



June 8, 2009

Marlene H. Dortch  
Office of the Secretary  
Federal Communications Commission  
445 12 Street, S.W.  
Washington, D.C. 20554

RE: Comments to the FCC National Broadband Plan Notice of Inquiry  
GN Docket No. 09-51

Dear Ms. Dortch:

On behalf of the National Association of State Chief Information Officers, I am pleased to submit the attached comments, which represent the views of my association on a range of issues relating to the FCC's role in developing a national broadband plan. NASCIO regards expansion of broadband services to unserved and underserved areas as a critically important element for enhancing the nation's digital infrastructure, and with that in mind, welcomed the opportunity to provide input.

Please note that NASCIO chose to comment only on a subset of the questions raised in the NOI. Our responses are directed specifically at highlighted portions of those questions, as indicated.

Should you have any questions regarding NASCIO's comments, please feel free to contact Doug Robinson, NASCIO's executive director, at 859 514-9153 or by email at [drobinson@amrms.com](mailto:drobinson@amrms.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Gopal Khanna'.

Gopal Khanna, President  
National Association of State Chief Information Officers

CC: Doug Robinson  
NASCIO Executive Director

### **Defining Broadband Capability**

18. (p. 6) We also request comment on whether a definition of broadband should be static or dynamic, with speed tiers that adjust with changes in technology. Further, we seek comment on the definitions for broadband used by other government agencies and how any such definition by the Commission would impact the various government programs designed to improve consumers' access to or use of broadband services. For example, **should the Commission define broadband in the same manner as other agencies charged with implementing parts of the Recovery Act?** We also seek comment on any definitions for "broadband" used in other nations or international organizations that may be useful to the Commission in this proceeding.

*Comment:* NASCIO encourages the Commission to work in cooperation with NTIA and RUS to employ a single definition of broadband that is consistent and used across the breadth of government. The Recovery Act alludes to this coordination, in recognition that a single metric is critical to the effective and efficient expenditure of ARRA BTOP funding and to broadband roll-out generally. NASCIO also encourages a definition that focuses on end-user experience, and not advertised but seldom-achieved connection speeds. The current FCC standard of 768 Kpbs provides a useful floor, though many unserved or underserved populations would benefit from Internet connections of speeds that are significantly less than that. Speeds substantially higher than 768 Kpbs are needed to support more advanced state government online applications, such as video arraignments, remote health diagnostics, etc. Regular upgrades to the definition are needed to protect the nation's economic interests and competitiveness. NASCIO recognizes that user experience plays a significant factor in right-sizing broadband definitions, and as content and service demands change, expectations will change.

19. (p. 6-7) Because a range of technologies may be used to provide broadband services in a variety of situations, we seek comment on whether to adopt different definitions or standards of what constitutes broadband based on the technology being used to provide the service or the context in which the service is applied, or some combination of both. For instance, should a different set of standards be used to identify mobile broadband services – which allow mobility or portability but may have lower throughputs – and fixed broadband services? Should the definitions vary depending on whether the broadband service is used to serve residential or business customers and if so, how? Should rural regions, with their inherently higher deployment costs, have different definitions or standards for broadband than urban areas? How should satellite technology with comparatively limited bandwidth and higher latency but potentially lower cost of deployment in rural regions be accounted for? Should our definition include some baseline dependability metric? **Are there other dependability concerns, such as susceptibility to weather disruptions, that need to be addressed now or in the future?**

**Comment:** The Internet has become a critical communications path and, based upon the growth of e-mail, text, and video communications; it has outdistanced traditional voice communications from a volume perspective. As voice communications moves to the Internet, consumers are becoming increasingly reliant on robust, reliable broadband communications. Citizens, businesses, and governments all are increasingly dependent on a high level of broadband availability, and if connections are not consistently available, consumers are hindered in their public and private uses of the Internet, business functions fail, and government services cannot be delivered. This also impacts broadband adoption, since businesses and the public are less likely to employ services that are unreliable.

As stated above, NASCIO urges the FCC to adopt a definition of broadband that focuses on end-user experience as measured in real world conditions.

