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EXECUTIVE SUMMARY

In its Notice of Inquiry (“NOI”) released last month, the Federal Communications Commission (“FCC” or “Commission”) seeks comment to inform its development of a national broadband plan. The New Jersey Division of Rate Counsel (“Rate Counsel”) has participated in numerous FCC proceedings that concern broadband policies, and now welcomes the opportunity to participate in this comprehensive and vitally important proceeding.

The American Recovery and Reinvestment Act (“ARRA”) requires the national plan to include:

- (A) an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States;
- (B) a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public;
- (C) an evaluation of the status of deployment of broadband service, including progress of projects supported by the grants made pursuant to this section; and
- (D) a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.¹

Rate Counsel is hopeful that the task of creating a national broadband plan will create an opportunity for the Commission to replace the previously fragmented endeavors to promote affordable broadband throughout the country with a coherent approach.

¹ / American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (“ARRA”) § 6001(k)(2).

Broadband service exhibits network externalities: the greater the number of citizens that can participate in our nation's broadband-based economy and society, the better off all citizens will be. As the FCC recognizes, the benefits of affordable broadband are numerous and include, among others, a more climate-friendly environment, improved health care delivery, reducing the isolation experienced by the disabled and elderly, enabling students to connect to diverse learning opportunities, facilitating civic participation, and enabling the unemployed to find jobs.

Rate Counsel recommends the following goals and criteria to guide the FCC's development of a national broadband plan:

Promote affordable access by all citizens:

- *Expand universal service support to include broadband services:* The existing universal service program likely requires expansion to promote broadband deployment to all households. Absent such regulatory intervention, the United States may become a two-tiered society of disparate access to and use of broadband.
- *Affordability for all citizens:* Broadband must be affordable to be considered available. Rate Counsel has been an early and consistent advocate for broadband subsidies for Lifeline customers; this may not be enough, however, to address affordability concerns (e.g., for those who have limited disposable income but who do not qualify for Lifeline).
- *Access by the disabled and elderly community:* It is critically important that funding and programs target specialized assistance to ensure that disabled citizens and elderly citizens can easily avail themselves of the capabilities that broadband access offers. The nation's broadband infrastructure should be inclusive.
- *Consumers should benefit from the ubiquitous copper networks they have funded:* incumbent local exchange carriers have an obligation to deploy digital subscriber line service in a timely and comprehensive manner (consumers have paid for the ubiquitous network over the years) and at affordable prices.
- *Rippling digital divide:* The FCC needs to be on the alert for a "second wave" of digital divides where some consumers have high speeds and others have low speeds. Just as dial-up is no longer considered a reasonable alternative to broadband, as technology evolves, some consumers should not be relegated to tortoise speed while others benefit from jaguar speed.

Market structure affects affordability:

- *A duopoly does not provide consumers with effective competition:* A duopoly is not the same as effective competition. The presence of two suppliers, although indisputably preferable to no supplier or a single supplier, should not be confused with effective competition. The substantial market concentration that has occurred in the past thirteen years underscores the need for regulatory oversight of the pricing and network management practices of the nation's primary broadband suppliers.
- *Special access:* Exorbitant special access rates deter broadband investment and innovation. Special access rates should be reduced.

Technological progress should not erode consumer protection:

- *Consumer protection:* Technological progress does not justify a diminishment of consumer protection. As demand for broadband increases, and broadband evolves into a more ubiquitous mode of communication platform (and in the pursuit of such ubiquity), the FCC should not relinquish the consumer protection that has evolved for traditional telephone service. States are in the best position to protect consumers and therefore, although Rate Counsel supports federal-state cooperation, states should be afforded substantial latitude in setting and enforcing consumer protection rules and regulations.
- *Ensure and recognize states' role in consumer protection and broadband regulation:* States possess greater familiarity with their terrain, consumers, and infrastructure than does the FCC and therefore have an invaluable role in achieving broadband goals. Congress gave no expressed directive to the FCC regarding broadband including preempting states in regulating broadband. Any attempt to limit state jurisdiction interferes with state authority and implicates the role of the state and federal government under our Constitutional form of Government. Rate Counsel submits that there is concurrent jurisdiction over broadband. Although Section 706 of the Act encourages deployment of advanced services, nothing in this section grants the FCC the right to exclusive jurisdiction or evidence an expressed intent to preempt state authority.
- *Open network:* Network architecture should be open to maximize consumer welfare; where public monies are used to subsidize network infrastructure, wholesale and retail services should be separated.
- *Net neutrality:* A clear and enforceable FCC mandate should prohibit network discrimination. Net neutrality is of paramount importance to encourage the open and efficient use of the Internet by all consumers.

Comprehensive data and mapping information should identify underserved and unserved areas of the nation:

- *Public investment should not displace private investment:* Working in collaboration with states and municipalities, and informed by detailed data and mapping information, the FCC should distinguish between markets that can support broadband without subsidies and those that cannot.

- *Informed decision-making:* Data, which should be public to the greatest extent possible, is essential to guide investment decisions, to inform assessments about the status of competition, to measure progress, and to deter and to detect redlining. Information that should provide tools to federal and state policy makers include such data as:
 - Data collected on the Form 477;
 - Mapping information;
 - Pricing information; and
 - ARMIS data.
- *Role for municipalities:* Municipalities should be encouraged to pursue broadband investment, particularly where the private sector has neglected to provide such investment.

