BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska Public Service Commission, on Its Own Motion, to Investigate Ways to Accelerate the Deployment of Broadband Consistent with Section 706 of The Telecommunications Act of 1996.	)	Application No. C-4807/PI-202

Comments of Level 3 Communications, LLC

Level 3 Communications, LLC, Broadwing Communications, LLC, WilTel Communications, LLC and Global Crossing Telecommunications, Inc. (hereafter referred to jointly at "Level 3") file these comments addressing the issues outlined by the Commission in its December 15, 2015 Order Opening Docket and Setting Workshop in the above referenced docket.

Level 3 applauds the Commission for recognizing that improving access to rights-of-way is a fundamental requirement for expanding broadband deployment and looks forward to working with the Commission and stakeholders to identify challenges and potential solutions, particularly as it pertains to barriers to construction of broadband networks and measures the Commission can employ to encourage or support broadband deployment. Level 3 offers these preliminary comments on some of the issues raised by the Commission in its Order Opening the Docket, and may provide additional comments at the workshop or as the docket and dialogue continues.

As a global communications provider, delivering communications services to enterprise, government and carrier customers in more than 500 markets in over 60 countries, Level 3 has an extensive global network with approximately 30,000 buildings on-net in the United States. Level 3 will invest in excess of $1 billion in capex this year, and aims to put thousands of new buildings on-net every year. But like most competitive carriers, Level 3's cash is tightly managed and every dollar of expense reduces the capital budget available for network expansion and broadband deployment. As a result,

Level 3 is focused on eliminating or reducing unnecessary or unreasonable expenses so that the savings can be used to augment existing fiber-optic network facilities and permit delivery of additional telecommunications and enhanced services to additional communities and end user buildings all the while moving at the speed of business.

General Overview

Other states commissions, state legislatures, and federal legislators, as well as the FCC, are engaging in similar efforts to identify challenges that impede broadband deployment and develop potential solutions to those address those issues, including streamlining processes, ensuring non-discrimination, eliminating expenses, and providing inventories of available assets along with clear guidance on how to leverage those assets. Level 3 encourages the Commission to leverage the background work and solutions being implemented in other jurisdictions to develop best practices for Nebraska.

For instance, Indiana recently enacted legislation to incent communities to become certified as a "Broadband Ready Community". Ind. Code Section 5-28-28.5. The newly created Broadband Ready Communities Development Center (under the Indiana Economic Development Corporation) serves as an information resource that will certify local communities as being "broadband ready". While investment in broadband infrastructure is not guaranteed to follow once a community obtains the certification, it is a sign to telecommunications industry that a community has taken steps to reduce barriers to broadband infrastructure investment by reducing the regulatory hurdles that deter investment. The community must have a clear procedure for obtaining permits for broadband projects, and reduce the regulatory burdens by ensuring there is single point of contact, a guarantee to review/approve/reject applications within 10 business days, an assurance that inspections occur in an expeditious manner, and a process to allow electronic filing for documents and forms. In addition, the community must agree

NOT to impose a fee to review application or issue permits; NOT to impose a seasonal moratorium on issuing permits, and NOT to discriminate among providers. In order to assist communities, the Broadband Ready Communities Development Center has created a model ordinance, which if passed would satisfy the requirements under the new Indiana Law. A copy of the legislation, the model ordinance and the fact sheet on Broadband Ready Communities is attached hereto as Attachment 1. This type of legislation is certainly a step in the right direction to encourage communities to create an environment that reduces the expenses and the delay that can hinder broadband deployment efforts. Several communities have already achieved certification, clearly indicating they understand the value of broadband to their communities and residents and that they are doing everything they can to incent providers to deploy facilities – not to charge them more to do so.

While Indiana pursued a legislative solution to streamline access to rights-of-way, Wisconsin developed a *Playbook for Broadband Progress* (attached hereto as Attachment 2), outlining strategies for reform needed to incent additional investment to ensure every corner of the state has access to affordable, reliable and adequate broadband. The Public Service Commission of Wisconsin led a steering committee of stakeholders to develop a list of best practices and actionable ideas, model legislation from other states, model legislation to facilitate sharing of assets, poles, trenches and other resources, and standard terms, conditions and requirements for access to provide municipal authorities with a baseline document. The Playbook included a process for making recommendations for legislative or agency rule changes to reduce time and costs of access to towers, rights-of-way and other governmental resources that can improve broadband access and a process to explore targeted tax incentives for broadband equipment and facilities.

And while states continue to look at local processes, the FCC has an open docket on improving policies regarding public rights-of-way to accelerate broadband deployment.[1] Level 3 has filed comments and reply comments in that docket explaining concerns with unreasonable charges and calling for a uniform standard for assessing the reasonableness of fees. Level 3 explained in those comments that uncertainty regarding costs for right-of-way access deters investment and expansion, and that disparate approach to rights-of-way management and fees impacts deployment as providers must devote time and resources to securing access through a variety of processes.[2] While the FCC has made strides toward reducing some costs of deploying facilities when it released its most recent order on pole attachment rates[3], it has yet to issue an order to improve policies regarding rights-of-way.

Against that backdrop, Congress continues to work on ways to facilitate additional broadband deployment. The most recent bill being discussed would provide an inventory of federal assets for use in connection with broadband deployment, and allow state assets to be included in that inventory. It would also streamline approvals for use of facilities and have the FCC develop rules for make-ready work necessary on poles for pole attachments.[4] Additional measures being considered include language that would facilitate the provision of broadband conduit in highway construction projects (i.e., "dig once"); a bill that would ensure that any requesting broadband provider has access to each broadband conduit installed, on a competitively neutral and nondiscriminatory basis, for a charge not to exceed a cost-based rate; and a measure to establish a federal pilot program to develop best practices and streamline rights-of-way. As Nebraska reviews the challenges and potential solutions that are relevant to the state,

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[1] Acceleration of Broadband Deployment: Expanding the Reaching and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, Notice of Inquiry (WC Docket No. 11-59, 4/7/2011).

[2] Level 3 Comments in WC Docket No. 11-59, pp.3, 20. http://apps.fcc.gov/ecfs/document/view?id=7021693636

[3] In the Matter of Implementation of Section 224 of the Act A National Broadband Plan for Our Future, WC Docket No. 07-245, GN Docket No. 09-51, ORDER ON RECONSIDERATION (11/24/2015).

[4] http://docs.house.gov/meetings/IF/IF16/20151202/104251/BILLS-114pih-DiscussionDrafttoamendthe.pdf

Level 3 encourages the Commission to weigh in on these important issues developing at the FCC and US Congress.

