
From: Price, Bill <Bill.Price@gta.ga.gov>
Sent: Tuesday, April 28, 2015 2:17 PM
To: BOCrfc2015
Cc: Brian T. Gibbons
Subject: FW: Broadband Opportunity Council Seeks Comment on Ways to Further Expand and Promote Broadband Deployment, Adoption and Competition
Attachments: Broadband and DOT ITS Fiber letter to FCC 10-09 Final.pdf

To whom it may concern,

In response to your request for comment I am submitting the attached analysis and request that I did while working for the State of Florida regarding Federal ITS fiber funding build out for State governments.

Regards,

Bill Price

Specifically, the RFC seeks comment on such questions as:

- How can the federal government best promote coordination and use of federally-funded broadband assets? [See Attached relating to use of ITS fiber assets funded by the ITS program in each state.](#)
-
- What regulatory barriers exist within the agencies of the Executive Branch to the deployment of broadband infrastructure? [Federal ITS rules prohibit local government use for non ITS purposes unless a federal waiver is granted.](#)
-
- Are there specific regulations within the agencies of the Executive Branch that impede or restrict competition for broadband service? [None that I am aware of.](#)
-
- How can communities and regions incentivize service providers to offer broadband services, either wired or wireless, in rural and remote areas? [By focusing resources on programs that will stimulate adoption in business, government and citizens. An example is the Digital Bootcamp program in Georgia for small business through the Small Business Development Centers: \[http://www.georgiasbdc.org/subpage.aspx?page_name=digital&cart=ec6b91b7-affd-40a0-a277-e6cdf2d242fc\]\(http://www.georgiasbdc.org/subpage.aspx?page_name=digital&cart=ec6b91b7-affd-40a0-a277-e6cdf2d242fc\)](#)
-
- What can the federal government do to make it easier for state, local, and tribal governments or organizations to access funding for broadband? [Provide for a coordinated \(cross federal agencies\) *broadband program office* to communicate with identified state and local government representatives.](#)

Bill Price
Georgia Technology Authority
Digital Georgia Program
47 Trinity Ave. Atlanta Ga. 30334
404.326.9462

DIGITAL GEORGIA



From: Joelle Tessler [mailto:JTessler@ntia.doc.gov]

Sent: Tuesday, April 28, 2015 10:20 AM

To: Joelle Tessler

Subject: Broadband Opportunity Council Seeks Comment on Ways to Further Expand and Promote Broadband Deployment, Adoption and Competition

Broadband Opportunity Council Seeks Comment on Ways to Further Expand and Promote Broadband Deployment, Adoption and Competition

FOR IMMEDIATE RELEASE:

April 28, 2015

News Media Contact:

Juliana Gruenwald, (202) 482-2145, jgruenwald@ntia.doc.gov

USDA News Media Contact: Anne Mayberry

(202) 690-1756

anne.mayberry@wdc.usda.gov

<http://www.ntia.doc.gov/press-release/2015/broadband-opportunity-council-seeks-comment>

WASHINGTON – Today, the President’s interagency Broadband Opportunity Council (BOC) announced it is seeking public comment on how federal agencies can promote broadband deployment, adoption and competition.

In a [request for comment](#) (RFC), the Departments of Agriculture and Commerce - which are co-chairing the BOC - are asking the public for input in helping to identify regulations and other barriers that are hampering deployment of broadband. The RFC also is seeking recommendations on ways to promote public and private investment in broadband and get a better understanding of the challenges facing areas that lack access to broadband. The Council, which is made up of 25 federal agencies, was established by a March 23 [Presidential Memorandum](#) to develop a framework of recommendations to explore ways to remove unnecessary regulatory and policy barriers, incentivize investment, and align funding polices and decisions to support broadband access and adoption.

“In an increasingly interconnected world, reliable access to broadband is essential to U.S. economic growth and competitiveness,” said Assistant Secretary for Communications and Information and Administrator of the National Telecommunications and Information Administration Lawrence E. Strickling, who has been designated as Commerce’s representative on the Council. “While Commerce’s broadband programs [have made great progress](#) in expanding broadband access and adoption, the Council will look for new and improved ways all federal agencies can target resources and regulations to ensure all Americans can take advantage of this vital technology.”

“Everyone has a stake in ensuring that all Americans, whether they live in the city or a rural community, have high-speed Internet access. We look forward to hearing from all stakeholders on what further steps the federal government can take to expand broadband access, adoption and competition,” said Under Secretary for Rural Development Lisa Mensah, the Agriculture Department’s designee on the Council.

