

NSF Strategic Plan

Craig Robinson, Ph.D.
Senior Advisor (BFA/BD)

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NSF

Strategic Plan to be Updated This Year

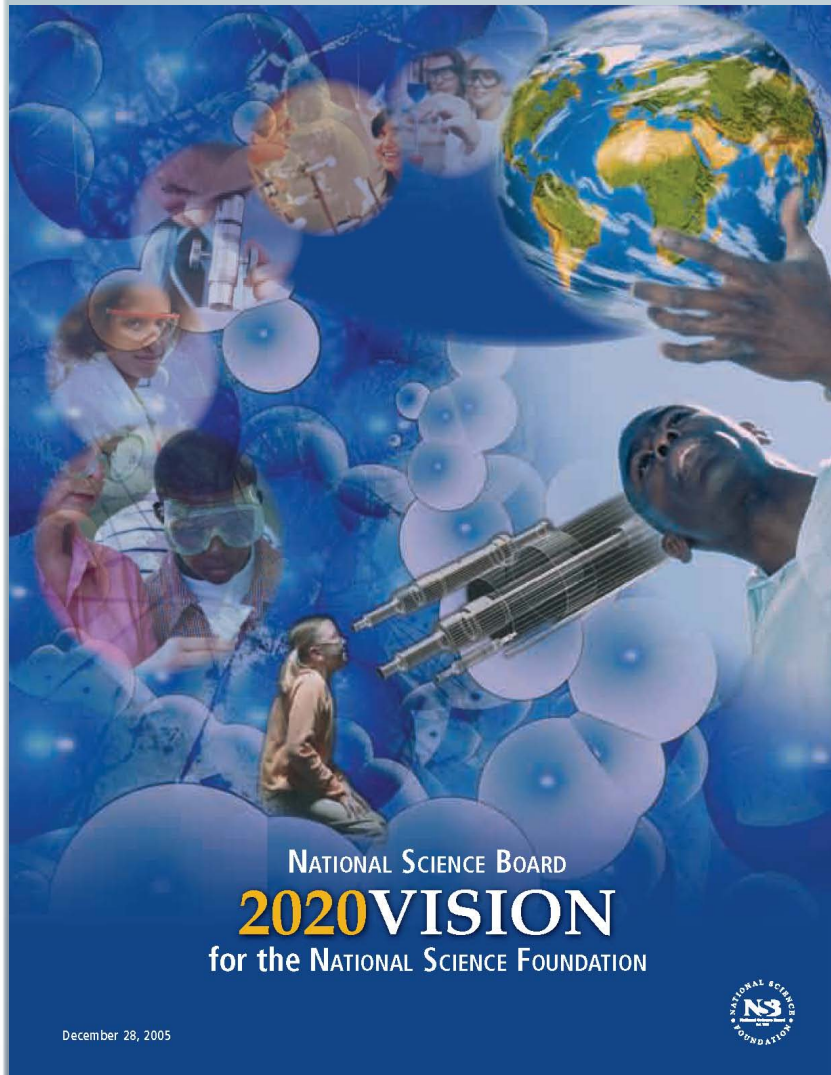
“The strategic plan shall cover a period of not less than five years forward from the fiscal year in which it is submitted, and shall be updated and revised at least every three years.”

Government Performance and Results Act (GPRA) of 1993

Why Should You Care?

The Plan Contains...

- 1. Agency mission and vision.**
- 2. One or more strategic goals.**
- 3. Means and strategies for achieving strategic goals.**
- 4. Relationship between annual performance goals and strategic goal framework.**
- 5. Identification of key factors that could affect achievement of the strategic goals.**
- 6. A description of program evaluations.**
- 7. Outline the process for communicating goals and strategies throughout the agency, and for assigning accountability to managers and staff for goal achievement.**



NSB 2020 Vision for the National Science Foundation (NSB-05-142)