Rate Counsel commends the Commission for its comprehensive approach to developing a national broadband plan and responds to some but not all of the many issues that the *NOI* raises. Rate Counsel also urges the Commission to include consumer representation in any broadband working groups or advisory groups that the Commission may establish. The ultimate beneficiary of broadband deployment is the consumer. Therefore, the consumer's perspective is essential to ensure that not only is adequate infrastructure available, but also that consumers can afford and have the training necessary to take advantage of the nation's broadband network, and that consumer protection goals are achieved.

Telecommunications Act of 1996³ and the American Recovery and Reinvestment Act of 2009 (“ARRA”).⁴ The New Jersey Legislature has declared that it is the policy of the State to provide diversity in the supply of telecommunications services, and it has found that competition will “promote efficiency, reduce regulatory delay, and foster productivity and innovation” and “produce a wider selection of services at competitive market-based prices.”⁵ The FCC’s decisions regarding broadband service will affect New Jersey’s economy, welfare, and ability to compete in a global economy. The availability of affordable broadband service at reasonable speeds to all consumers has been a long-standing goal of Rate Counsel, and the ability of the nation to achieve this goal bears directly on New Jersey consumers’ ability to participate fully in today’s information-dependent society.

B. SCOPE OF THE PROCEEDING

The FCC seeks “the best and most efficient means of achieving” the congressional mandate to create a national broadband plan.⁶

The ARRA provides for \$786 billion of new direct expenditures by the federal government. Of that amount, \$7.2 billion was allocated to stimulate broadband development.⁷ As explained on the FCC’s web site, the broadband initiatives “are

³ / Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (“1996 Act”). The 1996 Act amended the Communications Act of 1934. Hereinafter, the Communications Act of 1934, as amended by the 1996 Act, will be referred to as “the 1996 Act,” or “the Act,” and all citations to the 1996 Act will be to the 1996 Act as it is codified in the United States Code.

⁴ / American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (“ARRA”). The Recovery Act was signed into law on February 17, 2009.

⁵ / N.J.S.A. 48:2-21.16(a)(4) and 48:2-21.16(b)(1) and (3).

⁶ / *NOI*, at para. 12.

⁷ / The FCC is currently working in coordination with the NTIA to perform the FCC’s role under the Recovery Act. As part of the Broadband Technology Opportunities Program established by the Act, the FCC has been tasked with creating a National Broadband Plan by February 17, 2010. As explained by the FCC, the “Recovery Act states that the National Broadband Plan shall seek to ensure all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal.”

intended to accelerate broadband deployment in unserved, underserved, and rural areas and to strategic institutions that are likely to create jobs or provide significant public benefits.”⁸

The ARRA also requires the FCC to submit a report to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate by February 17, 2010, containing a national broadband plan.⁹ The plan must “seek to ensure that all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal.”¹⁰

The plan also must include:

- (A) an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States;
- (B) a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public;
- (C) an evaluation of the status of deployment of broadband service, including progress of projects supported by the grants made pursuant to this section; and
- (D) a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.¹¹

The ARRA is one of several ongoing federal efforts to promote broadband. The following section of these comments identifies some of the major recent FCC

NOI, at para. 9. The \$7.2 billion that is slated for broadband includes \$4.7 billion to NTIA for competitive grants and \$2.5 billion for the USDA’s Rural Utilities Service (“RUS”) for rural broadband grants and loans. A particular project may not receive funds from both NTIA and RUS.

⁸/ <http://www.fcc.gov/recovery/broadband/>

⁹/ ARRA, § 6001(k)(1).

¹⁰/ ARRA, § 6001(k)(2).

¹¹/ *Id.*

proceedings that affect broadband policy in the United States. The Appendix to the *NOI* also summarizes the FCC’s ongoing broadband efforts.

C. RELEVANT PRIOR PROCEEDINGS

Rate Counsel has participated in many prior FCC proceedings that shape U.S. broadband policy,¹² and has, in the past, lamented the FCC’s seemingly splintered approach to the development of national broadband policy. Rate Counsel welcomes the opportunity to contribute to the development of a coherent, integrated national broadband plan. Table 1 below summarizes the major dockets in which Rate Counsel has submitted comments that address broadband policy. In these comments, Rate Counsel reiterates some of the points that it has raised previously, and elaborates as appropriate upon those long-held views and recommendations, and incorporates by reference its comments submitted in other FCC proceedings.

Table 1
FCC Broadband Proceedings: 2005 - 2009:
Rate Counsel Participation

Topic	Docket No.	Proceeding	Dates of Rate Counsel Comments
Net neutrality	WC Docket No. 07-52	Broadband Industry Practice	Initial June 15, 2007; Reply July 16, 2007; Reply February 28, 2008
Deployment	GN Docket No. 07-45	In the Matter of Inquiry Concerning the Deployment of 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	Initial May 16, 2007; Reply May 31, 2007

¹²/ Also, as FreePress describes in detail, a long series of regulatory proceedings has perhaps irrevocably shaped the cable and telecommunications industry. Turner, S. Derek, “Dismantling Digital Deregulation: Toward a National Broadband Policy, FreePress (“Dismantling Digital Deregulation”), at 38-61.

