	**14.8**	**(6.31)**	**-30%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	3.0	(2.82)	-49%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	9.0	(2.18)	-19%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	2.8	(1.31)	-32%
Oak Ridge									**$435**	**80.0**	**5.4**	**72.0**	**(7.96)**	**-10%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	7.4	(0.60)	-7%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	37.7	7.98	27%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	9.0	(4.35)	-33%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	3.4	(7.60)	-69%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	1.1	(3.17)	-74%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	13.5	(0.23)	-2%

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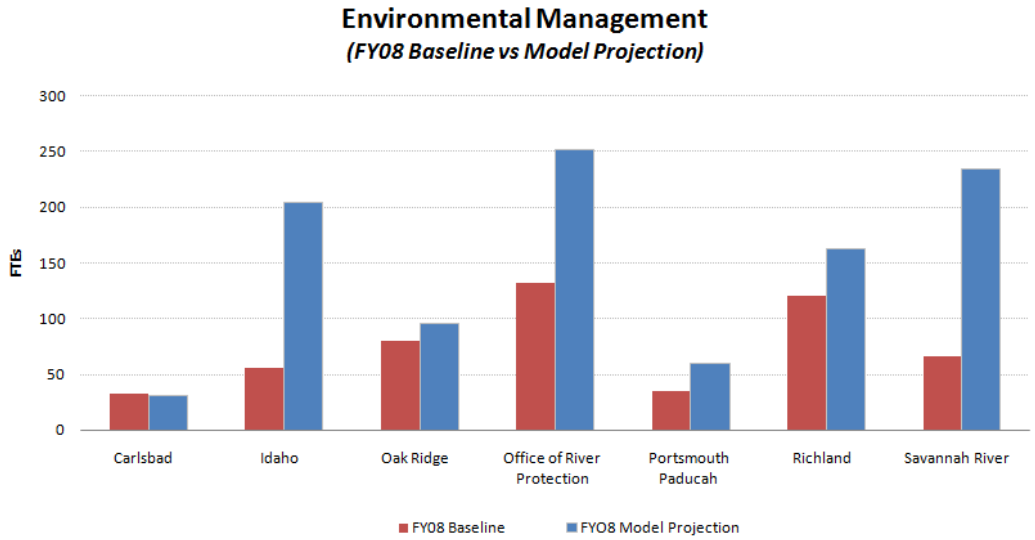
Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**2.6**	**(10.17)**	**-79%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	2.6	(10.17)	-79%
Office of River Protection									**$958**	**132.6**	**7.2**	**188.4**	**55.83**	**42%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	43.1	(20.46)	-32%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	145.3	76.29	111%
Pantex									**$26**	**2.3**	**11.4**	**3.9**	**1.58**	**68%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	3.9	1.58	68%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**45.1**	**10.07**	**29%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	10.2	1.10	12%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	24.3	15.17	167%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	6.6	(2.22)	-25%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	4.0	(3.98)	-50%
Richland									**$831**	**120.9**	**6.9**	**121.8**	**0.86**	**1%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	14.2	(3.48)	-20%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	3.2	(5.88)	-65%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	14.3	0.02	0%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	31.2	6.70	27%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	14.7	(1.38)	-9%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	10.7	(8.31)	-44%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	33.4	13.18	65%
Sandia									**$2**	**0.7**	**3.5**	**0.4**	**(0.33)**	**-48%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.4	(0.33)	-48%
Savannah River									**$1,102**	**65.7**	**16.8**	**175.8**	**110.10**	**168%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	16.0	13.78	626%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	36.4	33.22	1038%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	0.9	(1.03)	-54%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.3	(8.15)	-97%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	77.1	71.95	1384%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	21.7	(7.29)	-25%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	11.2	9.28	489%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	12.2	(1.66)	-12%
UMTRA									**$36**	**4.7**	**7.7**	**5.3**	**0.62**	**13%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	5.3	0.62	13%

Productivity Factor At $7.5M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	1,160.7	557.83	93%
Brookhaven	$25	5.1	4.9	4.8	(0.30)	-6%
Carlsbad	$160	32.0	5.0	31.5	(0.53)	-2%
Idaho	$949	55.4	17.1	204.7	149.31	270%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	2.7	(4.26)	-61%
Livermore	$9	1.2	7.2	1.7	0.51	42%
Los Alamos	$381	26.4	14.4	75.2	48.81	185%