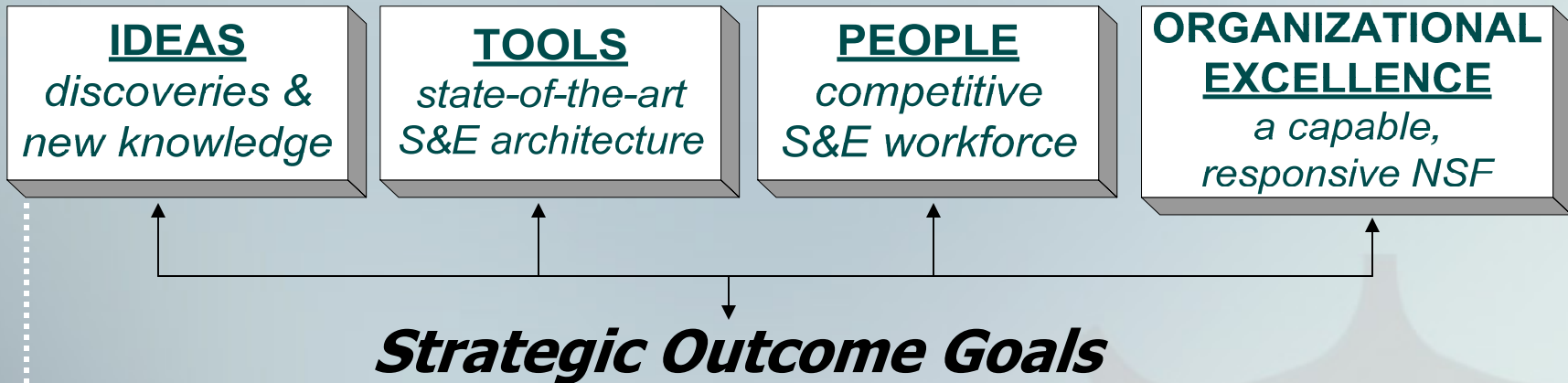
December 2005

NSF

Current NSF Plan

Mission To promote the progress of science; to advance the national health, prosperity & welfare; to secure the national defense

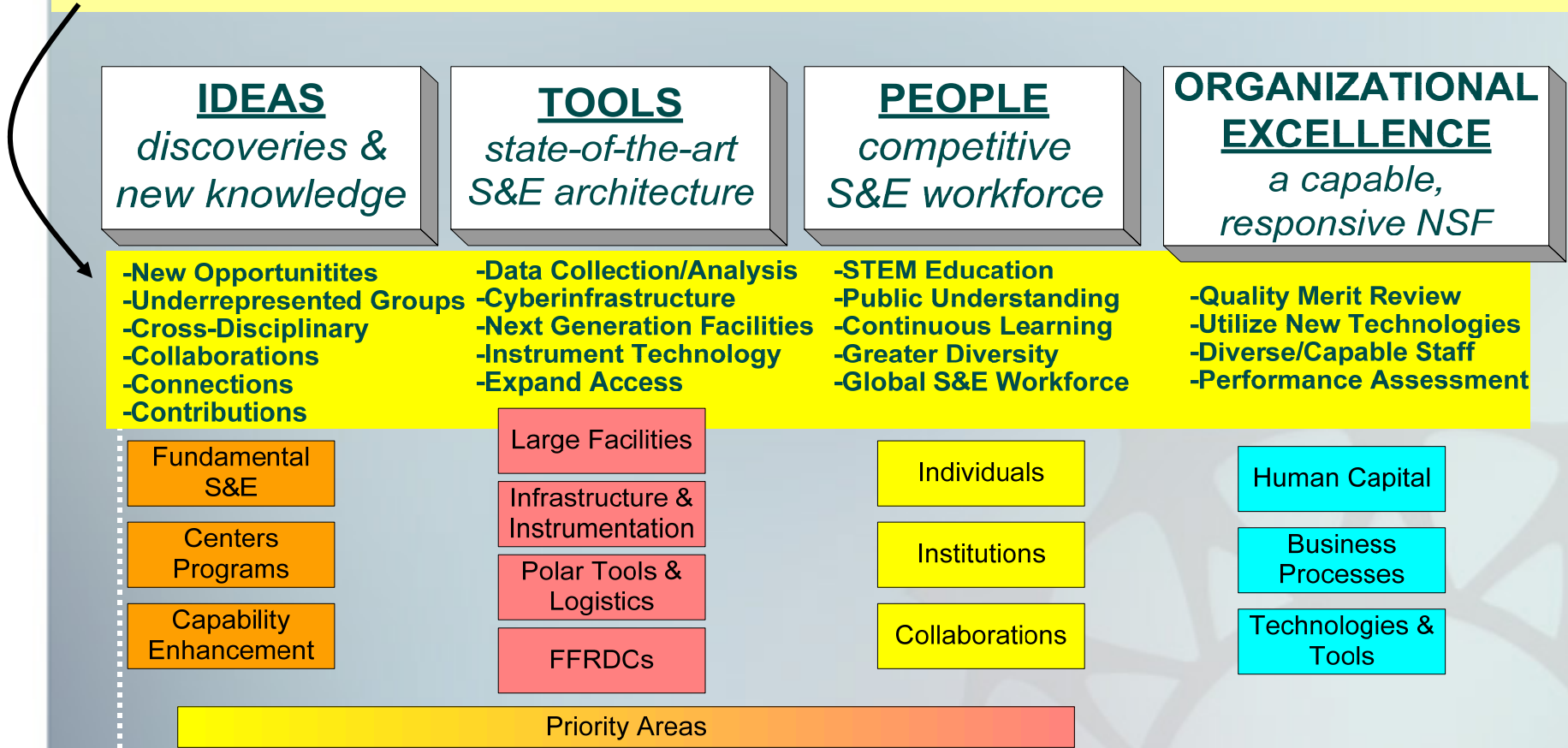
Vision Enabling the Nation's future through discovery, learning and innovation



