

President's Council of Advisors on Science and Technology

**Federal-State R&D Cooperation for Technology Development:
Improving the Likelihood of Success**

***Panel Discussion on
Effective State Science and Technology Strategies***

Thomas A. Waltermire

President and Chief Executive Officer
PolyOne Corporation
and

Chairman, NorTech

Chairman, Ohio Business Roundtable, Technology-Based Economic Growth Initiative

Key Questions for Panelists

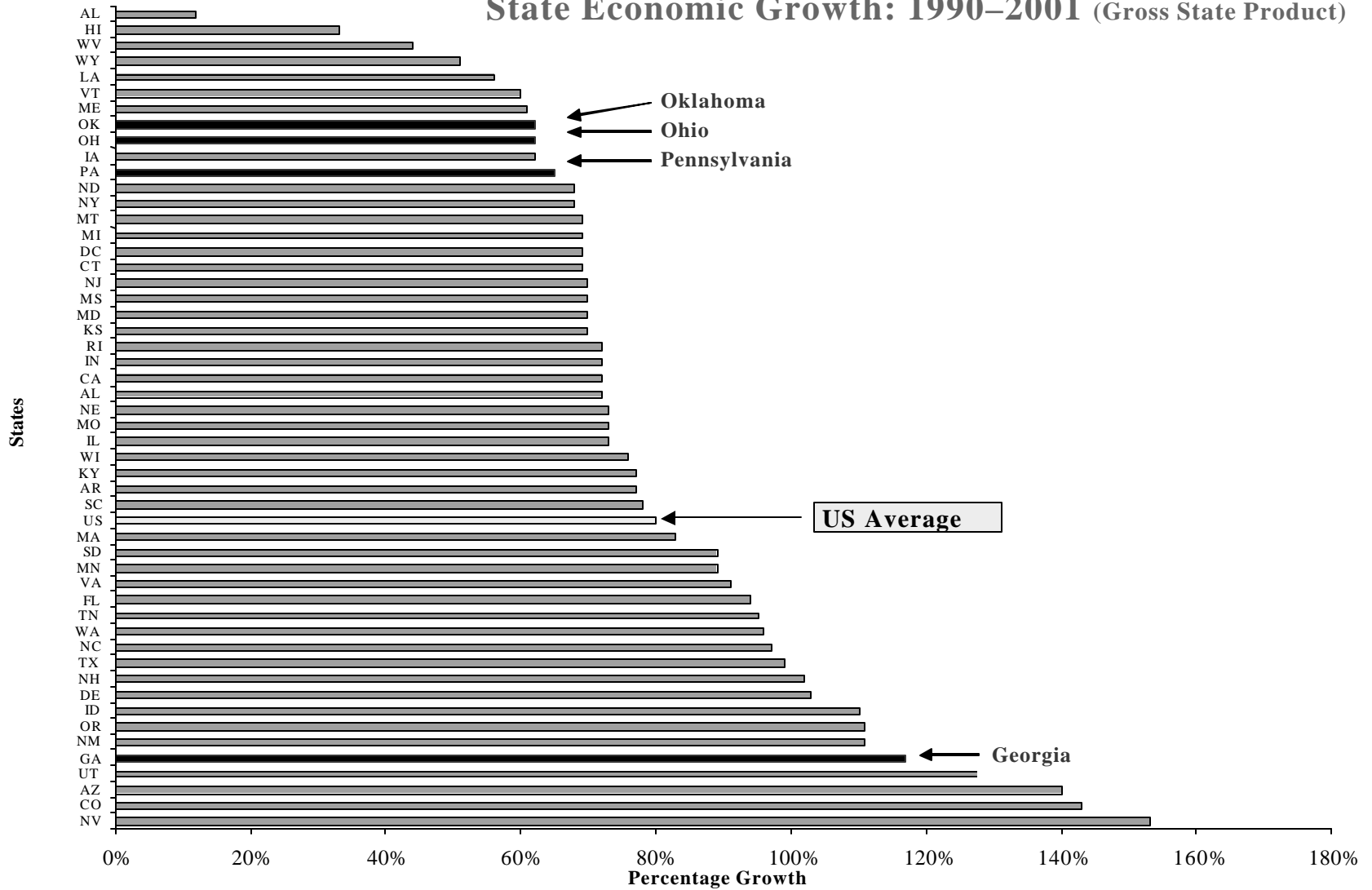
1. What S&T strategies have states pursued ... and how have they been developed?
2. Are strategies S&T or economic development oriented ... or both?
3. What can the federal government do to improve federal-state cooperation as states execute their strategies?