		Telecommunications Act of 1996	
Data and mapping	WC Docket No. 07-38	In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership	June 15, 2007; July 16, 2007; July 17, 2008 (mapping); August 1, 2008 (mapping); August 1, 2008 (data); September 2, 2008 (data)
Consumer Protection	WC Docket No. 05-271	In the Matter of Consumer Protection in the Broadband Era	January 17, 2006; March 1, 2006
Net neutrality, deployment, affordability, market concentration	WC Docket No. 05-75	In the Matter of Verizon Communications Inc. and MCI, Inc., Applications for Approval of Transfer of Control,	May 9, 2005; May 24, 2005
Net neutrality, deployment, affordability, market concentration	WC Docket No. 05-65	In the Matter of SBC Communications Inc. and AT&T Corp. Applications for Transfer of Control	April 25, 2005; May 10, 2005
Net neutrality, deployment, affordability, market concentration	WC Docket No. 06-74	In the Matter of AT&T Inc. and BellSouth Corporation Applications for Approval of Transfer of Control	June 5, 2006; June 20, 2006
Special access rates	WC Docket No. 05-25; RM-10593	In the Matter of Special Access Rates for Price Cap Local Exchange Carriers; AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services	June 13, 2005; July 29, 2005; August 8, 2007; August 15, 2007
ARMIS data	WC Docket No. 08-190	In the Matter of Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering	December 12, 2008
FCC's Consultative	GN Docket No. 09-40	Commission's Consultative Role in the Broadband	April 13, 2009

Role		Provisions of the Recovery Act	
Affordability, deployment	CC Docket No. 96-45; WC Docket No. 05-337	In the Matter of Federal-State Joint Board on Universal Service High-Cost Universal Service Support	Initial September 30, 2005 (Joint Board Recommended Decision); Reply October 31, 2005; Initial March 27, 2006 (Qwest II remand); Reply May 26, 2006; Initial April 17, 2008 (USF comprehensive reform); Reply June 2, 2008; Initial November 26, 2008 (Intercarrier compensation and USF comprehensive reform); Reply December 18, 2008; Initial (Qwest II Refresh the Record) May 8, 2009.

II. DEFINITION OF “BROADBAND”

The definition of broadband should be linked to specific minimum download and upload speeds, and should evolve as technology evolves.

The FCC seeks comment on how “broadband capability [should] be defined going forward, and what it means to have access to it.”¹³ As noted by the FCC, to ensure access to broadband, the FCC first must identify “goals and benchmarks” but the term broadband “can be defined in myriad ways.”¹⁴ The FCC seeks comment on whether the definition of broadband should be linked to speed, technology, “experiential” metrics, or something else and whether that definition should be static or whether speed tiers should adjust as technology change.¹⁵ Rate Counsel agrees with the FCC’s observation that: “With technology developing at such a rapid pace, it is important that we do not lose sight of the potential for monumental shifts in technological platforms that would render

¹³ / *NOI*, at para. 13; see also *id.*, at para. 15.

¹⁴ / *Id.*, at para. 15.

¹⁵ / *Id.*, at paras. 17-18.

definitions obsolete or indeed harmful to developments that might otherwise take place in the market” and, as such, the definition of broadband should be “sufficiently flexible to adapt.”¹⁶

Rate Counsel also concurs with the FCC that “[o]ur goal must be for every American citizen and every American business to have access to *robust* broadband services.”¹⁷ The definition of “robust” however is not straightforward. In earlier modes of telecommunications technology, lines could be more easily drawn. There was a bright line between the multi-party service that was once present in localities throughout the country and single-line local service; similarly a clear distinction can be made between service offered out of electromechanical switches (lacking touch tone and custom calling features) and that offered out of digital switches (with access to caller identification, call waiting, etc.). The elimination of party-line service and the replacement of electromechanical switches provided an unambiguous change to the other side of a type of telecommunications divide.

In sharp contrast with these technologies that had a readily identifiable “bright line,” within the broadband-served community, there is a significant spectrum of capabilities, with a wide and evolving array of broadband speeds available throughout the country and world. Although there is a divide between those with and those without broadband access, referring simply to the digital “have” and “have-nots” simplifies a complex situation where consumers have access to an evolving array of broadband options, ranging from digital subscriber line service (“DSL”) to Verizon’s FiOS.

¹⁶ / *Id.*, at para. 22.

¹⁷ / *Id.*, at para. 5 (emphasis added).

The definition of broadband should be pegged to specific minimum download and upload speeds, with the definition evolving as technology evolves. Absent such a definition, policy analyses and discussions will be less meaningful as the nation seeks to measure progress in establishing a national broadband network with affordable service for all.

The definition of broadband service also should relate to the way in which the NTIA and RUS apply the definition to decide where to allocate broadband grant monies.¹⁸ In terms of reasonable technological expectations for consumers in the early 21st century, broadband should be defined to be offered at speeds of at least 3 mbps downstream and 1 mbps upstream, with that definition evolving frequently. However, in determining where to provide grants, those communities that do not even have broadband access at one of the three lowest tiers reported in the new Form 477 (the first tier is greater than 200 kbps but less than 768 kbps; the second tier is equal to or greater than 768 kbps but less than 1.5 mbps; and the third tier is between 1.5 mbps and 3.0 mbps) should be given priority for grants over those communities that have access to “low” broadband speeds (between 200 kbps and 3 mbps).