Nebraska Specific Issues

Level 3 encourages the Commission to take steps to streamline processes, reduce unnecessary and burdensome costs and create best practices for municipalities to grant access to rights-of-way. While the statutory framework in Nebraska gives telecommunications companies the right to construct facilities in the rights of way,[5] some municipalities have begun to adopt ordinances that increase fees (rather than decrease or eliminate fees as other states have) by imposing an occupational tax that is tied to the gross revenues generated by the telecommunications provider in the municipality (which has no relation to the actual costs incurred by the municipality in administering the permits). While municipalities may have a statutory right to impose an occupational tax, those fees increase the costs to deploy the broadband services – the very services that municipalities should be in incenting. These actions by municipalities make it increasingly more difficult for Level 3 to secure access to the public rights of way in Nebraska.

For example, municipalities that were once allowing Level 3 to operate under permits, or simple license agreements, are now adopting ordinances that call for increased annual fees and more complex negotiations. The City of Papillion, Nebraska, granted Level 3 an 'Agreement to Occupy Public Rights of Way and Provide Private Telecommunications Services', but requires Level 3 to pay 5% of its gross revenue annually as an occupation tax. In addition, Level 3 is responsible for providing the names and contact information for any third party that leases or purchases facilities from Level 3 in that market, including but not limited to any person, user, subscriber, affiliate or entity.

[5] Neb. Rev. Stat. Ann 86-704

The City of Papillion is not alone in moving to impose additional new costs on broadband infrastructure providers. A phenomenon often exists where the compensation methodology imposed by one government entity is adopted by other municipalities in the same area, in either a "domino effect" or some "group pricing" scenario where the practices tend to move telecommunications franchise fees (or in this case occupational taxes) up to the highest price charged by municipalities in the region. The City of La Vista, Nebraska required Level 3 to execute a 'Communications Cable and Facilities Agreement', that is more like a franchise agreement than it is a permit. This agreement requires the payment of 5% of gross revenues as an "occupational tax" in addition to requiring the payment of an annual $2.00 per linear foot "rental fee" for all installed cable/conduit within the public rights of way. The additional expenses drive up the cost of providing services within the municipality and the process of obtaining those franchise agreements caused additional delay – taking four months from initial contact with the city through final approval of the agreement before Level 3 was permitted to begin construction. This process is far from the streamlined process and no-fee structure that municipalities in other states, like Indiana, commit to when they seek to be certified as "Broadband Ready."

In addition to the above examples, Level 3 provides the following comments on the questions/issues raised by the Commission:

1. The challenges that carriers face when deploying new broadband infrastructure.

In the comments above, Level 3 identifies and explains the challenges, including but not limited to expenses imposed by rights-of-way, pole owners or permit holders, time delay in obtaining permits and authorizations, and uncertainty in processes. It is difficult to commit to turn up service to a new customer that requires facilities to be built to serve them when the process includes obtaining authorization from municipalities that may require a franchise agreement and impose additional

expenses. With different municipalities having different agreements and different requirements, review and negotiations impose delay and uncertainty. Level 3 encourages the development of a streamlined and consistent process, in which the requirements are clearly identified and the times to obtain an agreements are set forth. In addition, there should be a process to ensure visibility to terms and conditions to validate that all telecommunications providers are being treated fairly and equally.

2. and 3. The approval processes and the extent to which the processes vary from one jurisdiction to another and the fees for obtaining access and how they compare to other market-based rates.

In the comments above, Level 3 provides examples of a few Nebraska municipalities who have imposed a revenue-based fee that bears no relation to the cost of management of the rights-of-way. In most states that require an agreement, the fee structure is such that you either pay a linear foot fee or a percent of revenue fee, not both. A recovery of ROW fees that is not based on the cost of managing the ROW could be contrary to federal law and therefore, unlawful and subject to legal challenges.

The permitting process in some municipalities can cause delay and additional unnecessary expenses as well. For example, in Lincoln, Nebraska, there was a lengthy process to secure registration and approval as a "vendor" even before being allowed to submit a permit for use of the rights-of-way. The process is not streamlined at all. It requires all permits to include Professional Engineering drawings regardless if it is a new build or using existing infrastructure, which imposes additional expense and delay. There are multiple layers of approvals each with its own permit fee layering on top of the next one, such as a permit fee of $365 per application for the City (higher than in most other markets, which range from $25.00 t0 $250), then an environmental flood plain permit of $200 per location and sometimes a state permit to cross a state road. Inefficiencies, duplication and redundancy in processes

drive up costs and impose delay in building broadband networks. Based on the foregoing issues, Level 3 encourages the development of streamlined processes for permitting.

4. The challenges of negotiating rights of way access with entities such as railroads, utilities and other private entities.

Many of the challenges identified above exist when Level 3 negotiates access with railroads and other entities, and at times negotiations are protracted, delaying deployment. Access to pole attachments has been a source of much discussion, debate and comment at the FCC. However, not all pole attachment providers are governed by the federal statute and regulations, leading to additional challenges to negotiate for access when the pole owner is a municipality or a co-op.

5. The extent to which the Commission or public stakeholders can play a role to encourage the rapid deployment of broadband in areas where federal CAF support is being provided.

Level 3 has no comment on this issue at this time but reserves the right to comment at the workshop or as this docket develops.

Level 3 encourages the Commission to advocate for the adoption of statutory, rule and regulatory changes that would promote broadband infrastructure deployment, including streamlining and creating uniform processes and supporting fee structures that reduce the costs and burdens that hinder and delay broadband investments.

Respectfully Submitted this 20th day of January, 2016.

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Attachment 1

INDIANA
A State that Works®

Indiana Economic Development Corporation

BROADBAND READY COMMUNITIES

DESCRIPTION

The IEDC will assist in encouraging broadband development throughout Indiana by certifying communities as broadband ready.

The Broadband Ready Community certification sends a signal to the telecommunication industry that a community has taken steps to reduce barriers to broadband infrastructure investment.

While investment in broadband infrastructure is not guaranteed to follow once a community obtains the certification, reducing the regulatory hurdles that deter investment is a key step towards creating an environment ripe for broadband investment.

APPLICATION PROCESS

Any community in Indiana pursuing improved broadband access is eligible for the Broadband Ready Community certification and may apply through the IEDC.

The IEDC will certify a unit as a Broadband Ready Community if it meets the following requirements:

- Fill out the online application form, accessed via the Broadband Center website.
- Upload via the online application form any supporting documentation necessary to demonstrate compliance with the eight (8) statutory requirements under IC 5-28-28.5-7.