Specifically, the RFC seeks comment on such questions as:

- How can the federal government best promote coordination and use of federally-funded broadband assets?
- What regulatory barriers exist within the agencies of the Executive Branch to the deployment of broadband infrastructure?
- Are there specific regulations within the agencies of the Executive Branch that impede or restrict competition for broadband service?
- How can communities and regions incentivize service providers to offer broadband services, either wired or wireless, in rural and remote areas?
- What can the federal government do to make it easier for state, local, and tribal governments or organizations to access funding for broadband?

The deadline for submitting comments is June 10, 2015. Written comments can be submitted by email to BOCrfc2015@ntia.doc.gov or by mail to the National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Room 4626, Attn: Broadband Opportunity Council, Washington, DC 20230.

Joelle Tessler
Manager of Stakeholder Relations and Outreach
National Telecommunications and Information Administration
U.S. Department of Commerce
jtessler@ntia.doc.gov



Communication and Information Technology Services
4030 Esplanade Way, Suite 115
Tallahassee, Florida 32399-0950
Tel: 850.487-9971
Fax: 850.922.5162
www.dms.MyFlorida.com

Governor Charlie Crist

Secretary Linda H. South

NATIONAL BROADBAND AND THE NATIONAL INTELLIGENT TRANSPORTATION SYSTEMS PROGRAM (ITS)

To achieve the goals of the Recovery Act in creation of a national broadband plan and broadband network that provides greater broadband capacity, availability and benefit to the country, we propose an opportunity for the FCC's consideration during development of the National Broadband Plan for Congress.

There are idle fiber network assets in each state funded by Federal programs in support of the Intelligent Transportation Systems (ITS). These assets can accelerate and lower the costs of broadband services. There are barriers in federal ITS rules that prohibit the use of these assets beyond ITS. We suggest that the FCC, through Inter-Agency cooperation, amend rules to allow State DOT's the ability to work with designated State authorities charged to provide broadband services to anchor institutions to utilize idle fiber or microwave network capacity that is available in State DOT ITS networks.

The federally funded ITS program since 1991 has provided states with funding for broadband telecommunications infrastructure as well as other technology in support of ITS applications that are critical to efficient operation of the highway system in the country. Through this paper using Florida as an example, we try to illustrate the idle capacity that we believe should be leveraged as part of the National Broadband Plan to provide broadband to anchor institutions.

In our role as the provider of broadband services to anchor institutions in Florida, the Department of Management Services has researched the USDOT ITS program and Florida's DOT ITS implementation to determine the extent of idle telecommunications capacity of fiber optic communication systems in Florida.

From our research we have found that Florida DOT ITS has deployed up to 96 fiber strands when implementing the network. The Florida DOT ITS office has informed us that this idle network capacity cannot be used for any purposes outside of ITS applications due to Federal Highway Administration (FHWA) rules. And to do so would jeopardize funding or require the State to pay the funding back if they were. The result is that while we seek to create broadband capacity with Stimulus funding, the State appears to have idle capacity already in place. Thus we may not be able to leverage all potential economies of scale benefits for the advancement of broadband service to anchor institutions in Florida.

Federal and State DOTs have worked together enabling right of way access through resource sharing agreements. These efforts stop short of addressing the idle capacity in the ITS Telecommunications infrastructure as another asset that could be leveraged to meet the broadband goals of the country.

In this paper we are providing supporting information that we believe will be useful to the FCC to pursue this opportunity. We welcome the opportunity to work with the FCC as you evaluate the options. Below we have provided an email from a Local Federal Highway Safety Administration representative regarding our request for ITS asset use, ITS history, ITS documentation, ITS reference links as well as Florida ITS specific information. We would welcome the opportunity to work with you to further this effort.

SUPPORTING REASEARCH INFORMATION

Interpretation of FHWA rules regarding use of ITS infrastructure:

If Federal money is used to implement a facility (e.g. a communications network) then FHWA regulations require that the facility usage should be limited to transportation purposes. The basis for this is drawn from Title 23; which states in essence that the Highway Trust Funds are for Transportation Purposes. This means if there is excess capacity in the infrastructure installed, the non-highway use would have to be paid back.

History of the Federal ITS Program

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) established a Federal program to research, develop, and operationally test Intelligent Transportation Systems (ITS) and to promote their implementation. The program was designed to facilitate deployment of technology to enhance the efficiency, safety, and convenience of surface transportation, resulting in improved access, saved lives and time, and increased productivity.

