

Statewide Broadband Deployment in West Virginia

"West Virginia needs statewide high-speed bandwidth to be competitive in the global economy. Cisco IBSG played a huge part in helping us to identify how to reach that goal in the most effective and efficient manner possible. We are already seeing the positive impact of that work."

— Joe Manchin, governor, State of West Virginia

In Brief

Joe Manchin was elected governor of West Virginia in 2004, and was reelected by overwhelming majority for a second term in 2008. During his administration, the state has experienced its lowest-ever unemployment rate at 4.6 percent, has retired burdensome debt, lowered taxes, reengineered mine safety, and reformed worker's compensation. When Governor Manchin was elected, he stated that, "... by 2010 all West Virginians will have the opportunity to use broadband at home and at work." West Virginia is a mountainous state with a large rural population. According to the latest U.S. Census, the state, with a population of 1.8 million, has the third-lowest per capita income, is last in median household income, and last in the number of adults with a college education. Many rural citizens live in remote mountain hollows, and 37 percent are disabled and/or over the age of 65 (the U.S. average is 28 percent). Cisco Internet Business Solutions Group (IBSG) initiated the statewide broadband deployment process by conducting discovery interviews with cabinet members and key staff to identify which areas of government and education would benefit most from the deployment of high-speed broadband infrastructure. The greatest opportunities were found to be in education, healthcare, public safety, and economic development. IBSG began to work with champions in each area to transform West Virginia's educational system from 43rd in the U.S. to world class; broadband communication from spotty to ubiquitous and robust; healthcare from difficult to access to virtually pervasive; public safety from siloed to integrated; and a workforce and economy from regional to globally connected. Collaboration involved the participation of multiple vertical specialists, enabling integrated solutions across agency and industry silos, resulting in truly transformational results.

Customer

State of West Virginia

Industry

Government

Challenges

- A widely dispersed and economically disadvantaged population in a mountainous state.
- An education system with schools in remote areas where there is no broadband access.
- Students who view a college degree primarily as a ticket out of the state.
- A public safety environment complicated by its proximity to Washington D.C., and demands from the federal government.
- A high number of homebound residents whose trips to the doctor are an ordeal.



Cisco Internet Business Solutions Group (IBSG)

Solutions

- West Virginia Department of Commerce, Department of Homeland Security, Department of Education, Office of Technology, First Lady Gayle Manchin, and Cisco IBSG worked with community leaders on a plan to extend broadband access across the state.
- The substance of the plan was legislated in 2008.
- The governor's goal is ubiquitous broadband by 2010.

Projected Results / Benefits

Anecdotal results indicate that the following improvements are taking place as a result of ubiquitous broadband deployment:

- Improved economic activity across the state, estimated at more than \$600 million in annual economic impact, 12,000 new jobs annually, and nearly \$5 million in avoided healthcare costs by the time the deployment is complete.*
- Improved national rating of West Virginia education system, higher attendance, fewer dropouts, and more college admissions.
- Better public safety response and coordination across the state due to interoperable communications systems and improved surveillance.
- Improved access to healthcare will allow the elderly to live at home longer and reduce emergency room visits, mortality, inpatient stays, and nursing home admissions.

Best Practices / Lessons Learned

- **Executive commitment:** Governor Manchin is a hands-on executive with a high profile (Manchin is a former chair of the Democratic Governors Association) and 100 percent commitment to the broadband deployment program. Champions were identified in each critical area to work with the team. West Virginia Secretary of Commerce Kelley Goes was designated by the governor to lead the initiative.
- **Connecting the dots:** The first step was to interview the stakeholders and understand their concerns and objectives. Stakeholders included other Cisco IBSG vertical experts, industry, the state legislature, and elected and appointed officials. Cisco IBSG in effect "swarmed" the state with vertical experts in each of the key target areas of education, healthcare, public safety, and economic development.
- **Look for a quick win:** IBSG identified areas that would most clearly benefit from statewide broadband infrastructure and focused on improvements in these areas. Quick wins in these areas will lead to interest from other quarters.
- **Establish credibility for Cisco:** IBSG called upon subject-matter experts within Cisco to consult with vertical areas, demonstrating the expertise and knowledge to accomplish the job.
- **Build on a successful initiative to start another:** Success in original target areas has contributed to broadening the scope of IBSG's work in West Virginia.

*[The Economic Impact of Broadband](#)

IBSG Consultants

Pete Cevenini
Phone: 703 945 4588
Email: pcevenin@cisco.com

Jeff Frazier
Phone: +1 919 392 4132
Email: jefrazie@cisco.com

John Goggin
Phone: +1 518 527 4010
Email: jgoggin@cisco.com

Carolyn Purcell
Phone: +1 512 917 7448
Email: purcellc@cisco.com



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco StadiumVision, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn is a service mark; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0804R)