Please send questions or inquiries to:

Devin Hillsdon-Smith
Regulatory Affairs Liaison
(317)232.8833
dhsmith@iedc.in.gov

MINIMUM STATUTORY REQUIREMENTS

In order to comply with statutory requirements, a unit seeking the Broadband Ready Community certification must institute procedures that provide for:

(1) The appointment of a single point of contact for all matters related to broadband development projects
(2) The establishment of procedures to allow for the electronic submission of all forms, applications, and documentation required for a broadband development project
(3) A requirement that all permit applications are approved or denied within 10 business days after they are filed
(4) An assurance that all inspections related to a broadband project will be completed in a timely and expeditious manner

These procedures must also prohibit the unit from:

(5) Requiring the designation of a final contractor to complete a broadband project
(6) Imposing a fee to review an application or to issue a permit on a broadband project
(7) Imposing a seasonal moratorium on the issuance of permits for a project
(8) Discriminating among communications service providers

MODEL ORDINANCE/RESOLUTION

One way a unit can comply with the requirements of state law is to pass a resolution or ordinance establishing permit procedures.

The IEDC, in collaboration with the telecommunications industry and local government representatives, has created a model ordinance to assist communities in this effort. The model ordinance, found on the Broadband Center website, satisfies the minimum requirements under IC 5-28-28.5-7.

First Regular Session of the 119th General Assembly (2015)

PRINTING CODE. Amendments: Whenever an existing statute (or a section of the Indiana Constitution) is being amended, the text of the existing provision will appear in this style type, additions will appear in **this style type**, and deletions will appear in ~~this style type.~~

Additions: Whenever a new statutory provision is being enacted (or a new constitutional provision adopted), the text of the new provision will appear in **this style type**. Also, the word **NEW** will appear in that style type in the introductory clause of each SECTION that adds a new provision to the Indiana Code or the Indiana Constitution.

Conflict reconciliation: Text in a statute in *this style type* or ~~*this style type*~~ reconciles conflicts between statutes enacted by the 2014 Regular Session and 2014 Second Regular Technical Session of the General Assembly.

HOUSE ENROLLED ACT No. 1101

AN ACT to amend the Indiana Code concerning utilities.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. IC 5-28-28.5 IS ADDED TO THE INDIANA CODE AS A **NEW** CHAPTER TO READ AS FOLLOWS [EFFECTIVE UPON PASSAGE]:

Chapter 28.5. Broadband Ready Communities Development Center

Sec. 1. As used in this chapter, "center" refers to the broadband ready communities development center established by section 5 of this chapter.

Sec. 2. As used in this chapter, "permit" means any local, state, or federal agency permit, license, certificate, approval, registration, or similar form of approval required by statute, administrative rule, regulation, ordinance, or resolution with respect to a project.

Sec. 3. As used in this chapter, "project" means the construction or deployment of wireline or wireless communications facilities to provide communications services (as defined in IC 8-1-32.5-3) in a unit.

Sec. 4. As used in this chapter, "unit" means a county, city, or town.

Sec. 5. The broadband ready communities development center is established within the corporation. The center has the following

duties:

(1) Providing comprehensive information concerning permits required for projects and related business activities in Indiana and making this information available to any person.

(2) Working with other state and local government offices, departments, and administrative entities to encourage timely and efficient issuance of permits and resolution of related issues.

(3) Encouraging local and federal government agencies to coordinate activities related to approving applications and issuing permits for projects.

Sec. 6. (a) In addition to the duties set forth in section 5 of this chapter, the center shall create a program to certify a unit as a broadband ready community.

(b) A unit may apply for certification as a broadband ready community. The application must be in a form and manner prescribed by the corporation. The corporation shall approve an application and certify a unit as a broadband ready community if the corporation determines that the unit has:

(1) established a permit procedure that complies with section 7 of this chapter; and

(2) complied with any other requirements of the corporation.

Sec. 7. (a) A unit that wishes to be certified as a broadband ready community must establish a procedure to review applications and issue permits for projects. The procedure must contain the following components:

(1) A single point of contact for all matters related to a project.

(2) A guarantee that all applications related to a project will be reviewed and either approved or rejected within ten (10) business days after an application is submitted.

(3) An assurance that all inspections, including necessary approvals, related to a project will occur in a timely and expeditious manner.

(4) An authorization for all forms, applications, and documentation related to a project to be filed and signed by electronic means.

(b) A procedure established under subsection (a) may not do the following:

(1) Require an applicant to designate a final contractor to complete a project.

(2) Impose a fee to review an application or issue a permit for

a project.

(3) Impose a seasonal moratorium on the issuance of permits for a project.

(4) Discriminate among communications service providers or utilities with respect to any action described in this section or otherwise related to a project, including granting access to public rights-of-way, infrastructure and poles, river and bridge crossings, and any other physical assets owned or controlled by the unit.

SECTION 2. **An emergency is declared for this act.**

Whereas, [the unit] seeks to promote private investment in broadband infrastructure, and Whereas [the unit] seeks to be designated as a Broadband Ready Community pursuant to IC 5-28-28.5, Therefore, [the unit] adopts the following:

An Ordinance For A Broadband Ready Community

Sec. 1. As used in this chapter, "permit" means any local permit, license, certificate, approval, registration, or similar form of approval required by policy, administrative rule, regulation, ordinance, or resolution with respect to a project.

Sec. 2. As used in this chapter, "project" means the construction or deployment of wireline or wireless communications facilities to provide communications services (as defined in IC 8-1-32.5-3) in a unit.

Sec. 3. Notwithstanding any other provision of this [unit's ordinance, regulation, policy or practice], the following shall apply to a project:

The applicable governing body of the unit shall:

(a) appoint a single point of contact for all matters related to a project'

(b) establish procedures to allow all forms, applications, and documentation related to a project to be filed or submitted and signed by electronic means;

(c) review and approve or reject all applications for a permit related to a project within ten (10) business days after an application is filed or submitted;

(d) assure that after an application is approved pursuant to subsection (a)(3), any inspections, including any additional necessary approvals, related to a project will occur in a timely and expeditious manner.

Sec. 4. [The unit or applicable department of the unit] shall adopt adequate processes and procedures to implement the provisions of Sec. 3. Processes and procedures established hereunder may not do the following:

(a) Require an applicant to designate a final contractor to complete a project;

(b) Impose a fee to review an application or issue a permit for a project;

(c) Impose a seasonal moratorium on the issuance of permits for a project;

(d) Discriminate among communications service providers or utilities with respect to any action described in this section or otherwise related to a project, including granting access to public rights-of-way, infrastructure and poles, river and bridge crossings, and any other physical assets owned or controlled by [the unit].