20. (p. 7) In shared bandwidth broadband access technologies, how should actual speed delivered to consumers be determined, taking into account that for wireline systems, frequency bandwidth, the number of simultaneous users, and distance to the end user affect the data rates delivered? . . . **In general, how should the speeds and other characteristics of services delivered to consumers be determined?**

**Comment:** NASCIO believes that all measures of broadband speed should be based on typical sustained speeds. Broadband should be able to independently demonstrate that a typical user consistently gets that level of service. Any technological limitations, such as decrease in speed over distance, should be clearly documented and disclosed to customers in easily to understand examples before start of service. Currently, broadband providers use largely unachievable theoretical maximum speeds in their advertisements that can mislead the average customer.

### **Defining Access to Broadband**

27. (p. 9) **We also seek comment on the extent to which access hinges on affordability.** For instance, how should the Commission consider broadband services fully deployed to an area, but set at a subscription cost that is unaffordable to some or many residents of the area? Commenters should discuss other distinctions that may be relevant and should be taken into consideration in developing a national broadband plan.

**Comment:** Among the many factors that may inhibit the adoption of broadband service where it is available today, affordability may be the most complex. Once the consumer has been able to acquire a PC or other device and gained secure broadband access, the crux of the affordability issue becomes his or her ability to pay, rather than the price of the service. Especially in these tough economic times, budgeting for a \$30-\$50 a month Internet bill is less and less feasible. The monthly cost of broadband for those disadvantaged citizens is ideally lowered, but whether this is through direct subsidies, public access stations, or a combination of both is unclear. As measured on a cost per megabit, the US is consistently more expensive than nations that have a comprehensive broadband deployment commitment.

### Measuring Progress

29. (p. 10) In order to develop a national broadband plan, we need up-to-date and complete information on existing broadband deployment and possible future deployments. The Commission collects a variety of information regarding broadband subscribership. We seek comment on how the Commission's existing data collections, as well as ones that we could undertake, can play a role in measuring our nation's progress toward the goal of ensuring that all Americans have access to broadband. Specifically, we seek comment on which metrics the Commission should use to measure progress and how such metrics capture the variety of communities and technologies across the nation. Further, we seek comment on how the information collected from consumers based on the periodic consumer surveys may assist the Commission in establishing or measuring progress.

**Comment:** NASCIO recommends that the Commission uses the metrics of access, adoption, reliability, and speed at the most granular level practical. Many state members regard the current census tract level as inadequate in terms of granularity. See our response to question 61 for further commentary.

### Market Mechanisms

37. (p. 12) Market mechanisms have been successful in ensuring access to broadband in many areas of the country. . . . What have been the results of consolidation in some parts of the telecommunications industry with regard to broadband deployment? What is the role of spectrum policy, tax incentives, and other initiatives in promoting market-based delivery of the goals of a national broadband plan?

**Comment:** NASCIO generally believes that robust competition speeds broadband roll-out and that in instances where competition has narrowed to a single wireline carrier vs. a cell carrier, roll-out is significantly slowed and unserved and underserved areas persist. This presents a roadblock to the expansion of interactive online government services, making it a critical public policy issue.

Wireless remains the most cost-effective and rapid means to bring broadband access to unserved and underserved citizens, especially in rural areas. One of the significant obstacles for wireless providers to expand broadband availability is access to appropriate licensed spectrum. NASCIO encourages the Commission to continue to look for opportunities to lower barriers to spectrum access by increasing the amount of publicly available spectrum and encouraging other means to share existing spectrum. Purchased spectrum which is not used to deploy broadband represents an underutilized resource, and NASCIO also encourages the FCC to examine unused licenses and explore means of promoting full deployment.

### **Determining Costs**

38. (p. 12) In order to capably develop a national broadband plan, how useful or necessary is it for the Commission to understand the costs of deploying broadband networks to the unserved and underserved areas of our country? **Should the national broadband plan seek to bring broadband to 100 percent of the country? If so, what are the costs and benefits of bringing broadband to the least densely populated areas?** We seek comment on how we can better estimate the cost of deploying various alternative broadband technologies to those areas that the market is not serving, or not adequately serving. Which broadband technologies might work best and deliver the most effective, efficient services in various parts of the nation? For this task, are cost models a viable tool, or are there other appropriate ways for estimating deployment costs? If cost models are appropriate tools, how should the Commission develop or otherwise obtain them? Can these methods be verified in some objective, dependable manner?