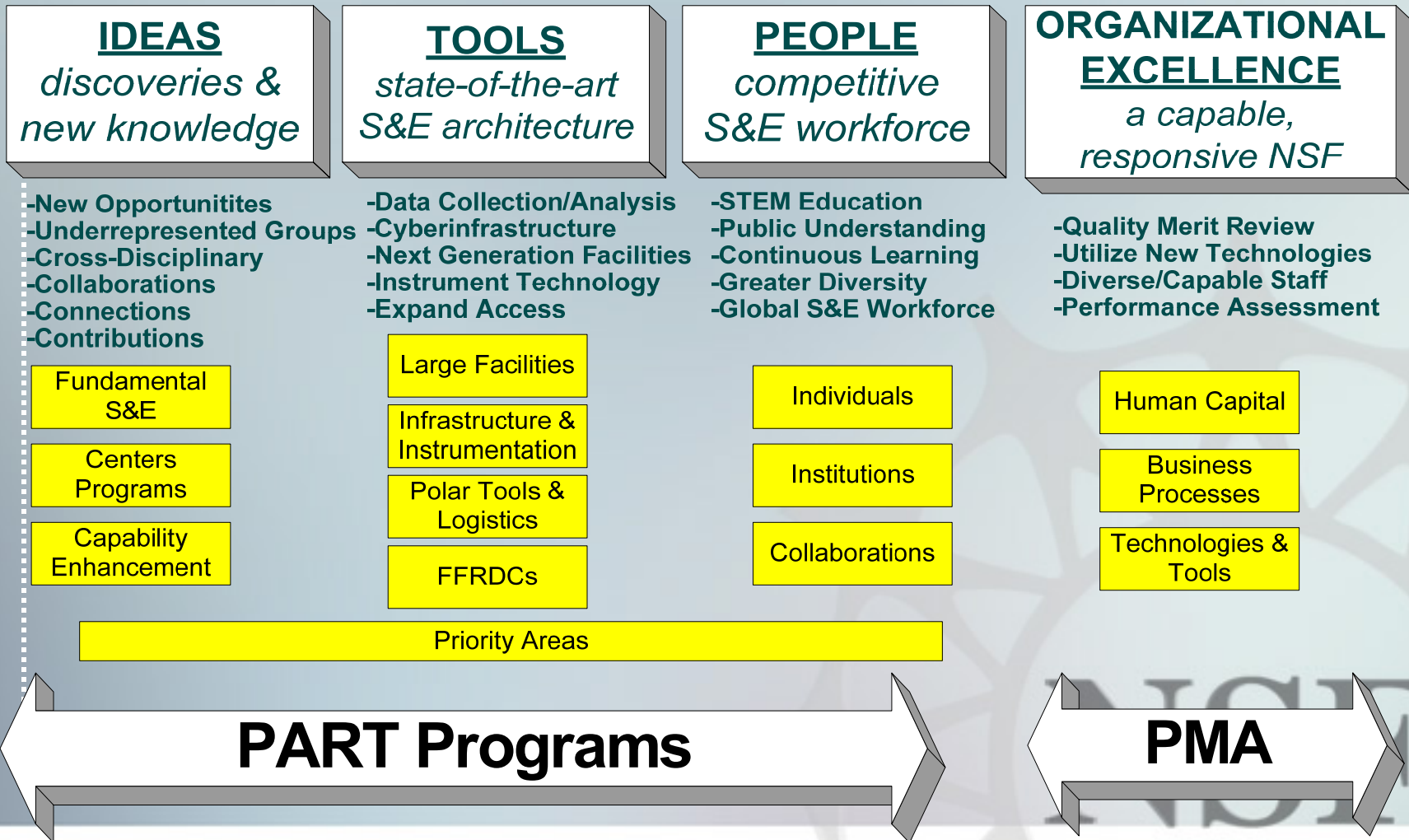
"The most effective means of evaluating federally funded research programs is expert review."

("Implementing the Government Performance and Results Act for Research: A Status Report" (2001) National Academies Committee on Science, Engineering, and Public Policy)

Objectives Evaluated by Advisory Committee for GPRA Performance Assessment



PMA = President's Management Agenda



Evolving Strategic Planning Process -- Recommendations from internal focus group...