PSC REF#:182473

Public Service Commission of Wisconsin
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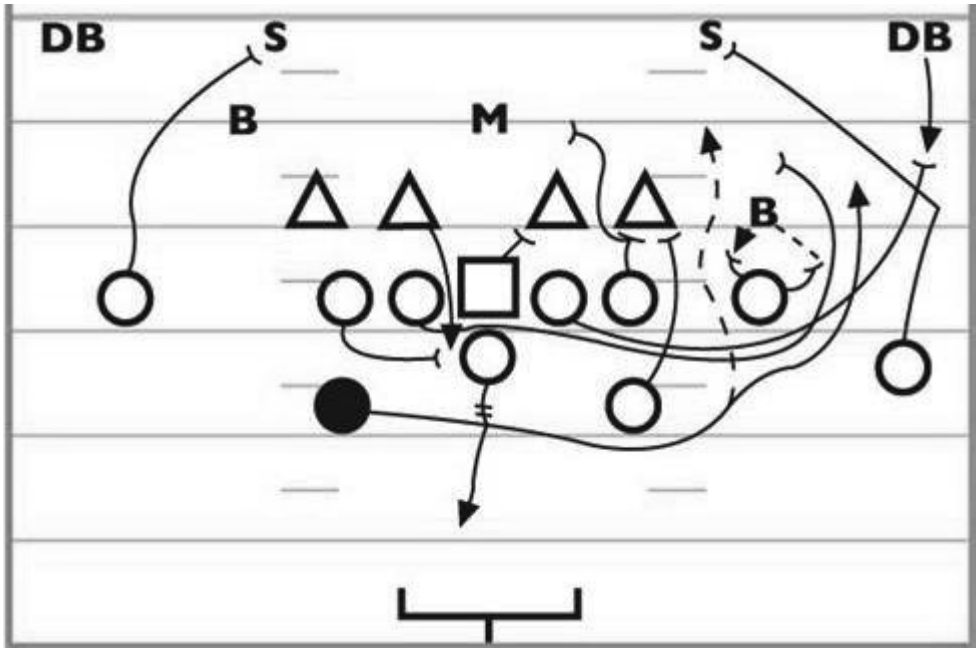
Wisconsin's Playbook for Broadband Progress



Broadband is a quintessential modern communication media and among the most essential infrastructures of our time. This Playbook provides specific actionable initiatives (plays) to expand broadband availability, adoption and application throughout the state. The proposed initiatives included herein were compiled by proven approaches conveyed by Wisconsin's provider community, business, governmental and citizen leadership. The Public Service Commission of Wisconsin and LinkWISCONSIN express their appreciation to the hundreds of individuals who took time from their busy schedules to contribute the ideas that make up this Playbook.

LINK WISCONSIN

For additional information, visit: http://www.link.wisconsin.gov.

March 2013

Public Service Commission of Wisconsin

Phil Montgomery, Chairperson
Eric Callisto, Commissioner
Ellen Nowak, Commissioner

610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

March 20, 2013

To: Interested Wisconsin Consumers, Businesses and Policy Leaders

Re: Broadband Mapping and Planning 5-GF-188

We are pleased to release *Wisconsin's Playbook for Broadband Progress*. This *Playbook* sets out for examination, dialog and execution several "plays" that offer potential pathways to enhance broadband coverage and use in Wisconsin.

Improved access to broadband, an increased understanding of its benefits, and the expanded usage of its capabilities are critical to our future. A more robust broadband infrastructure and the creative application of its potential will improve business, education, health care, economic development and the quality of life for all Wisconsin.

This *Playbook* is not a prescriptive mandate from the Public Service Commission; it is the product of discussion, debate, and analysis by a broad coalition of citizens and state leaders. We applaud the work of that group in developing this tool and bringing it forward for further implementation and planning efforts. This *Playbook* is not self-effectuating. It is a tool that all stakeholders need to study and explore to identify specific broadband actions and initiatives that can be considered for the state.

We encourage citizens, policy makers, governmental leaders, businesses of all types and sizes, and communications providers to have frank discussions about and evaluations of these strategies and concepts. We urge collaborative efforts and the use of this *Playbook* as a guide to future efforts that will make Wisconsin a national leader in broadband policy and provisioning and a beneficiary of broadband's promise for all segments of the state's populace and economy.

Sincerely,

P. L. Montgomery

Phil Montgomery
Chairperson

Eric Callisto
Commissioner

Ellen E. Nowak

Ellen Nowak
Commissioner

GAE:DL:00647635

Telephone: (608) 266-5481 **Fax: (608) 266-3957** **Home Page: http://psc.wi.gov**
TTY/TextNet: In Wisconsin (800) 251-8345, Elsewhere (608) 267-1479 **E-mail: PSCRecordsMail@wisconsin.gov**

BACKGROUND

History of the LinkWISCONSIN Initiative

The Public Service Commission of Wisconsin (PSCW) provides oversight to a statewide broadband mapping and planning initiative known as LinkWISCONSIN.[1] This federally funded initiative has created an interactive online map depicting the availability of different levels of advertised broadband service within each of the state's 250,000 census blocks.[2] Data presented in this map is developed through the effort and cooperation of Wisconsin's broadband provider community and updated every six months. As such, the availability map provides an on-going tool to inform state and local leadership as well its residents and businesses on Wisconsin's continued progress in delivering important high speed Internet infrastructure and services to every corner of the state.

The availability of broadband infrastructure is only one part of the challenge. If this infrastructure is to fulfill its promise to enhance business opportunity, create jobs, improve access to health care and education or strengthen public safety, it must be adopted and applied. Wisconsin is a very diverse state and consequently there is no "one-size fits all" solution that will lead to better broadband availability, adoption or application. In October 2010, nine broadband Regional Planning Teams (RPTs) were formed. In each region, economic development and planning leaders were consulted to identify membership for regional teams representing diverse stakeholder interests such as business, seniors, health care, public safety, education and others. Each RPT met for over a year to identify a broadband development strategy most appropriate for its area of the state, culminating in the release of a Broadband Investment Plan for each region.[3]

Purpose of this Playbook

This Playbook builds on the work accomplished over the past two years at the regional level to create a set of realistic action steps that can improve broadband availability and utilization throughout Wisconsin. The Playbook recognizes the extensive investments already made by Wisconsin's broadband provider community. Incumbent local exchange carriers, competitive local exchange carriers and, increasingly, many wireless (mobile and fixed) providers have invested and are investing millions of dollars in Wisconsin to make broadband available to a majority

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[1] After a request for competitive proposals, LinkAMERICA, a nationally-recognized team of broadband mapping and planning consultants led by CostQuest Associates, was selected to support the LinkWISCONSIN initiative.