ISTEA originally authorized \$659 million for ITS in fiscal years (FY) 1992–1997, with additional funds appropriated by Congress to the States, for a total of approximately \$1.2 billion. The *Transportation Efficiency Act for the 21st Century* (TEA-21) confirmed the direction of the ITS Program and authorized and appropriated a similar amount through FY 2003: \$603 million for research and development and \$679 million for deployment activities, for a total of \$1.282 billion. Because SAFETEA-LU was enacted in late FY 2005 (two years after the end of TEA-21) Congress provided a continuing budget for the ITS Program, appropriating \$220 million for continued research and development and \$244 million for deployment activities. Table ES.1 summarizes the allocation of financial resources over the course of the three authorizations.

	ISTEA	TEA-21	Continuing Funding	SAFETEA-LU	Total
ITS Program Activity	1991-1997	1998-2005	2004-2005	2006-2008	
Research and Development	\$659M	\$603M	\$220M	\$330M	\$1.812B
Deployment	\$564M	\$679M	\$244M	Discontinued	\$1.487B
Total	\$1.223B	\$1.282B	\$464M	\$330M	\$3.299B

The ITS program carries out its goals through research and development, operational testing, technology transfer, training and technical guidance in the areas of intelligent vehicles, advanced traffic and transit management, commercial vehicle operations, public safety, traveler information, and intermodal freight.

US Department of Transportation ITS Telecommunications page: <http://www.its.dot.gov/telecom/index.htm>

US Department of Transportation ITS Resource sharing page: http://www.its.dot.gov/telecom/tele_srguide.htm

In 1991, ISTEA launched a program of research and testing of intelligent transportation systems, with a charge to U.S. DOT to investigate their effectiveness in solving congestion and safety problems, in addressing operating inefficiencies, and in reducing the environmental impact of growing travel demand.

In January of 1996, former Secretary of Transportation Peña set a 10-year national goal of building an ITS infrastructure that would support metropolitan travel management and safety needs. U.S. DOT set similar objectives for rural and commercial vehicle ITS applications. Legislation launched an era of ITS infrastructure deployment by mainstreaming ITS funding eligibility under the National Highway System, Surface Transportation, and Congestion Mitigation and Air Quality programs, and by creating the ITS integration and commercial vehicle ITS infrastructure incentive programs. TEA-21 provides funding incentives for ITS deployment through two specific components: the ITS integration incentive program and the commercial vehicle ITS infrastructure incentive program. Together, these two programs help facilitate the integration of legacy systems, and hasten the mainstream deployment of integrated ITS technologies. During the 6 years of TEA-21 authorization, a total of \$679 million is devoted to incentive funding.

The National Highway System (NHS) comprises of approximately 163,000 miles (262,000 kilometers) of roadway, including the Interstate Highway System (46,837 miles) and significant rural and urban roads serving major population centers, international border crossings, intermodal travel facilities, and major travel destinations

Nearly 90 percent of the U.S. population lives within 5 miles (8 km) of an NHS roadway, as does nearly all of the urban areas with a population of more than 50,000 and 93 percent of urban areas with a population of between 5,000 and 50,000

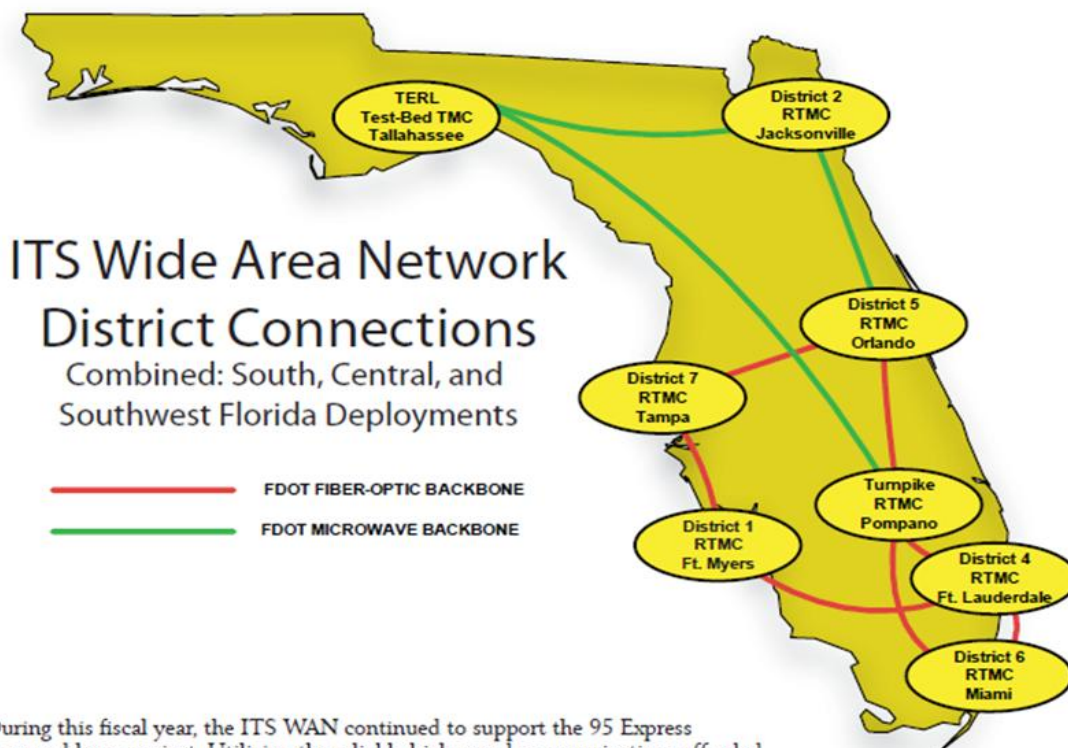
Federal highway regulations already strongly encourage the accommodation of utility facilities along the existing right-of-way of highway projects. Additionally, current highway funding can be utilized to offset the cost of accommodating a utility, including the cost of buried "utility tunnels" to accommodate telecommunication lines.^[xi] The Federal Highway Administration (FHA) estimates that 90 percent of the cost of deploying fiber in public rights of way along roadways is associated with digging up and repairing the road to install the buried fiber.^[xii] Thus, it is both expedient and significantly cheaper to install conduit and fiber while a roadway is already being substantially repaired, reconstructed or built. Installing conduit and fiber in open trenches during road construction, costs between \$10,000 and \$30,000 per mile. Low-end construction costs for highways are around \$3 million per lane, per mile, although they can be substantially higher depending upon the area. Thus, adding fiber would increase highway construction costs by as little as 1 percent on average.