The establishment of a minimum threshold for speed is critically important to prevent future waves of “digital divides” where some communities’ broadband access is vastly superior to other communities’ broadband access. Rate Counsel is encouraged that the FCC has taken steps to improve its ability to monitor the speed of broadband that is deployed throughout the country, which, in turn will enable it to periodically revisit the definition of broadband. Last year, the FCC released its Report and Order and Further

¹⁸ / See *id.*, at para. 18.

Notice of Proposed Rulemaking in the broadband data gathering docket, WC Docket No. 07-38 (“Form 477 Order”).¹⁹ In the *Form 477 Order*, the Commission updated the reporting categories for broadband service, replacing the five tiers that describe the maximum connection speed²⁰ to eight speed tiers.²¹ Additionally, in recognition of the growing importance of upload speeds as well as download speeds, the Commission requires service providers to categorize subscribers based on both download and upload speeds. The Commission declined to create a system that would automatically adjust the speed tiers to reflect improving technology,²² but instead stated that it would review the speed tiers every two years and make any adjustments necessary.²³ Rate Counsel recommends that the analyses and findings undertaken by the Commission based on its collection of the revised Form 477 inform and serve as the basis for the definition of broadband that it recommends to NTIA and RUS.²⁴

The definition of broadband should be dynamic, “with speed tiers that adjust with changes in technology.”²⁵ Rate Counsel concurs with the FCC that “it is important that

¹⁹ / In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership, WC Docket No. 07-38, *Report And Order And Further Notice Of Proposed Rulemaking*, released: June 12, 2008 (“Form 477 Order”).

²⁰ / The previous five tiers included: 200 kbps to 2.5 mbps, 2.5 mbps to 10 mbps, 10 mbps to 25 mbps, 25 mbps to 100 mbps, and greater than 100 mbps.

²¹ / The new speed tiers are: (1) greater than 200 kbps but less than 768 kbps; (2) equal to or greater than 768 kbps but less than 1.5 mbps; (3) equal to or greater than 1.5 mbps but less than 3.0 mbps; (4) equal to or greater than 3.0 mbps but less than 6.0 mbps, (5) equal to or greater than 6.0 mbps but less than 10.0 mbps; (6) equal to or greater than 10.0 mbps but less than 25.0 mbps; (7) equal to or greater than 25.0 mbps but less than 100.0 mbps; and (8) equal to or greater than 100 mbps. *Form 477 Order*, at para. 20.

²² / *Id.*, at para. 22.

²³ / *Id.*, at para. 21.

²⁴ / The first filings under the revised Form 477 guidelines were due to be filed by March 16, 2009. DA 09-573, “Wireline Competition Bureau Announces New Tutorial to Assist Form 477 Filers; Over 2100 Filings Have Been Submitted as Complete to Date,” WC Docket No. 07-38, released March 11, 2009.

²⁵ / *NOI*, at para. 18.

we do not lose sight of the potential for monumental shifts in technological platforms that would render definitions obsolete or indeed harmful to developments that might otherwise take place in the market.”²⁶ Rate Counsel recommends that the Commission re-visit its broadband definition once each year until such time as technological advancements appear to be reaching a plateau.

Encouraging diverse broadband infrastructure.

The Commission asks:

Are there specific Commission actions that could encourage more rapid adoption of these more advanced broadband deployments using mobile wireless technologies, such as Worldwide Interoperability for Microwave Access (WiMAX), Long Term Evolution (LTE), or wireline broadband deployments, such as fiber, DSL, or coaxial deployments supporting DOCSIS 3.0, for example? Are there other advanced broadband technologies that, if deployed, might better position the nation's broadband infrastructure for continued evolution?²⁷

The Commission should not attempt to predict or influence the development of specific technologies, but rather should be open to any technology that meets the various requirements developed through the design of its broadband policy. While the requirements should be universal, the technology used to achieve these results might vary from place to place. The Commission should regard any technology that delivers data at the appropriate speed, with appropriately little latency, and with appropriate reliability, as a valid broadband technology. Although the most popular technologies in use in the United States today – DSL and cable modem service – might be the best technologies for some remaining unserved areas, these are clearly not the only choices. The Commission

²⁶ / *Id.*, at para. 22.

²⁷ / *Id.*, at para. 16.

correctly opens the door to various wireless technologies and fiber optics. Rural areas may very well be served economically by fixed wireless, for example.

Rate Counsel cautions the Commission, though, on two related matters. First, any technology deployed today should remain useful for many years. Due to the expense of deploying backbone, whether digging up streets and sidewalks or erecting towers and roadside poles, the technology used in each particular area must be chosen carefully. Technological obsolescence would mean redeploying new backbone and incurring the greatest part of the expense again. The Commission and the industry can avoid this extra expense by planning deployment carefully, with an eye toward easy maintenance and upgrades. In this way, as technology improves and throughput needs increase, the plant deployed today will remain useful for years to come.

