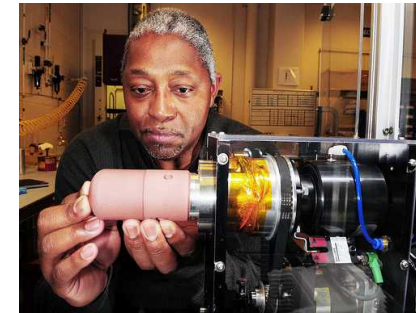


Nuclear Security Survey

Shawn P. Burns, NW Mission Area Planning

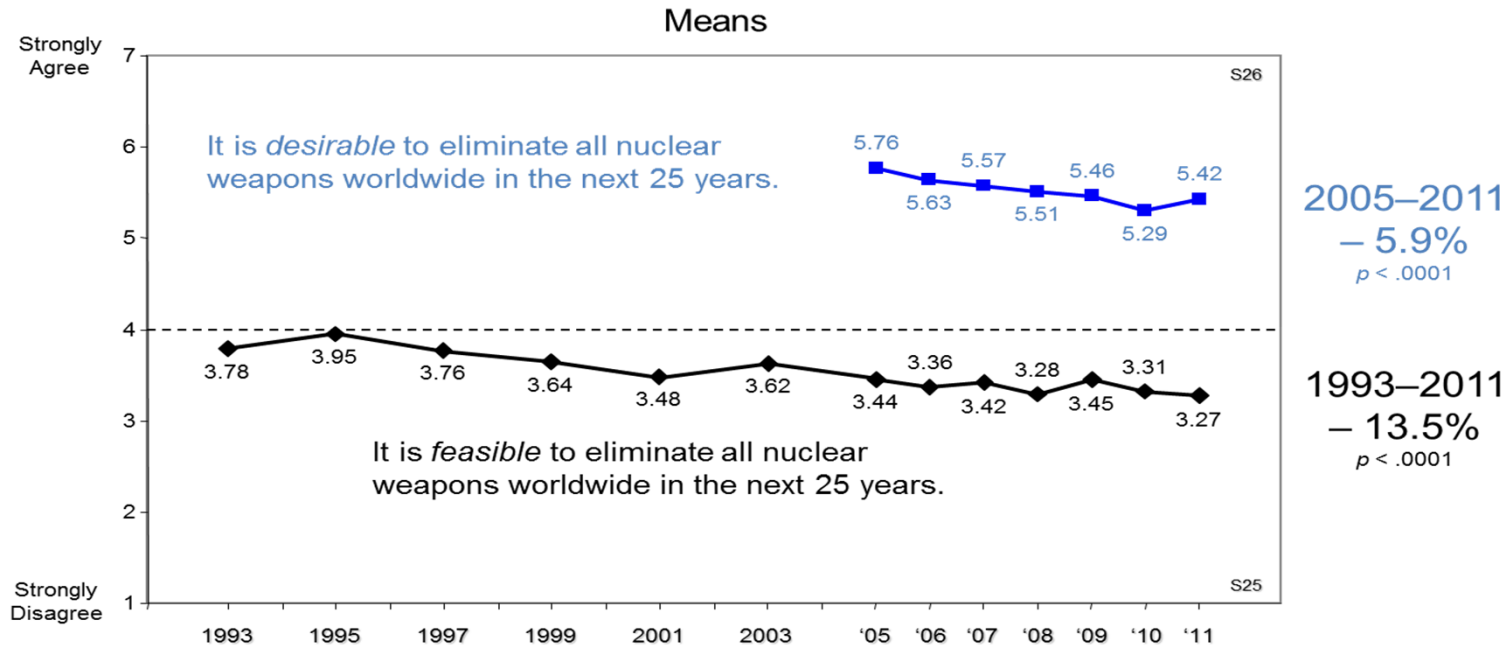
Presented at the
Center for Energy, Security, and Society
2016 Strategic Planning Meeting

December 14, 2015



 **ANTICIPATE**
INNOVATE 
 **COLLABORATE**
ADVOCATE 

Continuation of the 1993-2011 Survey*



**How will the end of the Cold War
affect public views about nuclear
deterrence?**

- R. Hagengruber (c. 1993)

*Jenkins-Smith, H.C., Herron, K.G., Silva, C.L., 2011, "American Perspectives on Security, Energy, Nuclear Weapons, and Terrorism: 2010," SAND2011-1686, Sandia National Laboratories, Albuquerque, Nm, March

Why is this survey important to the NW Program?



