



# Department of Energy MIDYEAR REVIEW

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## Oak Ridge National Laboratory

April 15, 1999

- 1.0 Science and Technology
- 2.0 Leadership
- 3.0 Environment, Safety and Health
- 4.0 Infrastructure
- 5.0 Business Operations
- 6.0 Stakeholder Relations



# 1.0 Science and Technology

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**Provide high-quality research and develop leading edge, enabling technologies that are critical to DOE's mission and the nation.**

- 1.1 Sponsor Surveys**
- 1.2 SNS Project Execution**
- 1.3 HFIR Operation**
- 1.4 HFIR Upgrade Projects**
- 1.5 Neutron Users Group**
- 1.6 Technology Transfer**
- 1.7 Public Visibility**
- 1.8 Electronic Delivery of Documents**



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# 1.0 Science and Technology

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## 1.1 Sponsor Surveys

**Rating: Excellent**

**Basis:**

- **HQ Programmatic Surveys - No Input**
- **WFO Sponsors (63 Surveys, 17 Responses)  
Scale 1-5: Federal 4.3, Non-Federal 3.9,  
Cumulative 4.2**
- **User Facilities - No Input**



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# 1.0 Science and Technology

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## 1.2 SNS Project Execution

**Rating: Marginal**

**Basis:**

- **Project significantly behind baseline schedule.**
- **Performance measurement system fails to identify root causes and corrective actions.**
- **Management improvements being implemented to strengthen project leadership & discipline.**



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# 1.0 Science and Technology

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## 1.3 HFIR Operation

**Rating: Good**

**Basis: Current predictability/reliability is at 1.0. Availability is 59.6%. It is understood that outages in winter months are longer in preparation for shorter summer outages to support research.**



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# 1.0 Science and Technology

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## 1.4 HFIR Upgrade Projects

**Rating: Good**

**Basis:** Major activities (construction jobs, procurements, and component fabrication) are either on schedule or within manageable variances. Costs are slightly above projections but also within expected limits. Individual project managers appear to be effective at keeping non-dedicated personnel resources focused on completing “upgrade related” tasks on schedule.



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# 1.0 Science and Technology

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## 1.5 Neutron Users Group

**Rating: Good**

**Basis: The SNS and HFIR Users Group was established in November 1998.**



# 1.0 Science and Technology

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## 1.6 Technology Transfer

**Rating:** Will be rated at the end of the FY when objective outcomes are finally determined.

**Basis:** The laboratory has demonstrated progress as follows through March 31, 1999:

<b>Patents</b>	<b>30 (60% of goal)</b>
<b>Licenses per LE</b>	<b>1.1 (23% of goal)</b>
<b>Running Royalties</b>	<b>\$239K (43% of goal)</b>



# 1.0 Science and Technology

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## **1.7 Provide high visibility forum for science and technology**

**1.7.1 Develop a strategic plan for future operation of AMSE**

**1.7.2 Integrate ORNL public tours with AMSE**

### **1.7.1 Develop a strategic plan**

**Rating: Good**

**Basis:**

- **Reviewing (internally) preliminary draft outline**
- **Underpinning is Business Plan submitted to SC**
- **Ensuring complimentary and consistent with:**
  - **S1 National Energy Strategy**
  - **SC Goals & Strategies**
  - **ORNL Strategic Plan**
  - **Y-12 Plant Strategic Plan**



# 1.0 Science and Technology

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## 1.7.2 Integrate ORNL public tours with AMSE

Rating: Good

Basis:

- Expanding Environmental Walks (type, number, content)
- Integrating AMSE/ORNL in 1st annual Earth Day
- AMSE staff person at the Gateway Pavilion to promote ORNL public tours
- AMSE Information Officer participates in LMER Communications & Public Affairs staff meetings



# 1.0 Science and Technology

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**1.8      20% Electronic delivery of STI from originators**

**Rating: Good**

**Basis:**

- **Simplified Web site developed to facilitate process.**
- **Training sessions conducted (11).**
- **Executive Committee required conference papers, technical reports (up to 25 pages), and foreign trip reports to be provided in native PDF as of March 15, 1999.**
- **As of April 14, 1999, an estimated 8% of documents received in PDF and available for delivery to OSTI.**
- **Unresolved issue - home for documents:**
  - **Store documents in house, send URL to OSTI**
  - **Send electronic document to OSTI**



