

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Inquiry Concerning the Deployment of) GN Docket Nos. 09-47 and 09-137
Advanced Telecommunications Capability)
to all Americans in a Reasonable and)
Timely Fashion, and Possible Steps to)
Accelerate Such Deployment Pursuant to)
Section 706 of the Telecommunications Act)
of 1996, as amended by the Broadband Data)
Improvement Act)
)
A National Broadband Plan for Our Future) GN Docket No. 09-51

To: The Commission

**COMMENTS – NBP Public Notice #18
THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”) provides these Comments to address certain aspects of NBP Public Notice #18¹ to urge the Commission to incorporate into its National Broadband Plan recommendations that will improve economic opportunity for all Americans and specifically for those located in unserved and underserved areas.

Background

WISPA was founded in 2004 and represents the interests of more than 300 wireless Internet service providers (“WISPs”), vendors, system integrators and others interested in promoting the growth and delivery of fixed wireless broadband services to Americans. WISPA estimates that more than 2,000 WISPs operate in the United States

¹ Public Notice, “*Comment Sought on Relationship Between Broadband and Economic Activity*,” NBP Public Notice #18, DA 09-2414 (rel. Nov. 12, 2009) (“*Public Notice*”).

today. WISPA's ongoing research reveals that WISPs cover more than 2,000,000 square miles in all 50 states. Using primarily license-free frequencies authorized under Part 15 of the Commission's Rules and licensed-lite services in the 3650-3700 MHz band under Part 90 rules, WISPs provide fixed wireless broadband services to more than 2,000,000 people in residences, businesses, hospitals, public safety locations and educational facilities.

Discussion²

I. Mobile Broadband is Not a Substitute for Fixed Broadband Among Businesses.

In the *Public Notice*, the Commission rightly notes that broadband adoption and usage brings substantial economic benefit to businesses and individuals. The Commission asks if mobile broadband services for businesses constitute a reasonable alternative (rather than a complementary solution) to wireline access.³ WISPA believes that mobile broadband is *not* a reasonable substitute for fixed services. While mobile broadband provides a useful service that allows the business community to check email and browse the web while on the road, the amount of bandwidth available via a mobile broadband connection does not remotely approach the amount of bandwidth provided by either wireline access or by fixed wireless broadband. Mobile broadband today typically provides bandwidth in the range of a few hundred kilobits per second while fixed wireless broadband provides bandwidth in the range of megabytes per second. The

² WISPA's Comments address Section II.a. of the *Public Notice*.

³ *See id.* at 2.

typical wireline or fixed wireless broadband service provides 10 times the bandwidth (or more) compared to the bandwidth of a mobile broadband connection.⁴

Any business that operates from a fixed location or that has more than one employee will find that the limited bandwidth provided by mobile broadband is inadequate to conduct normal business. This makes mobile broadband complementary to both wireline and fixed wireless broadband. Mobile broadband is clearly not a replacement for wireline access or for fixed wireless broadband access. WISPA respectfully suggests that these differences be kept in mind when considering claims that mobile broadband is somehow a satisfactory substitute for fixed wireless broadband or for wireline access, especially in rural areas.

II. Businesses in Many Rural Areas are Unserved or Underserved, and the Impact on the Economy Can Have Far-Reaching Economic Consequences.

Many WISPs serve residences and small businesses (as defined in the *Public Notice*) in rural areas and small communities that have little or no broadband access via DSL or cable. Some communities have experienced first-hand the adverse economic effects of small businesses leaving town because of a lack of broadband. As businesses leave town (or never come to town), economic opportunities for the local citizenry evaporate. In part because of the lack of broadband, young adults and families are leaving rural areas for large cities that have broadband, threatening the survivability of many rural communities.