The Setting

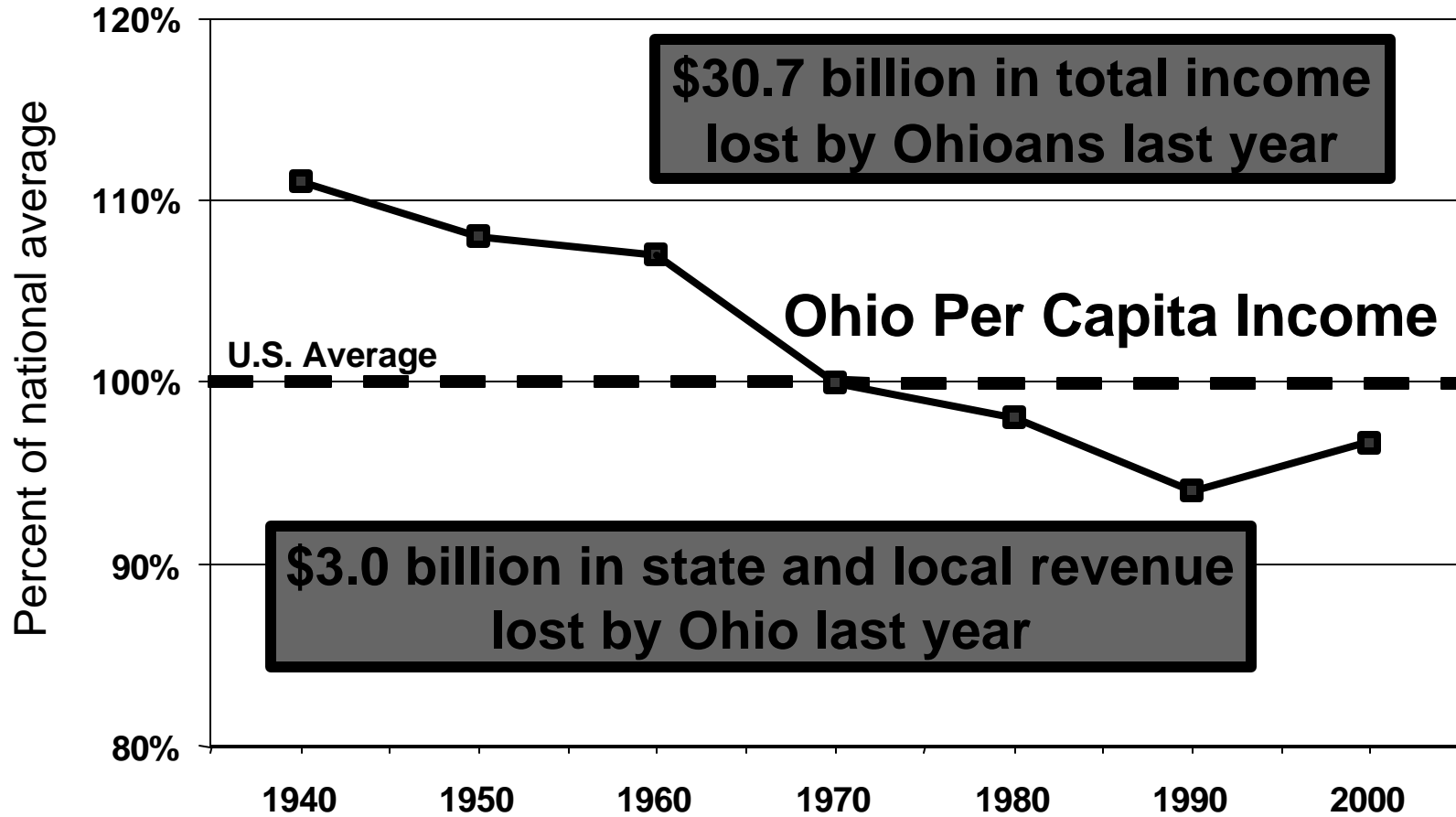
- Global competitiveness demands a strategic approach to grow state and regional economies.
- Must leverage assets and strengths in research, technology, capital and talent.
- Tech-based growth is the centerpiece of our agenda in Ohio – with key leadership from:
 - ✓ Governor and Legislature
 - ✓ BRT and regional organizations
 - ✓ Research Universities

The Need for Action ...

State Economic Growth: 1990–2001 (Gross State Product)



The Need for Action – another view ...



Ohio's Approach

- ***Our objective ...*** to stimulate high-wage economic growth, cutting across all regions of the state, thereby improving the lives of all Ohioans – as measured by growth in real per capita income.
- ***Our strategy ...*** invest in core research strengths to commercialize and bring technology to market – with five areas of focus:
 1. Advanced Materials
 2. BioSciences and BioEngineering
 3. Information Technology
 4. Instruments, Controls, Sensors and Electronics
 5. Power and Propulsion
- ***Our gameplan ...*** Governor's 3rd Frontier Project – business-driven.