## 2.0 Leadership

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**Provide leadership that ensures excellence, relevance, and stewardship in all aspects of the conduct of assigned programs.**

**2.1 Strategic Planning**

**2.2 Reengineering**

**2.3 Human Resources**

**2.4 Socioeconomic Development**

**2.5 Critical Outcomes Assessment Report**

**2.6 Self-Assessment Programs/Corrective Actions**



## 2.0 Leadership

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### 2.1 Strategic Planning

**Rating: Good**

**Basis: Efforts at defining the strategic planning process have been exceptional; however, business plans have yet to be completed and performance measures defined.**



## 2.0 Leadership

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### 2.2 Reengineering

Rating: **Good**

**Basis:**

- **Change in leadership during FY 1999**
- **Resumption of periodic meetings/reviews by steering committee**
- **Reviews to date, ED&C and ES&H**
- **Final evaluation dependent on progress in second half of FY 99**



## 2.0 Leadership

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### 2.3 Human Resources

Rating: Good

#### Positive Employee Relations

#### Basis:

- **ORNL focuses on managing organizational conflict and on fostering a safe and comfortable environment for employees to bring up their issues and concerns.**
- **No progress evaluating Alternate Dispute Resolution.**
- **Little progress to date on developing a Differing Professional Opinion process.**



## 2.0 Leadership

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### Diversity of Workforce

#### Basis:

- Representation of Women increased in O&M positions
- No O&M or Professional positions filled by minorities
- Women and Minorities included in Succession Planning

### Leadership Development

#### Basis:

- Proactive approach to leadership development
- 43% (32/75) of FY 99 target audience begun (90% is goal)
- Feedback summarized/evaluated for improvement
- L-ORNL graduates in succession planning tracked
- Approach to evaluate the effectiveness of leadership development initiatives is needed.



## 2.0 Leadership

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### 2.4 Socioeconomic Development

