



National Nanotechnology Initiative Workshop

Nanomaterials and the Environment and Instrumentation, Metrology, and Analytical Methods

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Travis Earles

Co-chair, Subcommittee on Nanoscale Science, Engineering, & Technology
National Science and Technology Council

Assistant Director for Nanotechnology
White House Office of Science and Technology Policy



NNI Overview

- The NNI is an interagency, cross-cut program that coordinates Federal nanoscale research and development activities and related efforts among various participating agencies (currently 25) with a range of research, industry, trade, and regulatory roles and responsibilities.
- The NNI began in 2001 and its activities were codified and further defined in the 21st Century Nanotechnology Research and Development Act (Dec. 2003)
- Thirteen of the participating agencies have R&D budgets that relate to nanotechnology, with the reported NNI budget representing the collective sum of these (\$1.6 billion in 2009 and 2010)
- The NNI is not a separately funded line item in the Federal budget or a funding agency.
- The NNI informs and influences the Federal budget and planning processes through its member agencies.



NNI Vision

A future in which the ability to understand and control matter on the nanoscale leads to a revolution in technology and industry that benefits society

Expedite discovery, development, and deployment of nanotechnology

- ❖ To serve the public good
- ❖ For economic benefit
- ❖ National & homeland security

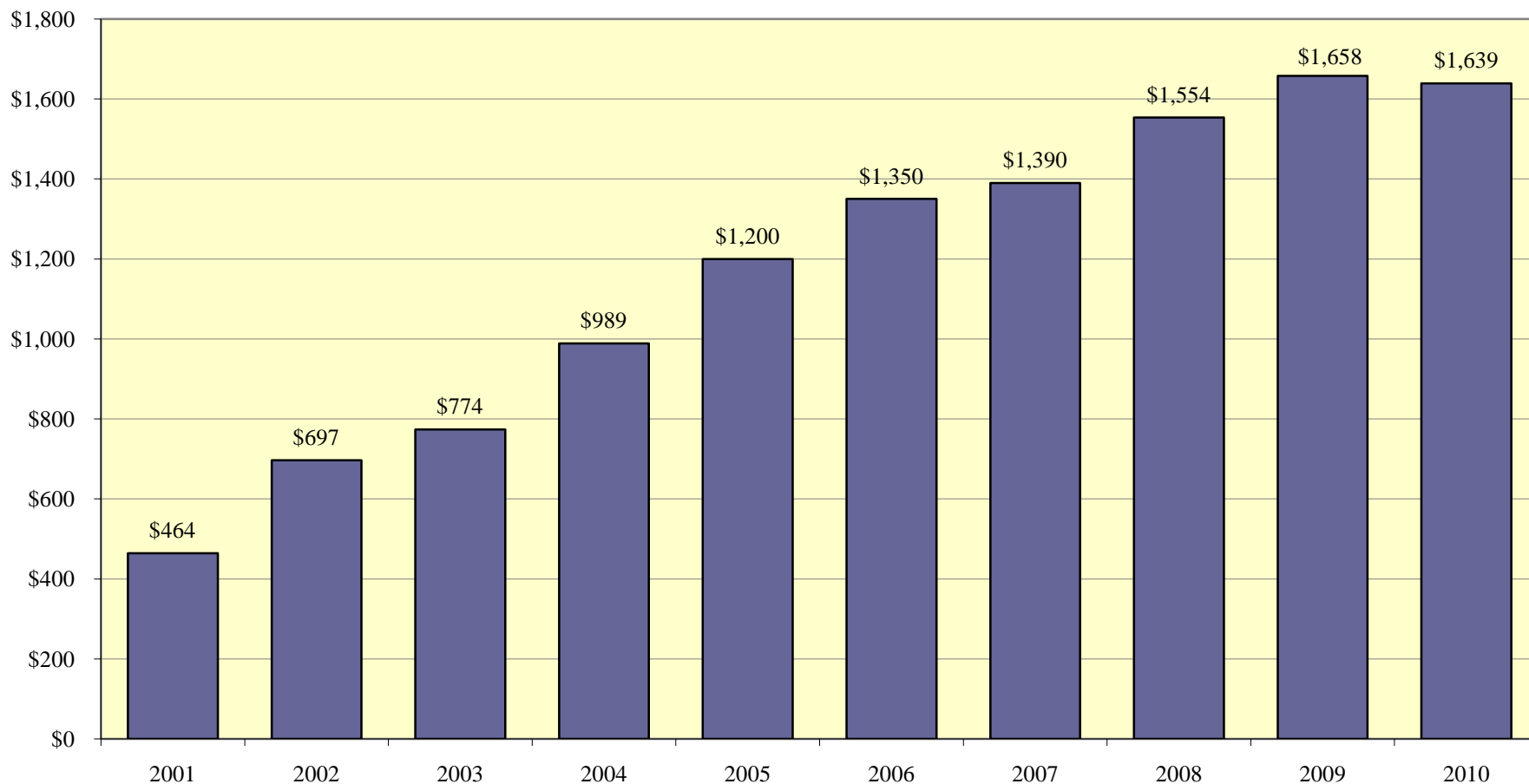


NNI Goals

- Advance a world class R&D program
- Foster transfer of new technologies
- Develop & sustain educational resources, a skilled workforce, and the supporting infrastructure and tools to advance nanotechnology
- Support responsible development of nanotechnology



NNI Investment



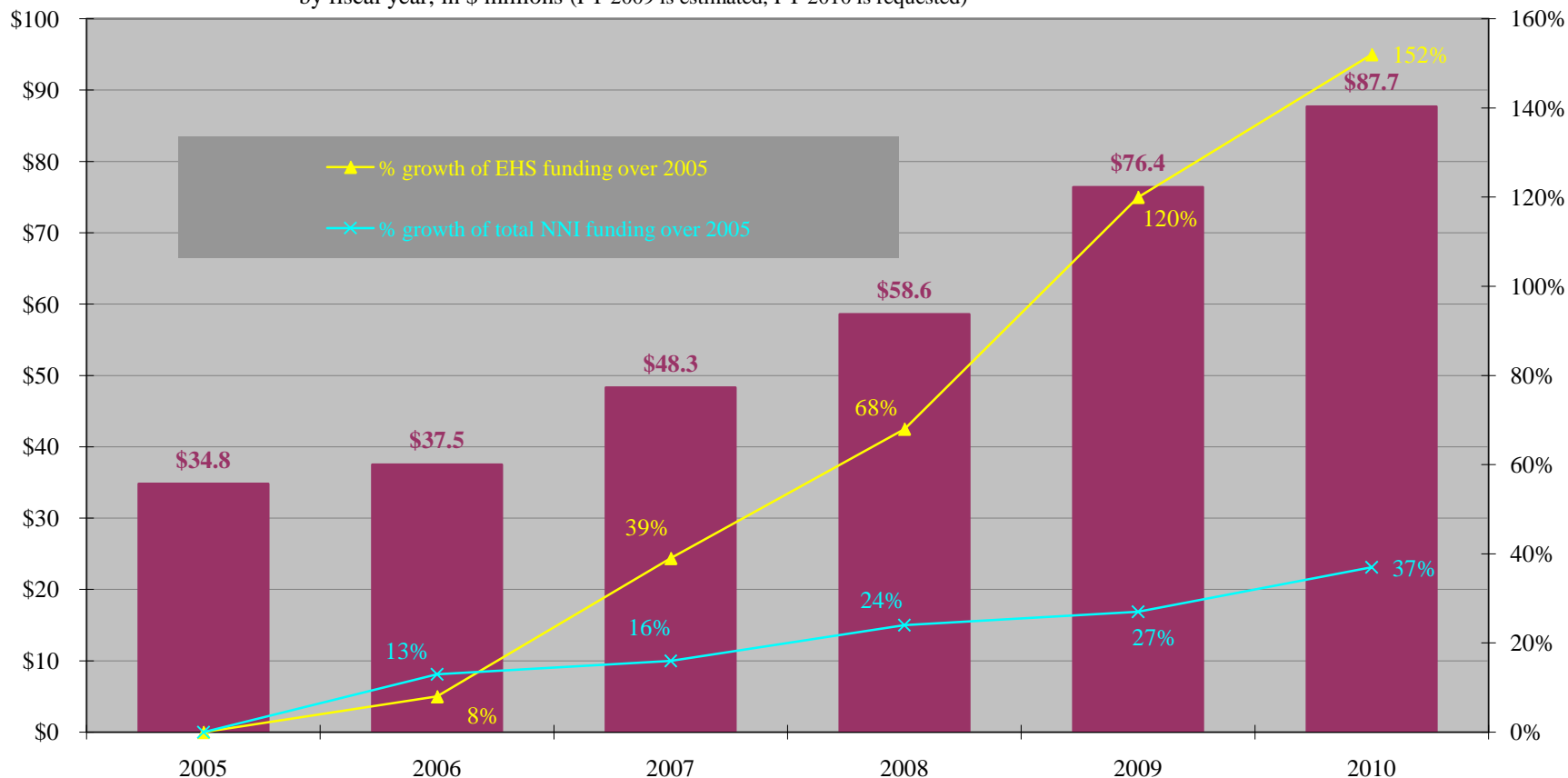
Collective agency funding (in \$ millions) reported since NNI inception (2009 is estimated and 2010 is requested)