The second caution regards reliance on unproven technologies. Again, Rate Counsel recommends that the Commission not “pick winners,” but also warns the Commission against unrealistic expectations of unproven technology. For example, satellite-based broadband, while *possible* in any area with a clear, southern facing exposure, presently remains too slow, too expensive, and too unreliable for the purposes of meeting the requirements of a national broadband policy.²⁸ Relying on satellite technology to serve rural populations essentially shuts these citizens out of the digital age. Similarly, although Rate Counsel supports efforts to encourage broadband over power lines, to date only de minimus deployments have been made, and these are largely test deployments. The Commission should encourage the development of these technologies, and remain open to including them in a national broadband policy when

²⁸ / See *id.*, at para. 19.

they mature, but should ensure that consumers have access to proven technology, pending the development of new technology.

The Commission also asks whether a different set of standards should be used “to identify mobile broadband services - which allow mobility or portability but may have lower throughputs - and fixed broadband services?” and whether the definitions should “vary depending on whether the broadband service is used to serve residential or business customers and if so, how?”²⁹ Rate Counsel encourages the Commission to make deployment of broadband to homes and businesses a priority over deployment of mobile-specific broadband technology, and not to create multiple standards. Mobile broadband is valuable, of course, but can reasonably be considered an “extra” compared to fixed deployment. The emergence of thousands of Wi-Fi hotspots in cafés, parks, public buildings, etc., shows that when fixed broadband is deployed, additional connectivity follows.³⁰ The use of multiple standards based on whether a technology is fixed or mobile seemingly would not add significant value.

III. ACCESS

Analyzing the most effective and efficient means for ensuring ubiquitous access.

The FCC seeks “comment on how to provide ‘an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States.’”³¹ An integral aspect of such analyses is determining “what it means to have

²⁹ / *Id.*, at para. 19.

³⁰ / *See id.*, at para. 21. These unlicensed technologies should not be considered a substitute for fixed deployment, but rather, a Wi-Fi hotspot is better considered as an extension of deployment, but not deployment itself.

³¹ / *NOI*, at para. 13, citing ARRA, § 6001(k)(2)(A).

access to broadband capability.”³² Access and availability, as noted by the FCC, could be defined more broadly as access to broadband somewhere in the community (*i.e.*, the library or a Wi-Fi hotspot) or in one’s home. However, although access in a library or other community location is preferable to no access at all, it should not substitute for direct broadband access by households. Therefore, if a consumer can obtain broadband access at a town hall or library, but not at home, the consumer should be considered unserved.

Broadband service must be affordable to be considered available.

Rate Counsel concurs with Commissioner Adelstein that “[b]roadband is no longer a luxury” and that broadband “is essential if we are going to maximize the potential of every citizen to contribute to our social, cultural, and economic life.”³³ Furthermore, Rate Counsel concurs with the FCC that “we have not yet met the challenge of bringing broadband to everyone.”³⁴

The FCC seeks comment “on how to develop ‘a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public.’”³⁵ Rate Counsel urges the Commission to conclude that “access hinges on affordability.”³⁶ The Commission correctly recognizes that supply and demand problems thwart the goal of a nation of broadband-connected consumers, and seeks comment on whether subsidizing the subscription cost for broadband and the start-up

³² / *NOI*, at para. 23.

³³ / *Id.*, Statement of Commissioner Jonathan S. Adelstein, at 56.

³⁴ / *NOI*, at para. 5.

³⁵ / *Id.*, at para. 13, citing ARRA, § 6001(k)(2)(B).

³⁶ / *Id.*, at para. 27. *See, also, id.*, at para. 25 seeking comment on whether the FCC should consider price when determining whether people have access to broadband.

costs of obtaining computers and equipment would address affordability issues.³⁷ Ensuring that broadband service is offered at affordable rates should be a cornerstone of a national broadband plan. If broadband service is not affordable or accessible to consumers within a particular area, then broadband service cannot be considered “available” to them.³⁸ Rate Counsel reiterates its support for addressing affordability, in part, through the expansion of Lifeline and Link-Up programs to include broadband services.³⁹

Affordability affects whether consumers have broadband connections to the nation’s Internet infrastructure and capabilities. One report observes that seven of the ten countries that have lower prices per megabit than the United States also have greater broadband penetration.⁴⁰ Rate Counsel is encouraged that the Commission is taking steps to develop a national broadband plan, with a specific goal of expanding access and affordability. If the United States is to compete in a rapidly evolving global economy, where timely access to information is crucial, then affordable and ubiquitous access to the technology that makes the information economy possible – namely, broadband access – is essential. In 2005, Rate Counsel stated, among other things:

³⁷ / *Id.*, at para. 54.

³⁸ / See *Wired Less, Disconnected in Urban America*, Freepress, April 7, 2009, http://www.freepress.net/files/Wired_Less_Disconnected_in_Urban_America.pdf

³⁹ / See *In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service*, WC Docket No. 05-337; CC Docket No. 96-45, Comments of The New Jersey Division of Rate Counsel, November 26, 2008 (“November 2008 USF Comments”), at 11-12, 56-57, and 60. See, also, Reply Comments of The New Jersey Division of Rate Counsel, December 18, 2008 (“December 2008 USF Comments”), at 37-41 discussing proposals for a Broadband Lifeline Program. As noted elsewhere in these comments, although critically important, Lifeline subsidies will not address affordability concerns for those with limited disposal income who are not Lifeline-eligible.

⁴⁰ / “A Plan to Extend Super-Fast Broadband Connections to All Americans,” John Windhauser, Jr., The Century Foundation, 2009 (“A Plan to Extend Super-Fast Broadband Connections to All Americans”), at 14.