**Rating: Good**

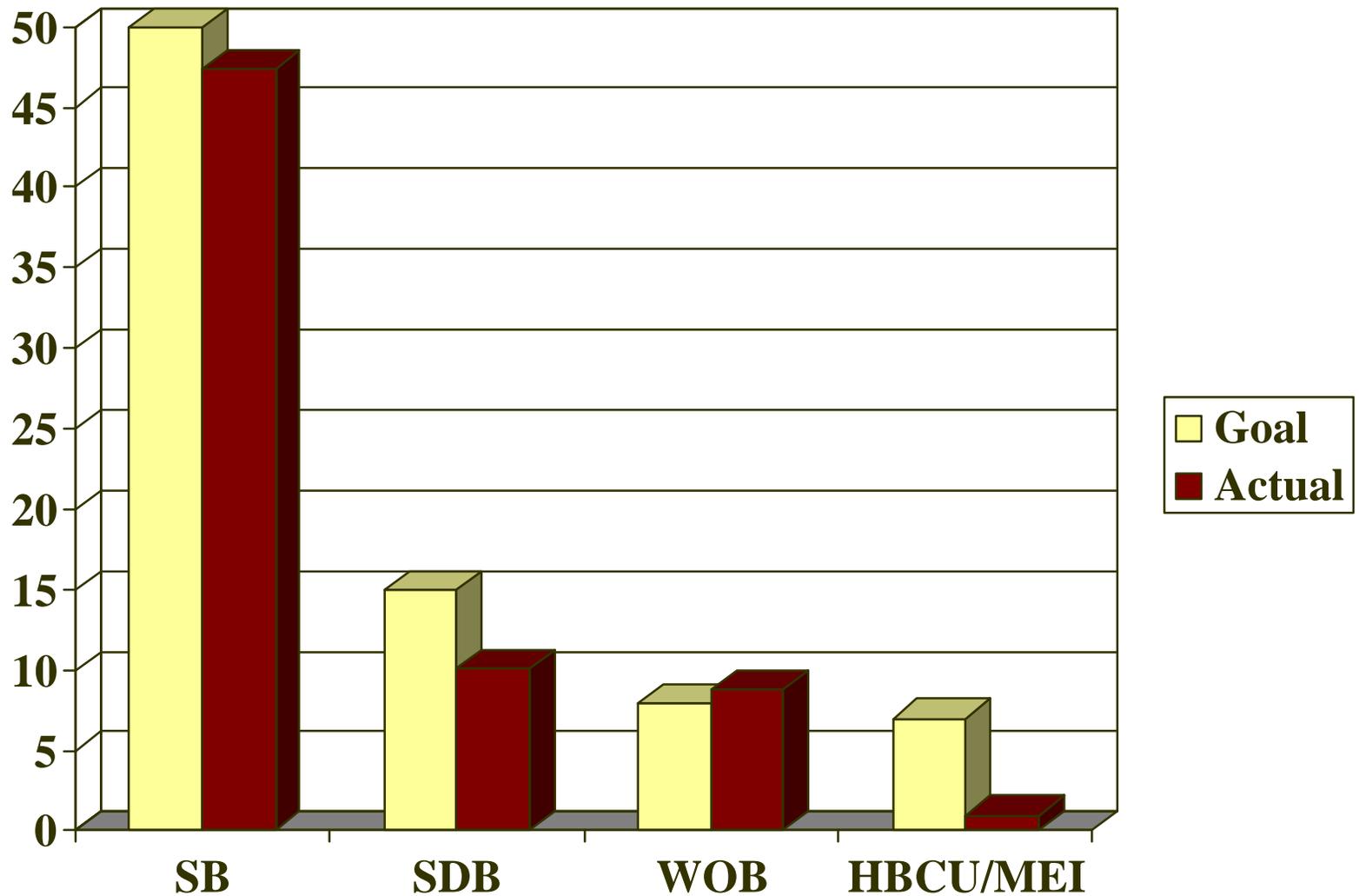
**Basis:**

- **SNS Project Small Business Plan**
- **Only four procurements made with HBCU/MEI**



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## 2.0 Leadership





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## 2.0 Leadership

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### 2.5 Critical Outcomes Assessment Report

**Rating: Not rated for this review period.**

**Basis: Deliverable due November 15, 1999.**



## 2.0 Leadership

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### 2.6 Self-Assessment Programs/Corrective Actions

Rating: Marginal

Basis:

- Assessments of divisions still finding deficiencies. (ORNL assessments and Operational Awareness)
- Draft criteria proposed and discussions in progress.
- Some divisions not meeting goal for late corrective actions.
- Number of corrective actions rescheduled are being reported.



## **3.0 Environment, Safety and Health (ES&H)**

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**LMER will integrate ES&H into research, operations, and management practices such that work is performed in a manner that protects the environment and the safety and health of the workforce and the public.**

- 3.1 Integrated Safety Management System**
- 3.2 Personnel Exposures**
- 3.3 DOE Safety Index**
- 3.4 Radiological Control Index**
- 3.5 Nuclear Safety Violation Index**
- 3.6 Safety Analysis Reports**
- 3.7 Imminent Danger and Hazard Abatement**
- 3.8 Environmental Laws, Regulations, and Permits**



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## 3.0 Environment, Safety, and Health (ES&H)

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### 3.1 Integrated Safety Management System (ISMS)

**Rating: Excellent**

**Basis:**

- The Laboratory has met all of the scheduled items to date.
- The Laboratory has developed a tailored ISMS program that is conducive to ownership by the various lab organizations.
- The ISMS implementation plans (34) were much more resource intensive than developing one plan but should produce a better program.



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## **3.0 Environment, Safety, and Health (ES&H)**

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### **3.2 Personnel Exposures**

**Rating: Good**

**Basis:**

- **The objective is being met.**
- **There were no exposures exceeding permissible exposure limits/threshold limit values when personal protective equipment factors were taken into account.**



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## 3.0 Environment, Safety and Health (ES&H)

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### 3.3 DOE Safety Index

**Rating: Marginal**

**Basis:**

- The objective is less than 15.
- Six month cumulative rate = 22.6  
(from 7/1/98 - 12/1/98 with 3 month lag).



## 3.0 Environment, Safety, and Health (ES&H)

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### 3.4 Radiological Control Index

**Rating: Excellent**

**Basis:**

- The objective is less than 9.
- Reported at 6.05.



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## 3.0 Environment, Safety and Health (ES&H)

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### 3.5 Nuclear Safety Violation Index

**Rating: Excellent**

**Basis:**

- The objective is less than 18.
- The NSVI is currently equal to 4.