[2] Wisconsin's interactive broadband availability map can be viewed at http://wi.linkamericadata.org/

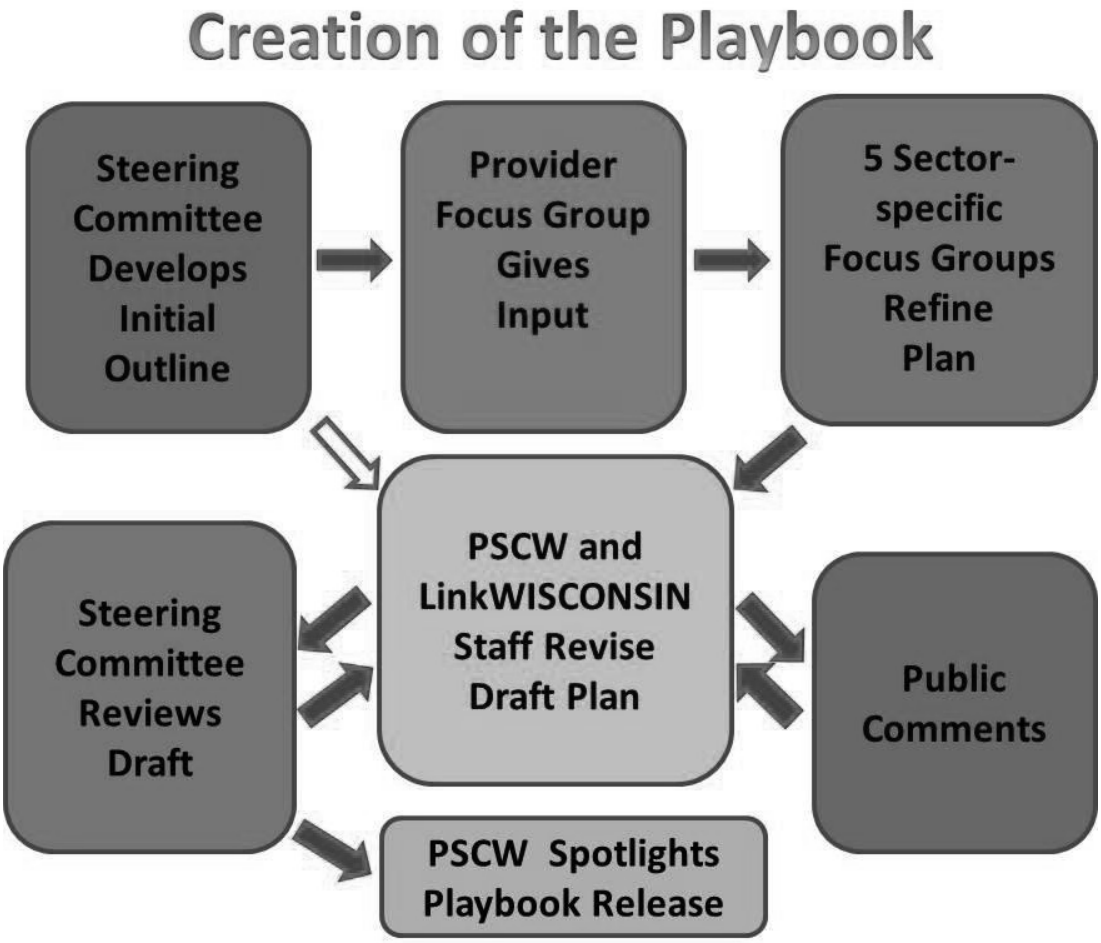
[3] Regional memberships and activities of the regional teams are documented on the LinkWISCONSIN website http://www.link.wisconsin.gov/lwi/default.aspx?page=52.

of the state. (See the interactive broadband map at http://www.link.wisconsin.gov). That investment, primarily through private funds, and in some cases through grants and loans from the federal Rural Utility Service or the National Telecommunications and Information Administration through the American Recovery and Reinvestment Act, has fueled an increased presence and use of broadband in many parts of the state and has also served to promote demands for broadband coverage in other locations. Even where broadband is available, there are numerous identified needs to incent subscribership, to improve knowledge of broadband availability and capabilities, and to expand the use of the technology for a wide variety of applications. The Playbook was developed to address all these needs and to emphasize opportunities to incent additional investment to ensure every corner of the state has access to affordable, reliable and adequate broadband communications, to meet not only today's needs, but also to serve the emerging communications markets of tomorrow.

The purpose of this Playbook is to highlight specific replicable initiatives and actions that (1) are realistic and possible within available resources; (2) have enough consensus to be successfully implemented; and (3) are consistent with the needs of Wisconsin. The audience for the state Playbook is Wisconsin leadership, whose actions or coordination is important to advancing state broadband initiatives. This includes legislators, the Governor's office, educators, private providers, industry, business leaders, state agencies, economic development and regional planning organizations, municipal and county officials, trade associations, consumer interests and others. This document provides actionable ideas that can be implemented successfully in Wisconsin to improve broadband availability, adoption or application.

Stakeholder Leadership Underlying the Identified Plays

Beginning in the spring of 2012, LinkWISCONSIN began a process to create a "Playbook" to expand broadband availability and adoption guided by direction and input from a diverse cross-section of stakeholder interests, including industry representatives and a multitude of regional and statewide leaders. The following figure highlights the extensive stakeholder process that led to the creation of this Playbook.



As an initial step, a Steering Committee was formed including representatives from all nine Wisconsin RPTs with diverse backgrounds (*e.g.,* local government, business, economic development, education, health care, regional planning). The Steering Committee was charged with providing the overall direction and guidance to the PSCW/LinkWISCONSIN project in the development of the Playbook.

Six focus groups were implemented during April and May, 2012, to gather perspectives on plays that address a real Wisconsin need and are likely to gain enough consensus to have a good chance of being implemented. The first focus group consisted of broadband providers giving their feedback on plays most important to their investments in Wisconsin. Additional stakeholders from throughout the state, representing the interests of educators, regional planning, businesses, government at all levels, medical service providers and others, as well as broadband providers and users, were invited to future focus groups. Participants in all focus groups were asked to provide ideas on actions that are realistic opportunities for Wisconsin to advance broadband availability, adoption and/or application. Ideas developed in these sessions form the foundation for the plays included in this Playbook. Those ideas were considered within the context of statewide broadband data that has been collected and developed by

LinkWISCONSIN over the past two years. This data includes information on broadband service availability at the census block level, consumer survey information, demographic data and "regional broadband investment plans" developed for each of nine regions of the state. In short, this final product is a compilation of responsive ideas perceived by the vast majority of stakeholders to be realistic, actionable and important to improve broadband availability, adoption and application throughout Wisconsin.