**Comment:** NASCIO believes that the National Broadband Plan should strive to ensure that every citizen (100%) has access to broadband services. As a key element of the supply-chain through which government delivers services to its citizens, there is an equity issue wherever access is not provided. This does not necessarily mean that a wire or a wireless signal can reach every household throughout the country -- some geographic areas just may not be reachable. However, a community computing center can/should be provided in these areas so that residents do have the ability to get out to the Internet if desired. In cases where no ROI model could ever re-coup the capital expense of reaching individual households, some ongoing form of subsidy may be necessary. The benefits of having broadband access should be considered in light of the fact that the investment may pay for itself in energy conservation, education, shopping, telecommuting, economic competitiveness, etc. In many instances, the survival of underserved rural communities may be at stake.

### **Affordability & Maximum Utilization**

52. (p. 19) The Recovery Act requires that the Commission formulate “a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public.” We seek comment generally on how to interpret this task, including how the goals of affordability and maximum utilization work together, or separately. **As broadband becomes more affordable, will more consumers use broadband?**

**Comment:** NASCIO believes that lower prices in combination with richer, more securely delivered, and easier to use content and services will lead to far greater broadband utilization, although, just as with other adoption rates, e.g., with telephone service, 100% adoption is likely to remain elusive. While many prospective users do not yet see the value proposition we believe to be inherent in Internet-delivered services, it is expected that the economic and social benefits of high speed connectivity will be more and more apparent over time.

53. (p. 19) We seek comment on **how consumers and businesses are using broadband**. Similarly, we seek comment on who is (and is not) using broadband – children, immigrants, small businesses, seniors, persons of color, tribal communities, people with disabilities, people with low income, and others. We seek comment on how we would monitor or measure affordability and maximum utilization of infrastructure, and how we might address any problems, including changes or additions to regulatory requirements that need to be made to better address affordability and maximum utilization? How could the Commission establish benchmarks or measure progress toward this goal? Are there existing data sources the Commission could draw upon, or are there specific data the Commission should collect itself? In this regard, we seek comment on how we should incorporate the analysis and recommendations of the Government Accountability Office, which is tasked with developing a report analyzing additional metrics for broadband cost, capability, deployment, and penetration. Further, we seek comment on any programs or policies adopted by other nations or international organizations aimed at achieving affordability for broadband services that may be useful to the Commission in this proceeding.

**Comment:** The range of activities that are made possible and that are happening as a result of Internet service are far too great to enumerate here. To put it into general terms, Internet connectivity is impacting life in the 21st century in ways comparable to how railroads, highways, and telephone and power lines impacted the 19th and 20th centuries. Internet connectivity enables commerce, education, e-government, entertainment and many other activities – it directly supports the economic health of the nation.

A key element for the FCC to consider is that transition from simpler, lower-speed connectivity to broadband is already well-underway; the marketplace of the nation and the world amply demonstrate this. Governments certainly understand some of these market demands and are relying on the availability of more robust speeds to deliver a broadening array of services so that costs sustained in analog service delivery can be driven down. Citizens have demanded that governments change, and broadband is one of the infrastructure elements government requires to make the changes demanded. Simply put, government can no longer afford to staff the wooden desks and to meet people over the counter. Neither do citizens expect that kind of eight to four-thirty service delivery model.

To a significant degree, the progress governments at all levels can make in delivering 21st century services – real-time interactions for ehealth and civic engagement – are resource- and bandwidth-intensive, and require BTOP and follow-on programs to succeed.

### **Broadband Privacy**

59. (p. 22) The last several years have witnessed significant growth in multi-platform services, such as mobile wireless telephones enabled with broadband Internet access; bundled service offerings of voice, video, and broadband communications; and voice services offered over broadband. What are consumer expectations of privacy when using broadband services or technology and what impact do privacy concerns have on

broadband adoption and use? We also note that certain broadband providers have purchased the behavioral advertising services of companies that advertise an ability to “deliver[] the most actionable consumer intelligence by extending [those companies’] reach dynamically to encompass the ever-growing network of sites that consumers visit.” These companies track the webpages customers visit, the searches they perform, and the ads they click, among other information. Consumers may also be aware of the technological ability that broadband providers have to perform functions such as deep packet inspection. **What is the impact of this type of activity on consumers’ willingness to use broadband services?**

**Comment:** It is not clear if this type of activity is in the purview of the FCC -- this may more closely align with the Federal Trade Commission (FTC) as deceptive advertising or Department of Justice (DOJ) as invasions of privacy. Historically, if consumers do not trust a product or have privacy concerns they will choose not to adopt or use the product. This issue would have to be addressed from both sides. First, additional education for the consumers on what level of privacy they have on the Internet. Secondly, the government should promptly react with strict enforcement when consumer protection laws (new or existing) are violated.

