Building State-Level Science Policy Capacity

Oklahoma EPSCoR Program

Economic Development Generating Excellence (EDGE)

- Goal: Actions to increase prosperity
- Broad participation and media attention
  - Steering Committee
  - Expertise Teams
  - Statewide workshops
- EDGE Action Plan

EDGE Action Plan

- Research (education, health, business environment)
- Tangible
  - $1.0 B for *Research Capital of the Plains*
  - Centers of innovation
  - EPSCoR involved throughout
- Intangible
  - Changed statewide discussion
  - Enabled National Lambda Rail, endowed chairs, seed venture capital
  - Capital bond with focus on science facilities
- Increased the policy capacity of Oklahoma to address science and technology

Science and Technology Plan

- Designed to meet EPSCoR goal
- Derivative of EDGE
- Centers of Innovation
  - Advanced Manufacturing
  - Aerospace
  - Health Delivery
  - Telecommunications
  - Strategic Research (alternative forms of energy, human & animal health, information technology & cyber-security, meteorological sciences, sensors, nanotechnology)

National R&D Priorities

OMB and OSTP

1. Homeland security and national defense
2. Energy and climate change technology
3. Advanced networking and information technology
4. National nanotechnology initiative
5. Understanding complex biological systems
6. Environment
7. Next generation air transportation system
8. Federal scientific collections
9. Science of science policy

Federal Science of Science Policy

- Interagency participation to promote and coordinate actions to:
  - Better assessment of impacts of R&D investments
  - Define appropriate metrics for measuring impact
  - Understand effects the globalization of science and technology
  - Improve the basis and capacity of Federal science policy decisions to achieve national goals

Questions of Science Policy and Actions

- What is the problem to be solved?
- Why is it important and to whom?
- What are the consequences of failing or not doing it?
- Who else can do it?
- How can it be done cheaper?
- Whose constituents are affected?
- Who will be harmed or advantaged?

Building State-Level Science Policy Capacity

- Lessons
  - *Credible information and informants*
  - Benefits described as what is important to policy makers
  - Accountability and measurement
  - Strong leader and public involvement
  - Perceived as statewide benefit
  - Evaluate winners and losers
  - Higher education institutions, agencies, organizations
  - Media participation
  - Attach to state and national priorities
  - **Building science policy capacity as an explicit objective of EPSCoR**