



Issue Brief

September 2004

NASCIO Staff Contact: Chris Dixon; cdixon@amrinc.net; (859) 514-9148

Putting the “E” in Economic Development: Leveraging E-Government Services for Economic Growth

Introduction

Regardless of economic circumstances, elected officials are always responsive to policy options that promote economic development for their constituents. One such option which is often overlooked is the deployment of digital government services. When such service-delivery options are discussed, they are usually framed in terms of quantifiable operational benefits at the back end. However, this brief, which is the third installment in a series of briefs addressing the role of the state chief information officer (CIO) in economic development, will look at how digital government services can provide soft returns on investment (ROI) in terms of economic development.

In his Deloitte Research report “Citizen Advantage™: Enhancing Economic Competitiveness through E-Government” (November 2003), William Eggers offers an excellent overview of how governments can calculate the hard and soft savings for B2G and C2G service providers and customers, including entrepreneurs, business owners, and citizens. He pays close attention the ROI that can be captured by taxpaying citizens and businesses when they can better find, understand, and comply with registration, credentialing/licensing, permitting, reporting, and payment requirements via digital government services. Mary Gay Whitmer compiles the variety of state government ROI approaches in her NASCIO issue brief, “States’ Methods of Calculating ROI on IT Projects” (October 2002).

Building on the work already contained in the Eggers and Whitmer publications, this issue brief will focus on real-world examples of B2G and C2G services with economic development impact beyond the ROI from streamlining. Special attention will be paid to how states are using their Internet Age infrastructure investments as G2G “digital coattails” to help county and municipal governments serve their citizens. The state-and-local aspect of G2G service provision has not been nearly as well documented as the federal-and-state aspect. Finally, some “prestige” services that don’t fall into the established x2G categories will also be cited.

Additional Resources:

- City of Tampa’s “eGovernment Savings Calculator”:
http://www.tampagov.net/egov/savings_estimator/
- Iowa’s Return on Investment (ROI) Program:
http://das.ite.iowa.gov/roi/roi_program.html

Copyright © NASCIO 2004 • All rights reserved

167 West Main St., Suite 600 • Lexington, KY 40507

P: (859) 514-9153 • F: (859) 514-9166 • E: nascio@amrinc.net • <http://www.nascio.org>

C2G Services – Creating, Attracting, and Keeping Tech-Savvy Workers

Working in Utah

In addition to being one of the most prominent and comprehensive state business portals, the newest version of Utah’s one-stop portal, Business.utah.gov, which went live in August 2003, includes a variety of services for visitors, students, and workers, including online filing for unemployment benefits. For those looking to relocate to the state, a section on living in Utah includes career support, community, social services, entertainment, cultural, and legal information. The site includes hundreds of links to online services, FAQ tutorials, live 24/7 online help, RSS feeds, and a user satisfaction survey.

(<http://www.utah.gov/working/workforce.html>)

South Dakota’s Computer-Based Media Production and Distribution Project

A partnership between South Dakota Public Broadcasting (SDPB), which falls under the purview of the state CIO, and the South Dakota High School Activities Association (SDHSAA) encourages high school students to use multimedia production tools to chronicle and promote the results of athletic and fine arts competitions. The project leverages the SDPB website, the state’s K-12 telecommunications network, and state-provided multimedia tools. The state has trained staff at each high school to teach students how to do audio and video production for the web, thus introducing the students to practical Internet Age career experiences and providing local communities with coverage of localized athletic and fine arts participants.

(<http://sports.sdpb.org/>)

Wisconsin’s Deaf/Hard-of-Hearing (D/HH) Program

Wisconsin’s Department for Workforce Development and the University of Wisconsin-Madison (UWM) teamed up to overcome the state’s shortage of highly skilled captioners and translators via the use of remote video and audio connections. A partnership with a regional post-secondary educational outreach program expands the reach of the program beyond (UWM). Today, the UWM program alone allows more than 40 D/HH students to advance their education and economic potential for the state.