NNI Support for EHS Research

NNI Funding for Nanotechnology-Related EHS Research (PCA 7)

by fiscal year, in \$ millions (FY 2009 is estimated, FY 2010 is requested)

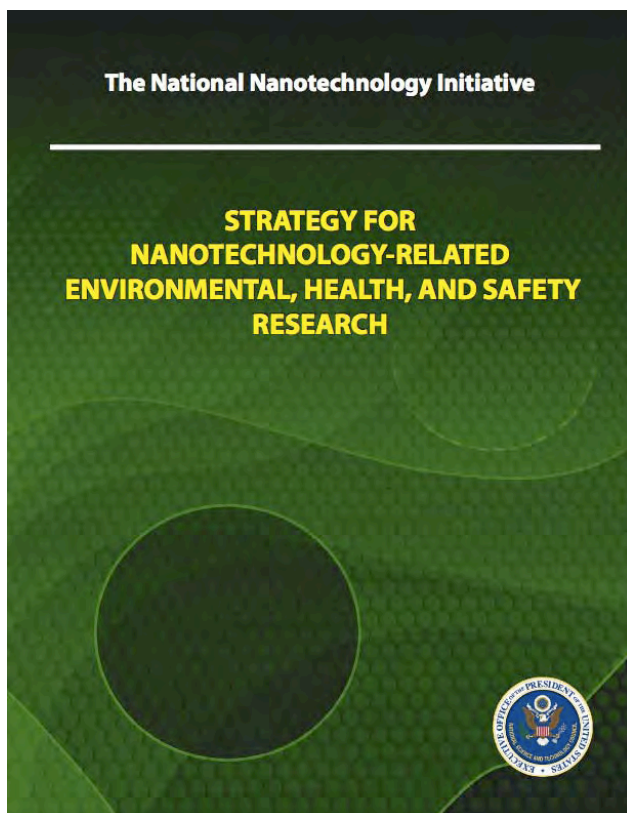


* research whose primary purpose is to understand and address potential risks to health and to the environment from nanotechnology, i.e., not including related instrumentation and metrology research



NNI EHS Research Strategy

How Is This Strategy Used By Federal Agencies?