The societal implications of the technology haves and have-nots. Based on the [Rate Counsel's] comprehensive examination of information provided in state and federal proceedings regarding mega-mergers between SBC and AT&T, and between Verizon and MCI, [Rate Counsel] is concerned that the merged companies' priorities will veer even further toward big business, enterprise, and global customers and further away from the historic mission of providing basic local exchange service customers. Simultaneously, in pursuit of deploying fiber to the home, the companies will be targeting affluent, technologically-savvy households. The Commission should consider carefully the implications of a society with such widely disparate access to communications technology.

Disparate levels of access to the Internet by diverse demographic groups continues to provide evidence of a sobering digital divide that conflicts with the directive in the 1996 Act that "Consumers in all regions of the Nation, including low-income consumers...should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." As the Commission recently stated, "[t]he availability of the Internet has had a profound impact on American life. This network of networks has fundamentally changed the way we communicate." Not only should the Commission consider how best to promote universal service in rural areas, but also the Commission should evaluate the disparate levels of access to broadband and to the Internet throughout the country.⁴¹

⁴¹ / Rate Counsel 2005 Initial USF Comments, citing to In the Matter of Transfer of Control filed by SBC Communications Inc. and AT&T Corp., FCC WC Docket No. 05-65; Joint Petition of SBC Communications Inc. and AT&T Corp., Together with its Certificated Subsidiaries for Approval of Merger, New Jersey Board of Public Utilities Docket No. TM05020168; In the Matter of Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control, FCC WC Docket No. 05-75; Joint Petition of Verizon Communications Inc. and MCI, Inc. for Approval of Merger, New Jersey Board of Public Utilities Docket No. TM05030189; In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, CC Docket No. 02-33, Policy Statement, released September 23, 2005; and "Internet Access Disparity Hits Kids Hardest, Report Says," *TR Daily*, September 27, 2005; Are We Really A Nation Online? Ethnic and Racial Disparities in Access to Technology and Their Consequences, Report for the Leadership Conference on Civil Rights Education Fund Robert W. Fairlie, University of California, Santa Cruz and National Poverty Center, University of Michigan; "A Nation Online: Entering the Broadband Age," US Department of Commerce, Economics and Statistics Administration, National Telecommunications and Information Administration, September 2004, Appendix Tables 1 through 4, available at <http://www.ntia.doc.gov/reports/anol/NationOnlineBroadband04.doc>; Harris Interactive, Consumers and Communications Technologies: Current and Future Use, prepared for National Consumers League, final report June 29, 2005, at page 7.

Consumers clearly consider broadband more than a luxury. It is already a basic necessity for anyone trying to participate in the information economy. Despite current widespread economic difficulties, subscribership to broadband access has continued to grow in recent years, underscoring the importance of access to the Internet. A recent report by the Organisation for Economic Co-operation and Development (“OECD”) stated that broadband penetration in the United States:

slightly outpaced the overall OECD penetration growth, moving from 23.4 subscribers per 100 inhabitants at the end of 2007 to 26.7 subscribers per 100 inhabitants at the end of 2008. Its increase of 3.26 subscribers per 100 inhabitants put the U.S. in seventh place among OECD nations in year-over-year penetration growth. With 26.7 subscribers per 100 inhabitants, the U.S. maintained its 15th ranking among OECD members in broadband penetration.⁴²

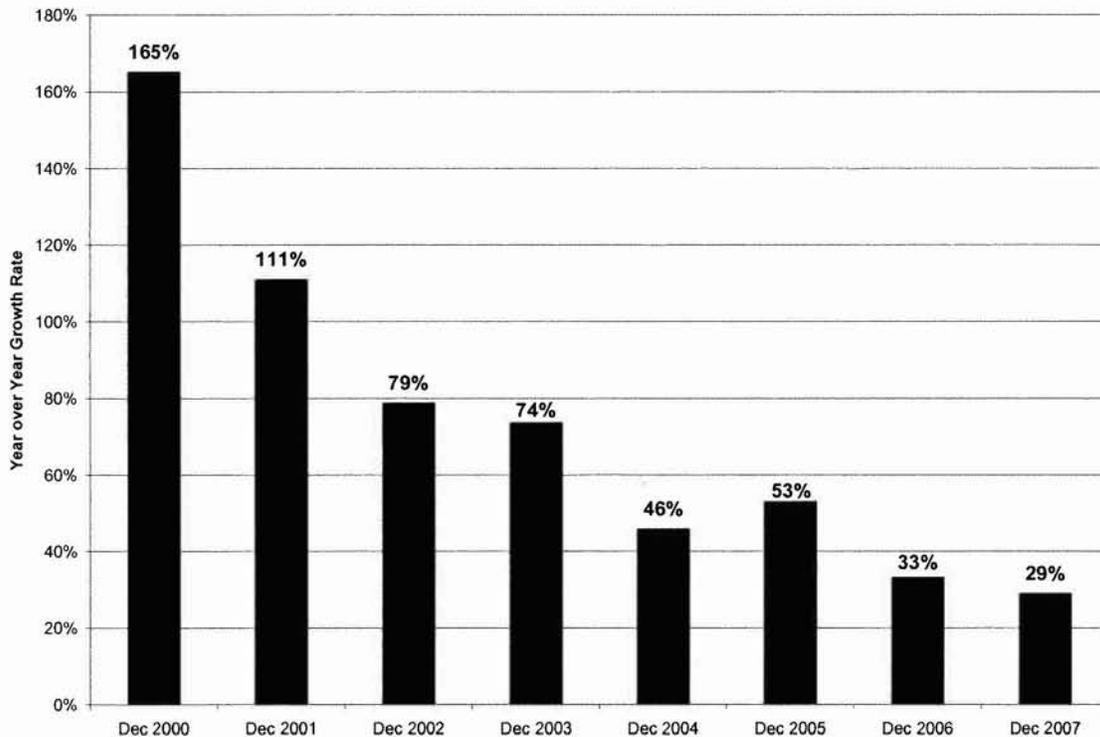
Data compiled by the FCC, however, show a declining rate of growth in broadband subscribers in the United States. Figure 1 below demonstrates that the year-over-year growth in broadband subscribership for residential “advanced services” is slowing.⁴³

