

*Strength Through Science*



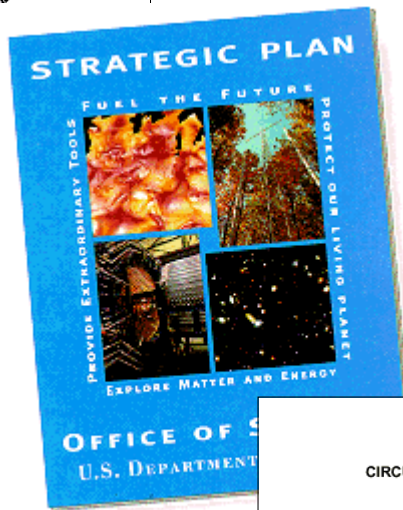
GOVERNMENT-WIDE  
PERFORMANCE PLAN



BUDGET OF THE UNITED STATES

Fiscal Year

# Strategic Management Systems *Performance Measures & GPRA*



Bill Valdez  
Director,  
Office of Planning and Analysis

*November 14, 2000*

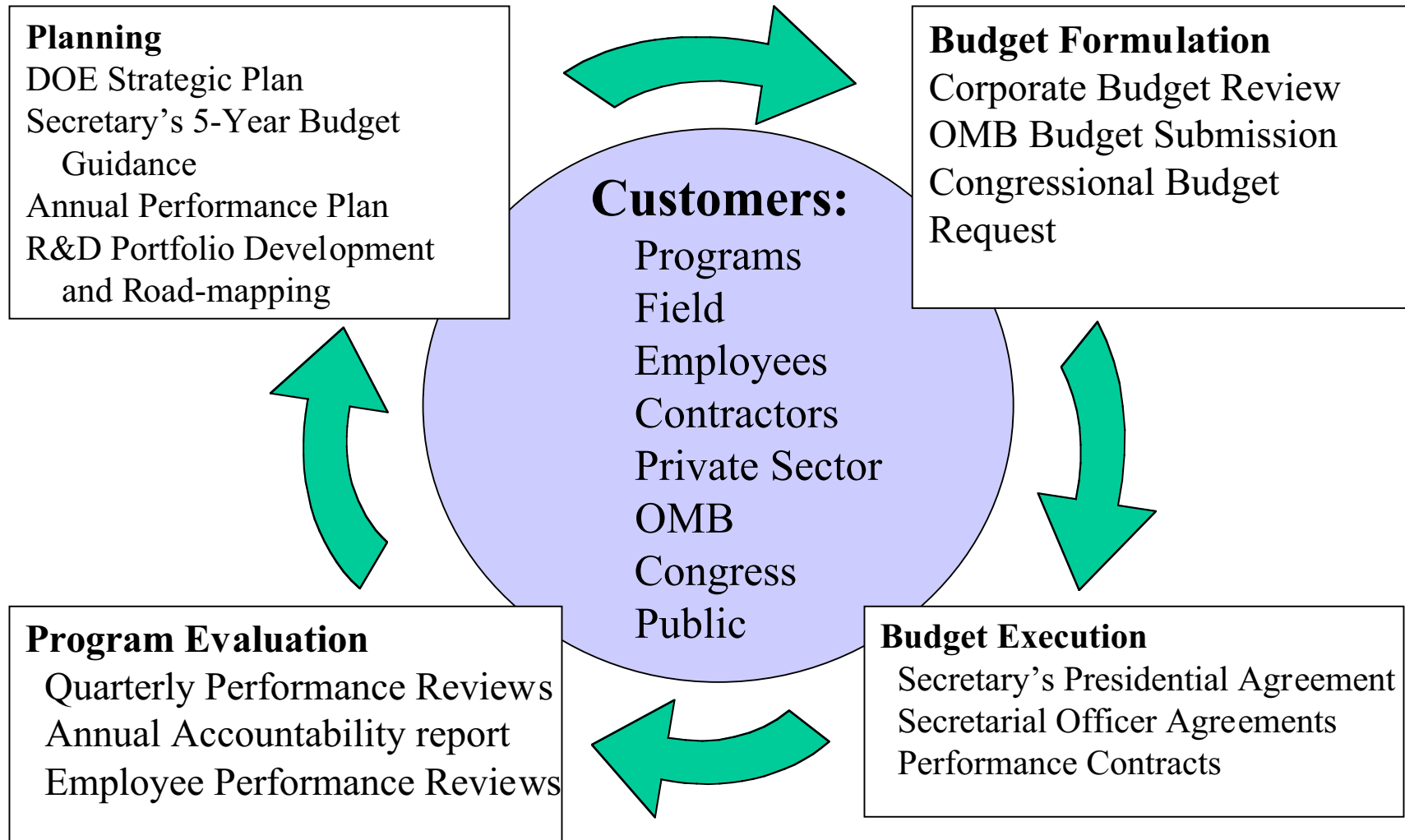
CIRCULAR NO. A-11  
PART 2

PREPARATION AND SUBMISSION  
OF STRATEGIC PLANS  