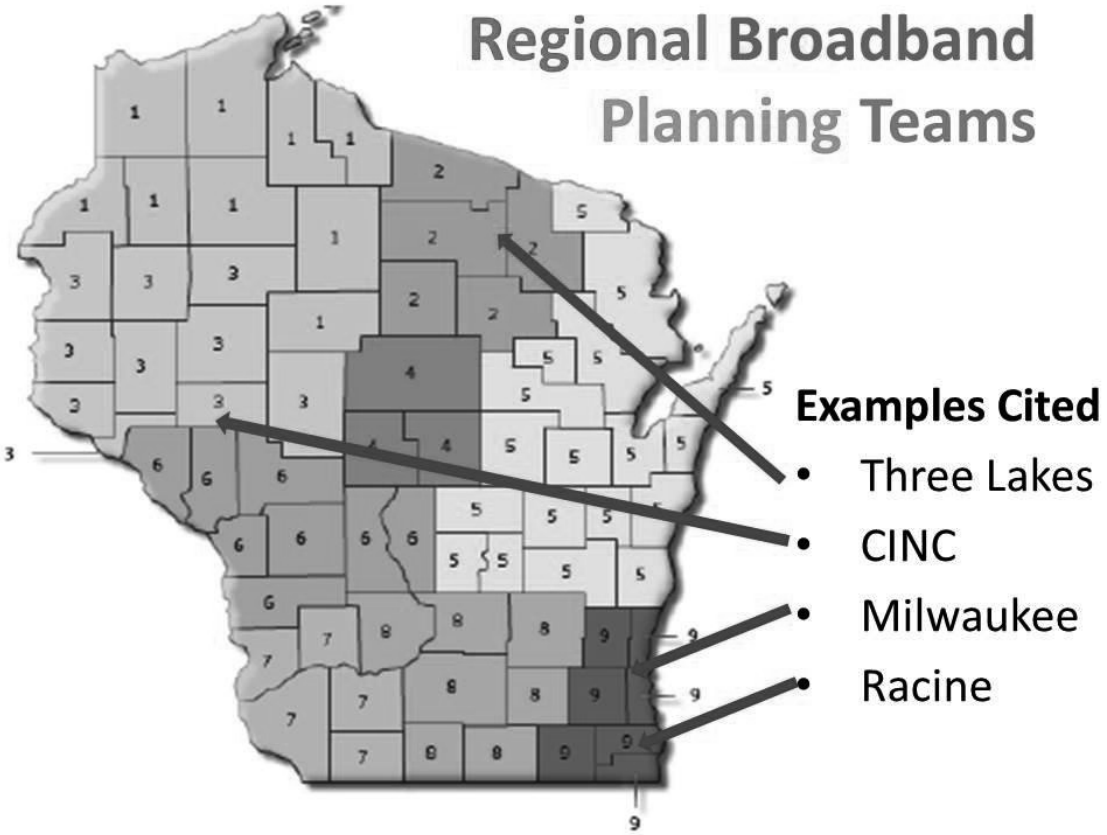
BROADBAND AND ITS IMPORTANCE TO WISCONSIN'S QUALITY OF LIFE AND ECONOMIC VITALITY

Wisconsin's beautiful lakes, wooded acres, and expansive recreational assets are the envy of many. Agriculture and natural resource enterprises, as well as businesses and industries of all sizes, have flourished in rural Wisconsin for generations. The state's urban and suburban centers are recognized nationally as leading centers of education, research, industry, commerce, arts and culture. Through initiative, innovation, and vast investments in infrastructure (including broadband communications), Wisconsin has built a sound and resilient economy.

While recognizing these strengths, members of all nine Wisconsin Regional Broadband Planning Teams note there remain gaps in critical broadband communications infrastructure, as well as in utilization. Not only is the availability of high-speed Internet service essential to commerce and quality of life, but that service must be of the speed and quality required for today's multiple uses ranging from finding information on the Web, to videoconferencing, and to sending and receiving large amounts of data. Wisconsinites will be thwarted in their efforts to continue improving their lives, families, businesses and communities if they do not have access to adequate and affordable broadband communications.

Access to broadband equals access to opportunity for both commerce and individuals. With broadband, people can search for jobs, start new innovative businesses, gain new skills, connect with critical health services, enjoy entertainment, network with others and do even more. Businesses can innovate, recruit the best possible employees, connect with partners and reach markets not otherwise accessible. Businesses also find broadband increasingly essential for filing forms, obtaining approvals and licenses, as well as for submitting responses to business opportunities on-line. The services citizens count on, ranging

from health care to public safety to education, can be delivered more efficiently and be available anywhere with a broadband connection. Increasingly, broadband is a basic need for family members to maintain contact with one another. In short, the availability of sufficient and affordable broadband service is critical to economic vitality and quality of life for all Wisconsin families, businesses and communities.



EXAMPLE PROJECTS

Because of broadband's importance, leaders from across the state are stepping up to the challenge of ensuring that high-speed service is available, adopted and applied to promote economic development and quality of life. These efforts use very different models and technologies, all of which work toward improved broadband access for Wisconsin residents and businesses. Each of these technologies has a different mix of available bandwidth, supported services, features, costs, availability and environmental impacts.

Mobilizing Providers

The community of Three Lakes in Wisconsin's Northwoods proactively brought together providers and community members desiring additional broadband service.

Governmental and private sector leaders conducted meetings to inform the community of the benefits of broadband; mapped areas where there were unmet demands; and sought out providers willing to make the needed investments. As a result, nearly 90 percent of the Three Lakes Area residents spread across 90 square miles can now choose from up to five broadband providers.

What has since become known as the Three Lakes model has spread, and is now being introduced to the five-county Grow North Regional Economic Development Corporation area in the Northwoods. With multi-county leadership – including providers, business, government and higher education – the communities have surveyed seasonal homeowners in the region to assess both current gaps in coverage and the economic benefits of expanded coverage. Results from this survey conclude that, on average, seasonal residents would stay in the Northwoods an additional four to six weeks per year if broadband were available. Six percent indicated they would permanently relocate. This would mean more people in local stores, stronger property values, and greater incentive for entrepreneurs to start new businesses in or migrate to existing ones to the Northwoods.