Florida DOT ITS Network

As it has from the beginning, the ITS WAN continues to use District-installed fiber-optic facilities for backbone circuits. Although other technologies are used where fiber is not available (microwave and commercial metropolitan-area network), optical networking is the technology of choice for the ITS WAN. Advantages of optical circuits over other technologies include very high speed (bandwidth), low latency, freedom from weather-related disturbances, and immunity to electrical noise and lightning damage. These and other advantages of optical networking give the ITS WAN a very high degree of reliability and "uptime."

31

FDOT ITS Program Annual Report FY 2008-09



During this fiscal year, the ITS WAN continued to support the 95 Express managed-lanes project. Utilizing the reliable high-speed communications afforded by optical networking, the variable tolling fee determined by the District 6 SunGuide Software is communicated in milliseconds to Florida's Turnpike Enterprise Toll Data Center and the toll collection system.

Additional ITS Reference Documents and Links:

The first document is the Rural Interstate Corridor Communications Study: Report to Congress.

http://www.ops.fhwa.dot.gov/int_its_deployment/rural/congrpt0807/index.htm

This report provides a summary of study resources available to the Corridor States to begin the process for possible deployment of high-speed telecommunications (HST) "broadband" in the corridors in question. The study reveals several insights into the issue of how rural Interstates enable greater penetration of high-speed telecommunications infrastructure in rural America. This report presents the findings of the investigation and a discussion of the potential benefits and costs associated with the introduction of a high speed telecommunications backbone facility in each corridor.

Rural Interstate Corridor Communications Study: Report to States

<http://www.ops.fhwa.dot.gov/publications/fhwahop09021/index.htm>. This document is the second of two reports that explore the potential for the use of rural Interstate Highway corridor rights-of-way for the deployment of fiber optic cable and/or wireless communication infrastructure, across multiple States linked by the Interstate Highway system.

Links

- [ITS America](#)
- [ITS JPO](#)
- [ITS Standards](#)
- [National ITS Architecture Version 6.1](#)
- [Electronic Document Library](#)
- [Facilitating Integrated ITS Deployment](#)
- ITS Cost Benefit Analysis 2003: http://www.itdocs.fhwa.dot.gov/jpodocs/repts_te/13772_files/13772.pdf
- IFlorida Model Evaluation Report 2009: http://ntl.bts.gov/lib/31000/31000/31051/14480_files/iflorida.pdf
- ITS Program Plan 2008: http://www.its.dot.gov/its_plan/es.htm#tabES-1
- ITS Operations Resource Guide 2009 : <http://www.resourceguide.its.dot.gov/default.asp?SID=6&SSID=41>
- ITS Document Search: <http://ntlsearch.bts.gov/tris/ntlc/itsjpo/index.shtm>

Regards,

Bill Price
Department of Management Services
4030 Esplanade Way
Tallahassee Florida
850.410.0709
bill.price@dms.myflorida.com