



THE NEW STRATEGIC PLAN AND STRATEGIC REVIEW PROCESS

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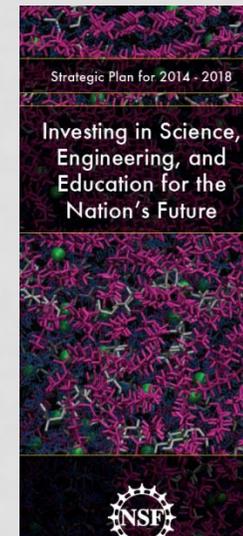


The screenshot shows the National Science Foundation (NSF) website. At the top left is the NSF logo with the tagline "WHERE DISCOVERIES BEGIN". To the right is a "QUICK LINKS" button and a search box. Below the logo is a navigation menu with links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. The main content area features a "Publications" sidebar on the left with links for "Search/Browse Publications", "Obtaining Publications", "Related", "News", and "Use of NSF Logos". The main article is titled "Investing in Science, Engineering, and Education for the Nation's Future - National Science Foundation Strategic Plan for 2014-2018". It includes a "Publications" header with a small image, a "Share" button, and the following text: "Available Formats: PDF", "Document Type: Reports", "Document Number: nsf14043", and "Document History: Posted: March 10, 2014. Replaces: nsf11047." Below this is a link to "Plug-ins and Viewers" and another "Share" button. At the bottom of the article are social media icons for Email, Print, Facebook, Twitter, YouTube, LinkedIn, and a "Feedback" button. A "Top" button is also present. The footer contains a navigation menu and a list of links: Research.gov, USA.gov, National Science Board, Recovery Act, Budget and Performance, Annual Financial Report, Web Policies and Important Links, Privacy, FOIA, NO FEAR Act, Inspector General, Webmaster Contact, and Site Map.

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf14043

HOW WILL THE PLAN BE USED?

- ❑ Communication
- ❑ Program and budget planning
- ❑ Accountability in staff performance plans
- ❑ GPRA Modernization Act of 2010 and OMB A-11
 - Performance.gov (new)
 - Strategic Reviews (new)
 - Performance reporting

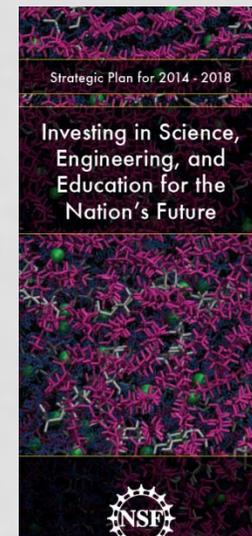


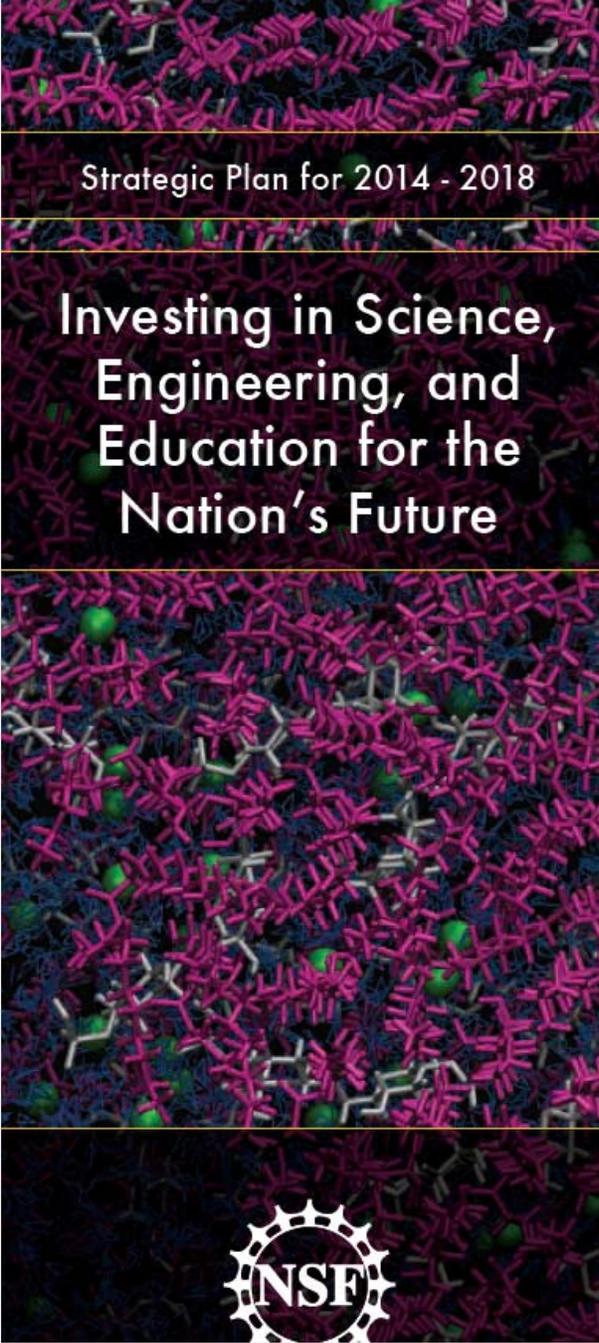
HIGH LEVEL CONTENT:

- ❑ **MISSION** – The NSF Act of 1950 (Public Law 81-507) sets forth a mission: *"to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes."*

- ❑ **VISION:** *A nation that creates and exploits new concepts in science and engineering and provides global leadership in research and education*

- ❑ **Core Values**
 - ❑ Scientific Excellence
 - ❑ Organizational Excellence
 - ❑ Learning
 - ❑ Inclusiveness
 - ❑ Accountability for Public Benefit





Strategic Plan for 2014 - 2018

Investing in Science, Engineering, and Education for the Nation's Future



CORE STRATEGIES

- Envision the future of science and engineering through the eyes of the world's front-line researchers.
- Maintain a balanced portfolio that provides
- opportunities for research in all fields of S&E.
- Maintain a balanced portfolio with regard to the mechanisms of support.
- Selectively invest in targeted areas of research related to high priority societal needs.
- Foster the development of fundamental research and innovation.
- Integrate research and education to equip
- the continuous flow of STEM graduates with
- the latest ideas, technological know-how, and networks of contacts.
- • Ensure diversity is at the forefront of all
- of NSF's internal and external activities to
- develop the Nation's intellectual potential.
- Maintain the public's trust by operating with transparency, accountability, integrity, and ethical conduct.
- Maintain NSF's reputation as the gold standard of merit review, while welcoming constructive criticism and seeking continuous improvement.

STRATEGIC GOALS

Strategic Goal 1: Transform the Frontiers of Science and Engineering.

Strategic Goal 2: Stimulate Innovation and Address Societal Needs through Research and Education.

Strategic Goal 3: Excel as a Scientific Federal Agency.

Strategic Goal 1: Transform the Frontiers of Science and Engineering.

- *Strategic Objective G1/O1: Invest in fundamental research to ensure a continuing stream of advances across NSF science, engineering, and education.*
- *Strategic Objective G1/O2: Integrate education and research to produce a diverse STEM workforce with cutting-edge capabilities.*
- *Strategic Objective G1/O3: Provide world-class research infrastructure to enable major scientific advances.*

Strategic Goal 2: Stimulate Innovation and Address Societal Needs through Research and Education.

- *Strategic Objective G2/O1: Strengthen the links between foundational research and societal needs through investments and partnerships.*
- *Strategic Objective G2/O2: Build the capacity of the Nation to address societal challenges using a suite of formal, informal, and broadly available STEM educational mechanisms.*

Strategic Goal 3: Excel as a Scientific Federal Agency.