Fixed Wireless

Also motivated by the importance of broadband for economic opportunity and quality of life, Racine County leadership implemented an innovative public and private partnership to fill gaps in service. Specifically, the County decided to partner with an Internet Service Provider (ISP), to provide fixed wireless access to subscribers in areas that did not have a broadband service option. The ISP rents space on water towers and other tall assets owned by the County (and by towns in the County). Racine County is one of a growing group of counties and municipalities across the state that are pursuing methods of giving private providers access to these assets to expand broadband options and coverage in these communities.

High Capacity Wired Broadband

The Chippewa Valley has a long history of grass roots collaboration for promoting the sharing of applications, infrastructure and equipment for the benefit of all communities in the region. The initiative, called the Chippewa Valley Internetworking Consortium (CINC) is built on a simple principle of sharing information and resources on communication needs, initiatives and assets to

encourage joint efforts among education, local government, health care, public safety and others within the area. This initiative, now passing its 12-year milestone, has resulted in reduced cost of services and innovations ranging from medical imaging applications to management of school budgets.

Computing Centers

The City of Milwaukee's "Connecting Milwaukee Communities" project opened a new public computer center and upgraded eight centers across the City. As a part of this project, the City intends to distribute approximately 270 new workstations and train as many as 10,000 city residents. To meet the needs of the city's diverse population, the City is partnering with the Milwaukee Public Library, the Housing Authority of the City of Milwaukee, the Milwaukee Area Workforce Investment Board, and the United Community Center – Olga Village to provide training classes in both English and Spanish at various sites. Along with these and other partners, the City is teaching classes and providing one-on-one computer help enabling its diverse residents to improve their lives by gaining new skills and meeting needs to improve their quality of life.

LESSONS LEARNED AND DIRECTION FOR WISCONSIN'S PLAYBOOK FOR BROADBAND PROGRESS

The following strategies are representative of the innovation and best practices Wisconsinites have used to encourage broadband availability, adoption and application. While the specific focus and type of communities illustrated by each of the above noted examples are different, there are important commonalities that cut across each success story. These include:

- **Partnerships and collaboration:** Inclusive leadership that incorporates shared benefits, mutual goals and participation by citizens, business, government, private providers, education, health care and others.

- **Leveraging:** Each successful example leverages existing resources ranging from water towers to local broadband providers to governmental advocacy connecting training opportunities to libraries.

- **Awareness:** Broadband is a means, not an end. Success stories highlight what broadband can do. Awareness education plays a key role in bringing consumers, government leaders and private providers together around the unique opportunities in their local area.

- **Actionable ideas:** Each success story illustrates an incremental approach that addresses a particular need (better coverage in rural areas, sharing of digital applications, expanded adoption for low-income residents, etc.). Each initiative is targeted, specific and achievable with resources that are available.

- **Consensus:** Closely related to targeting actionable ideas is the pursuit of consensus. Wisconsin communities are able to make important advancements most effectively when leaders focus on points of agreement for future progress.

- **Community:** Ability to engender and sustain support for efforts often hinges on leaders being mindful that "a rising tide lifts all boats." Successful initiatives are designed and portrayed in terms of the community's shared benefits.

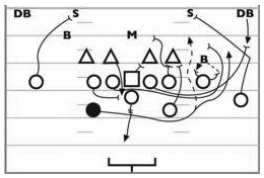
Mirroring lessons learned from local Wisconsin success stories, potential plays are organized under three larger themes:

- ***Leverage*** existing resources to incent private investment;
- Provide forums for public and private sector ***partnerships*** and ***collaborations*** to advance Wisconsin's broadband communications; and
- Promote ***awareness*** of shared opportunities among consumers, government leaders and providers.

In all cases, plays included in the Playbook meet the standard of ***actionable ideas*** that share a broad ***consensus*** within the ***community*** of stakeholders as expressed through focus groups and other public comment opportunities.

PLAYS THAT CAN MAKE A DIFFERENCE FOR WISCONSIN

➢ **<u>Leverage Existing Resources to Incent Private Investment</u>**



This Playbook offers directions on broadband infrastructure needs and how to pursue the common interests of private providers and Wisconsin's diverse stakeholder community for broadband progress. As with other forms of infrastructure, the public sector has served in varying roles in broadband infrastructure development. The focus groups conducted as a part of the Playbook development included voices representing multiple perspectives on the appropriate role for government in the provision of infrastructure in Wisconsin. However, following guidance and direction from the Steering Committee, this Playbook emphasizes the wide agreement among stakeholders on an important facilitating

role for government that is consistent with private investment. These include, but are not limited to, the following plays:

Play 1. Convene public agency leadership, provider representatives and other stakeholders as appropriate to:

- Document barriers that prevent the efficient leasing of available space on government owned towers (state, county, municipal) to private providers.
- Document barriers that prevent or inhibit access to other government owned facilities (*e.g.,* poles, open trenches, etc.) by private broadband providers.
- Develop workable options to streamline the process of accessing public assets for broadband build-out:

    - √ Identify and highlight best practice models (*e.g.,* "build once" models to require road construction projects to incorporate conduit to ensure that roads and landscapes are not needlessly and repeatedly torn up.)
    - √ Identify possible legislation or practice changes to standardize terms and conditions across jurisdictions.
    - √ Coordinate with state agencies (for example the Department of Transportation or Department of Natural Resources) on right-of-way issues.
    - √ Review appropriateness of model legislation from other states.
    - √ Develop education and awareness outreach to government decision leaders.

- Recommend legislative action or agency rule changes that may be needed to reduce time and cost of private provider access to towers, rights-of-way and other government resources that can improve broadband access.

Play 2. Create an information database to facilitate access to critical tower assets and right-of-way resources. This database would inventory:

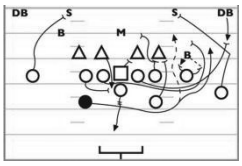
- Tall assets, poles, open trenches, etc., that could be used by private providers.
- Model legislation from other states.
- Examples of best practices used to support broadband adoption and deployment.
- Model ordinances to facilitate sharing of tall assets, poles, open trenches, and other resources.
- Typical terms, conditions, requirements and fees for access to public facilities providing a baseline for both municipal authorities and providers.

Play 3. Explore targeted tax incentives to encourage greater broadband availability, adoption and/or use such as:

- Tax incentives for broadband-related telecommunications equipment and facilities deployed in areas without current broadband service.

- Business tax incentive programs for implementation of qualified telecommuting or home agent initiatives in targeted areas.
- Personal tax credits for broadband expenses incurred in working from or running a business from home.