## **3.0 Environment, Safety and Health (ES&H)**

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### **3.6 Safety Analysis Reports**

**Rating: Marginal**

**Basis: The SAR and TSR for Building 7920 were submitted on schedule, but the SAR is incomplete.**



## **3.0 Environment, Safety and Health (ES&H)**

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### **3.7 Imminent Danger and Hazard Abatement**

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**Rating: Good**

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**Basis:**

- **The objective is being met.**
- **There were no imminent danger situations.**



## 3.0 Environment, Safety, and Health (ES&H)

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### 3.8 Environmental Laws, Regulations, and Permits

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**Rating: Good**

**Basis:**

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- The Laboratory has continued to ensure that all regulatory requirements are met and that the Laboratory maintains a compliant status.
- Document submittals are timely and all monitoring requirements continue to be met.



## 3.0 Environment, Safety, and Health (ES&H)

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### Emergency Management Program

1. Complete 75% of initial screening hazard assessments.

**Basis: Over 95% are completed.**

2. Complete 100% training of first and 75% of second responders.

**Basis: 90% of the first and 85% of second responders have been trained.**

3. 90% of responders that will participate in a drill or exercise.

**Basis: 90% of the first and 85% of second responders have participated.**



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## **4.0 Infrastructure**

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**Maintain the infrastructure to support operations in safe, environmentally responsible, and cost-effective manner.**

- 4.1 LCAM Comprehensive Planning Index**
- 4.2 LCAM Project Management Index**
- 4.3 LCAM O&M Management Index**
- 4.4 LCAM Real and Personal Property Index**
- 4.5 LCAM Deliverables**
- 4.6 P&E Division Reengineering**
- 4.7 Waste Management**
- 4.8 Training Program**



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## 4.0 Infrastructure

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### 4.1 LCAM Comprehensive Planning Index

**Rating: Good**

**Basis:**

- **GPP Prioritization/Allocation**
- **OR Reservation Management Plan**



## 4.0 Infrastructure

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### 4.2 LCAM Project Management Index

**Rating: Excellent**

**Basis:**

- **Costing/closeout performance exceeding expectations.**
- **Significant increase in cost efficiency after reengineering.**
- **Cost and schedule performance need improvement.**



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# Administrative Efficiency Measure

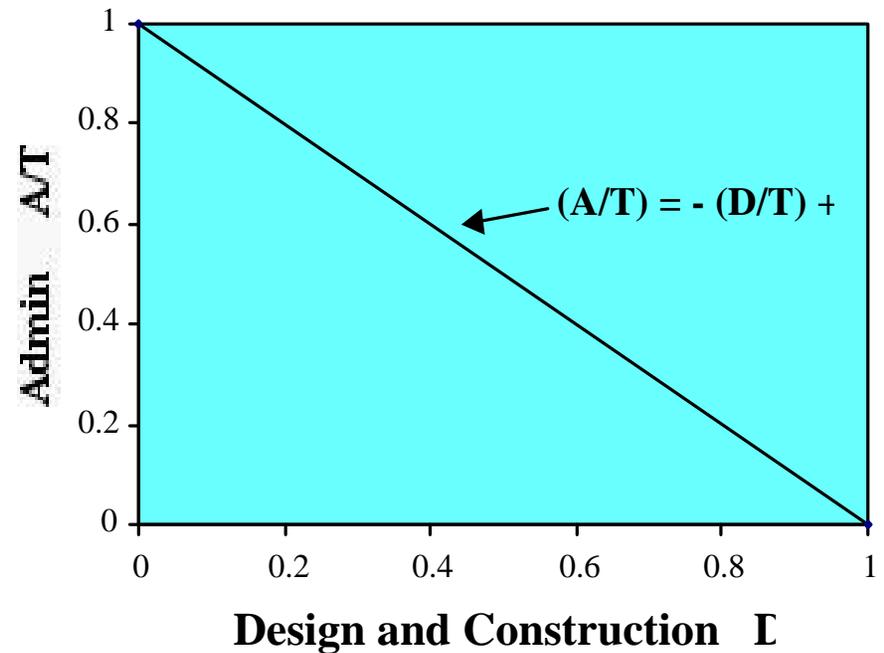
**Admin + Design and  
Construction = Total**

