Restoring Public Trust in the U.S. Government Through Scientific Integrity

National Science and Technology Council (NSTC)

Committee on Science (CoS)

Subcommittee on Scientific Integrity (SOSI)

Anne Andrews (NIST), Co-Chair
Francesca Grifo (EPA), Co-Chair
Craig Robinson (USGS), Co-Chair
Maryam Zaringhalam (OSTP), Co-Chair
Gretchen Goldman (DOT), Senior Advisor to SOSI
Eyeisha Barron, (NIST), Exec Sec
Anne Tillery (USGS), Exec Sec
Erica Reid (NIST), Exec Sec

DISCLAIMER

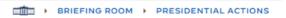
These opinions, recommendations, findings, and conclusions do not necessarily reflect the views or policies of NIST/DOC or the United States Government

JANUARY 27, 2021

2021 PRESIDENTIAL MEMORANDUM

- Directed review, expansion, and improvement of all federal agency scientific integrity policies
- Recognized changing landscape of science including emerging technologies like AI, ML
- Linked equity to scientific integrity
- Established Fast-Track Action Committee on Scientific Integrity

Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking



MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

It is the policy of my Administration to make evidence-based decisions guided by the best available science and data. Scientific and technological information, data, and evidence are central to the development and iterative improvement of sound policies, and to the delivery of equitable programs, across every area of government. Scientific findings should never be distorted or influenced by political considerations. When scientific or technological information is considered in policy decisions, it should be subjected to well-established scientific processes, including peer review where feasible and appropriate, with appropriate protections for privacy. Improper political interference in the work of Federal scientists or other scientists who support the work of the Federal Government and in the communication of scientific facts undermines the welfare of the Nation, contributes to systemic inequities and injustices, and violates the trust that the public places in government to best serve its collective interests.

2022 NSTC REPORT ON SCIENTIFIC INTEGRITY

- First whole-of-government review of scientific integrity policies and practices (57 representatives from 29 agencies, including science, statistical and other agencies
- Evidence building effort focused on three major areas: training & transparency; conduct of science; and communication of science
- Featured challenges to scientific integrity included 202 Census controversy
- Major recommendations focused on federal strategy to improve: consistency in scope, integration with other policies, and thwarting inappropriate interference



PROTECTING THE INTEGRITY OF GOVERNMENT SCIENCE

A Report by the SCIENTIFIC INTEGRITY FAST-TRACK ACTION COMMITTEE

of the
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

January 2022

NSTC FRAMEWORK FOR FEDERAL SCIENTIFIC INTEGRITY POLICY & PRACTICE

- Federal definition of scientific integrity
- Model scientific integrity policy
- Detailed direction for regular assessment and iterative improvement of agency scientific integrity policies and practices
- Formation of the National Science and Technology Council Subcommittee on Scientific Integrity



A Framework for Federal Scientific Integrity Policy and Practice

Guidance by the

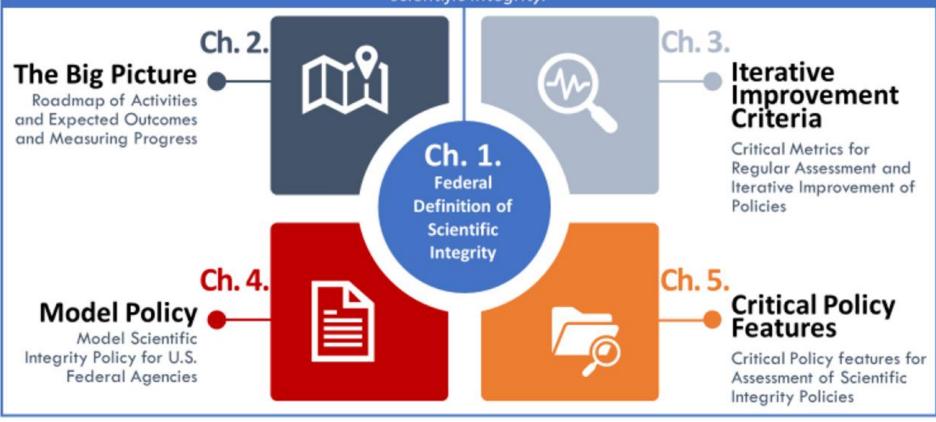
SCIENTIFIC INTEGRITY FRAMEWORK INTERAGENCY WORKING GROUP
of the

NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

January 202

The Framework for Federal Scientific Integrity Policy and Practice

Scientific integrity is the adherence to professional practices, ethical behavior, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity.



SUBCOMMITTEE ON SCIENTIFIC INTEGRITY (SOSI)

THE MEMBERSHIP OF THE SOSI SHALL BE CONSTITUTED BY THE SIO'S OF EXECUTIVE BRANCH DEPARTMENTS AND AGENCIES.

