

Vision 2025: The West Virginia Science and Technology Strategic Plan

Annual Report on progress

August 2016

Vision: By 2025, Science, Technology, and Engineering are WV's Leading Economic Growth Drivers Attracting Investments, Creating Jobs, and Improving Our Quality of Life

Key Objective: Financial Development

Smart Goal: Obtain \$6 MM in state-based funding for HEPC Division of Science and Research and match 3-1 with external funding by July 1, 2017 and grow 5% per year thereafter

Progress: The Chancellor has met with legislative leaders regarding funding for science and technology development. Due to the state's economic troubles, no additional funds have been forthcoming. However, for FY17, the Research Challenge Fund did not suffer any further reductions.

Smart Goal: Dedicate \$10 MM in annual funding with private 1-to-1 match for a Science and Technology Future Fund starting July 1, 2017

Progress: The Chancellor has met with legislative leaders regarding funding for science and technology development. Due to the state's economic troubles, no additional funds have been forthcoming. The success of the Research Trust Fund with \$50M of state funds being matched by private gifts has helped West Virginia University regain its Carnegie Highest Research status and has helped Marshall University increase its competitiveness for federal grants including its first NSF CAREER winner. Additional funding would increase the likelihood of more research leading to economic development.

Smart Goal: Obtain \$1MM funding for start-up and venture businesses with private 1-to-1 match by July 1, 2017 and grow 10% per year

Progress: Due to economic issues facing the legislature this year, no funding was allocated for start-up and venture businesses this session. The Senate Economic Development Committee has requested that the Tech Park present a strategy for moving forward for next year's session. Dr. Kruzelock also reached out to private investors regarding matching support.

Key Objective: Physical Development

Smart Goal: Determine statewide needs for science and technology facilities to enable research and business growth goals at Universities and technology parks by July 1, 2016

Institutions are undertaking an evaluation of facility needs. The evaluations should be completed by late September or early October, 2016

Smart Goal: Upgrade and increase science and technology facilities to enable research and business acceleration needs for Vision 2025 at Universities and technology parks by July 1, 2024

The new engineering building at Marshall University is the new home of the Marshall Institute for Interdisciplinary Research. Researchers at MIIR are now focusing on research that will lead to biomedical

advances that can be patented and licensed. At the Blanchette Rockefeller Neurosciences Institute (BRNI) in Morgantown, research develops drugs that have potential for treating and reducing the effects of major neurological disorders including Alzheimer's disease and stroke.

Smart Goal: Ensure continual upgrades and expansions of broadband infrastructure to meet prevailing FCC and E-rate standards and follow the recommendations of the WV Strategic Broadband Plan for statewide administration, promotion, and development, starting July 1, 2017.

The WV Broadband Enhancement Council (BEC) established by SB488 in 2015 (WV §31-15C-3) to replace the Broadband Deployment Council, which was sunset in December 2014, has unfortunately never convened or appointed a Chair, so there is still no accountable person for this goal in the Strategic Plan. However, there was still quite a bit of activity before and during the 2016 WV legislative session to introduce legislation related to the broadband infrastructure needs in WV. A key piece of legislation introduced by Senator Chris Walters was the "middle mile" bill (SB315). Unfortunately, SB315 and two other broadband-related bills (SB16, HB2551) never even made it to the House floor - despite several activities organized around the state to promote broadband legislation, including a Broadband Summit in Pocahontas County (at NRAO in Green Bank), breakout sessions at the Create WV Conference (in Fayetteville), and a Broadband Day at the Legislature – attracting many of the key players in broadband. Aaron Sporck, spokesman for the Capito Connect Plan, was among them, as was Sterling Beane, the CIO for the Department of Education, Natalie Roper, the Executive Director of Generation WV, and Matt Turner, the Executive Vice Chancellor for the Higher Education Policy Commission and Council for Community and Technical College Education. Meanwhile, the FCC and USAC continue to set aggressive standards and incentivize broadband providers to help close the rural connectivity gap and increase the affordability of high-speed broadband to schools and libraries through a second modernization of the federal E-rate program.

Key Objective: People Development

Smart Goal: Create and implement a STEM and entrepreneurial-based education and workforce development plan by December 31, 2016

A team to work on this plan has been created, but has not yet met.

Smart Goal: STEM faculty at all WV colleges and universities have opportunities to be rewarded for entrepreneurial activities and innovation in promotion and tenure considerations by 1 January 2017

A meeting with the provosts at WVU and MU will occur this fall to discuss this goal.

Key Objective: Cultural Development

Smart Goal: Increase West Virginia public's understanding of the value of STEM and research by 5% annually starting January 1, 2016

A survey is under development to evaluate this goal – first, with those who have attended the Chancellor's STEM Speaker series events, and then in a general call via social media.

Smart Goal: Increase external understanding and awareness of West Virginia's STEM strengths and attract new STEM-based businesses by increasing external communication, public relations, and marketing activities starting January 1, 2016

The Division of Science and Research is continuing to host nationally-recognized STEM speakers via the Chancellor's STEM Speaker series. We also highlight West Virginia scientists and their research in brief documentary-style videos hosted on YouTube and promoted through *The Neuron*, Facebook and Twitter.

Key Objective: Innovation Economy Development

Smart Goal: Grow number of technology based businesses by 2% annually starting July 2016

No information available

Smart Goal: Increase research and development public and private expenditures in WV by 6% annually starting January 1, 2016

The latest data from NSF on research expenditure will not be available until November 2016 at the earliest.