TESTIMONY

OF

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COMMITTEE ON ENERGY AND COMMERCE

UNITED STATES HOUSE OF REPRESENTATIVES

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Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss issues relating to the deployment of broadband communications networks.

I have had the opportunity to study communications and broadband policy issues over the course of many years, and in several capacities, including in my current positions as a Managing Director at Navigant Economics, an adjunct professor at George Mason University Law School, and a member of the Advisory Board of the Pew Project on the Internet and American Life. I should note that, while my consulting practice often involves issues relating to communications and broadband policy, I am appearing today solely on my own behalf.

If there is one primary message I hope you will take away from my testimony today it is that America's broadband policies are succeeding. They are succeeding in increasing broadband availability, succeeding in reducing broadband prices, and succeeding in increasing the proportion of the population that chooses to purchase broadband at home. They are incentivizing high levels of investment, and generating rapid innovation in every sector of the Internet "ecosystem," from networks and devices to content and applications.

I know you sometimes hear otherwise. Various interest groups – and sometimes even government officials – have taken to talking down America's broadband success as a means of justifying their proposals for radical changes in telecommunications policy. There is plenty of room for improvement in U.S. broadband policy, but that improvement consists mainly of expanding upon the market-based approach that has defined our policy for more than a decade.

Today, I would like to briefly cover two broad topics. First, I want to present just a few facts and statistics about the state of broadband in America, to illustrate the basis for my belief that our current policies are, by and large, succeeding. Second, I will briefly address four policy issues that relate directly to broadband deployment: Network Neutrality; Wholesale Competition; Allocation of Wireless Spectrum; and, Universal Service.

The FCC's Omnibus Broadband Initiative, and the resulting National Broadband Plan, undoubtedly represent the most thorough and intensive analysis of communications policy ever undertaken in the U.S., or, perhaps, anywhere. I salute Chairman Genachowski, as well as OBI Executive Director Blair Levin and everyone who worked on the plan, for producing a tremendous amount of useful data and substantive analysis in a very short time.

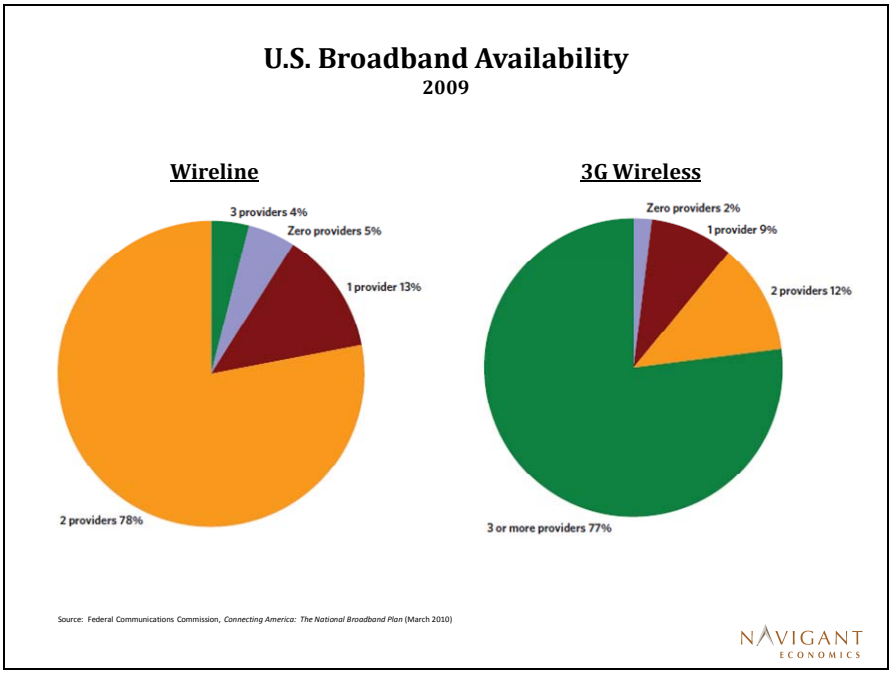
A careful reading of the analysis presented in the Plan, and of the large and detailed record that supports it, supports the conclusion that U.S. policies have accomplished a great deal over the past several years, and that progress is likely to continue unless it is interrupted by adoption of excessive and unnecessary regulation.