Key Events – Ohio

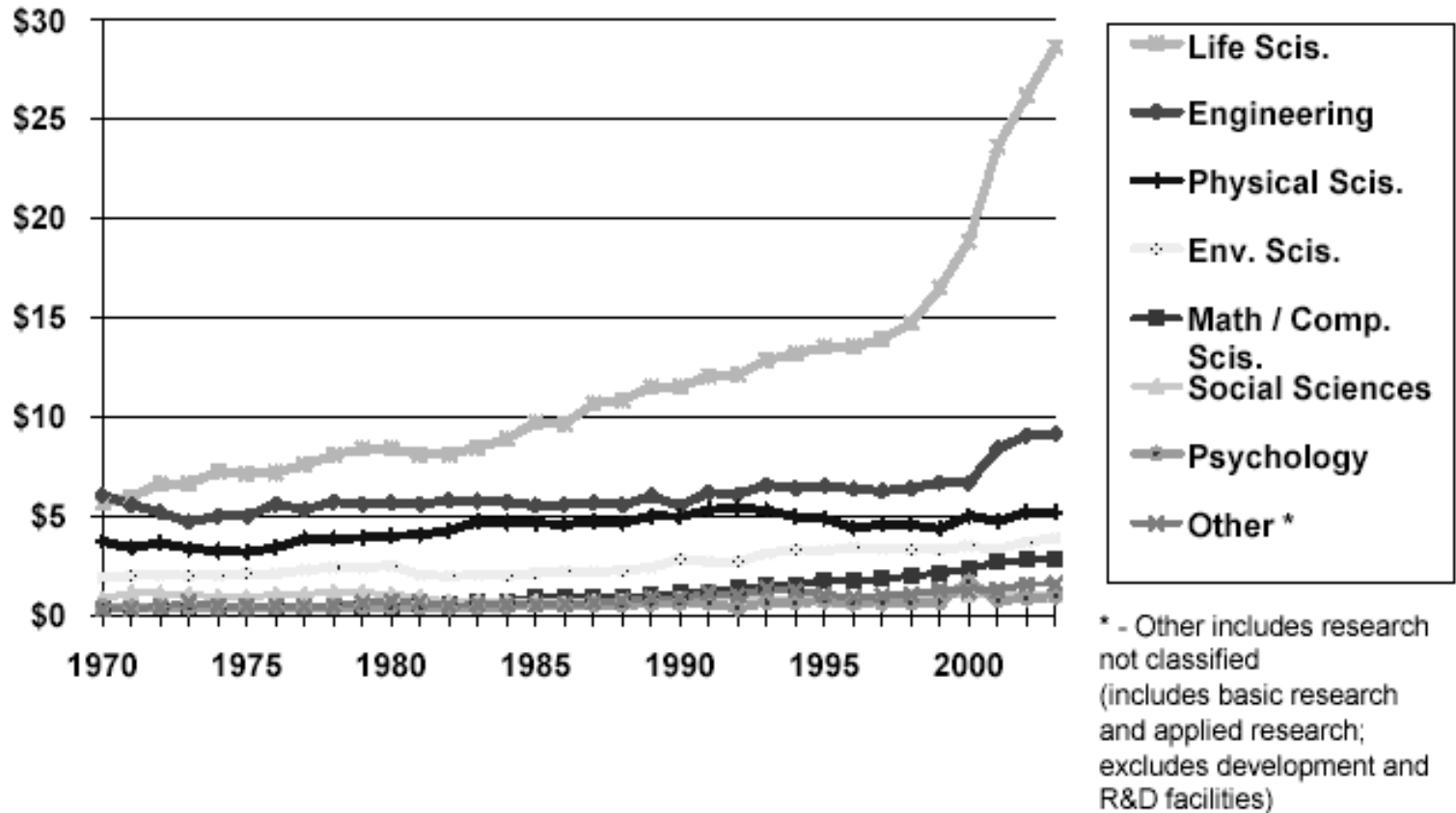
- **2001** BRT Ohio Growth Project
Ohio Technology Partnership formed
- **2002** Governor announces \$1.6 billion 3rd Frontier Project
Battelle Study
- **2003** BRT World-Class Ohio Initiative
3rd Frontier Commission / Advisory Board created
Initial round of 3rd Frontier Awards
Issue 1 narrowly defeated
- **2004** Governor and Legislature reaffirm support

Looking ahead – challenges...

- Even better, stronger industry leadership
- Improved collaboration – business and academia
- Close “proof of concept” gap
- Support new and growing companies, without forsaking the needs of existing businesses
- Attract more, better balanced federal research funding

Trends in Federal Research by Discipline

FY 1970-2003, obligations in billions of constant FY 2003 dollars



Source: National Science Foundation, *Federal Funds for Research and Development FY 2001, 2002, and 2003*, 2003. FY 2002 and 2003 data are preliminary.

Constant-dollar conversions based on OMB's GDP deflators. AUGUST '03 © 2003 AAAS

Panelists

- **Michael Cassidy**, Georgia Technology Alliance
- **Leslie Hudson**, University of Pennsylvania
- **Sheri Strickley**, Oklahoma Center for the Advancement of Science and Technology