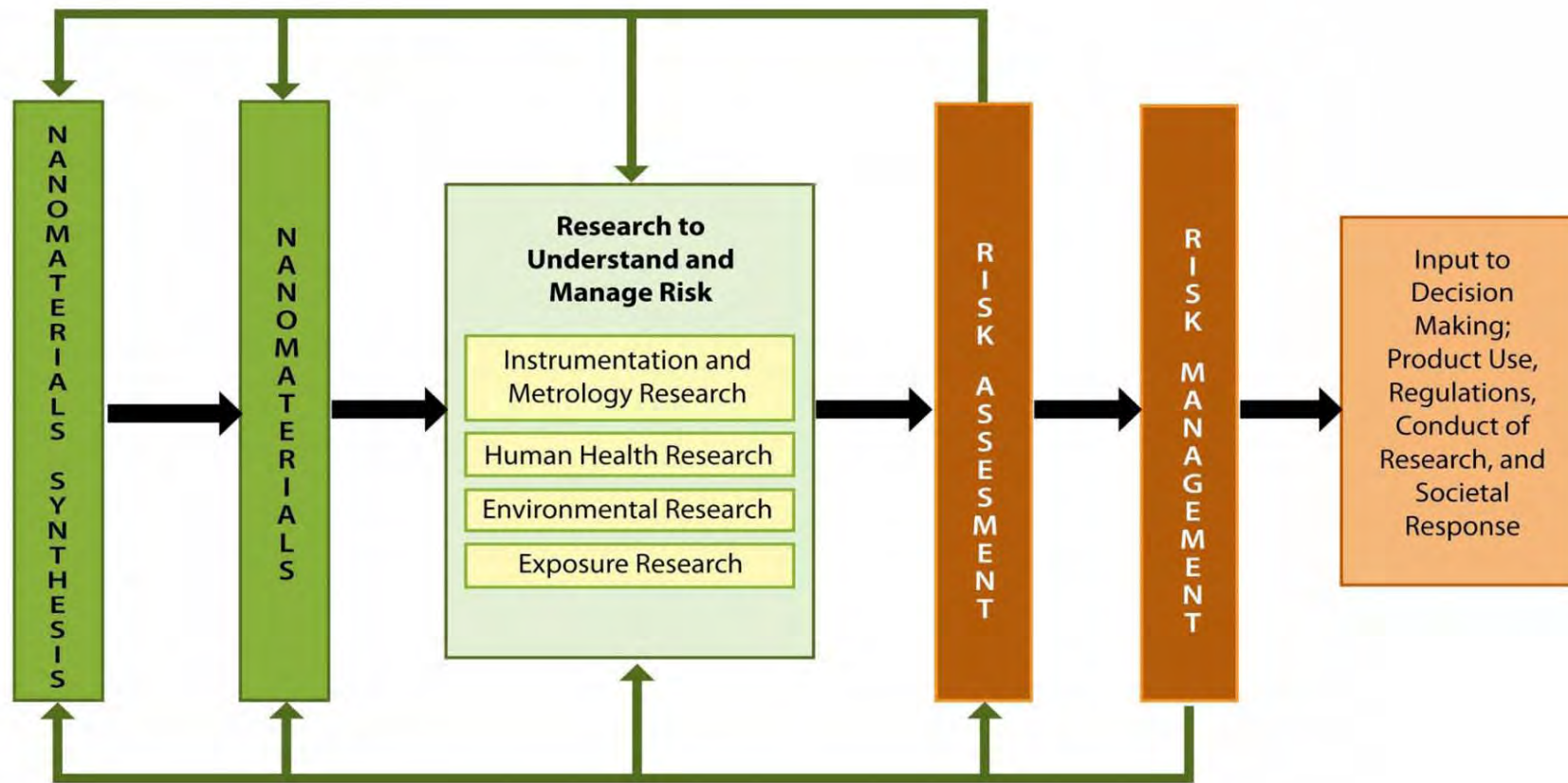


- Common framework for ongoing dialogue, collaboration, and co-funding.
- Foundation from which agencies can build or modify their implementation plans.
- Near to long term perspective with an internal adaptive management process.



The National Nanotechnology Initiative: EHS Research Framework

Role of nanotechnology-related EHS research in risk management of nanomaterials*



* from Strategy for Nanotechnology-Related Environmental, Health, and Safety Research (February 2008):
http://www.nano.gov/NNI_EHS_research_needs.pdf



Welcome and Thanks

● Planning Team

- ❖ David Andrews, Environmental Working Group
- ❖ John Cowie, American Forest & Paper Association
- ❖ John Gannon, DuPont
- ❖ Rebecca Klaper, Great Lakes Water Institute
- ❖ Dianne Poster, NIST/CEQ
- ❖ J. Alan Roberson, American Water Works Association
- ❖ Phil Sayre, EPA
- ❖ Paul Westerhoff, Arizona State University

● Over 30 invited experts

● NEHI Agency Representatives

● Participants Today and Tomorrow

● Rapporteurs