As the Plan itself concludes,

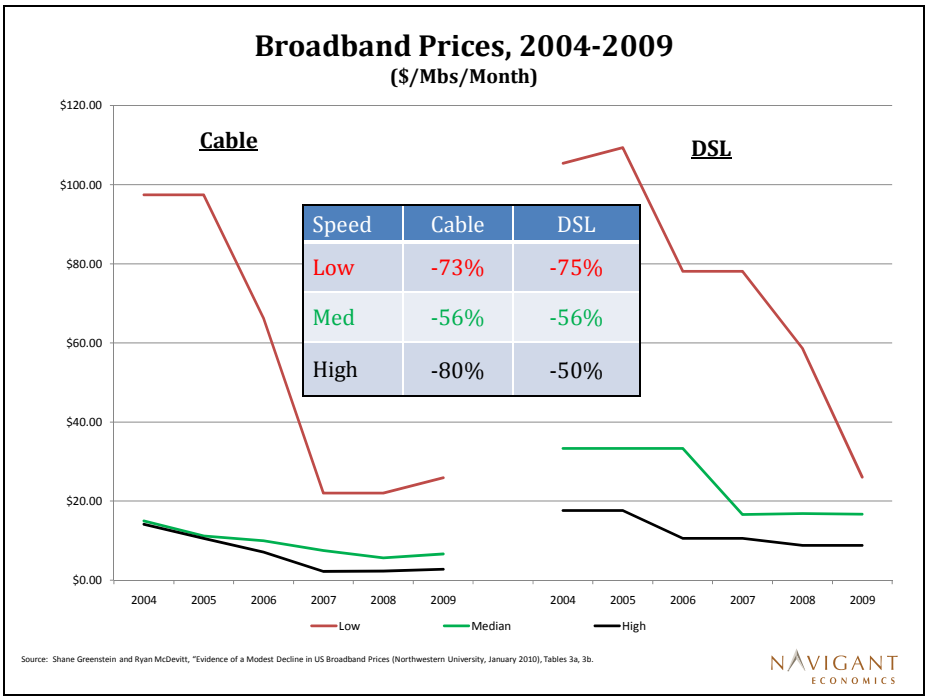
> Fueled primarily by private sector investment and innovation, the American broadband ecosystem has evolved rapidly. The number of Americans who have broadband at home has grown from eight million in 2000 to nearly 200 million last year. Increasingly capable fixed and mobile networks allow Americans to access a growing number of valuable applications through innovative devices. (National Broadband Plan at xi.)

Let me emphasize just a few facts that demonstrate what we have accomplished and what can reasonably be expected in the near future.

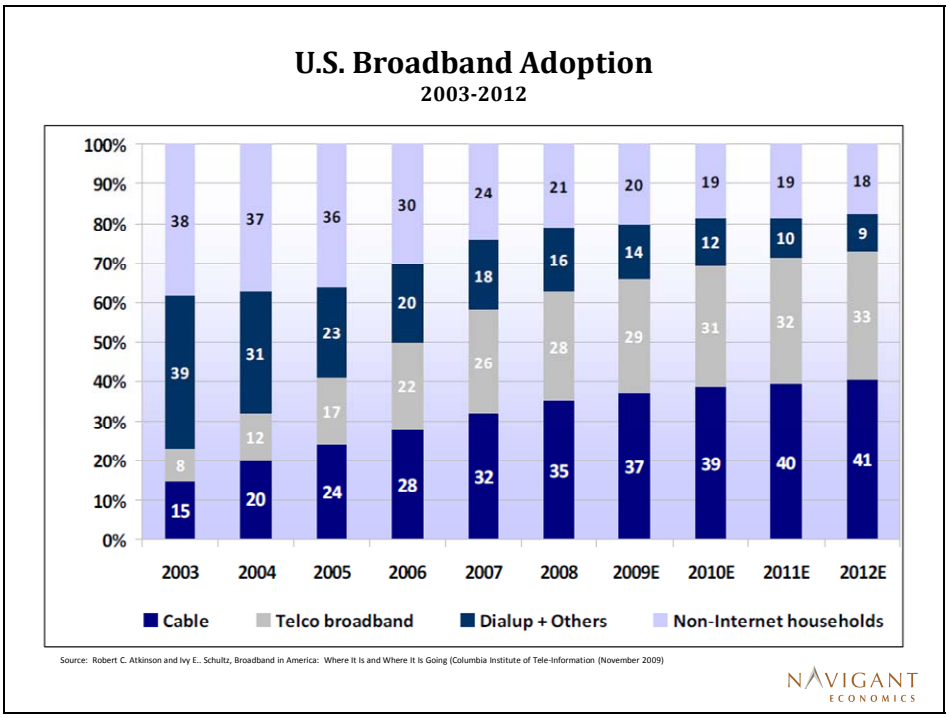
First, in terms of broadband availability, the National Broadband Plan reports that approximately 95 percent of U.S. households have access to wireline broadband service today, and the vast majority of those have access to two or more providers. (National Broadband Plan at 37.) Moreover, 98 percent of Americans live in areas served by 3G wireless services, and the vast majority of these have access to three or more providers. (National Broadband Plan at 39.)