Use an OPEN Process

Keep

- **Use expert evaluation of long-term goals (GPRA alternative format)**
- **Keep strategic plan assessment of goals at agency level and keep goals as consistent as possible**

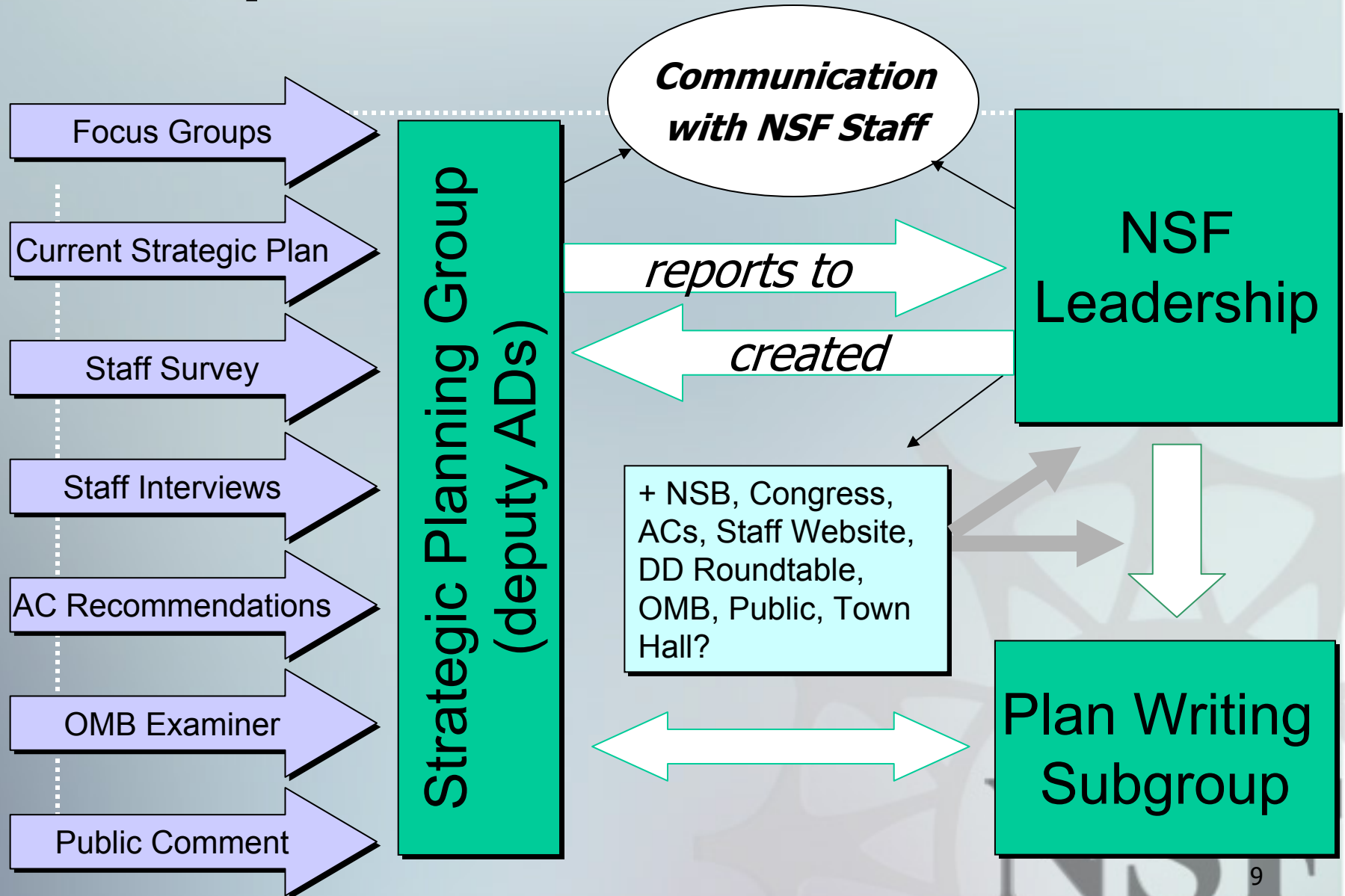
Eliminate

- **Review usefulness of investment categories (OMB PART Programs)**

Add/Change

- **Examine roles, responsibilities and processes for activities and groups involved in the evaluation of the strategic plan (including COVs, Advisory Committees, Staff)**
- **Identify a few key priorities over plan duration (FY 06-11)**
- **Ensure strategic plan objectives can be evaluated and that they are meaningful**

Plan Update Process



Community Input – First Round

An online survey was administered from December 14th, 2005 to January 20th, 2006 and consisted of two open-ended questions, with options to provide name, title, affiliation, and additional comments

–**Question 1:** *Does NSF's current Strategic Plan effectively communicate NSF's roles and responsibilities as part of the S&E community? If not, what is lacking and how can it be improved?*

–**Question 2:** *What broad characteristics of the near and long term environment for S&E research and education should NSF consider and address in its next Strategic Plan?*

–**Question 3:** *Other comments?*

Over 200 responses (some from entire organizations)

Themes from public comments...

