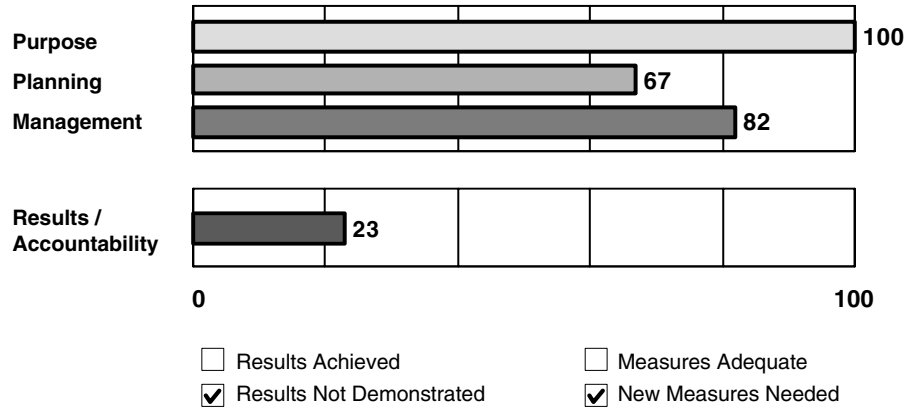


Program: High Energy Physics

Agency: Department of Energy

Bureau: Office of Science



Key Performance Measures

Year Target Actual

Key Performance Measure	Year	Target	Actual
Long-term Measure: Measures under development			
Annual Measure: Measures under development			

Rating: Results Not Demonstrated

Program Type: Research and Development

Program Summary:

The Office of Science's High Energy Physics (HEP) program supports large national and international particle accelerator experiments and research in high-energy (particle) physics and related fields, including particle astrophysics and cosmology.

The program received a perfect score in the purpose section and a high score in the management section, mainly as a result of standard management practices within the Office of Science that lead the HEP program to have a well defined mission and merit-based reviews for awarding contracts and grants. A cause for the lower scores for planning and results is the program's current lack of adequate long-term and annual performance measures. Nevertheless, the program has made significant strides toward developing such measures despite the problems inherent in measuring and then predicting scientific progress. Other findings include:

1. The program's results score was lowered further because of two construction and upgrade projects that are underperforming or over budget/schedule, in part because the program is undertaking several high-risk projects simultaneously.
2. The program coordinates its research strategy with the National Science Foundation through a jointly sponsored advisory committee; however, the program does not yet have regular reviews of its research portfolio and processes by ad hoc panels composed of outside experts external to its advisory committee.

To address these findings:

1. The 2004 Budget will focus resources on addressing construction and upgrade problems while operating the program's fully-functioning user facility at 87 percent of maximum capacity (the same as in 2003 and 9 percent more than in 2002).
2. The Department will institute a priority-setting mechanism for ranking medium and large construction projects within the program that have not yet reached the full construction phase.
3. The Administration will work to reform its performance measures and goals, while being sensitive to the problems that basic research programs face in attempting to predict future scientific progress.
4. The Department will institute a formal committee of visitors process for the program by September, 2003.

Program Funding Level (in millions of dollars)

<u>2002 Actual</u>	<u>2003 Estimate</u>	<u>2004 Estimate</u>
713	725	738