Secondly, the data also demonstrate that broadband prices are falling and, arguably, falling very rapidly. A study prepared as part of the National Broadband Plan utilized hedonic price indices to conclude that broadband prices are falling "modestly" – i.e., between 3 percent and 10 percent over the past five years. (Greenstein and McDevitt at 1.) While such measures have their place, the simple fact is that broadband prices as measured by *price per megabit* are falling much more rapidly. As shown in the figure below, actual prices per megabit have fallen by between 50 percent and 80 percent in the last five years. Moreover, and importantly, prices for entry-level services have fallen by between 73 and 75 percent.



Third, as a result of nearly ubiquitous availability and rapidly falling prices, broadband adoption in the U.S. is high and rising rapidly. As shown in the figure below, approximately 70 percent of U.S. households will subscribe to broadband by the end of this year, and that figure will rise to 74 percent by 2012 – just two years from now. (CITI Report at 26.)



Moreover, and importantly, broadband penetration is rising most rapidly in demographic groups where adoption has heretofore lagged behind. As shown in the figure below, Internet penetration is growing rapidly among older Americans, those living in rural areas, and those with lower incomes.

Increases in Broadband Adoption
2008-2009

	Percentage Point Change	Percent Change
Age		
65+	11	58%
50-64	11	22%
30-49	3	4%
18-29	7	10%
Location		
Rural	8	21%
Non-Rural	8	13%
Income		
Under $20K	10	40%
$40-50K	11	18%
Over 100K	3	4%

Source: Pew Project on the Internet and American Life, 2009

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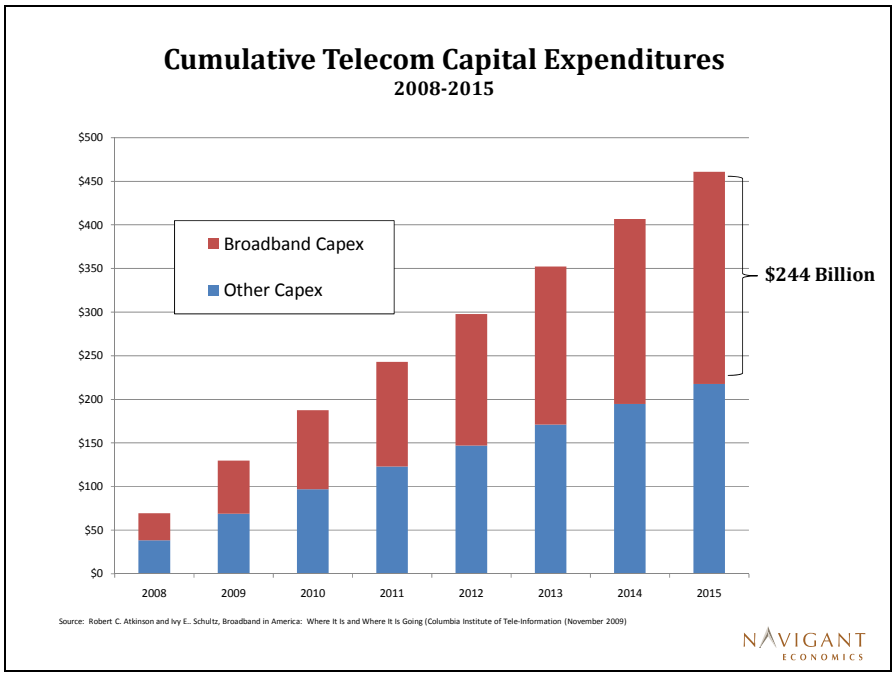
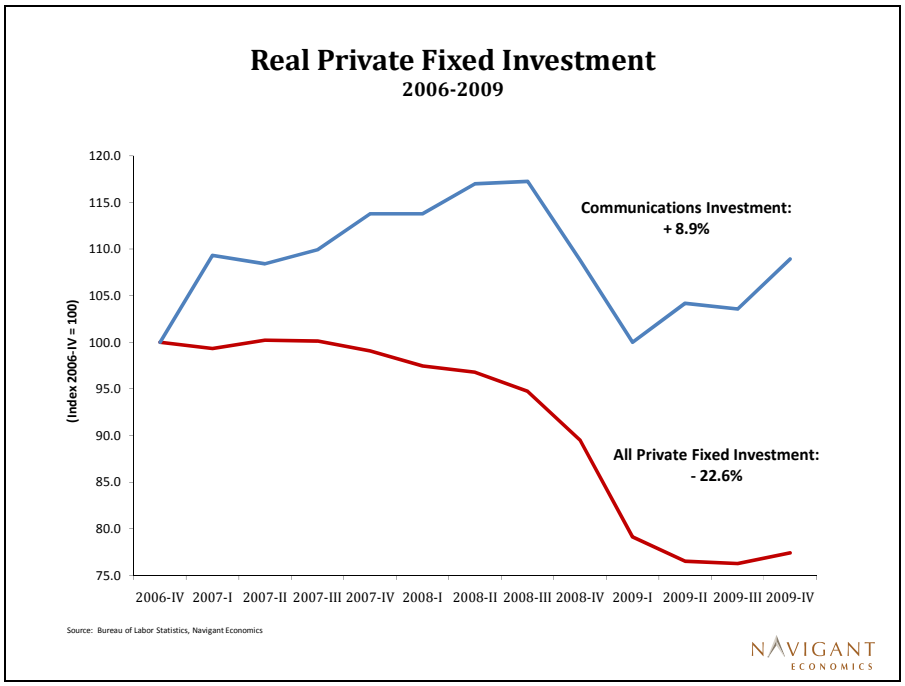
Fourth, all of this progress has been enabled, ultimately, by the high rates of investment our current broadband policies have produced. Industry analysts estimate that broadband providers will invest approximately $30 billion annually in broadband networks each year between 2008 and 2015, or a total during that eight-year period of more than $240 billion. (CITI November 2009 Report at 66.)



