

IT TAKES A STATE

West Virginia's Experience in
Research and Development

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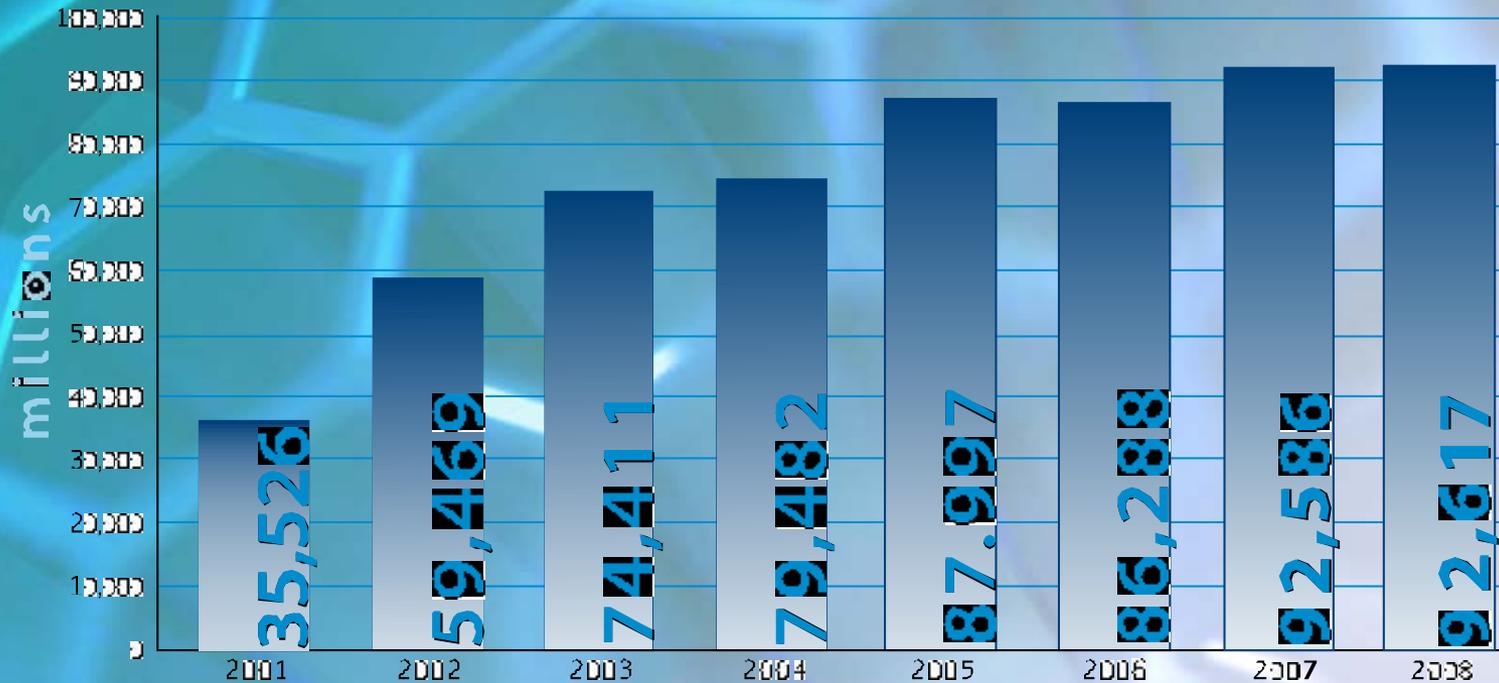
West Virginia

- **Infrastructure Investment**
- **Research Growth**
- **Innovation**
- **Business Development**
- **Economic Growth**

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- **Commitment of Leadership**
- **Commitment of Community**
- **Strategic Planning**
- **Follow through-**
 - Resources
 - Accountability
 - Perseverance

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WEST VIRGINIA
Federally Financed Expenditures
at Universities and Colleges

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WEST VIRGINIA
Total Expenditures
at Universities and Colleges