⁴² / *TR Daily*, “Broadband Growth Continues Despite Economic Downturn,” May 20, 2009. *See also* Organisation for Economic Co-operation and Development press release, “OECD Broadband Statistics (December 2008).”

⁴³ / According to this usage, “advanced services” means those services with a transmission rate of at least 200 kbps for both downloading and uploading.

Figure 1⁴⁴

Growth in Demand for Residential Broadband Is Slowing



Several factors could explain the slowing growth in subscribership: 1) the previous success in signing-up customers where broadband is already available (which diminishes the number of people likely to subscribe to services for the first time)⁴⁵, 2) the slowing deployment of broadband infrastructure to hard-to-reach and sparsely-populated areas (which reduces overall availability), 3) consumers' budget constraints (particularly where broadband is not affordable), and 4) consumers' need for training and computer equipment. The first reason is positive: customers are adopting broadband technology

⁴⁴ / FCC, *High-Speed Services for Internet Access: Status as of December 31, 2007*, January 2009, at Table 4. This figure does not adjust the subscribership numbers to account for reporting changes in December 2004.

⁴⁵ / Also, related to this, as the total base of subscribers increases, any given quantity of new subscribers represents a smaller percentage of the total subscriber base.

where it is available. The latter three reasons justify Commission action: many Americans are unable to subscribe to broadband either because it is simply not available where they live, it is financially out of reach, or customers require training to adopt new technology.⁴⁶

Ensuring that broadband service is offered at affordable rates should be a cornerstone of a national broadband plan. The areas that today remain without access to broadband service likely include those that are thought to be unprofitable, and yet, deployment of broadband to these areas will have positive effects and externalities far in excess of the ability of consumers to surf the Internet. The increased deployment of broadband services is an equalizing tool that will help not only with employment, but education and health care as well.⁴⁷ Citizens in unserved and underserved areas require the support of the Commission in connecting to the modern information economy. Furthermore, broadband service needs not only to be *available* but also *affordable*.⁴⁸

What are current prices, and how have they changed in recent years?

A recent report on broadband affordability describes the scene in Azusa, California, where every morning brings a mad dash as the doors to the public library open. The goal is to be the first to one of the library's thirteen public computers. Library patrons "rely on the library's Internet connection to perform the necessary functions of life – from looking for jobs to e-mailing distant relatives to researching a city council

⁴⁶ / See In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service, WC Docket No. 05-337; CC Docket No. 96-45, Comments of New Jersey Division of Rate Counsel, April 17, 2008 ("April 2008 USF Comments"), at 26-28.

⁴⁷ / See *TR Daily*, April 3, 2008, which quoted Representative Sheila Jackson, of Texas, as saying, "Put a computer in front of somebody, and you open their eyes to the world." *Id.*

⁴⁸ / See April 2008 USF Comments, at 26-28.

measure.”⁴⁹ This illustrates not only the importance of computing and doing business online, but also the fact that many Americans simply cannot afford broadband and must rely on public facilities.

The figures below show that although service providers have rolled out higher speed services, they have made little progress in offering basic broadband at a low price.⁵⁰ Figure 2 plots price and downloading speed data for several large service providers (Verizon, AT&T, Qwest, TimeWarner Cable, Cox, and Comcast) as of June 2007. Figure 3 shows broadband service offerings for the same companies in May 2009. Figure 4 combines the previous two figures to show how service offerings have changed over the past two years. The figures show that some consumers, but not all, are getting more speed for their dollar. Specifically, broadband service in the 3 Mbps to 7 Mbps range is generally less expensive now than it was two years ago. In addition, nearly all of these companies offer broadband at higher speeds than two years ago, though sometimes at a significant premium. Lower-speed services are not significantly more affordable, however. In June 2007, Verizon was the only company (of the six companies under comparison) with a broadband offering for under \$15; the maximum download speed for this service was 768 kbps. Today none of these companies offers a generally-available broadband service for less than \$19.95. Although there is more availability of basic-level

⁴⁹ / Internetforeveryone.org and Free Press, *Wired Less: Disconnected in Urban America*, 2009, at 4.