- ✓ The nation has a critical need to improve math and science education
- ✓ The nation needs to continue to attract the best and brightest to study and perform research
- ✓ NSF needs to balance support for investigators with the development of world-class research infrastructure
- ✓ NSF needs to continue to coordinate research efforts with other organizations
- ✓ NSF needs to further enhance consistency and transparency of the merit review process

NSF Leadership and Staff Comments

- **Stay Strategic, Find Common Ground and Keep it Short**
- **Communicate the Types of Things that Can Only Be Achieved Through Publicly-Funded Research**
- **Greater Convergence of Fields in S&E**
 - Take steps to promote cross-foundation initiatives
 - Permit more flexibility to “dog the frontier”
- **Build Capacity at Two and Four Year Colleges and Minority Institutions**
 - Faculty and Instrumentation
 - STEM Ph.D. Programs (minority institutions)
- **Public Science Literacy – Inform and Engage the Public**

NSF Leadership and Staff Comments (cont.)

- **Recognize Needs in Computational S&E**
 - Increased complexity
 - Need for cyberinfrastructure tools
 - Added emphasis across disciplines on applied mathematics, statistics, databases and data management
- **American Competitiveness Initiative**
 - Continue Investment in Making Math & Science Education Best in the World
 - Focus on K-12 without neglecting critical NSF role in undergraduate, graduate and post-doc education and training
 - STEM Workforce – ensuring pathways to graduate education are established and full

NSF Leadership and Staff Comments (cont.)

- **Increase Investment in Major and Mid-Size Instrumentation**
- **Emphasize NSF's Leadership Role in Developing New Knowledge in All Disciplines**
- **NSF's Education Roles**
 - **Research Directorates are Critical**
 - **NSF Niche: Exploratory, Best Practices, Research-Based**
 - **Need Partnerships with Other Agencies and Organizations Outside of Government**
- **Communicate Wonder & Awe of Science**

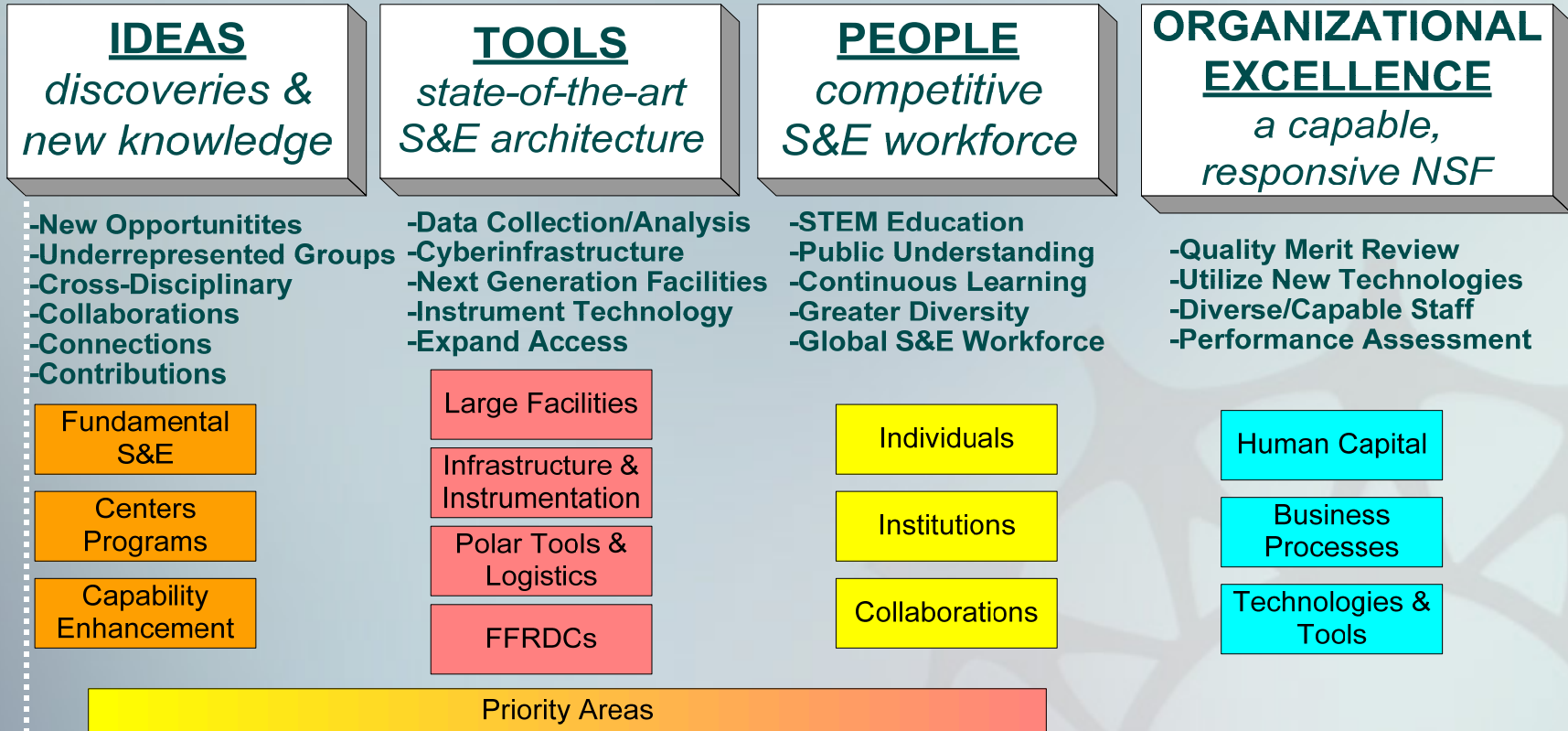
NSF Leadership and Staff Comments (cont.)