In their recent book entitled “*Hollowing Out the Middle: The Rural Brain Drain and What it Means for America*,” authors Patrick J. Carr and Maria J. Kefalas analyze the

⁴ In addition, the bandwidth provided by fixed wireless broadband access or by wireline access is constant. The bandwidth provided by mobile broadband is not constant and varies as the mobile user moves about and as their mobile connection is handed off from cell site to cell site.

exodus of young people from America's rural heartland.⁵ Though there are certainly many reasons why people – especially those that the authors call “Achievers” – are leaving small communities for larger cities, the lack of broadband access is a contributor to the “brain drain.” The authors note the irony of Google's decision in 2007 to establish data centers near Council Bluffs, Iowa where the state's technology infrastructure has been described as a “nightmare.”⁶ Citing the 2007 Generation Iowa Report, the authors write:

if people were to drive “less than 30 miles south of Des Moines and only slightly to the west of Indianola, [they would be in] one of several pockets where high-speed Internet access is only a dream.” In Chicago, Minneapolis/St. Paul, or Kansas City, the report's authors lamented, “How long would you have to drive before you found a place without the ability to acquire high-speed Internet access?”⁷

The authors also point out that the rural population is being left behind as more and more educated workers migrate to the cities. They recognize that the lack of access to digital infrastructure will limit participation in the global economy, stating:

The Heartland's growing educational deficits will continue to be one of the most serious roadblocks for the region if it is to take advantage of coming opportunities in the global marketplace. *Simply put, globalization readiness – without human- and digital-capital investments in the countryside's labor forces – means that better equipped metropolitan areas will always have the upper hand in attracting and developing new industries. Therefore, it is critical that economic development in rural areas proceed hand in hand with digital investments and human-capital development.* Simply put, prosperity cannot come to this region without better preparing the Stayers [those that do not leave their communities] and Returners [those that return after college or military commitments] for biotech and technology jobs; keeping a greater share of the Achievers home; luring more in-migrants (possibly through immigration); and building an infrastructure, supported through cutting-edge digital

⁵ Carr, Patrick J. & Kefalas, Maria J., “*Hollowing Out the Middle: The Rural Brain Drain and What it Means for America*,” Beacon Press (2009).

⁶ *Id.* at 116.

⁷ *Id.* at 116-17.

technology, that reduces the economic costs of conducting business far from center cities.⁸

It is apparent from this analysis that the lack of broadband access in rural areas is driving consumers and businesses to other areas, depleting the educational and economic bases and limiting future opportunities in the global marketplace.

In addition to the authors' recommendations, WISPA believes that the Commission and other federal agencies must remain committed to promoting broadband access in rural areas. Investments in infrastructure will help stem the "brain drain," and additional economic stimulus beyond the relatively small amount of funding under the American Recovery and Reinvestment Act must be made available. Moreover, adopting WISPA's proposals in the middle mile/second mile⁹ and spectrum for broadband proceedings¹⁰ will enable businesses to obtain affordable connectivity and adequate fixed spectrum access to improve the economic viability of needy communities. Only through a combination of economic assistance and better policy can businesses in rural areas have a better chance to succeed in a global marketplace.

Conclusion

All citizens and all businesses deserve equal access to the benefits made possible by true broadband Internet access. As work proceeds on the National Broadband Plan, WISPA urges the Commission to avoid the confusion and the mischaracterizations caused by simply using the term "wireless broadband" without specifying whether that term refers to fixed wireless broadband or mobile wireless broadband. WISPA also

⁸ *Id.* at 148-49 (emphasis added).

⁹ See Comments of WISPA in response to Public Notice, "*Comment Sought on Impact of Middle and Second Mile Access on Broadband Availability and Deployment*," DA 09-2186, GN Docket Nos. 09-47, 09-51 & 09-137 (rel. Oct. 8, 2009), filed November 4, 2009.

¹⁰ See Comments of WISPA in response to Public Notice, "*Comment Sought on Spectrum for Broadband*," DA 09-2100, GN Docket Nos. 09-47, 09-51 & 09-137 (rel. Sept. 23, 2009), filed October 23, 2009.

believes that the Commission's National Broadband Plan should recognize that a combination of federal funding and policy changes is essential to improve the economic prospects for businesses and consumers in rural areas and to alleviate the very serious "brain drain" phenomenon that is contributing to educational deficits and economic decline.

Respectfully submitted,

**THE WIRELESS INTERNET
SERVICE PROVIDERS ASSOCIATION**

December 4, 2009

By: */s/ Richard Harnish, President*
/s/ Jack Unger, Chair of FCC Committee

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