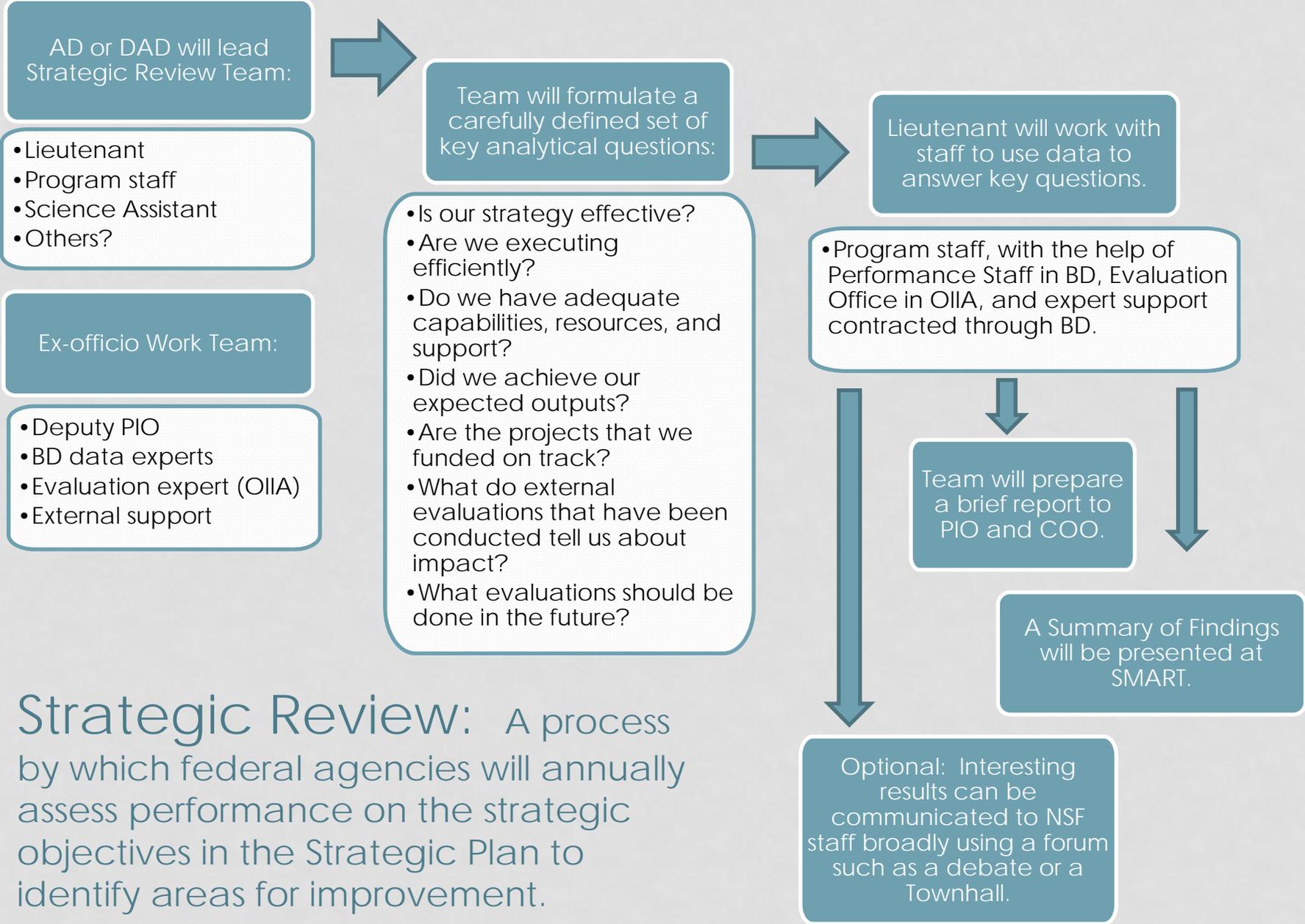
- *Strategic Objective G3/O1: Build an increasingly diverse, engaged, and high-performing NSF workforce by fostering excellence in recruitment, training, leadership, and management of human capital.*
- *Strategic Objective G3/O2: Use effective business methods and innovative solutions to achieve excellence in accomplishing the agency's mission.*

STRATEGIC REVIEW DEFINITION:

A PROCESS BY WHICH FEDERAL AGENCIES WILL ANNUALLY ASSESS PERFORMANCE ON THE STRATEGIC OBJECTIVES IN THE STRATEGIC PLAN TO IDENTIFY AREAS FOR IMPROVEMENT.