$$A + D = T$$

$$A/T + D/T = 1$$

$$(A/T) = - (D/T) + 1$$

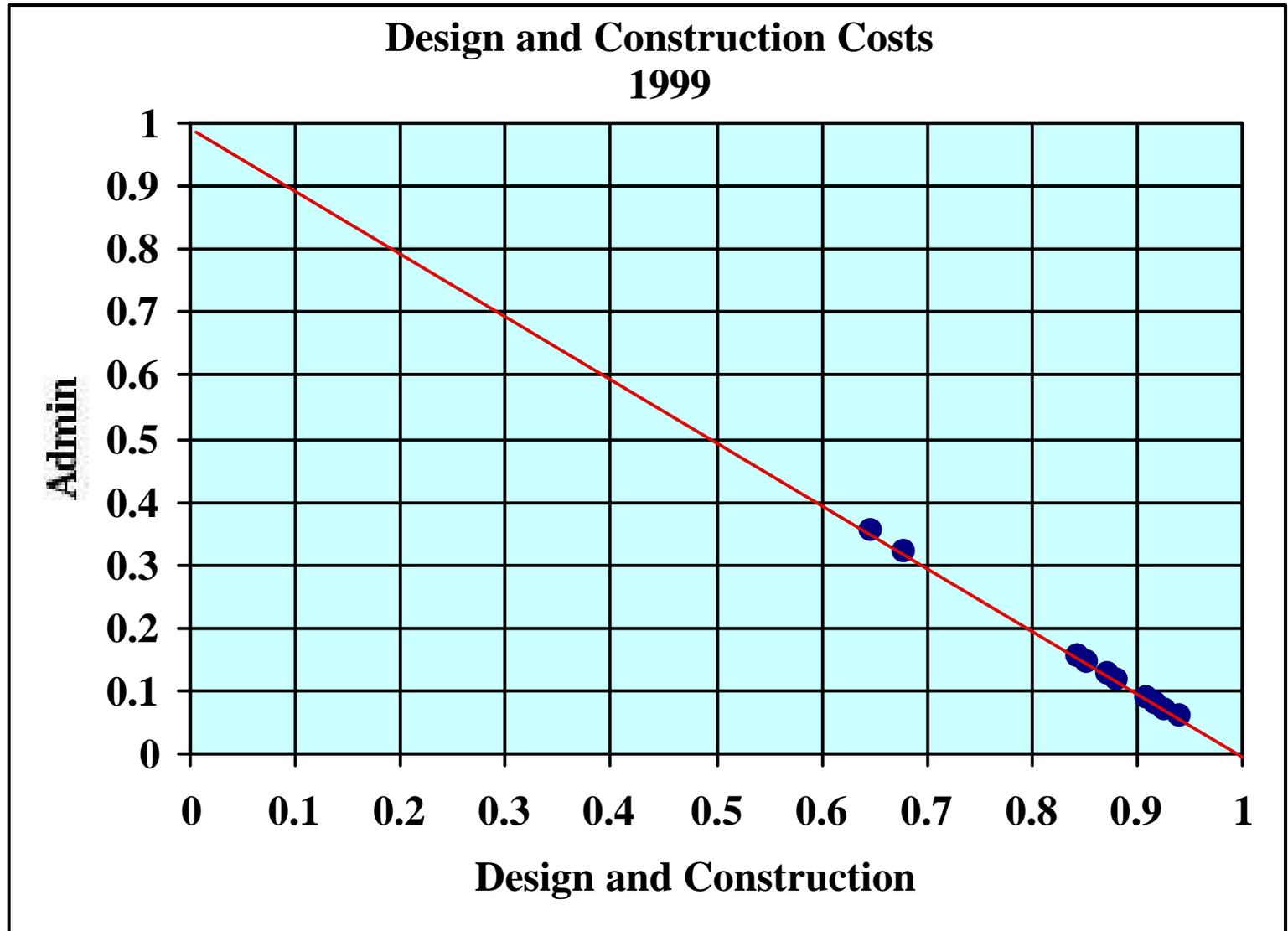
**Project Management Efficiency**





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OFFICE

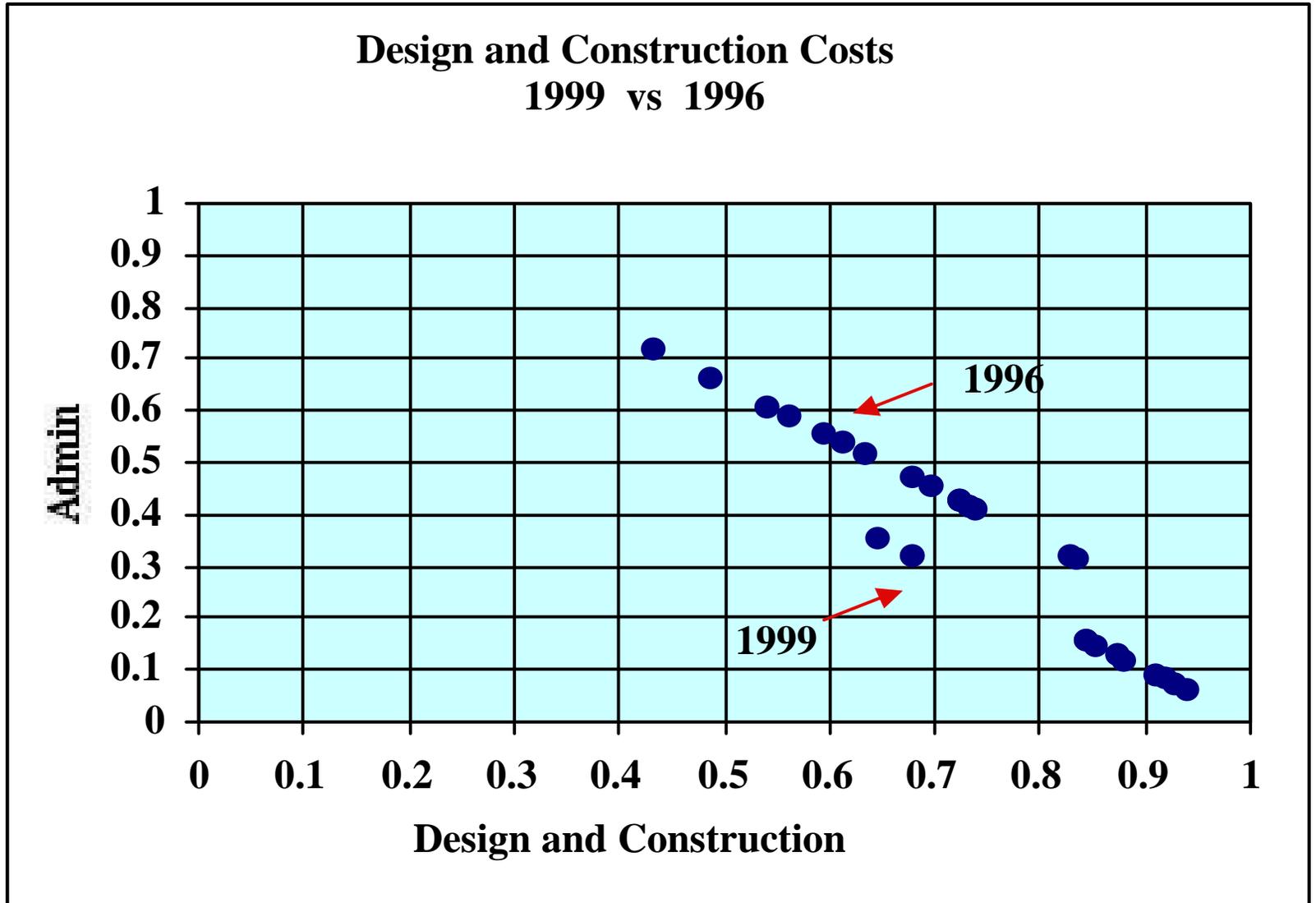
# Project Management Performance





# Project Management Performance

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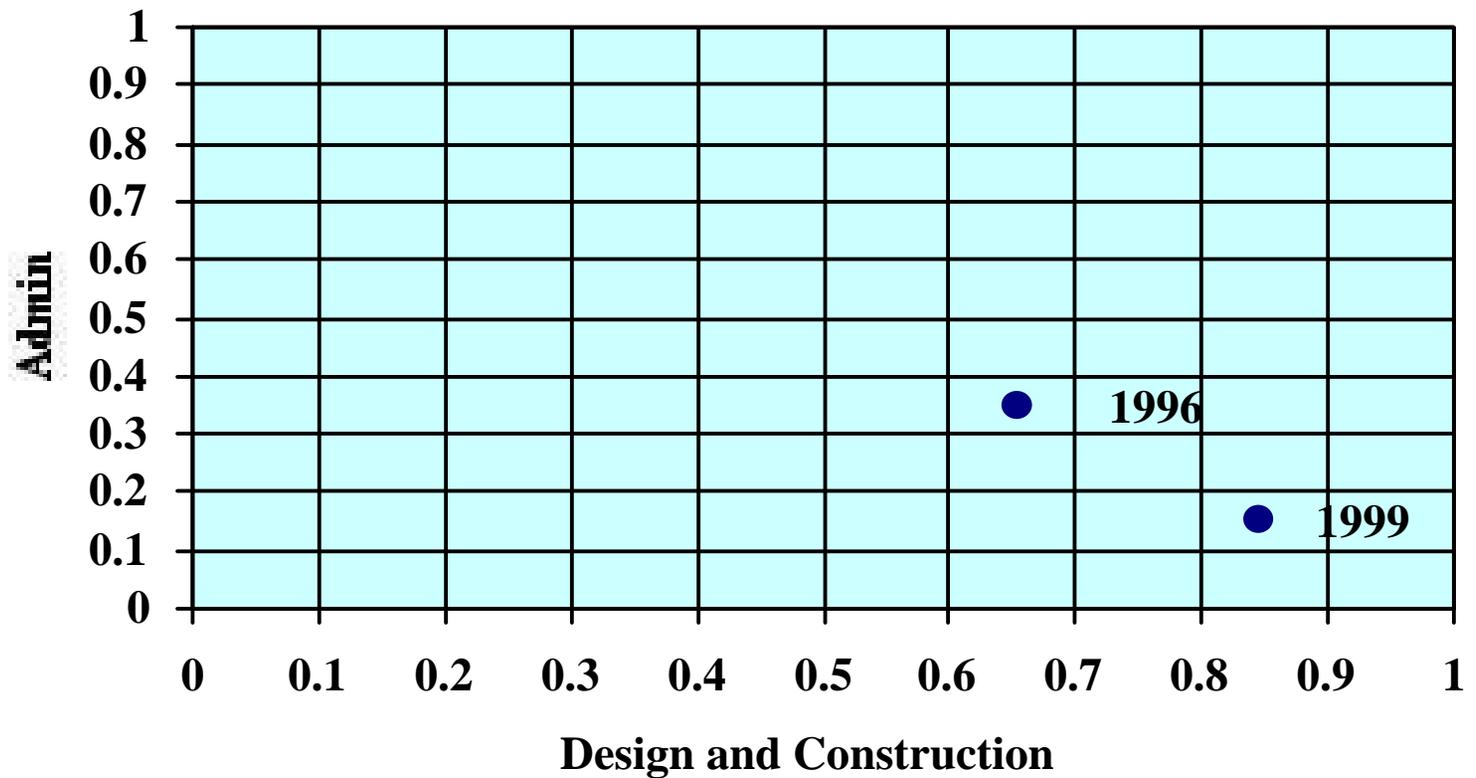




# Project Management Performance

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Average Design and Construction Costs  
1999 vs 1996





## 4.0 Infrastructure

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### 4.3 LCAM O&M Management Index

**Rating: Good**

**Basis: Most LCAM level 2 measures continue to be consistently met or exceeded by the maintenance organizations. Overall score justifies the rating. Areas for concern continue in the areas of maintenance rate and preventative maintenance.**



## 4.0 Infrastructure

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### 4.4 LCAM Real and Personal Property Index

**Rating: Outstanding**

**Basis: Exceptional performance resulting in the weighted average for the six performance objectives achieving the outstanding level.**

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## 4.0 Infrastructure

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### 4.5 LCAM Deliverables

**Rating: Not rated at this time.**

**Basis:**

- **Surplus Facilities List - on time (February)**
- **OR Reservation Management Plan - on time (March)**
- **Land and Facilities Plan due - August**
- **Comprehensive Integrated Plan due - September**



## 4.0 Infrastructure

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### 4.6 P&E Division Reengineering

