



Tools for Achieving U.S. Technology Independence and Job Growth: Understanding the Challenge

IT services can come from anywhere on the globe where there is adequate connectivity and a trained workforce. Today, we have the opportunity to retain these high-wage, high-skill, high-demand jobs in the United States by locating them in rural areas that have competitive cost structures, trained workforces, and sufficient broadband access. Not only does such IT on-shoring bring core jobs back to rural areas suffering chronic job losses in agriculture, mining, and manufacturing, it also addresses the national security imperative -- identified by such groups as the National Academy of Sciences and the Defense Sciences Board -- to keep oversight and control of sensitive IT infrastructures, data, and software and to develop a domestic pool of IT talent.

Rural American cost structures are increasingly competitive with off-shore locations. According to ITAA, domestic sourcing of applications-related projects in rural and mid-sized urban areas can generate 30 percent savings over more expensive domestic locations, such as Silicon Valley. This savings is competitive with the 20 to 40 percent savings from off-shore outsourcing of such projects. And domestic cost competitiveness will continue to improve as inflation and standards of living in premier IT outsourcing locations, such as Brazil, Russia, India, and China (the BRIC nations) continue to rise.

The key to on-shoring high-skill IT jobs is to combine the cost advantage of rural locations with a skilled workforce, effective deployment of core business application and management processes, and adequate broadband connectivity. The Southwest Virginia Center of Excellence in Lebanon, Va., is a model of how such a public-private effort can work to revitalize an economically depressed community and protect sensitive data and technology. In 2007, CGI opened this 42,000-square-foot facility that employs 300 software developers, analysts, and consultants at wages that exceed the county average by 50 to 60 percent. The project will generate more than \$65 million in economic activity in the region by 2010. The facility supports a mix of private- and public-sector clients. Key factors in ensuring the facility's success include:

- **Closing the Skill Gap.** CGI worked directly with Southwest Virginia Community College to develop a "fast track" program aimed at individuals with two-year degrees and basic computer skills, interests, and aptitudes. The program teaches design and database concepts and all major programming languages. Among fast-track graduates, 62 percent are employed either by CGI or other IT employers, with others still moving through.
- **Closing the Broadband Gap.** In the 1990s, Russell County, Va., realized that the IT industry could be key to its revitalization. The county leveraged \$1.6 million in federal funds and \$710,000 in state monies to develop a 51-mile fiber-optic backbone that serves Russell and Lebanon counties. This provides the key infrastructure necessary for IT companies to locate in the region.
- **Leveraging Core Processes.** Geographically dispersed IT business partners must apply core application and management processes to consistently achieve high-quality IT results. At the Southwest Center, CGI applies the processes that it refined and standardized at its other centers to ensure highest quality software development and maintenance services.

Other locations in the United States can implement successfully the lessons learned in Southwest Virginia about infrastructure, workforce development, and business processes standardization. With support from federal, state, and local policy-makers, and the involvement of private-sector partners, IT on-shoring can revitalize other rural areas while promoting national security objectives.