Additional detail:

- A process involving the highest level of leadership at the agency that uses evidence and data to answer key analytical questions.
- The process informs strategy and budget formulation, identifies opportunities for improvement and "significant challenges" to be reported to OMB.
- Internal stakeholders are the audience for the process.
- OMB is the audience for the final summary of findings.



AD or DAD will lead Strategic Review Team:

- Lieutenant
- Program staff
- Science Assistant
- Others?

Ex-officio Work Team:

- Deputy PIO
- BD data experts
- Evaluation expert (OIIA)
- External support

Team will formulate a carefully defined set of key analytical questions:

- Is our strategy effective?
- Are we executing efficiently?
- Do we have adequate capabilities, resources, and support?
- Did we achieve our expected outputs?
- Are the projects that we funded on track?
- What do external evaluations that have been conducted tell us about impact?
- What evaluations should be done in the future?

Lieutenant will work with staff to use data to answer key questions.

- Program staff, with the help of Performance Staff in BD, Evaluation Office in OIIA, and expert support contracted through BD.

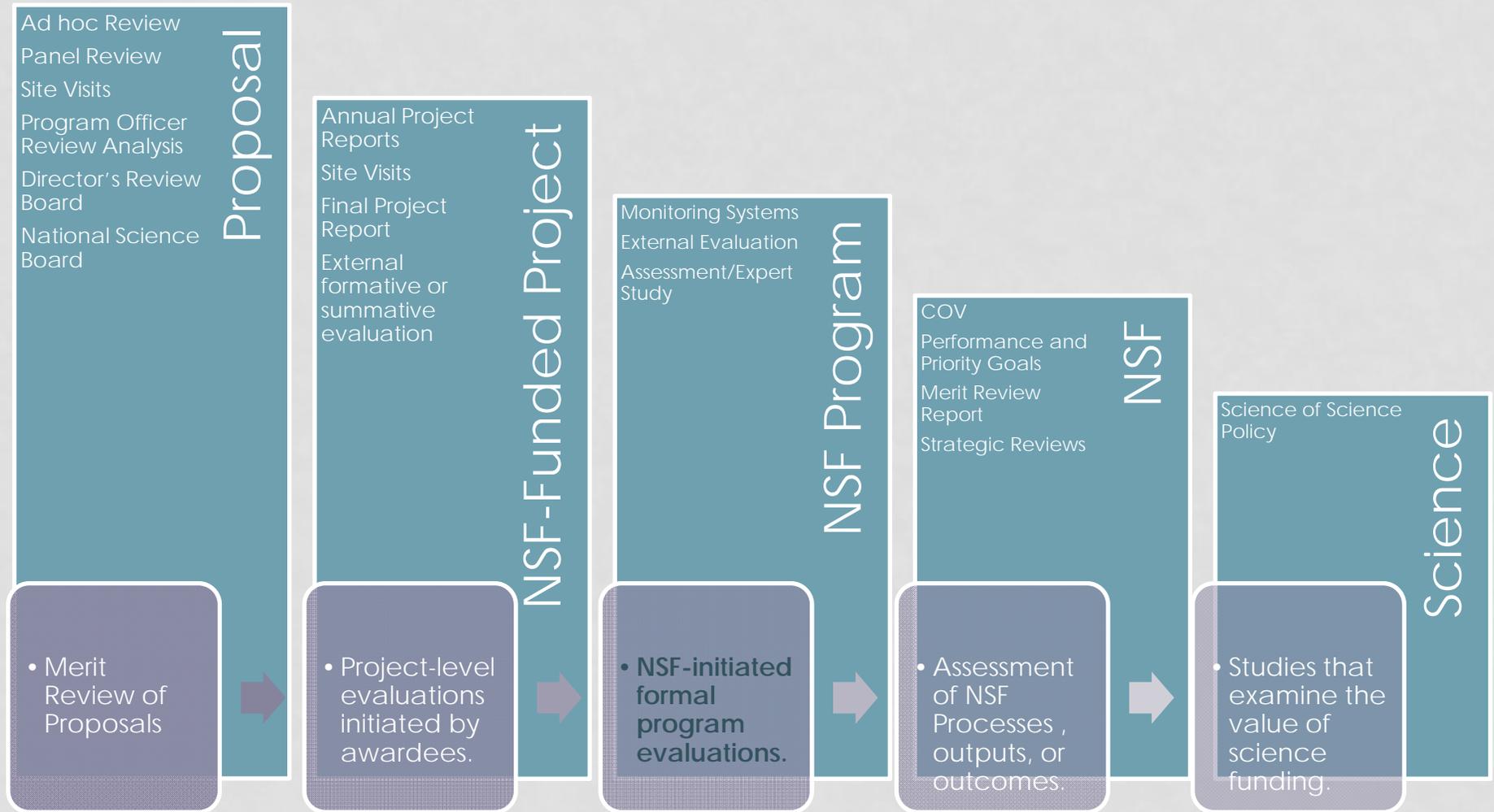
Team will prepare a brief report to PIO and COO.