AND ANNUAL PERFORMANCE PLANS



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
JULY 1998

# Elements of the Strategic Management System Framework



*“Strategic planning is one of the integral steps in fulfilling DOE’s mission and this strategic plan is the fundamental basis for all planning within the Department.”*

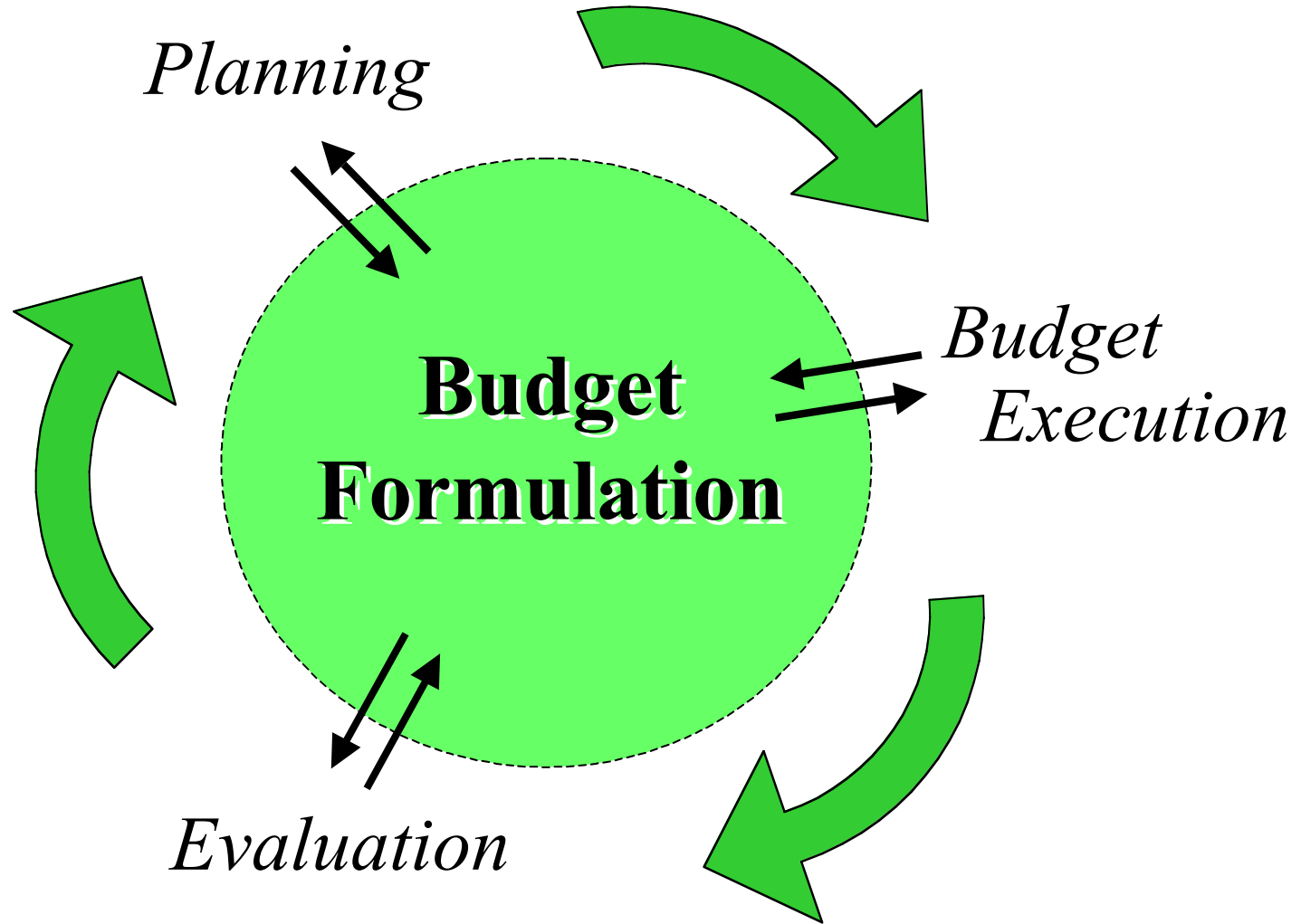
# Elements of the Strategic Management System Framework