➢ **<u>Provide Forums to Encourage Collaborations that Advance Broadband Communications Access and Use</u>**



Wisconsin has numerous on-going and innovative initiatives that advance broadband availability, adoption and use. These include the on-going private provider investments deployed throughout the state. There are a growing number of regional and locally-led initiatives that engage stakeholders on broadband issues supportive of expanded private investment. LinkWISCONSIN and the PSCW facilitated the creation of localized broadband investment plans led by local teams in nine different regions of the state. As they are being introduced to these regional plans, more individual counties and municipalities are considering or are already implementing specific initiatives to incent additional broadband investment and utilization.

There are also sector-specific broadband initiatives taking place at the same time. For example, Wisconsin's public safety community is preparing to expand public and private partnerships that better leverage broadband to meet public safety needs. Lands End is an example of a growing number of Wisconsin business innovators that are gaining a competitive edge by proactively connecting to their workforce in home offices. Broadband access to schools and libraries in Wisconsin has been expanded in recent years. These are just a few major examples of the types of activity that can happen, and need to happen, across the state.

Coordination is essential to reduce wasteful duplication, improve synergies and speed innovation through a sharing of best practices to advance broadband. This within the larger context of encouraging market forces as the primary approach for improving service and cost. State leadership can play an important role convening stakeholders representing multiple perspectives and from all regions of the state to speak with "one-voice" on broadband issues. The new State Broadband Director position established by the PSCW provides an opportunity to provide more focused state coordination of these diverse initiatives.

Examples of specific actions (or plays) that can be implemented to encourage coordination include:

Play 4. Transform the LinkWISCONSIN/PSCW initiative to include a statewide advisory committee representative of key stakeholders to:

- Advise on state policy as it affects broadband adoption, deployment and application.
- Advise and coordinate advocacy on national issues where feasible.
- Identify potential sources of funding, and assist and coordinate applicants to ensure the funding is applied for and used.

Play 5. Implement annual regional/state summits to bring diverse stakeholders together to:

- Assess and communicate best practices.
- Encourage consensus on statewide needs and actions to advance broadband objectives.
- Promote opportunities for collaboration where appropriate.

Play 6. Create and maintain a statewide broadband information web-portal:

- Assess options for ownership and sustainable operation of web-portal.
- Identify and leverage existing on-line web resources (higher education, federal, state agencies, etc.) to avoid duplication of effort.
- Assemble relevant web content and keep it updated to maximize usefulness.
- Serve as a clearinghouse to connect information on unmet needs with providers and service options.
- Provide a resource for businesses and individuals seeking to relocate to the state or to expand within Wisconsin.

Play 7. Convene governmental and private sector stakeholders to advocate collaboratively on issues such as, but not limited to:

- Coordinating statewide access to federal D-Block spectrum[4] to advance public safety and provide an additional resource to fill Wisconsin's broadband gaps.
- Maximizing Wisconsin's use of available federal universal service[5] resources where appropriate and desired – especially to assure affordable broadband access for disabled individuals and low-income households.
- Expanding business access to adequate and affordable broadband.

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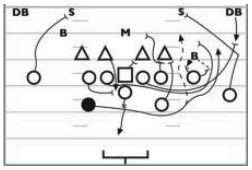
[4] "D-block," refers to a 10-megahertz band in the 700-megahertz radio spectrum that could serve as the backbone of a nationwide public safety and smart grid system (electrical grid that gathers and acts on information to improve the efficiency, reliability, economics, and sustainability of the production and distribution of electricity). Congress has passed a law that allows utilities to partner with public safety providers in using the D-block spectrum, and directs $7 billion in federal backing to state and local agencies that will be looking for funds to buy the radios and build and deploy the networks.

[5] In October 2011, the Federal Communications Commission created two new universal service funds – a Connect America Fund and a Mobility Fund – to support landline and wireless broadband deployment in unserved areas.

- Finding and exploiting opportunities to expand public computer and broadband access at libraries, schools and other identified public computer centers.
- Assuring robust broadband public safety networks and services.

➢ **<u>Promote Awareness of Shared Opportunities among Consumers, Governmental Leadership and Providers</u>**



Information is powerful. Not all consumers have the skills to access broadband, and many may not understand how broadband can benefit them. Government leaders may not perceive that they have a role to play in encouraging additional broadband investment or the importance of their constituents' adoption and use of broadband. Private providers are not always aware of all unmet demands that could become business opportunities. To correct these deficiencies, several important plays focus on awareness education and information sharing that can lead to more broadband investment and utilization, which will benefit Wisconsin.

Play 8. Promote the inclusion of broadband infrastructure within local economic development, comprehensive and capital improvements planning:

- Communicate success stories and best practices.
- Encourage engagement in broadband planning by regional planning commissions, local economic development councils, county/municipal government, and other existing leadership.
- Develop a guidebook for incorporating broadband adoption into comprehensive planning for local governments.
- Seek creative use of existing funding programs, such as the Tax Incremental Financing (TIF) and Community Development Block Grant (CDBG) programs, directed to localized broadband planning needs.
- Explore opportunities to leverage county and municipal resources.

Play 9. Communicate available broadband options to consumers:

- Maintain accurate public database/map of providers available by location at as granular a level as possible.
- Identify the broadband options available to consumers, and the strengths and capabilities of the various options. Conduct outreach and education to help business, residential and other providers understand their options.

Play 10. Document and communicate unmet market opportunities to potential providers of service:

- Provide local and regional teams with a survey resource to document unmet residential, business and other demands.

- Facilitate partnerships with higher education to manage, analyze and organize data on unmet consumer demand.
- Communicate unmet demands to providers with market incentive to address those needs.

Play 11. Facilitate partnerships to deliver broadband awareness/adoption education to government officials and consumers:

- Encourage the pursuit and use of public and private grant monies to leverage the demand-enhancing opportunities of digital awareness and competency.
- Coordinate and leverage existing assets and programs, such as:
    - Higher education (e.g., University of Wisconsin Extension).
    - Private providers (e.g., Connect to Compete or CenturyLink's Internet Basics[6]).
    - Libraries and community partners (e.g., Connecting Milwaukee Communities).
- Connect potential collaborators with new and existing ideas and projects.

HOW YOU CAN GET INVOLVED

If you have questions, concerns or want to get involved, you can use this e-mail address:

PSCBroadbandComments@wisconsin.gov

or you can reach us by paper mail at:

State Broadband Director
Telecommunications Division
Public Service Commission of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

For additional information, please visit:
http://www.link.wisconsin.gov.

[6] These programs provide discounted broadband service to low-income households.