- **Management of MREFC Projects**
- **Continue to Have NSF as One of the Best Places to Work**
 - **Training and Development**
 - **Constantly Challenging All of Our Staff**
- **Emphasize to Community Science Ethics and Integrity**
- **Merit Review**
 - **Increase Transparency and Efficiency**
 - **Improve Proposal and Award Management Mechanisms (e.g. finding and selecting reviewers)**
 - **Role of Program Officer**

Current Plan

Mission To promote the progress of science; to advance the national health, prosperity & welfare; to secure the national defense

Vision Enabling the Nation's future through discovery, learning and innovation



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Mission To promote the progress of science; to advance the national health, prosperity & welfare; to secure the national defense

Vision Assuring the Nation's Future Through Discover, Learning and Innovation

GOALS (consistent with NSB Strategic Priorities)

Discovery

new knowledge within the core and at the frontier

Learning

Scientifically literate citizenry and world-class S&E workforce

Research Infrastructure

Broadly accessible state-of-the-art S&E architecture

Stewardship

finding & supporting excellence in S&E research & education

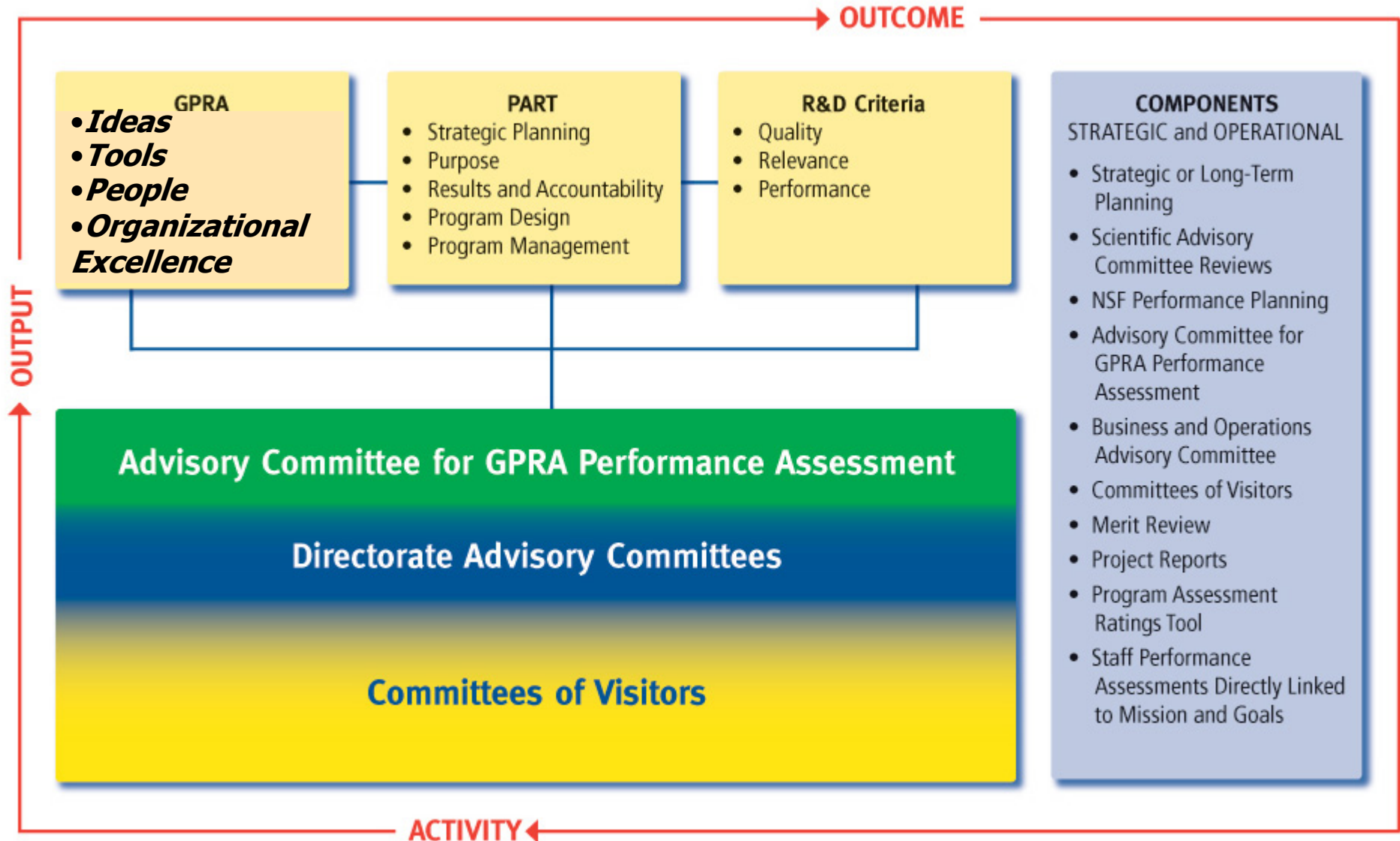
OBJECTIVES (evaluated over a 3 year cycle)