Nuclear Weapons
Ensure a safe, secure, and effective nuclear deterrent in collaboration with our customers, partners, stakeholders, and other Sandia mission areas

Serving the nation by meeting the challenges of nuclear deterrence in the 21st century

Current Stockpile
Sustained Deterrence
Capabilities & Operations

Strategic Priorities:

- Reinvigorate a strategic FFRDC partnership with NNC
- Challenge
- Exploit synergies with other mission areas
- Enrich the foundation

ASSURED AFFORDABLE AGILE INNOVATIVE

Life extending the Cold War stockpile is necessary, but is it sufficient?
Can we gain support for an Advanced Concepts and Architecture Program?
How do we assure Always/Never in the future?
How do we prevent technology surprise?

Current Activities:

- Tri-lab whitepaper on 21st century deterrence
- Revolutionary Approaches to the Stockpile Research Challenge
- Strategic stockpile vision to drive A&E priorities
- Program alternatives to achieve affordability
- Surveillance transformation studies
- S&T portfolio to underpin the deterrent
- Cross-domain deterrence work
- Hypersonic reentry technologies

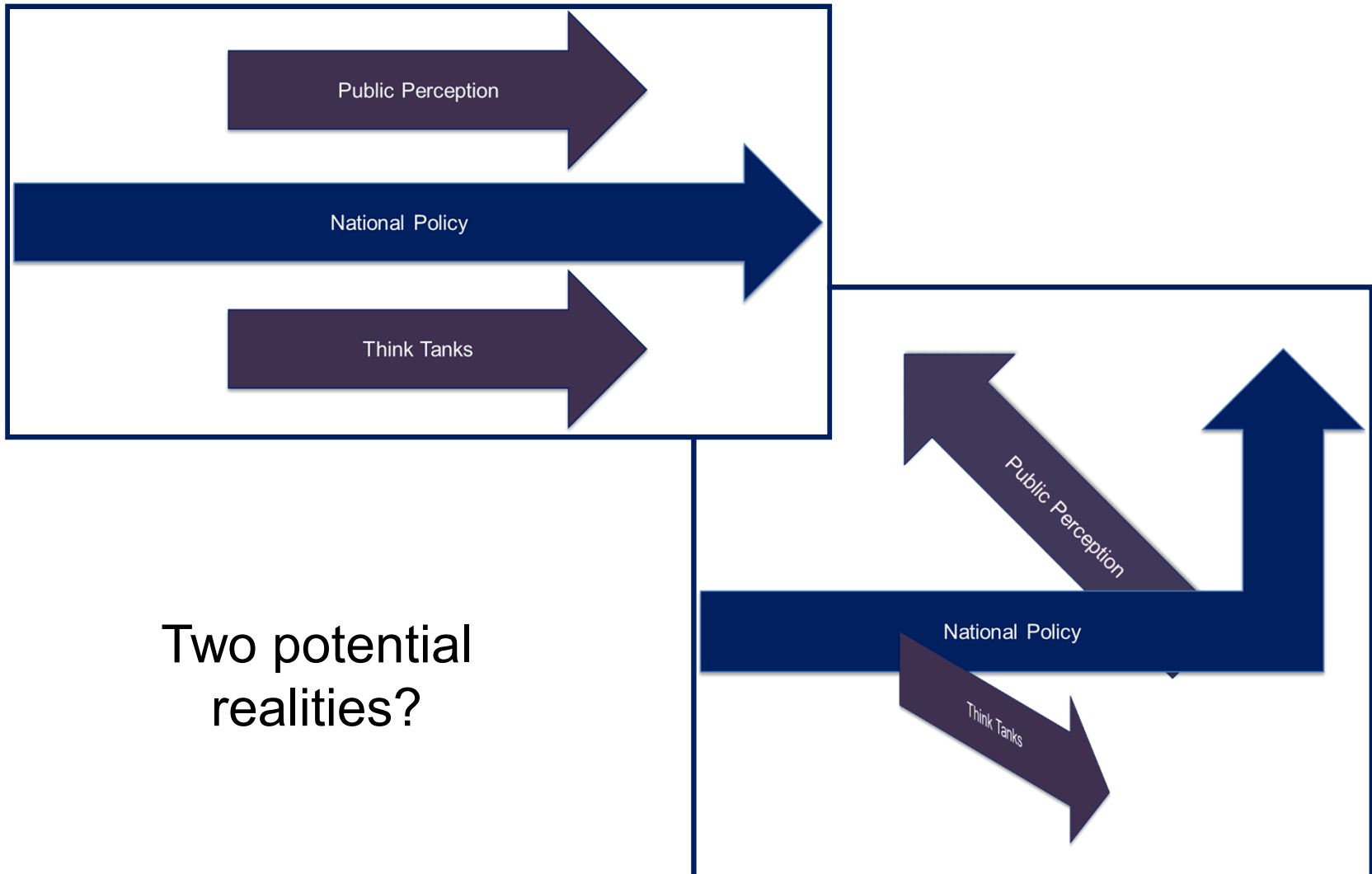
Key Investments:

- Revolutionary Engineering & Product Realization: Additive Manufacturing
- SiFab 2.0 Mission Needs Study: MESA Replacement
- Blackjack: Addressing Emerging Threats
- System Trust for Operations, Resilience, & Management (STORM): Trust Solutions
- Z-300 Mission Needs Team: Next Generation Facility
- Advanced SCN Architecture for NW Design: Identify Modern SCN Architecture

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SAND 2015-6441 D

What is the national policy environment?

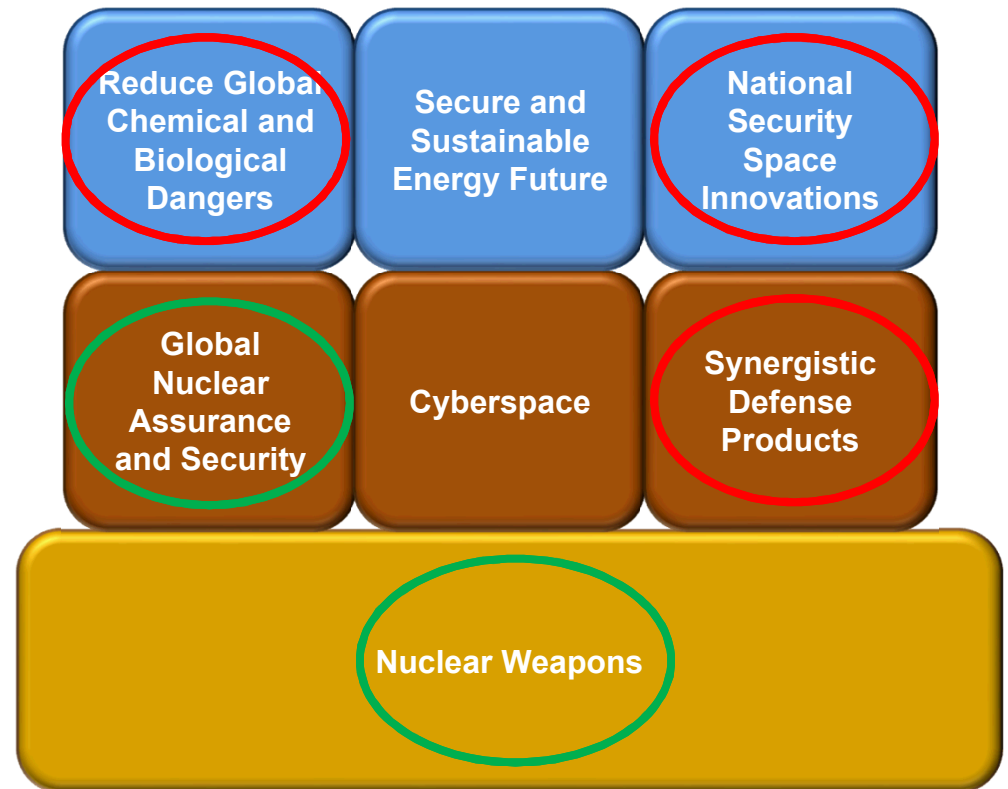


Two potential realities?

A Role for a Federally Funded Research and Development Center



The relevance
of the survey
extends
beyond the NW
mission area.



QUESTIONS?

Center for Energy, Security and Society



<http://cess.ou.edu/>



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Carol Sylva, OU

National Security and Nuclear Policies

- Nuclear security
- Security from terrorism
- Energy security
- Environmental security