Nevada	$100	21.1	4.8	19.7	(1.38)	-7%
Oak Ridge	$435	80.0	5.4	96.0	16.05	20%
Oakland	$18	12.8	1.4	3.5	(9.29)	-73%
Office of River Protection	$958	132.6	7.2	251.2	118.64	89%
Pantex	$26	2.3	11.4	5.2	2.87	125%
Portsmouth/Paducah	$283	35.0	8.1	60.1	25.10	72%
Richland	$831	120.9	6.9	162.3	41.44	34%
Sandia	$2	0.7	3.5	0.5	(0.21)	-30%
Savannah River	$1,102	65.7	16.8	234.4	168.69	257%
UMTRA	$36	4.7	7.7	7.1	2.39	51%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									$5,329	602.9	8.8	1,160.7	557.83	93%
Brookhaven									**$25**	**5.1**	**4.9**	**4.8**	**(0.30)**	**-6%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	4.8	(0.30)	-6%
Carlsbad									**$160**	**32.0**	**5.0**	**31.5**	**(0.53)**	**-2%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	25.6	5.27	26%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	5.9	(5.80)	-50%
Idaho									**$949**	**55.4**	**17.1**	**204.7**	**149.31**	**270%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.08)	-100%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	13.0	8.82	210%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.4	(6.07)	-93%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	47.8	42.92	876%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	7.5	3.72	98%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	70.0	61.87	764%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	24.9	12.70	104%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	41.0	29.43	254%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**2.7**	**(4.26)**	**-61%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	2.7	(4.26)	-61%
Livermore									**$9**	**1.2**	**7.2**	**1.7**	**0.51**	**42%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	1.7	0.51	42%
Los Alamos									**$381**	**26.4**	**14.4**	**75.2**	**48.81**	**185%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	6.9	3.69	115%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	39.8	19.77	99%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	28.6	25.35	792%
Nevada									**$100**	**21.1**	**4.8**	**19.7**	**(1.38)**	**-7%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	4.0	(1.83)	-32%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	12.0	0.83	7%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	3.7	(0.37)	-9%
Oak Ridge									**$435**	**80.0**	**5.4**	**96.0**	**16.05**	**20%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	9.9	1.87	23%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	50.2	20.54	69%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	11.9	(1.36)	-10%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	4.5	(6.47)	-59%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	1.5	(2.79)	-65%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	18.0	4.26	31%

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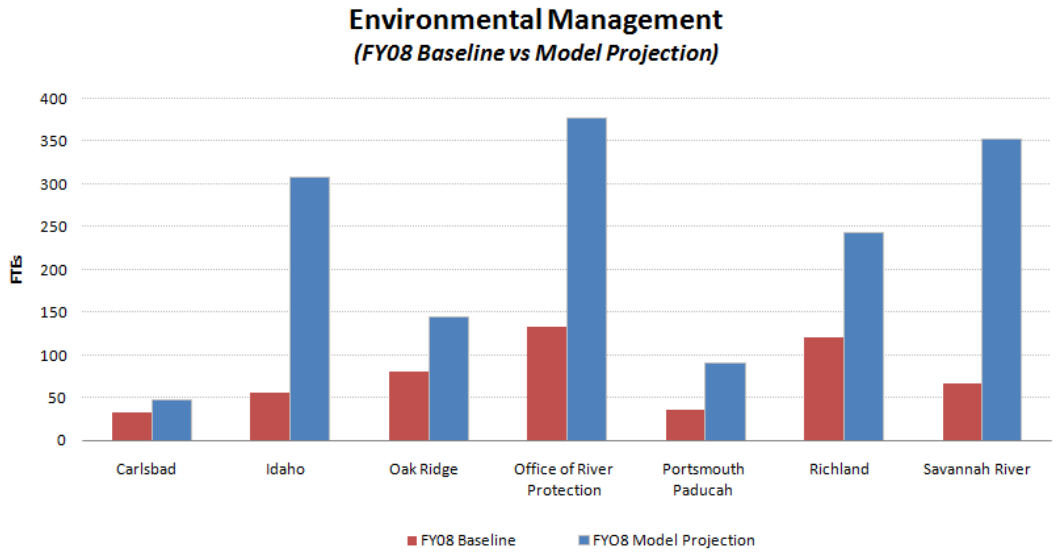
Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**3.5**	**(9.29)**	**-73%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	3.5	(9.29)	-73%
Office of River Protection									**$958**	**132.6**	**7.2**	**251.2**	**118.64**	**89%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	57.5	(6.08)	-10%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	193.7	124.72	181%
Pantex									**$26**	**2.3**	**11.4**	**5.2**	**2.87**	**125%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	5.2	2.87	125%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**60.1**	**25.10**	**72%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	13.6	4.50	49%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	32.4	23.26	256%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	8.8	(0.02)	0%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	5.4	(2.64)	-33%