### **Subscribership Data & Mapping**

61. (p. 23-24) The Recovery Act requires the Commission to develop a national broadband plan that includes “an evaluation of the status of deployment of broadband service, including progress of projects supported by the grants made pursuant to this section.” We note that the Commission recently revised its Form 477 collection of data regarding broadband subscribership. In particular, the Commission is beginning to collect broadband subscribership data at the Census Tract level, including data on the number of subscribers using different technologies, and at various upload and download speeds. We seek comment on how the Commission can use these data to report on the status of broadband deployment, including any benefits and limitations inherent in these data. We also seek comment on how additional measures, such as broadband availability data and mapping, would help the Commission to accurately assess the status of broadband deployment. **For example, does measurement by Census Tract adequately capture deployment on tribal lands, or in rural areas?**

**Comment:** NASCIO believes the recent move from ZIP code to Census Tract based reporting is a step in the right direction but still does not provide the level of granularity that is needed in both urban and rural areas. A further level of detail is needed. One possible solution would be to move to a smaller unit, such as census block, and include what portion of that smaller unit the provider can service. Ultimately, street level or address level data should be collected. Whatever data is collected, it should be available in an interoperable and open data format, perhaps an XML schema, that could be used for GIS and other spatial analysis applications.

## Advancing Consumer Welfare

67. (p. 25) We ask for comment generally on how advances in technology are helping to advance consumer welfare. We seek comment on what applications are emerging or may emerge in the future that will advance consumer welfare and what their network requirements will be. As Internet and computing security issues consume a great deal of resources by consumers of all types, **how should the Commission take security issues into account as it develops a national broadband plan?** Additionally, we seek comment on how consumers understand the dependability of broadband services and if there are ways to improve consumer understanding of the benefits and limitations of their services. Would consumer welfare be enhanced by more disclosures to customers of any limitations that providers place on broadband services, including limitations that may be placed on service on a temporary or intermittent basis, to deal with network congestion or for other reasons?

**Comment:** In asking how it should take security issues into account as it develops a national broadband plan, the Commission touches on an area of extreme importance to NASCIO and its members, which is that to a very significant extent, Internet security does not automatically come with Internet connectivity, but on the contrary requires a level of citizen awareness and proactivity that the public is often woefully short of.

The Federal government and states have taken strong steps to encourage the public to use the Internet to an ever-increasing extent, and these agencies have an equal responsibility to educate consumers and small businesses about the risks they incur when they use it without appropriate security awareness and protections. This is especially important as new connectivity options are made available to first-time users. It is absolutely imperative that first-time users take advantage of new services with full confidence they are secure from fraud, identity theft, and other potential hazards of online use.

## Civic Participation

70. (p. 26) The Commission is also instructed to formulate “a plan for use of broadband infrastructure and services in advancing . . . civic participation.” We seek comment on how to interpret and implement this portion of the Recovery Act. **We also seek comment on how the goals of open and accessible government aimed at increasing public awareness and participation in government can be amplified by access to broadband.**

**Comment:** The desire from citizens to have an easy and quick way to receive governmental services is ever-increasing. Many state governments have taken great strides over the past few years to increase e-government service availability, and many governments are eager to provide richer, more interactive services that require broadband connections, but are hindered by having to work with the lowest common denominator; i.e., the slower speeds of underserved populations and lack of any kind of connectivity in other instances. New emphases coming from the Obama administration on openness and transparency and toward a new era of greater civic engagement are strongly dependent on higher connection speeds.

To increase civic participation by citizens, government must be present in social

networking environments and collaborate with citizens and their businesses via the new media. Only broadband connections can facilitate such behavior.

### **Public Safety & Homeland Security**

73. (p. 27) We seek comment on whether and to what extent the national broadband plan should address means to protect and advance cybersecurity, specifically with respect to those broadband networks critical to the nation's critical infrastructure, financial institutions, public safety and homeland security. If so, what steps should be taken to secure the nation's most vulnerable broadband facilities and data transfers from cyber threats, such as espionage, disruption, and denial of service attacks? Should certain broadband service providers and operators adhere to specific standards or best practices to minimize such threats? Should the Commission adopt a process whereby communications providers can certify their compliance with specific standards and best practices? What agency or organization within the government is best positioned to take the lead inter-agency coordination role for protecting against and responding to cyber security attacks?