**Rating: Good**

**Basis: Progress continues to be made toward implementing reengineering recommendations.**



## 4.0 Infrastructure

### 4.7 Waste Management

**Rating: Excellent**

**Basis:**

- **Rejection Rate of Waste Data Packages are <1% versus a goal of <10%.**
- **Rejection Rate of Waste Packages = 0% versus a goal of <5%.**
- **Cost savings index should be surpassed on the identified Pollution Prevention projects; however, to date the committed funding is substantially under the \$100,000 goal for FY 99.**



## 4.0 Infrastructure

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### 4.8 Training Program

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**Rating: Good**

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**Basis:**

- **Organizational realignment of Training Integration Office positive move toward full implementation by October 2000.**
- **Deliverables consistently met.**
- **Level 2 measures well developed.**



## 5.0 Business Operations

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**Use efficient and effective corporate management systems and approaches to guide decision making, streamline and improve operations, align resources and reduce costs, improve the delivery of products and services.**

- 5.1 SAP Implementation**
- 5.2 SAP Implementation Phase II**
- 5.3 Budget/Overhead Management Control**
- 5.4 Y2K Activities**



## 5.0 Business Operations

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### 5.1 SAP Implementation

**Rating: Excellent**

**Basis: New SAP Cost Model breaks up overhead into causal-beneficial pools which follow the associated direct costs. This isolates true G&A and makes the burden pools visible.**



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## 5.0 Business Operations

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### 5.2 SAP Implementation Phase II

**Rating: Good**

**Basis:** The Human Resources portion of SAP Implementation is on schedule and within budget. Business function separability is on schedule for demonstration on 10/1/99 and for implementation in 12/99.



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## 5.0 Business Operations

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### 5.3 Budget/Overhead Management Control

**Rating: Good**

**Basis:** FY 1999 actual overhead rate through February is 33.8% versus a standard of 43.6%. FY 2001 budget estimates provided to ORO via web-based system ahead of schedule. Lack of communication on funding proposals for HFIR upgrades.



## 5.0 Business Operations

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### 5.4 Y2K Activities

**Rating: Excellent**

**Basis:**

- Efforts are on schedule and are being effectively managed.
- Recent response to ES&H review/validation/survey.
- February 1999 status meeting with Laboratory Director.
- Recent development of draft Business Continuity Plan submitted April 12, 1999.



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## 6.0 Stakeholder Relations

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**Be a good neighbor. Work with customer, stakeholders, and neighbors in an open, frank, and constructive manner.**

- 6.1 Community Relations**
- 6.2 Partnerships**
- 6.3 Community Service Programs**
- 6.4 Communication**



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## 6.0 Stakeholder Relations

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### 6.1 Community Relations

**Rating: Excellent**

**Basis:**

- **Successful commencement of ORNL Public Tour Program for this fiscal year.**
- **Excellent logistical support of high-level visits.**
- **Continued support of advancing DOE message with Knoxville and other regional news media organizations.**



## 6.0 Stakeholder Relations

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### Areas of Concern:

- For next rating period, Communications and Public Affairs should become more proactive in controversial topics by engaging diverse stakeholders groups, which may not be aware or support Laboratory programs.
- DOE is concerned that with departure of National Media Relations Manager, there is still an expectation for national news media visibility.



## 6.0 Stakeholder Relations

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### 6.2 Partnerships

**Rating: Excellent**

**Basis:**

- **National Transportation Research Center**
- **Tennessee Mouse Consortium for Functional Genomics**



## 6.0 Stakeholder Relations

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### 6.3 Community Service Programs

**Rating: Excellent**

**Basis:**

- **Support of Knoxville Gateway Pavilion Project**
- **United Way participation.**

**Area of Opportunity:**

**With the Laboratory taking on operation of the AMSE, encourage Communications, Public Affairs, and Laboratory employees to assume greater role in supporting the annual EnvironMENTAL Fair, to be held in late September 1999.**



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## 6.0 Stakeholder Relations

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### 6.4 Communication

**Rating: Good**

**Basis:**

- Establishment and following of protocol for approval of news releases.
- Daily Media Report.

**Area of Opportunity:**

**Given the need to reach a diversity of stakeholder audiences at different reading/education levels, encourage development of a simple fact sheet on ORNL written in easy to understand language which describes Laboratory activities.**