In fact, one measure of the success of our current policies is the extent to which investment has held up despite the deep economic recession. As shown in the figure below, real private fixed investment in the economy overall began declining in 2006, and remains roughly 23 percent below its late 2006 levels. Investment in communications equipment, by contrast, continued increasing through 2007 and 2008, and while it declined sharply in early 2009, it has resumed its prior growth trend and remains more than 9 percent above its 2006 levels. The continuing improvement in our broadband infrastructure is among the reasons the high-tech sector is leading the economy out of recession.



Finally, the most encouraging conclusion to emerge from the National Broadband Plan is the fact that all of the positive trends detailed above are likely to continue. In particular, the Plan notes the dramatic improvements in wireless broadband services – both satellite and terrestrial – on the immediate horizon, and suggests there are good reasons to believe that wireless broadband will soon emerge as an effective competitor to wireline. (National Broadband Plan at 40-42.)

To summarize this first part of my testimony, the evidence clearly demonstrates that U.S. broadband policies are yielding increasing availability, lower prices, rising adoption, and high levels of investing and innovation that bode well for the future. The evidence, in other words, does not support radical change in our current policies.

And yet, radical change is precisely what some would like to see – and, in certain areas, what the Commission has proposed.

First, last year, the Commission issued its *Notice of Proposed Rulemaking in the Matters of Preserving the Open Internet and Broadband Industry Practices* – the Net Neutrality rulemaking. Last week, I was among 21 economic experts who filed a declaration in those proceedings in which we stated our strong opinion that the economic evidence does not support the Commission's proposed rules. Indeed, and I quote, we advised the Commission that "it is extremely likely that the regulations proposed in the NRPM would harm consumers and competition and reduce economic welfare." (See Attachment A.)

Second, the National Broadband Plan alludes to the possibility of reversing more than a decade of Commission policy relating to wholesale unbundling of broadband infrastructure, suggesting specifically that the Commission should act on a petition for rulemaking by Cbeyond, Inc. that

would impose forced access regulations on fiber-to-the-home and fiber-to-the-cabinet infrastructures. (National Broadband Plan at n. 75.)