Richland									**$831**	**120.9**	**6.9**	**162.3**	**41.44**	**34%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	19.0	1.25	7%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	4.3	(4.80)	-53%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	19.1	4.79	34%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	41.6	17.11	70%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	19.6	3.53	22%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	14.2	(4.75)	-25%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	44.5	24.31	120%
Sandia									**$2**	**0.7**	**3.5**	**0.5**	**(0.21)**	**-30%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.5	(0.21)	-30%
Savannah River									**$1,102**	**65.7**	**16.8**	**234.4**	**168.69**	**257%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	21.3	19.10	868%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	48.6	45.35	1417%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	1.2	(0.73)	-39%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.3	(8.06)	-96%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	102.9	97.66	1878%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	28.9	(0.06)	0%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	14.9	13.01	685%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	16.3	2.42	17%
UMTRA									**$36**	**4.7**	**7.7**	**7.1**	**2.39**	**51%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	7.1	2.39	51%

Productivity Factor At $5.0M/FTE



Program / Site Office / Project	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM	$5,329	602.9	8.8	1,741.1	1,138.19	189%
Brookhaven	$25	5.1	4.9	7.2	2.10	41%
Carlsbad	$160	32.0	5.0	47.2	15.20	48%
Idaho	$949	55.4	17.1	307.1	251.67	454%
Knolls Atomic Power Laboratory SPRU	$13	7.0	1.9	4.1	(2.89)	-41%
Livermore	$9	1.2	7.2	2.6	1.36	113%
Los Alamos	$381	26.4	14.4	112.8	86.42	327%
Nevada	$100	21.1	4.8	29.6	8.48	40%
Oak Ridge	$435	80.0	5.4	144.1	64.07	80%
Oakland	$18	12.8	1.4	5.3	(7.53)	-59%
Office of River Protection	$958	132.6	7.2	376.9	244.26	184%
Pantex	$26	2.3	11.4	7.8	5.45	237%
Portsmouth/Paducah	$283	35.0	8.1	90.1	55.15	158%
Richland	$831	120.9	6.9	243.5	122.61	101%
Sandia	$2	0.7	3.5	0.7	0.03	5%
Savannah River	$1,102	65.7	16.8	351.6	285.89	435%
UMTRA	$36	4.7	7.7	10.6	5.93	126%

Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
EM									$5,329	602.9	8.8	1,741.1	1,138.19	189%
Brookhaven									**$25**	**5.1**	**4.9**	**7.2**	**2.10**	**41%**
Nuclear Facility D&D – Brookhaven Graphite Research Reactor	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$25	5.1	4.9	7.2	2.10	41%
Carlsbad									**$160**	**32.0**	**5.0**	**47.2**	**15.20**	**48%**
Operate Waste Disposal Facility	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$130	20.3	6.4	38.4	18.05	89%
Transportation – WIPP	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$30	11.7	2.6	8.9	(2.85)	-24%
Idaho									**$949**	**55.4**	**17.1**	**307.1**	**251.67**	**454%**
Non – Nuclear Facility D&D – INL	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$0	4.1	0.0	0.0	(4.07)	-99%
Nuclear Facility D&D – INL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$63	4.2	15.0	19.5	15.33	365%
Nuclear Material Stabilization and Disposition	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	6.5	0.3	0.6	(5.85)	-90%