(<http://www.uwm.edu/Dept/DSAD/SAC/dhh/>)

B2G Services – Creating and Keeping Jobs

Given the number of licensing activities conducted by state governments, an ideal online service would aggregate them into common “families” so that processes could be streamlined and a common infrastructure put into place. Such consolidation—even in a purely superficial or “online” sense—cuts across many departments and agencies serving citizens, professionals, and business owner and operators. States, such as Texas, Washington, and Wisconsin, have created departments of licensing and regulation. However, only Washington has combined the full spectrum of citizen, professional, and business licensing into one portal while most states have created mini-portals for one or more of the vertical licensing subsets with particular emphasis on business startups, expansions, and relocations. The recent California Performance Review recommended that California create one such mini-portal, a “One-Stop Business License

Center,” accessible by both telephone and the Internet and operating similar to Washington State’s business Master License Service (MLS).¹

[Virginia’s Center for Innovative Technology \(CIT\)](#)

The Center for Innovative Technology (CIT), which falls under the purview of the commonwealth’s Secretary of Technology, is intended to “accelerates Virginia's next generation of technology and technology companies” via research and investment, securing federal funds, providing access to capital, assistance to small businesses, and fostering broadband and e-business through ten regional offices and 13 university research institutes covering the entire state and headquartered in Northern Virginia. CIT has recently organized the Institute for Defense and Homeland Security (IDHS) research.

(<http://www.cit.org/>)

[Washington State Department of Licensing](#)

The homepage for Washington’s Department of Licensing provides access to vehicular, driver, business, and professional licensing along with voter registration. Not every process can be completed online, but in nearly every case a renewal can be. (There’s still no way to complete the parallel-parking portion of the driver’s test online!) The business licensing process uses an extensive variety of checklists and the Washington Licensing Information (WALI) wizard to guide applicants to the appropriate forms which most types of business can complete online.

(<http://www.dol.wa.gov/>)

[Kentucky’s Entrepreneur Resource Navigator \(ERN\)](#)

The Small and Minority Business Division of Kentucky’s Cabinet for Economic Development offers a county-specific online tutorial for users that helps them build a “my folder” portfolio of information. It also connects to the Economic Development Information System (EDIS), which provides access to a geographic locator for business sites based on lot size and proximity to key infrastructure such as rail service, highways, and airports. ERN takes an Internet Age approach by linking users to the state’s Department of Innovation and Commercialization for a Knowledge Based Economy, which seeks to advance businesses in A) human health and development, B) the biosciences, C) information technology and communications, D) environmental and energy technologies, and E) materials science and advanced manufacturing.

(<http://www.thinkkentucky.com/SMBD/ern.asp>)

G2G Services – E-Enabling Local Governments

Few counties and municipalities in this nation have the resources to develop a robust informational web presence much less a robust transactional one. The burden will be on state governments to extend their “digital coattails” to the locals to help them deploy web-based services with economic development value. State governments already hold much of the necessary data and have built much of the necessary infrastructure; however, they must provide gateways that users can find (much as the federal government has at businesslaw.gov) and web interfaces, or templates, that will allow local governments to plug these resources into their websites.

¹ California Performance Review, “GG22 Create a One-Stop Business License Center for California Businesses,” n.d., <<http://report.cpr.ca.gov/cprprt/issrec/gg/bus/gg22.htm>> (8 September 2004).

Iowa State County Treasurers Association's E-Government Services

Iowa's Department of Administrative Services Information Technology Enterprise (ITE) leveraged its state portal contract with Iowa Interactive, Inc., a Des Moines-based subsidiary of NIC, to provide all 99 of the state's counties with the infrastructure and templates to transact property tax payments online. More than \$130 million in payments were collected online in the FY2003. The project is the recipient of much national recognition and stands as a model of how state CIOs can provide digital coattails to local governments. Hawaii, Indiana, Maine, and Nebraska are also among states that have leveraged their NIC contracts to provide web tools to counties and municipalities.

(<http://www.iowatreasurers.org>)

Georgia.gov Local Information

Using a map- and link-based interface of its state homepage, the Georgia Technology Authority (GTA) has provided all of its counties and many of its municipalities with online "business cards" that they can maintain themselves. The cards include brief profiles of each unit as well as contact information and links to any other specific services and sites that the cardholders can provide. GTA sees the business cards as the first step toward fostering a more robust online presence for its local units of government.

(<http://www.georgia.gov>)

Michigan's Cyber-state.org

In its fourth year of existence, Cyber-state.org has been tracking the online presence of the state's 1,859 local government units, including cities, counties, townships, and villages. Since 1999, the state has seen a 25% increase in local governments online. Currently, 75% of counties, 39% of cities and villages, and 22% of townships have a web presence. Michigan is also using the Web Attribute Evaluation System to score the maturity of the web presence in each category. The state's Department of Information Technology (DIT) is currently looking into infrastructure tools that it can deploy to help get more localities online and conducting digital government transactions.