**Comment:** Broadband/Internet is already part of the nation's critical infrastructure and should be treated as such. It is rapidly becoming as important as electrical or water infrastructure. The recent trend in adopting voice over IP (VoIP) is eliminating the need for a traditional phone line to homes and business. Almost all industries depend on the Internet in order to function. Banks and other financial institutions use it to transfer funds, send images of checks, and allow their consumers access to their accounts. Grocery stores and gas stations use it for supply chain management, communications and payment processing. Schools use it to teach students, access far-flung sources of information and share resources. The nature of the Internet makes it hard to secure, thus a highly coordinated approach is the only one that can succeed. This is not just a FCC issue, the entire government and even other international governments need to coordinate activities for protecting against and responding to cyber security attacks. Challenges exist with securing those network endpoints residing in small businesses and/or remote geographies. Outreach efforts to these organizations is necessary to secure all sides of the nation's cyber infrastructure.

79 (p. 29) The prospect of a pandemic outbreak or act of bioterrorism raises the potential for radically shifting network traffic patterns. A likely result of a pandemic or bioterrorism threat is a large surge in citizens telecommuting from their homes or other locations rather than from their typical work sites. Could such a shift in broadband use from the workplace to the home trigger significant congestion and delays in the flow of data over broadband networks, particularly at the enterprise and residential Internet access levels?

**Comment:** The FCC should be aware that private sector tools support demand analysis and the provision of additional capacity in situations like those contemplated in this question. More effective and proactive public/private sector partnerships are needed to

create awareness of these tools and to ensure they are used in times of network stress.

### **Consumer Development**

80. (p. 29) The Recovery Act directs the Commission to include in its national broadband plan “a plan for use of broadband infrastructure and services in advancing . . . community development.” We seek comment on the interpretation and implementation of this portion of the Act. While one of the benefits of broadband is the ability to connect more efficiently with the global community, we seek comment on **how it could be used for developing local communities**. For example, how could a local community use broadband Internet access to identify local problems and enhance methods for solving those problems? Does or can broadband be used to help develop local resources, assess the needs of the local community, and foster cooperation and volunteerism on a local level? **How can broadband be used as a resource for economic development in communities across America?** How could broadband be used to provide communities with local news and information? How can the universal service High-Cost, Low-Income, Rural Health Care, and Schools and Libraries programs be modified to encourage community broadband development? What other local social goals may be impacted positively by broadband, and how could broadband access be used to further those goals?

**Comment:** NASCIO believes, with others, that broadband connectivity is essential to the economic growth and vitality of America, its states, and local communities, as critical as the electric power available to citizens at the flip of a switch or the roadways at the end of their driveways – connectivity is another vital element of the nation’s infrastructure. State governors and local communities place business attraction and citizen retention at the top of their priority lists, especially in today’s economic climate. Broadband plays an increasing role in attracting new business into communities across the country, as well as in sustaining the viability of existing businesses large and small. As social networking applications and real time collaboration tools become richer and are more widely used by governments at all levels, and as distance learning, telecommuting, e-commerce, and eHealth initiatives come to fruition, broadband becomes a requirement, not an option.

## Health Care Delivery

84. (p. 30-31) We also seek comment on how improved broadband infrastructure and services can increase the quality of medical care available to unserved and underserved parts of the country through tele-health initiatives. For example, how effective have existing efforts been and how can they be improved? To what extent would potential regulations impede or enhance development of a vibrant nationwide tele-health network? What effect would this network have on our economy and jobs? We also seek comment on ways in which Rural Health Care Pilot Program projects are advancing implementation of a national interoperable health information technology infrastructure. In doing so, we seek comment on lessons learned from the pilot and suggestions concerning how the Rural Health Care program can further this initiative.

**Comment:** The modern healthcare system requires that more and more data and information flows between patients and communities of medical responders, and broadband is the mechanism that makes this flow possible. Whether this supports remote consultations and treatment via video conference with experts from across the country, sharing health information within a health information exchange, or a computerized drug order entry system that reduces adverse drug interactions, all require reliable, secure, and affordable broadband access.