Radioactive Liquid Tank Waste Stabilization and Disposition 2012	2	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$182	4.9	37.1	71.7	66.83	1364%
SNF Stabilization and Disposition 2012	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	3.8	9.4	11.3	7.48	197%
Sodium Bearing Waste Treatment (SBWT)	3	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$344	8.1	42.5	105.0	96.85	1196%
Soil and Water Remediation 2012	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$127	12.2	10.4	37.3	25.15	206%
Solid Waste Stabilization and Disposition (Incl Advanced Mixed Waste Treatment Proj)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$195	11.6	16.8	61.6	49.95	431%
Knolls Atomic Power Laboratory SPRU									**$13**	**7.0**	**1.9**	**4.1**	**(2.89)**	**-41%**
Nuclear Facility D&D – Separations Process Research Unit (SPRU)	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$13	7.0	1.9	4.1	(2.89)	-41%
Livermore									**$9**	**1.2**	**7.2**	**2.6**	**1.36**	**113%**
Soil and Water Remediation – LLNL, Site 300	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$9	1.2	7.2	2.6	1.36	113%
Los Alamos									**$381**	**26.4**	**14.4**	**112.8**	**86.42**	**327%**
Nuclear Facility D&D – Defense, LANL	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$33	3.2	10.4	10.3	7.14	223%
Soil and Water Remediation – LANL	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$202	20.0	10.1	59.7	39.66	198%
Solid Waste Stabilization and Disposition – LANL Legacy	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$145	3.2	45.4	42.8	39.63	1238%
Nevada									**$100**	**21.1**	**4.8**	**29.6**	**8.48**	**40%**
Operate Waste Disposal Facility – Nevada	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$20	5.8	3.5	6.0	0.15	3%
Soil and Water Remediation – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$61	11.2	5.5	18.0	6.84	61%
Solid Waste Stabilization and Disposition – NTS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$19	4.1	4.6	5.6	1.49	36%
Oak Ridge									**$435**	**80.0**	**5.4**	**144.1**	**64.07**	**80%**
Downblend of U–233 in Building 3019	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$44	8.0	5.5	14.8	6.81	85%
Nuclear Facility D&D – East Tennessee Technology Park	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$228	29.7	7.7	75.4	45.67	154%
Nuclear Facility D&D – Oak Ridge National Laboratory	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$54	13.3	4.1	17.9	4.60	35%
Nuclear Facility D&D Y–12	3	D&D	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	11.0	1.9	6.8	(4.21)	-38%
Soil and Water Remediation – Melton Valley	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$7	4.3	1.6	2.3	(2.03)	-47%
Solid Waste Stabilization and Disposition – Oak Ridge	3	ER	High	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$80	13.7	5.9	26.9	13.24	97%

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Program / Site Office / Project	Project Phase	Project Type	HST	Project Execution	Contract Type	Project Uniqueness	Regulatory Involvement	External Influence	FY08 $M	FY08 Fed FTEs	PF (FY08$ / FY08 Fed FTEs)	FTEs - Model Projection	FY08 Gap	Pct Diff
Oakland									**$18**	**12.8**	**1.4**	**5.3**	**(7.53)**	**-59%**
Nuclear Facility D&D – Energy Technology Engineering Center	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$18	12.8	1.4	5.3	(7.53)	-59%
Office of River Protection									**$958**	**132.6**	**7.2**	**376.9**	**244.26**	**184%**