*“Strategic planning is one of the integral steps in fulfilling DOE’s mission and this strategic plan is the fundamental basis for all planning within the Department.”*

# *Proposed SC Strategic Management System Framework*

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# Pressure to Change the Process

## *Why this isn't going away*

2000-018528 Jul 13 2000

L. S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON SCIENCE  
SUBJECT: 2000 ANNUAL BUDGET HOUSE OFFICE BUILDING  
400 S. MICHIGAN, DC 20515-6201  
1-202-225-8233  
FAX: 202-225-8410

July 13, 2000


The Honorable Bill Richardson  
Secretary  
U. S. Department of Energy  
Washington, DC 20585

Dear Secretary Richardson:

As you know, the 1993 Government Performance and Results Act (Results Act) requires each Federal agency to submit a 5-year strategic plan and revise that plan every three years. The Committee has received your 2000 draft strategic plan and is submitting a memorandum with our comments and suggestions. The attached review takes into consideration comments provided by the Congressional Research Service.

I commend the Department of Energy (DOE) for the improvements in its 2000 draft strategic plan. While the DOE has more work to do, I appreciate the Department submitting its plan in a timely fashion and meeting with us to discuss possible improvements to fulfill the congressional consultation Act.

In developing a strategic plan, the Results Act requires Congress. I believe this consultation is critical to the establishment of performance objectives and standards upon performance and approve budgets. We note that DOE is seriously and hope the Department will find our comments as

Sincerely,  
  
F. JAMES SENSENBRENNER, JR.  
Chairman  
FJS/ers  
enclosure

“The objectives are not measurable outcomes as called for by the results act and do not outline planned accomplishments, schedule implementation, describe outcomes, guide agency staff or discuss where DOE’s span of influence stops as called for by OMB Circular 11A ... For example, how do we measure “Fuel the Future” or “Explore Matter and Energy”.

United States General Accounting Office

GAO

Draft Report

Correspondence to:  
The Honorable James Sensenbrenner

Date: OBSERVATIONS ON THE SCIENCE PORTIONS OF DOE'S FY1999 ACCOUNTABILITY REPORT AND FISCAL YEAR 2000 AND 2001 PERFORMANCE PLANS

Notice: This draft is restricted to official use.

This draft report is being provided to obtain advance review and comment from those with responsibility for the subjects it discusses. It has not been fully reviewed within GAO and is, therefore, subject to revision.

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GAO/RCED-00-268R  
GPO: 2000

GAO Form 335 (Rev. 3/99)

“FY 2000 and 20001 performance plans do not convey a clear picture of the Department’s science programs because they are not consistent over time.”

“The quality of information on performance is also limited because the accountability report does not explain how DOE verified and validated the results tied to each performance measure.”

# GAO Examples of “Unclear/Inappropriate” Performance Measures and Goals

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**Goal**: “Develop the technologies required to meet DOE’s energy, national security, and environmental quality goals”

**GAO**: “unclear because (it) does not provide information about what DOE has to do to ‘develop’ the technologies ... and no information about the ‘goals’ the new technologies will meet.”

**Measure**: “Maintain the high quality and relevance of DOE’s science as evaluated by annual peer review and advisory committees.”

**GAO**: “vague because it does not indicate how DOE’s science can be measured or quantified. ... a highly interpretative description ... reads more like a strategic objective than an annual performance measure.

