



AUGUST 17, 2020

Transportation Research Board Executive Committee

Discussion with Gregory H. Symmes
Chief Program Officer

Critical Moment for the National Research Council (NRC)

- Leadership commitment to change
- First strategic plan
- Transformation
- COVID-19
- Racial and social equity and justice

Priorities

- **Increasing the reach and impact of our work**
 - More timely, nimble
 - More strategic, proactive, forward-looking
 - Expand audiences/sponsors/partnerships
- **Enhancing staff empowerment, continuity, diversity, equity, and inclusion**
- **Improving efficiency/effectiveness of work processes and decision making**

NRC Strategic Planning Committee

Victor Dzau (chair) , NRC vice-chair (NAM)

Corale Brierley, Brierley Consulting (NAE)

Elizabeth Cantwell, University of Arizona

Ellen Chou, NASEM staff (DEPS)

Monica Feit, NASEM staff (DBASSE)

Lynn Goldman, George Washington University (NAM)

Diane Griffin, Johns Hopkins University (NAS/NAM)

Susan Hanson, Clark University (NAS)

Jim Hinchman, NASEM staff (Operations)

Eve Higginbotham, University of Pennsylvania (NAM)

Neil Jacobstein, Singularity University

Steve Koonin, New York University (NAS)

David May, NASEM staff (Communications)

Dick Meserve, Covington & Burling LLP (NAE)

Tom Pollard, Yale University (NAS/NAM)

James Rispoli, North Carolina State University

Sandy Schwartz, University of Pennsylvania (NAM)

Bob Sproull, RRC co-chair (NAE)

Gregory Symmes, NASEM staff (Program)

NRC Strategic Plan

Phase I

Conceptualization of strategic plan and high level outline
(Fall 2019 – Spring 2020; completed)

Phase II

Development of strategic plan content
(Summer - Fall 2020)

Phase III

Writing and finalization
(Fall 2020 – February 2021)

Draft Vision, Mission, Values

Vision A nation and a world that rely on scientific evidence to make decisions that benefit humanity

Mission The National Academies provide independent, trustworthy advice and facilitate solutions to complex challenges by mobilizing expertise, practice, and knowledge in science, engineering, and medicine

Core Values

- Respect for truth
- Independence
- Objectivity
- Rigor
- Integrity
- Inclusivity

Draft Strategies Required to Achieve Goals

- Expand with whom and how we engage and partner
- Design for inclusion, equity and diversity in all we do
- Enhance the NRC's capabilities through strategic investments in advanced technologies
- Embrace continuous innovation and learning

Draft Strategic Goals

- 1** Anticipate and prepare society for future challenges and opportunities
- 2** Expand the NRC's influence and impact on the world
- 3** Strengthen the NRC's creativity, resilience, and sustainability

Transformation Goal

Ensure the NRC is the **first institution** that decision makers turn to for **authoritative and unbiased** advice on matters involving science, engineering, and medicine

Transformation Objectives

Maximize the relevance, timeliness, and impact of NRC products and services

Strengthen sponsor stewardship to best meet current and future sponsor needs

Attract, develop, and retain the best talent, including both staff and volunteers

Elevate support functions to provide consistent and superior service to all stakeholders

Transformation Focus Areas

- Program Activities
- Workforce
- IT
- Finance
- Communications
- Institutional Performance Management

Transformation: New/Ongoing Initiatives

- Staff Diversity, Equity & Inclusion
- Staff Engagement Questionnaire
- Staff Continuity
- Project Management Training
- Nominations Process
- Sponsor Feedback Tool
- Post-Event Questionnaire
- Improving the Volunteer Experience

Response to COVID-19

- Resource page <https://nam.edu/coronavirus-resources/>
- Webinars, virtual workshops (many)
- Based on Science
<https://sites.nationalacademies.org/BasedOnScience/>
- Outreach to Congress
- High-Level Strategy for Responding to COVID-19
- Staff Work Group on Post-Pandemic NRC

High-level Strategy

- **Actionable** science, engineering, and medicine to inform immediate decisions related to the crisis
- **“Irreplaceable”** science, engineering, and medicine to enable learning from unique/ephemeral circumstances of the crisis
- **Strategic** science, engineering, and medicine to understand the range of possible consequences and identify interventions that could lead to a robust recovery and a more resilient society

<https://issues.org/mcnutt-actionable-strategic-irreplaceable-data-delivering-science-in-a-crisis/>

Actionable Science

Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats

- Requested by Office of Science and Technology Policy and Department of Health and Human Services
- Chaired by Harvey Fineberg (NAM), 26 members
- Rapid expert consultations (social distancing, face coverings, crisis standards of care, etc)
- Rapid, focused consensus studies

Societal Experts Action Network (SEAN)

- Requested by National Science Foundation
- Executive Committee chaired by Bob Groves (NAS/NAM) and Mary Bassett (NAM)
- Rapid responses to actionable questions with strong social, behavioral, and economic science dimensions
- Understanding/evaluating data sources, encouraging protective behaviors

“Irreplaceable” Science

Urgent need to collect data from unintended experiments to help response and recovery and prepare for future extreme events

Examples:

- Impacts of COVID-19 on air emissions and air quality
- Lessons learned/best practices from higher-education’s responses to COVID-19 during fall semester 2020

Response and Resilient Recovery Strategic Science Initiative (R³SSI)

- Rapid, scenario-based analyses of possible and probable futures
- Inform response and recovery decisions by governments, universities, businesses; identify potential interventions
- Executive Council, Strategy Groups

Example Scenarios

- Long-term impacts of COVID-19 on charitable food supply chain and hunger
- Impacts of various COVID trajectories on the fiscal sustainability and research capacity of the nation's research universities

Response and Resilient Recovery Strategic Science Initiative (R³SSI)

An Executive Council

- Consisting of leaders from government, business, academic, and other sectors
- Will identify and prioritize questions and potential scenarios critical to planning for crisis response and recovery
- After analyses by Strategy Groups, will share results with decision makers through national associations & other channels

Strategy Groups

- Interdisciplinary teams of scientists, engineers, and medical experts with experience translating analyses to policy
- Will conduct rapid, scenario-based analyses of possible & probable outcomes, including impacts of natural & human-initiated stressors
- Goal is to identify resilient strategies, vulnerabilities (with uncertainties), and potential interventions

Racial and Social Equity and Justice

- Transformation Initiative on Staff Diversity, Equity, and Inclusion
- Staff Work Group on Volunteer Diversity and Inclusion
- NRC Program Activities
 - Roundtable on Black Men and Black Women in STEM
 - Study to assess the influence of systemic racism in the scientific, technical, and medical workforce (possible congressional mandate)
 - Study on advancing diversity, equity, and inclusion in 21st Century STEM organizations (in development)

Discussion