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VISION2015

THE WEST VIRGINIA SCIENCE AND TECHNOLOGY STRATEGIC PLAN

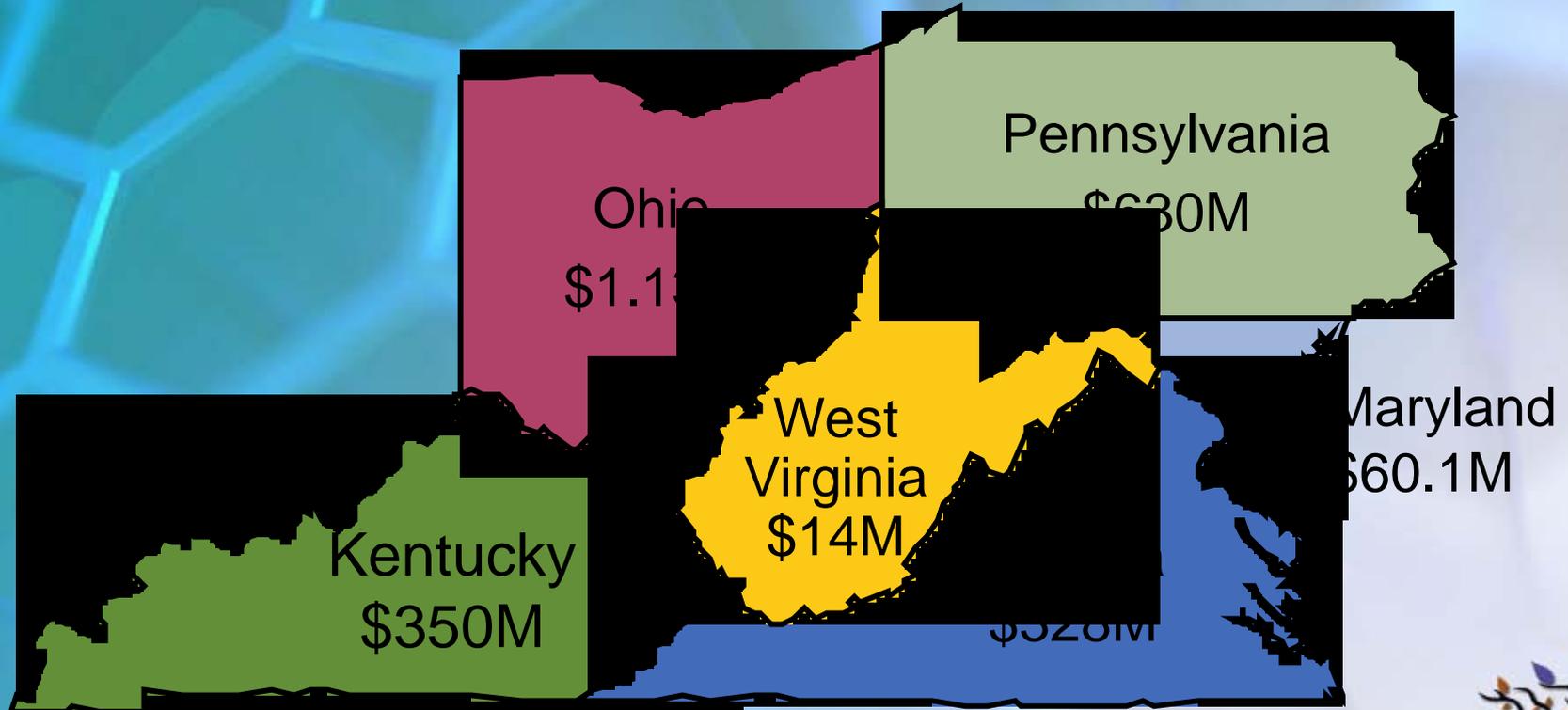
.:WVEPSCOR
science research innovation

Science and Research
West Virginia Higher Education POLICY COMMISSION



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VISION 2015



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VISION 2015

- **A joint collaboration:**
Between WVU, MU, PUI's, HEPC, E&A, WVDOC, EPSCoR and business
- **A plan to:**
 - Build Infrastructure
 - Recruit Creative Researchers
 - Train a Skilled Workforce
 - Stimulate Innovation and Job Creation

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VISION 2015

- **Plan Components:**
 - 16 Action Goals
- **Human and Physical Infrastructure**
- **Education & Outreach**
- **Policy**
- **Research and Innovation**
- **Economic Development**

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VISION 2015

What are the major actions?

- **Invest \$250M**
- **Recruit 89 new scientists and engineers**
- **Construct 2 state-of-the-art R&D facilities**
- **Increase the production of STEM degrees**
- **Target WV academic strengths**
- **Develop new tech-based businesses**

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- **2004 Research Challenge Fund**
- **\$4M annually from lottery**
- **Now in 5th year**
 - **Cost Share to EPSCoR**
 - **Challenge Grants to Faculty**
 - **PUI Instrumentation**
 - **SURE, Graduate Fellowships**

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- **2005 Strategic Plan**
 - **Academia**
 - **Industry**
 - **Agency Heads**

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- **2006 NSF EPSCoR**
 - **\$9M**
 - **Targeted investment in Biometrics and ID Technologies**

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- **2007 Eminent Scholars Recruitment and Enhancement (ESRE)**
- **\$10M to research universities**

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- **2008 Research Trust Fund**
- **\$50M for matched endowments**
- **(\$100M)**

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- **2009 NSF awards for infrastructure**
 - **\$4.4M mostly cyber**

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- **2010 budget plans**
 - **SBIR Match**
 - **MRI-WV**
 - **Commercialization Facilities**

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- **Events are structured results!**
- **Many people working together**
 - **Faculty, Presidents, Chancellor, Governor, Legislators, Agency Heads, Industry Leaders, etc.**
 - **Planning, communications, outreach, vision, accountability, leadership, commitment**

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- **Strategies that work well for S&T plans?**
- **Joint vision; specific R&D targets; current strengths; long term commitment; highest levels; beyond programs**

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- **Roles of State Committees?**
- **Planning; diversity; representation; focus; contacts**

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- **Effective support for small tech business?**
- **Tech Transfer; SBIR; agency collaboration (HE & DOC); cyber; incubator facilities**

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- **Effective business outreach and support?**
- **Economic Office services; internships; ‘blue collar’ computing; CTC flexibility**

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- **Effective leadership strategies?**
- **System-wide approach; mutual benefits; shared vision; top down- bottom up; carpe diem**

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- **Common barriers to innovation?**
- **Academic tradition; regional culture; public education; cyber and other tools**