A Summary of Findings will be presented at SMART.

Optional: Interesting results can be communicated to NSF staff broadly using a forum such as a debate or a Townhall.

Strategic Review: A process by which federal agencies will annually assess performance on the strategic objectives in the Strategic Plan to identify areas for improvement.

OVERVIEW OF ASSESSMENT MECHANISMS AT NSF



HOW WILL THE RESULTS BE USED?

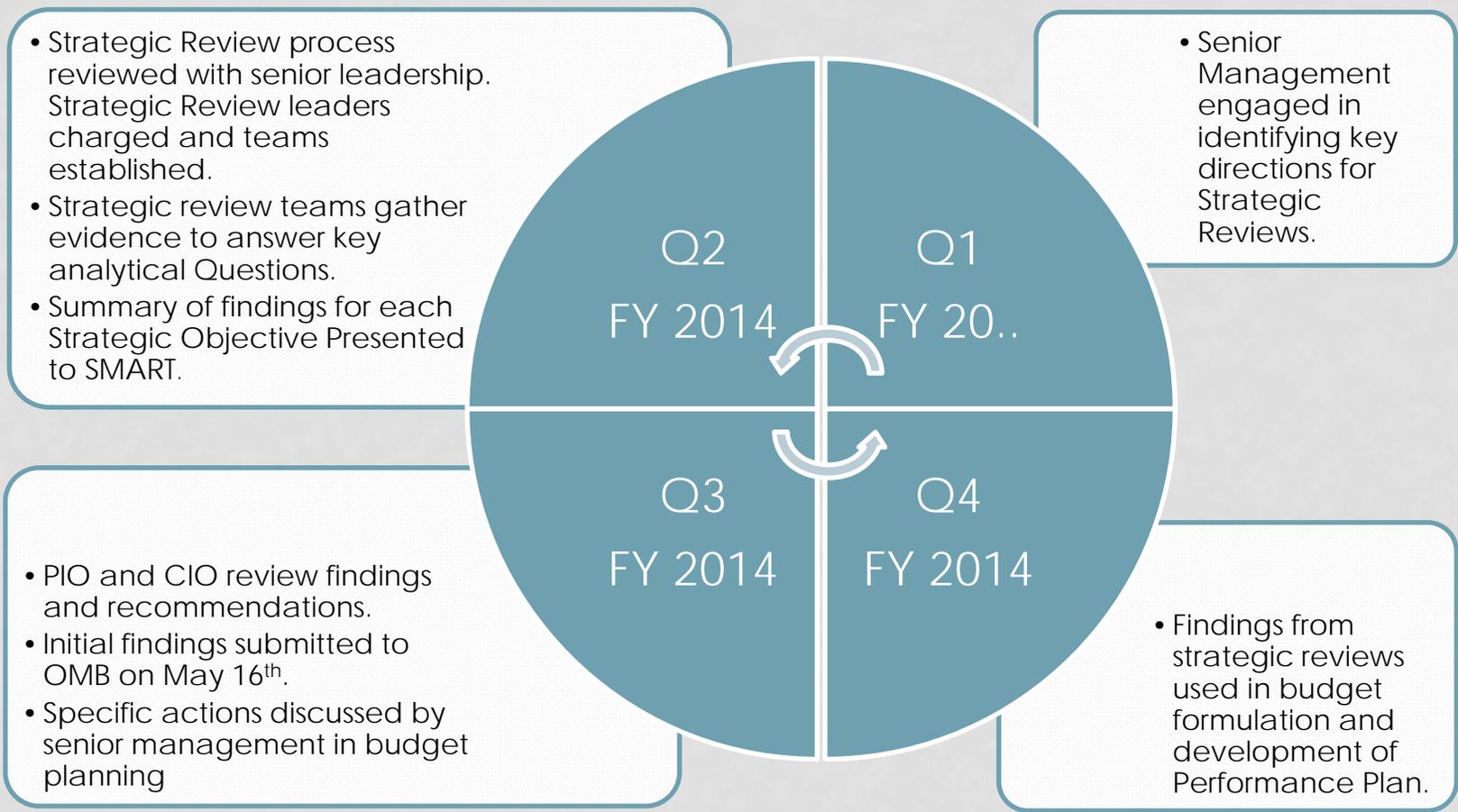
Cross-cutting Analysis (Conducted by PIOs with input from Policy and Budget Offices)