In support of its petition, Cbeyond argues that unbundling regulation does not reduce carriers' incentives to invest in infrastructure, a thesis that has also been advanced in recent studies by Harvard's Berkman Center and Free Press. In addition, Cbeyond and others have sought to inject partisanship into the debate, suggesting that the decision to forebear from unbundling broadband services was made in the early 2000s – that is, under the Bush Administration.

The Subcommittee should know two things. First, as I detailed in a joint declaration to the FCC late last year (see Attachment B), empirical studies of the effects of unbundling regulation leave little doubt that it has reduced investment and ultimately led to lower levels of broadband penetration. Indeed, the National Broadband Plan itself cites new empirical analyses demonstrating that *infrastructure-based competition* between wireline providers increases investment. (National Broadband Plan at 38.)

Second, the decision not to impose unbundling regulations on broadband was made, in the first instance, not by Chairman Powell or the Bush FCC, but rather by Chairman Kennard, in 1999. Faced with demands to impose open-access on cable modem services as condition in the AT&T-TCI merger, Chairman Kennard refused to do so. His September 1999 explanation is worth keeping in mind today:

> It is easy to say that government should write a regulation, to say that as a broad statement of principle that a cable operator shall not discriminate against unaffiliated Internet service providers on the cable platform. It is quite another thing to write that rule, to make it real and then to enforce it…. So, if we have the hope of facilitating a market-based solution here, we should do it, because the alternative is to go to the telephone world, a world that we are trying to deregulate and just pick up this whole morass of regulation and dump it wholesale on the cable pipe. That is not good for America.[1]

More than a decade later, the market-based solution Chairman Kennard envisioned has in fact come to fruition. There is simply no basis for the Commission to revisit the question of whether to impose "the whole morass" of unbundling regulation on broadband providers.

While I strongly oppose the Commission's proposals to drastically expand regulation of broadband networks, there are other areas where the National Broadband Plan has proposed sensible steps in the direction of important reforms. Let me mention two of them.

First, the Commission's focus on spectrum policy is highly commendable. Economists have been arguing for more than 50 years that spectrum licenses should be more flexible and more easily subject to voluntary reallocations among licensees – that is, that market forces should be allowed to play a greater role. Beginning in the early 1990s – and, again, on a bi-partisan basis –

[1] William E. Kennard, "Consumer Choice Through Competition: Remarks Before the National Association of Telecommunications Officers and Advisors, 19th Annual Conference," (September 17, 1999) (available at http://www.fcc.gov/Speeches/Kennard/spwek931.html).

policymakers have moved gradually to adopt these recommendations, first by allocating spectrum through the use of auctions and, later, by taking tentative steps to create more flexible licenses and workable secondary markets.

The National Broadband Plan potentially represents a significant move forward, explicitly calling for steps to increase spectrum flexibility and to speed the development of secondary markets, as well as supporting the so called "Spectrum Inventory" proposal. (National Broadband Plan at Chapter 5.) On the other hand, the Plan's proposal to "repurpose" 120 Mhz of spectrum currently licensed for digital broadcasting seems to *accept* as a starting point the notion that it takes a decade or more to reallocate – from which it concludes that the solution is to get started as soon as possible.

I respectfully suggest that the real problem is not that we are starting too late, but rather that *a decade is too long*. Rather than trying to engage in a one-time repurposing exercise (which would, indeed, take a decade or more), the Commission would do better to focus on implementing reforms that would allow spectrum to move dynamically – that is, continuously – to its highest valued uses, in response to changes in markets and technologies.

Universal service is a second area where the National Broadband Plan is on the right track. Most notably, the Commission's recommendations that the new Connect America Fund be limited to funding areas where there is no private-sector business case for providing unsubsidized broadband service, and that funding in such areas be limited to a single provider, represents an economically sound and fiscally prudent approach. My own research has demonstrated that the Universal Service Fund pays hundreds of millions of dollars annually to carriers where it is clear no subsidies are required. (See Attachment C.) If those dollars can be re-directed to supporting the investments required to extent broadband infrastructure to truly high-cost communities, we will speed up significantly the pace at which fast broadband is made available to the remaining five percent of U.S. households.

For the most part, the National Broadband Plan takes a fact-based, analytical approach to assessing the state of broadband deployment in the U.S. The evidence it presents strongly supports the need for continued reforms in areas such as spectrum flexibility and universal service. The evidence also shows that a radical departure from the market-based approach of the past decade is not called for, and why proposals to dramatically increase regulation would do far more harm than good.

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Mr. Chairman and Members of the Committee, that completes my testimony. I look forward to any questions you may have.