To Inspire and Transform

To Grow and Develop

Simplify

Performance Assessment Process



GPRA: The Government Performance and Results Act of 1993

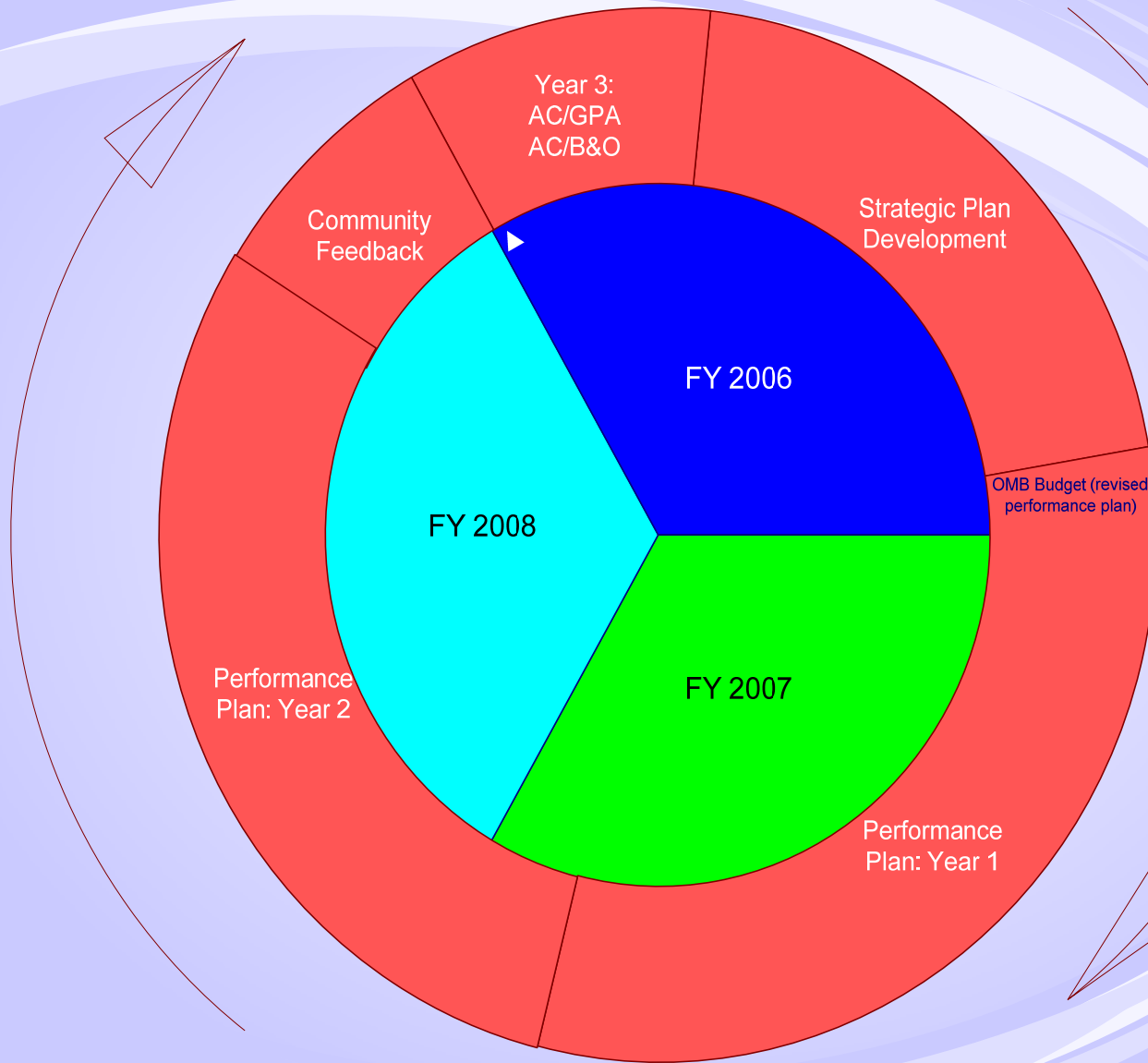
PART: Program Assessment Rating Tool

R&D: Research and Development

Strategic Planning Cycle