- Analyze relative impact on agency mission and priorities across objectives
- Determine objectives with Noteworthy Progress/Significant Challenges
- Identify improvement actions, including possible changes to strategy, budget, or operational changes

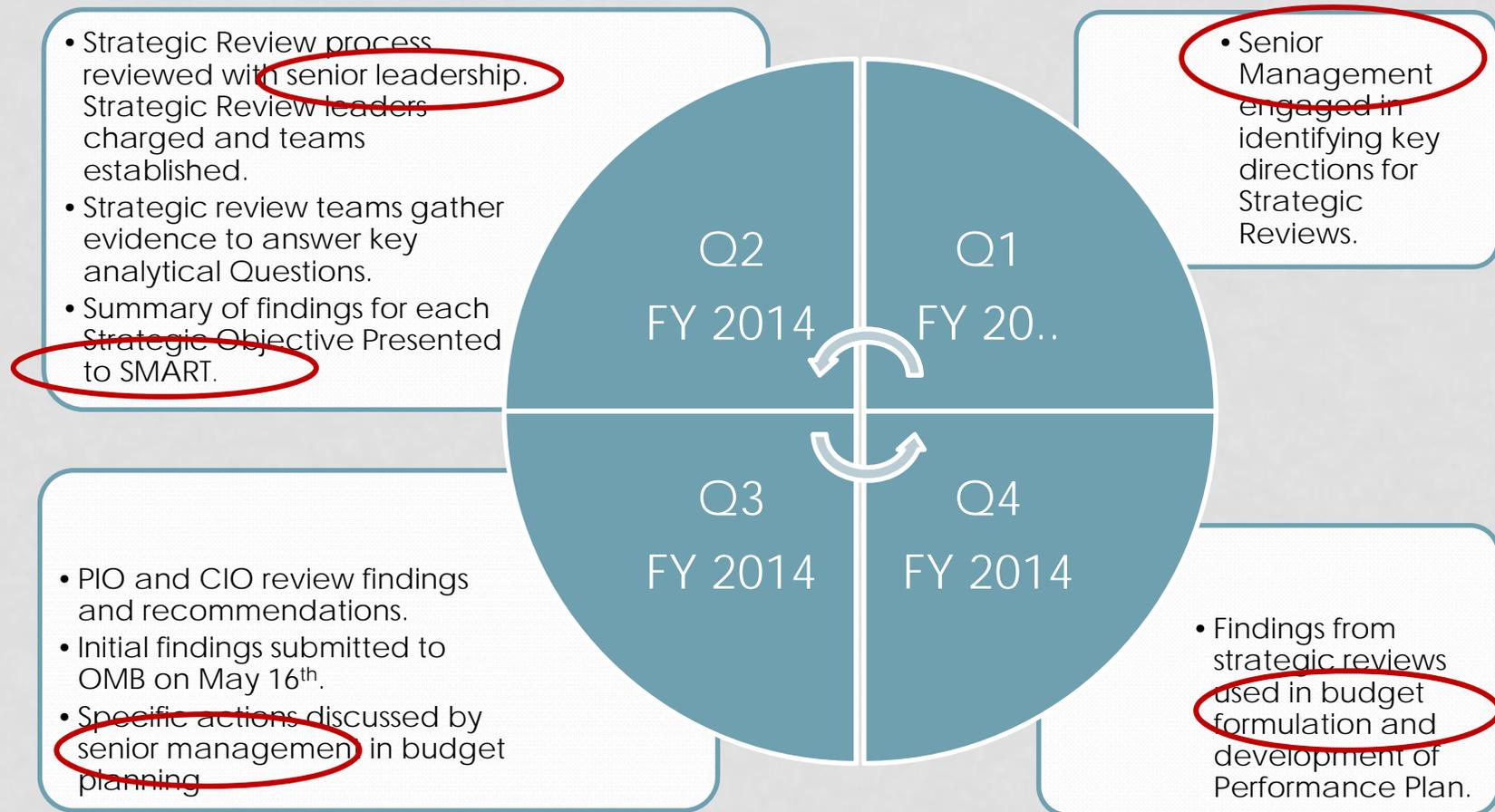
Decisions (made by COO with support from PIO)