**Measure**: “Measure progress and success of NP in responding to priorities & recommendations in NSAC plan as measured by NSAC”

**GAO**: “an evaluation of the (program) more than it is an output of the program and as such may not be appropriate as a performance measure”

# Proposed SC Budget Guidance

## *Summary*

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- Program Mission
- Program Goal
- Program Objectives
- Performance Measures
  - Science Excellence and Relevance
  - Science Leadership
  - Science Infrastructure and Stewardship
  - Management and Operational Excellence
- Sub-Program Performance Measures
- Verification and Validation/ Evaluation Plans
- Accomplishments
  - Science Excellence and Relevance
  - Science Leadership
  - Science Infrastructure and Stewardship
  - Management and Operational Excellence
- Major Program Shifts

# Currently Performing an Evaluation of All Existing Performance Measures

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- >150 Existing Measures (Total SC)
  - Budget
  - DOE Strategic Plan
  - SC Strategic Plan
  - DOE Performance Plan
  - President's Agreement
- Evaluation Criteria
- General Comments
  - All but BER are not specific enough.
  - BER is a bit too specific.
  - Most are not clear of DOE role.
  - Most do not include validation and verification method.
  - Links to Strategic Plan and Budget are not clear



# Review Criteria for Existing Performance Measures and Goals

## Office of Science Performance Measures Review - June 2000

Program \_\_\_\_\_

Goal/Objective/Performance Measure:

Recommendation:  Keep, as is  Keep but improve  Move to 2<sup>nd</sup> tier

1. Relevance to SC strategic goal or science theme area is clear

Clear  Not obvious Area (s) \_\_\_\_\_

**A** Scientific advance tied to applied mission area or technology innovation

**F** Fuel the future (new fuels, clean and affordable power, efficient energy use)

**P** Protect our living planet (energy by-products, understand impacts, prevent/protect)

**E** Explore matter and energy (components of matter, the universe, complex systems)

2. Characteristics of Goal

General/Program Goal

General/Program Objective

Success Indicator (strategic plan)

Performance Measure/Goal

Program Level

Project level

For what Year \_\_\_\_\_

Type of Goal/Objective/Performance Measure

**I** Socio-Economic Outcome (social, energy, environmental, or economic impact)

**EX** Science Excellence or Relevance

General **EXG** (Quality or Relevance expectation)

Specific **EXS** (Advancing science technical milestone)

**SL** Science Leadership (leadership in field or science area)

**IS** Infrastructure Stewardship (facility downtime, user satisfaction, # students trained)

**M** Management Process (# of peer reviews, cost schedule milestones)

**IN** Input Measure (budget, # of staff)

4. Where Located (check all that apply)

FY 2002 budget (June draft)

FY 2001 Performance Plan

FY 2000 President's Agreement

DOE Strategic Plan 2000

SC Strategic Plan

3. Measurable, Valid, Plausible (Summary)

Yes  No

3a. Stated in Measurable Terms

Yes  No

Performance expectation & date

Base level of performance

How assessed is clear

DOE role is clear

3b. Goal is plausible, can be met in timeframe

Yes  No  Don't know

3c. Validation method stated clearly

Yes  No/None

Peer/advisory committee review

Third party or external data

Program management records

3d. Quantitative and qualitative (want mix)

Qualitative  Quantitative

3e. Trend could be seen over time

Yes  No  Possible

5. Meets other DOE Criteria  Yes  No

Specific

Meaningful

Concise

Written for taxpayer

Comments:

1. Relevance to SC Strategic Goal or Science Theme Area
2. Characteristics of Goal
  - Program or Project Goal?
  - Measure, Objective, or Goal?
  - For What Year?
  - Type (Manage, Leader, Excellence)
3. Measurable, Valid, Plausible
  - Stated in Measurable Terms?
  - Can be Met in Timeframe?
  - Validation Method Stated?
  - Quantitative or Qualitative?
  - Trend can be Seen Over Time?
4. Where Located?
5. Other DOE Criteria
  - Specific?
  - Meaningful (to DOE Missions)?
  - Concise?
  - Written for the Taxpayer?

# SC-5 GPRA Responses

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- 3-year Benchmarking Study of Management Practices of Publicly Funded Science Organizations.
- SPIRE -- A Deep Analysis Datamining Tool for Portfolio Analysis.
- Innovative Evaluation Techniques: Case Studies, International Benchmarking, Quantitative Measures.
- Foresighting Study of International Science Trends.

# Next Steps

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- Meet with ADs to develop more Performance Measures that are both quantitative and qualitative (mix).
- Consider whether to pursue COSEPUP approach on international benchmarking.
- Followup with NASA, NIH, NSF & NIST to discuss/develop a common approach.
- Further interactions with COSEPUP including November 29th meeting with the full panel regarding GPRA.
- Validation of new consensus approach through discussions with GAO, Hill, OMB, SC Advisory Committees, COSEPUP, etc.
- Begin incorporating the new approach into the FY 2002 SC Budget Request.