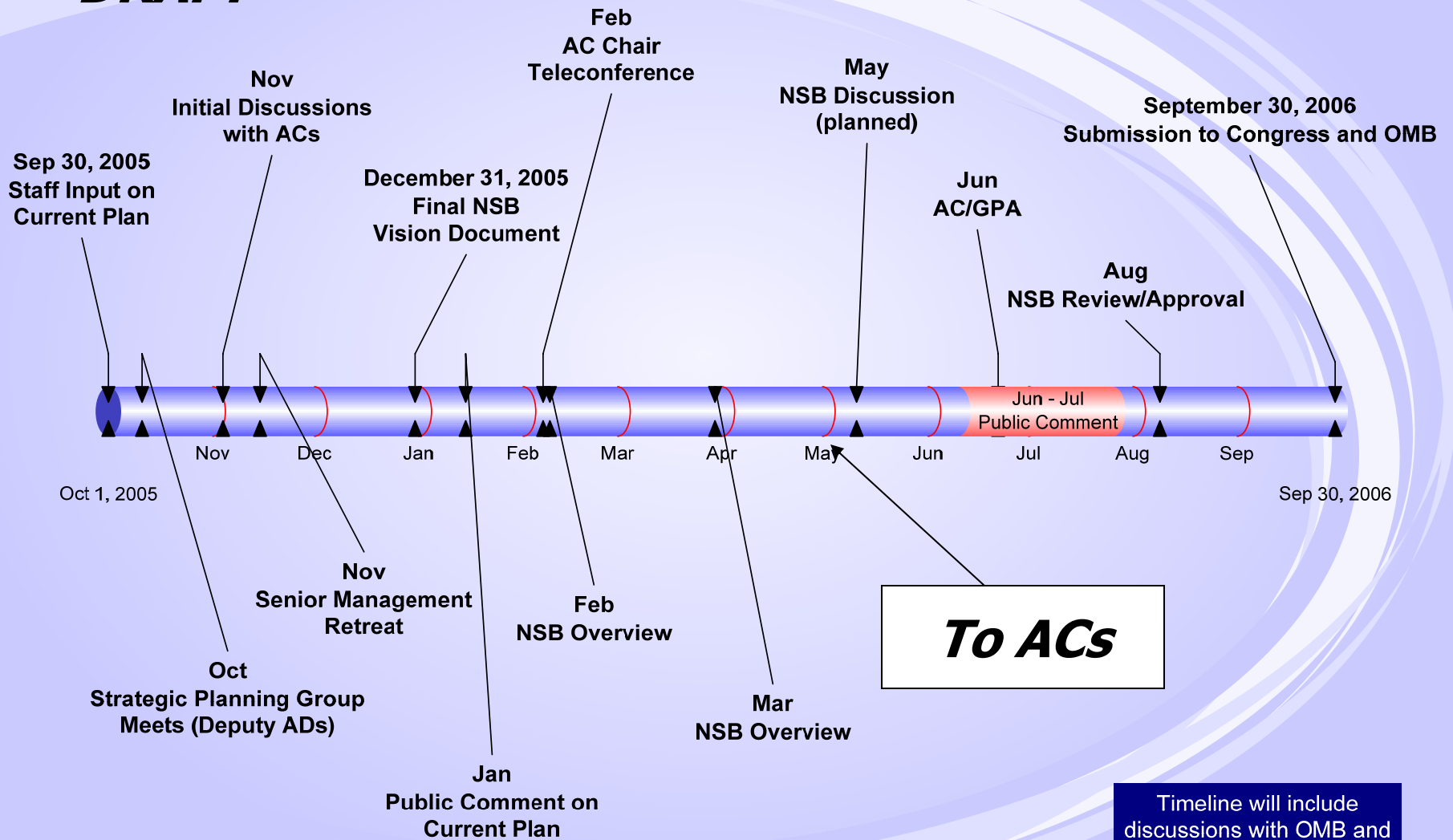
Thursday, April 06, 2006

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FY06 – FY11 Strategic Plan Development Timeline

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Timeline will include discussions with OMB and Congress