- Make decisions on proposals for the budget and performance submission to OMB, and appropriate material for public reporting
- Identify immediate actions which can be taken by the agency

PROCESS TIMELINE - ANNUAL CYCLE

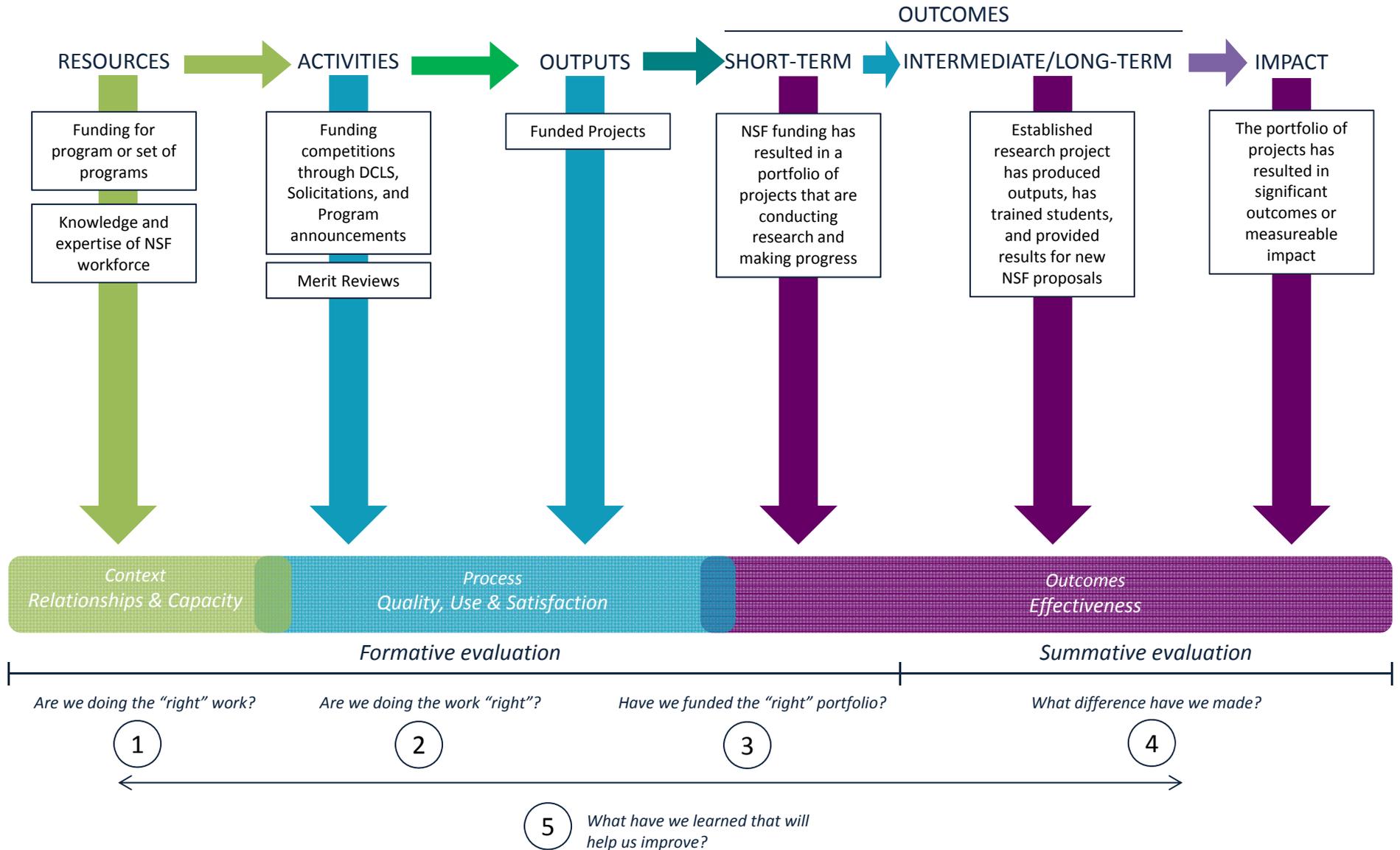


PROCESS TIMELINE - SENIOR MANAGEMENT INVOLVEMENT



Goal 1: Transform the Frontiers of Science and Engineering.

Objective 1. Invest in fundamental research to ensure a continuous stream of advances across NSF science, engineering, and education.



**KEY ANALYTICAL QUESTIONS FOR STRATEGIC OBJECTIVE G1/O1:
INVEST IN FUNDAMENTAL RESEARCH TO ENSURE A CONTINUING
STREAM OF ADVANCES ACROSS NSF SCIENCE, ENGINEERING, AND
EDUCATION.**

Q1 Does NSF have adequate mechanisms to fund IDR and PTR?

Q2 Does funding for NSF-wide activities impact core programs?

H⁰ Existing NSF core programs provide appropriate review of IDR and PTR proposals.

H¹ Some cutting edge IDR or PTR proposals do not fit in existing NSF programs.

H² Special IDR or PTR programs (like INSPIRE) are needed to provide a home for IDR and PTR.

H³ All NSF programs encourage IDR and PTR proposals.

H¹ NSF-wide activities are budget-builders.

H² NSF-wide activities support core research.

*KEY ANALYTICAL QUESTIONS FOR STRATEGIC OBJECTIVE G2/O1:
STRENGTHEN THE LINKS BETWEEN FOUNDATIONAL RESEARCH
AND SOCIETAL NEEDS THROUGH INVESTMENTS AND
PARTNERSHIPS.*

Focus: Linking knowledge and practice

What is the current conventional wisdom for knowledge transfer? (what are other agencies, universities, the private sector doing?)

What are the various models, tools, and mechanisms available within NSF? How are they tuned to past and current societal needs?

What does NSF need to do to adapt new ways of linking knowledge and practice? What are the gaps in what is needed and what we are currently doing?

STRATEGIC OBJECTIVE G3/O2: USE EFFECTIVE BUSINESS METHODS AND INNOVATIVE SOLUTIONS TO ACHIEVE EXCELLENCE IN ACCOMPLISHING THE AGENCY'S MISSION.

What effect does NSF culture have on our ability to use effective business methods and innovative solutions to achieve excellence in accomplishing the Agency's mission?

What can organizational theory tell us about the strengths and weaknesses of our structure and culture?

Does NSF's distributed-management model affect the efficiency of NSF-wide processes?

Is there evidence that business processes can be improved by changing our culture?

What can we learn from other agency's or the private sector?

Are there examples of similar organizations that achieve organizational excellence?

Is there evidence that our culture results in efficiency or inefficiency?

Does our lack of conformity make us flexible or recalcitrant?

Do some organizational units at NSF have processes that should be emulated?