Radioactive Liquid Tank Waste Stabilization and Disposition – ORP (Tank Farm)	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$274	63.6	4.3	86.3	22.67	36%
WTP	3	Const	High	DOE Direct	Incentive (cost-reimbursement)	Yes	High	High	$684	69.0	9.9	290.6	221.58	321%
Pantex									**$26**	**2.3**	**11.4**	**7.8**	**5.45**	**237%**
Soil and Water Remediation – Pantex	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$26	2.3	11.4	7.8	5.45	237%
Portsmouth/Paducah									**$283**	**35.0**	**8.1**	**90.1**	**55.15**	**158%**
Depleted Uranium Hexafluoride 6 Conversion (DUF6)	2	Const	Med	DOE Direct	Incentive (cost-reimbursement)	No	Medium	Medium	$44	9.1	4.8	20.4	11.30	124%
Nuclear Facility D&D of Gaseous Diffusion Plant – Portsmouth	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$167	9.1	18.4	48.5	39.44	433%
Solid Waste Stabilization and Disposition – LPP – Portsmouth	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$45	8.8	5.1	13.2	4.37	50%
Solid Waste Stabilization and Disposition – Paducah	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$27	8.0	3.4	8.0	0.03	0%
Richland									**$831**	**120.9**	**6.9**	**243.5**	**122.61**	**101%**
NM Stabilization and Disposition – PFP	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$98	17.7	5.5	28.4	10.73	61%
Nuclear Facility D&D – Fast Flux Test Facility	3	D&D	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$21	9.1	2.3	6.4	(2.65)	-29%
Nuclear Facility D&D – Remainder of Handford	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$99	14.3	6.9	28.6	14.34	100%
Nuclear Facility D&D – River Corridor Closure Project (RCCP)	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$215	24.5	8.8	62.4	37.91	155%
SNF Stabilization and Disposition (K Basin Closure – KBC)	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$100	16.1	6.2	29.4	13.35	83%
Soil and Water Remediation – Groundwater/Vadose Zone	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$72	19.0	3.8	21.4	2.37	12%
Solid Waste Stabilization and Disposition – 200 Area	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$226	20.2	11.2	66.8	46.57	231%
Sandia									**$2**	**0.7**	**3.5**	**0.7**	**0.03**	**5%**
Soil and Water Remediation – Sandia	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$2	0.7	3.5	0.7	0.03	5%
Savannah River									**$1,102**	**65.7**	**16.8**	**351.6**	**285.89**	**435%**
Balance of Nuclear Materials	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$108	2.2	49.2	32.0	29.75	1352%
Enriched Uranium Disposition Project	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$231	3.2	72.3	72.8	69.63	2176%
Nuclear Facility D&D – SRS	3	D&D	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$6	1.9	3.2	1.7	(0.15)	-8%
Plutonium Disposition Project	1	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$1	8.4	0.1	0.5	(7.90)	-94%
Radioactive Liquid Tank Waste Stabilization and Disposition - SRS	3	ER	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$490	5.2	94.2	154.3	149.09	2867%
Salt Waste Processing Facility (SWPF)	2	Const	Med	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$107	29.0	3.7	43.4	14.41	50%
Soil and Water Remediation – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$76	1.9	39.9	22.4	20.47	1077%
Solid Waste Stabilization and Disposition – SRS	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$83	13.9	6.0	24.5	10.58	76%
UMTRA									**$36**	**4.7**	**7.7**	**10.6**	**5.93**	**126%**
Soil and Water Remediation – Moab	3	ER	Low	DOE M&O	Incentive (cost-reimbursement)	No	Medium	Medium	$36	4.7	7.7	10.6	5.93	126%