Use and adoption of health information technology (health IT or HIT) is a vital element of the current administration’s drive to reduce spiraling healthcare costs. HIT is a recipient of over \$30 billion dollars in separate stimulus funds, and its implementation will dramatically increase in the next few years and place an enormous demand on the broadband infrastructure. More doctors and other medical professionals are choosing to not install an electronic health record (EHR) within their practice but instead are using a hosted solution (a.k.a. application service provider (ASP) model) where the EHR is delivered to the practice over the Internet. This requires an extremely reliable and high-speed connection. New telehealth projects are starting to include “in-the-home” aspects that require a broadband connection to the patient’s home.

85. (p. 31) We also seek comment on how we can continue to work with HHS and other agencies to maximize the penetration of tele-health initiatives, educate citizens on broadband and tele-health options, and generally use broadband to increase health awareness, diagnosis, and treatment. Finally, the Recovery Act requires that HHS, in consultation with other government agencies, including the Commission, conduct a study and report on the availability of open source health information technology systems. We seek comment on how to consider the availability of open source health information technology systems with respect to the national broadband plan, which, as stated, includes a plan for use of broadband infrastructure and services in advancing health care delivery.

**Comment:** NASCIO believes the FCC should support HHS’ Office of the National Coordinator for Health IT and its newly designated standard-setting body, the Health IT Standards Committee, along with the Health IT Policy Committee, to build upon the

work and recommendations already adopted by previous standard-setting bodies within HHS' ONC. HHS-supported standards effectively drive state health care programs and services, and standards in turn help speed adoption and implementation of ehealthcare systems and services. FCC should be responsive to HHS' standards-based initiatives and should itself focus on facilitating the development of communications capabilities that support those initiatives. Health information technology is changing at an amazing pace and the FCC must remain nimble and adaptive in this environment. Items such as the FCC adopting HHS definitions of key terms and types of health care providers would be extremely helpful. These are the terms the health care industry uses operationally, and it does not make sense for the FCC to develop and maintain a separate set of definitions.

### **Energy Independence & Efficiency**

87. (p. 31) How does the potential for more widespread use of teleworking based on access to broadband capability factor into our country's energy independence and efficiency?

**Comment:** NASCIO believes, as do others, that telework significantly reduces demands on transportation systems as well as the energy costs associated with maintaining traditional office-environment space for employees. To the degree that broadband facilitates employees working effectively at home, the benefits seem clear. Telework is especially attractive in areas where public transportation is sparse or not available, and can significantly reduce energy needs for commuting as well as reducing carbon emissions.

### **Relationship Between the Recovery Act & Other Statutory Provisions**

109. (p. 36) We also seek comment on how the broadband elements of the 2008 Farm Bill relate to the Commission's development of a national broadband plan. Specifically, the 2008 Farm Bill requires the Commission, in a separate proceeding, to develop "a comprehensive rural broadband strategy," including recommendations to Congress. We seek comment on whether and how the Commission's comprehensive rural broadband strategy should become a part of its development of a national broadband plan.

**Comment:** NASCIO believes that the National Broadband Plan must be exactly that, national in scope. As such it must incorporate the Commission's comprehensive rural broadband strategy. But it also must be more than that. It must ensure coordination of federal, state, regional, tribal, and local government agencies to ensure consistency of purpose in broadband roll-out, and to avoid duplication of effort. Funding for broadband/networks comes from multiple agencies of the federal government, including the FCC, DOC, USDA, and HHS, among others. Unless these efforts are coordinated, the government will continue to waste money building networks on top of networks.

A specific mechanism NASCIO believes to be necessary for ensuring coordination of state and lower level broadband initiatives with Federal initiatives is creation of state-level broadband authorities.

### **Improving Government Performance & Coordination With Stakeholders**

113. (p. 37-38) *Coordination among Federal Departments, Agencies, and Others.* A number of federal departments and agencies, including RUS, NTIA, and the Commission, have programs aimed at increasing the deployment and use of broadband facilities, and many of these departments and agencies are tasked with substantive broadband-related obligations under the Recovery Act. We seek comment on **what specific steps these departments and agencies should take to cooperate with each other.** How, in particular, can the heads of broadband-related programs ensure that the programs are consistent with each other? What should each department and agency do to ensure that its staff has access to expertise and relevant information in other departments and agencies having responsibility for broadband initiatives? What specific steps should broadband program heads take to make staff in other departments and agencies aware of their broadband initiatives and to avoid duplication of efforts? To what extent should interagency coordination include informal staff-to-staff interactions as well as more formal contacts?