(<http://www.cyber-state.org>)

Additional Resources:

- Center for Technology in Government's guide "Making A Case for Local E-Government" (July 2002)
http://www.ctg.albany.edu/publications/guides/making_a_case
- Cyberspace Policy Research Group's Website Attribute Evaluation System (WAES)
<http://www.cyprg.arizona.edu/waes.html>
- ICMA's report "High Payoff in Electronic Government: Measuring the Return on E-Government Investments" (2003)
<http://www.icma.org/main/ld.asp?from=search&ldid=15908&hsid=1>

Prestige Services – Creating an Internet Age Reputation

Workers, entrepreneurs, and business owners in all types of business face a variety of technological and non-technological drivers, including the emergence of mobile technologies and traffic congestion. Below are two digital government services that address such commercial and lifestyle concerns. Except for online learning, these services haven't traditionally been

Copyright © NASCIO 2004 · All rights reserved

167 West Main St., Suite 600 · Lexington, KY 40507

P: (859) 514-9153 · **F:** (859) 514-9166 · **E:** nascio@amrinc.net · <http://www.nascio.org>

thought of in term of economic development impact, but they can easily be evaluated in such terms using Eggers's approach.

Transportation Information System for Massachusetts Consumers, Visitors, and Business Partners

As Americans continue to cluster in increasingly traffic-congested metropolitan areas, transportation information and intelligent transportation services will be more than mere safety tools. They will be beneficial to travelers, commuters, and commercial drivers seeking to save time and find recreational opportunities. The Commonwealth of Massachusetts's Executive Office of Transportation (EOT) is developing a mini-portal that aggregates a variety of transportation related information sources and services. Citizens will be able to find construction updates, traffic cameras, public transportation, rail, maritime, air, biking, and pedestrian traveler information.

(<http://www.mass.gov/eotc/>)

Virginia's Wireless and PDA Services

Wireless personal digital assistants (PDAs) are rapidly becoming a significant Internet access point for many citizens. The Commonwealth of Virginia has gotten out in front of this trend by offering a PDA-optimized version of its website that offers an extensive subset of information for users on the go. Among the services offered are emergency notifications, legislative tracking, tax filing, tourism information, and even the locations and operating hours of ABC stores.

(<http://www.vipnet.org/mobilegov/>)

Kentucky's Commonwealth Virtual University

Since going live in 1999, Kentucky's Commonwealth Virtual University/Library/High School/Adult Education program has enrolled thousands of students who have been able to advance their educations at reduced cost and in ways that meet the needs of their lifestyles and career situations. The program offers dozens of secondary, associate, baccalaureate, and masters degrees as well as licenses and certificates. The program includes nearly every state university and community and technical college entity.

(<http://www.kyvu.org>)

Conclusion

State CIOs already have access to methodologies that will allow them to assess the back-end (hard) and user-end (soft) savings from digital government services. More research will have to be done into the impact of services on the decision making of visitors, students, workers, entrepreneurs, and business owners. Until then, state CIOs will have to rely on more anecdotal assumptions. But, this should not prevent them from including discussion of the potential economic development impact of certain digital government services, projects, and programs in business case justifications.

So far, several different types of digital government-related endeavors with economic development impact can be identified as follows:

- Mini-portals with vertical aggregations of services for visitors, students, workers, entrepreneurs, and business owners
- One-stop, aggregate portals with user-oriented aggregations of services for visitors, students, workers, entrepreneurs, and business owners
- Directories, shared template architectures, and infrastructure that helps counties and municipalities get online with informational and transactional websites *and* help visitors, students, workers, entrepreneurs, and business owners find these services
- Projects and programs that use state-owned resources to introduce students to Internet Age technologies and advance their education in technology and other fields
- Projects and programs that expand economic opportunities to underserved portions of the population and increases the state’s intellectual capital
- Services that increase the channels by which visitors, students, workers, entrepreneurs, and business owners can access the services they seek on their terms

Promoting digital government in terms of economic development impact could be make-it-or-break-it element that determines whether a given proposal is green-lighted in an era of tight budgets and increasing global economic competition. NASCIO will continue to watch developments in this area. More importantly, NASCIO will continue to promote the economic development perspective to state CIOs who must, in turn, promote it to their states’ policy makers. Already, it appears that advancement of digital government from this angle has been emerging slowly and disjointedly. While not every state will have a Silicon Valley, the nation as a whole has a huge stake in this approach and every state that takes up the charge should be able to share some portion of the global benefit that will accrue to tech-savvy governments.

This issue brief was produced under the guidance of the Economic Development Subcommittee of NASCIO’s Strategic Business and Services Committee.