REPRESENTATIVE
AGENCIES INCLUDE,
BUT SHALL NOT BE
LIMITED TO:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Housing and Urban Development
- Department of Justice
- Department of Labor
- Department of State
- Department of the Interior
- Department of Transportation
- Department of Treasury
- Department of Veterans Affairs
- National Aeronautics and Space Administration
- National Science Foundation

- Smithsonian Institution
- The Office of Personnel Management
- United States Agency for International Development
- United States Consumer Financial Protection
 Bureau
- United States Consumer Product Safety Commission
- United States Environmental Protection Agency
- United States Nuclear Regulatory Commission
- Federal Communications Commission
- The following components in the Executive Office of the President are represented on the SOSI:
 - Office of Management and Budget; and
 - Office of Science and Technology Policy (permanent co-chair)

INTERAGENCY WORKING GROUPS

Policy and Assessment

- Review policies
- Update model policy as needed

Community of Practice

- Assistance resource for SI staff
- Regular discussions on topics of general interest

Training

- Catalog existing resources
- Create new training products

Survey

- Catalog existing resources
- Create new survey and guidance

Communication and Outreach

- Develop websites
- Communicate with agencies and public

Implementation and Evaluation

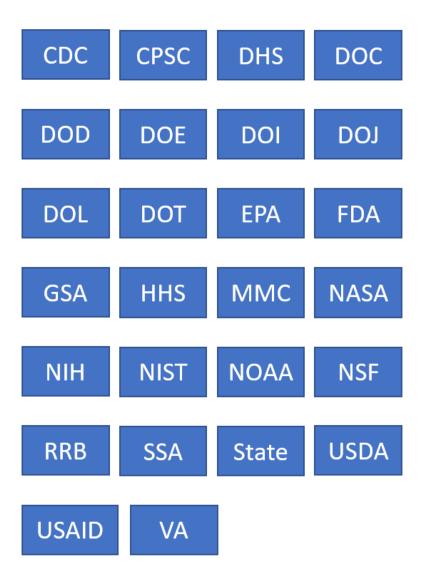
Create system for evaluations and reporting

Strategy and Emerging Issues

- Share agency best practices and achievements
- Provide advice to other agencies, including on SI inquiries regarding senior officials (when requested)

POLICY REVIEWS

- 26 Scientific integrity policy drafts reviewed by SOSI
- Final versions of policies and implementation reviews every two years



AGENCIES WITH PUBLICLY POSTED FINAL SI POLICIES



















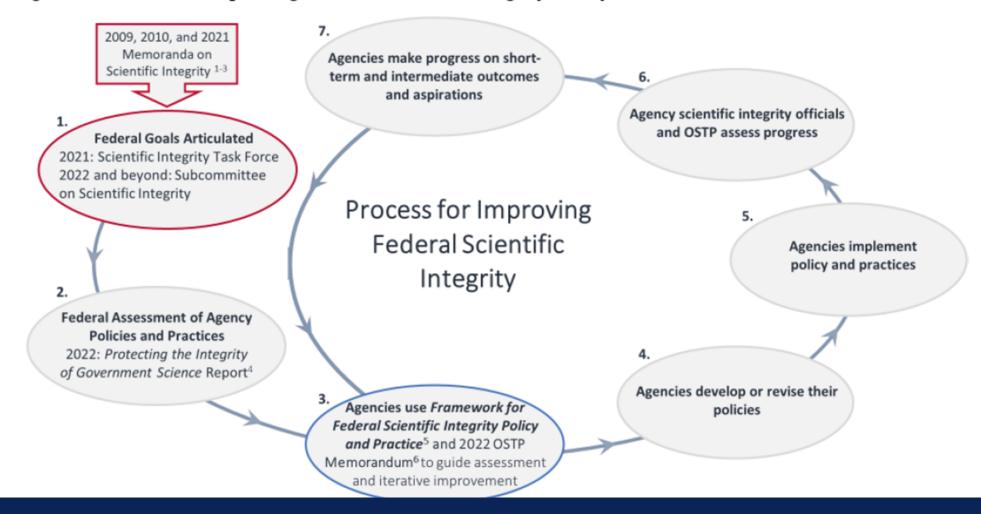






NSTC Framework for Federal Scientific Integrity Policy & Practice

Figure 1. Process for Improving Federal Scientific Integrity Policy and Practice



THANK YOU

More information at https://www.science.gov/Scientific-Integrity.html

Anne Andrews (NIST), SOSI Agency Co-Chair, anne.andrews@nist.gov

Francesca Grifo (EPA), SOSI Agency Co-Chair, grifo.Francesca@epa.gov

Craig Robinson (USGS), SOSI Agency Co-Chair. crrobinson@usgs.gov

Maryam Zaringhalam (OSTP), SOSI OSTP Co-Chair, maryam.zaringhalam@ostp.eop.gov

Gretchen Goldman (DOT), Senior Advisor, gretchen.goldman@dot.gov