**Comment:** As suggested above, NASCIO believes that coordination is vital for the most economical implementation of broadband connectivity in the nation. The National Broadband Plan must provide a roadmap for all related federal broadband funding and initiatives. The current situation is a tangled web of different funders addressing different but often overlapping issues. Take a theoretical rural community as an example: the community might have an education network funded through the E-Rate portion of the Universal Service Fund (USF), a health care network funded by the Rural Health Care Program of USF, a USDA Community Connect Grant-funded network all on top of Low Income and High Cost support from USF. Add in the pending NTIA funding and maybe some funding from HHS-HRSA telehealth or USDA Distance Learning & Telemedicine. There could be close to a dozen separate federally-funded networks in just one small town. There is little to no coordination between these “siloed” efforts and by funding multiple networks in the same community vast sums of money are wasted. The focus of the plan should be on providing network connectivity that meets the aggregate needs of the whole community.

114. (p. 38) We note that broadband itself can enhance the level of coordination among, and services provided by, federal, tribal, state, and local governments. For example, the federal government’s recovery.gov website provides an interactive map with links to state government websites providing information about how Recovery Act funds are being used in each state. Feedback to the government is easily enabled at the recovery.gov website and many others at the federal, state and local level. What other ways are there that government at all levels can utilize broadband capabilities for coordination and service provision? **Are there “best practices” models that we should be aware of while crafting the national broadband plan?**

**Comment:** NASCIO urges the FCC to examine successful models for broadband implementation internationally, as well within the U.S., with the aim of gaining a better

understanding of those models' suitability or unsuitability for the American market. Recent analyses like the just-released Organization for Economic Cooperation and Development broadband penetration study reflect that the U.S. model has not driven it to the top in terms of penetration, and while there may be circumstances that explain this, we need better understanding and broader public policy discussion about the differences between our efforts and those of other nations. Such analyses should also examine local and regional models that have proven effective in rural areas of the country.

116. (p. 38) *Information Systems and Websites*. We seek comment on **specific steps federal departments and agencies should take to improve their information systems to facilitate sharing of information among different parts of the federal government, with other governmental entities, and with the public**. Is there specific technology that can be cost-effectively employed for such sharing? What interim measures should the Commission and other federal departments and agencies take in the short run to improve information sharing regarding broadband initiatives? What steps should the federal government take to develop a long-term system for information sharing among departments and agencies having broadband-related responsibilities?

**Comment:** With specific reference to sharing information regarding broadband initiatives, NASCIO notes that in its *Report on Rural Broadband Strategy*, the FCC documents its cooperation with other Federal agencies with whom it shares broadband expansion responsibilities for rural areas. We have urged this kind of cooperation in our remarks above, but take this opportunity to recommend that the FCC make this cooperation as transparent as possible, so that it becomes clear that formerly disparate efforts are being un-siloed and coordinated.

The broader issue of information and data sharing between federal, state, and local agencies and the systems and applications they use, as well as the subsequent sharing of that data with citizens, is also of critical importance to NASCIO. Such sharing and integration of information and data is where technologies fulfill their biggest promise; it is undergirded by data standards, and it occurs to greater and greater extents once the standards are in place. When sharing occurs at the levels needed to truly optimize the delivery of government services, bandwidth requirements are substantially increased.

118. (p. 39) We also seek comment on **how the federal government can use web-based systems to coordinate broadband rollout with tribal, state, and local governments and other interested groups and individuals**. We ask how these systems may be made accessible to individuals with disabilities. We also ask whether we should develop other systems specifically to assist individuals and organizations that lack broadband access.

**Comment:** Examples of how the Federal government can use web-based systems to coordinate broadband roll-out and to make the issues associated with that roll-out as transparent as possible are as close at hand as the Federal recovery.gov site. NASCIO lauds the use of such technologies as RSS feeds, open Wiki pages, and interactive timelines, as well as other leading edge technologies associated with Web 2.0 that facilitate the sharing of information and broader civic engagement. These tools do not

get broadband installed and running, but they certainly contribute to an environment in which that roll-out is facilitated. Information that is readily accessible over the Internet creates demand for services that will further the goals of the Commission of broadband deployment.

On the other hand, it must be recognized that these tools are not readily accessible to the entire population of potential users, and alternate methods and /or channels of communication are required to open these processes as equitably as possible, and are legal and moral requirements.