⁵⁰ / The source for 2007 data is: In the Matter of Broadband Industry Practices, WC Docket No. 07-52, Comments of the National Association of State Utility Consumer Advocates, June 15, 2007, at 15. The sources for the 2009 data are:
<https://www22.verizon.com/Residential/HighSpeedInternet/Plans/Plans.htm>, viewed 5/26/2009;
<http://www.att.com/gen/general?pid=6431>, viewed 5/26/2009;
<http://www.qwest.com/residential/internet/broadbandlanding>, viewed 5/26/2009;
<http://www.comcast.com/shop/buyflow2/products.csp? SourcePage=Internet>, viewed 5/26/2009;
<http://www.optimum.com/ratecard.jsp?serviceType=ool& regionIdnull&searchby=corp&corp=07844>, viewed 5/26/2009; <http://ww2.cox.com/residential/gulfcoast/ internet/pricing.cox>, viewed 5/26/2009;
<http://www.timewarnercable.com/nynj/learn/bundles/new.html>, viewed 5/26/2009.

broadband (1 to 1.5 Mbps) for less than \$25 per month than there was two years ago, the affordability of non-premium broadband service has not improved in the past two years.

Figure 2
Broadband Pricing Data: June 2007

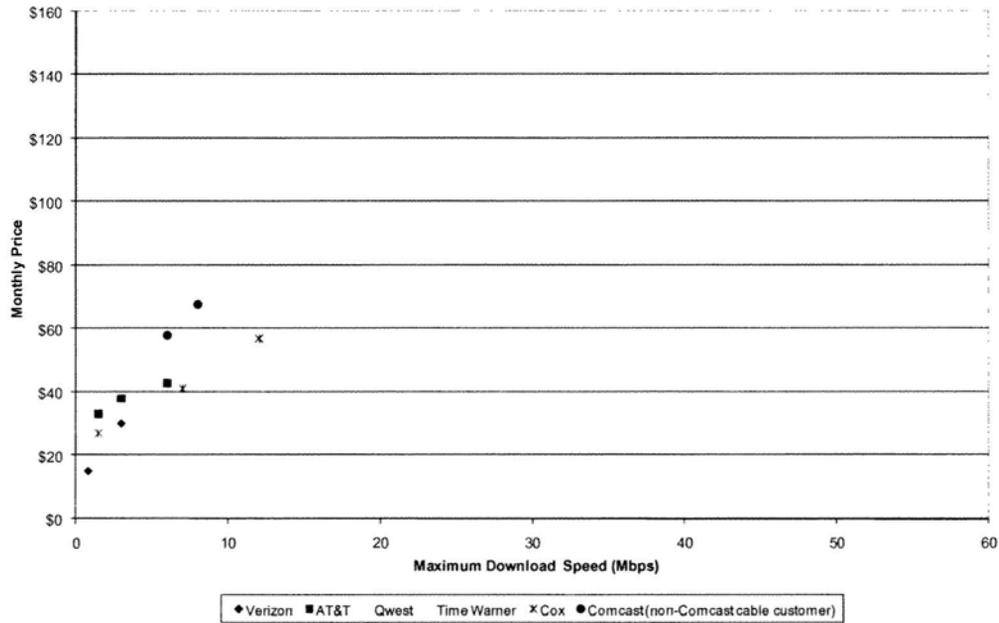


Figure 3
Broadband Pricing Data: May 2009

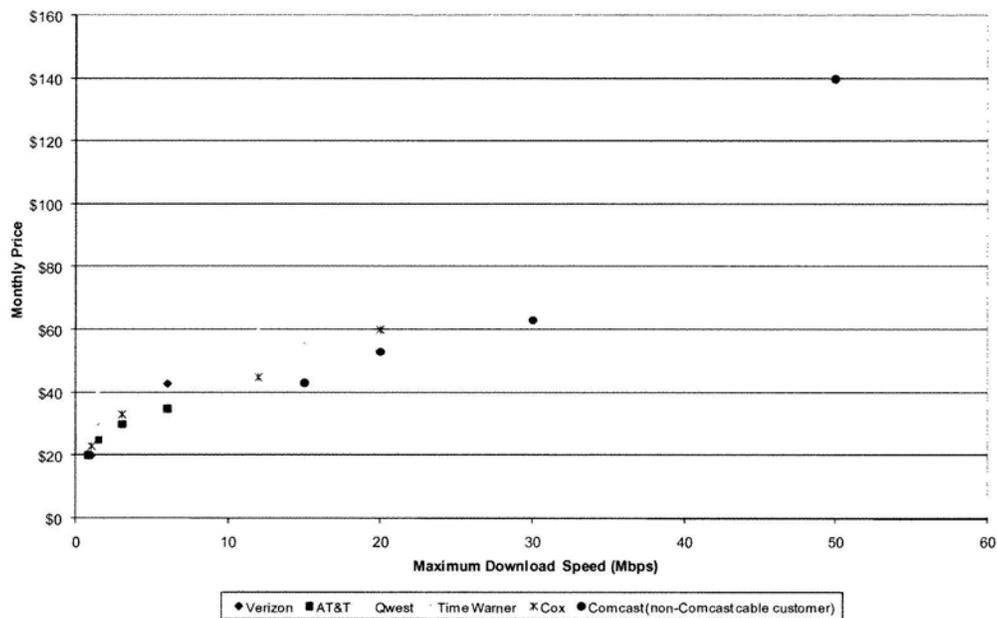
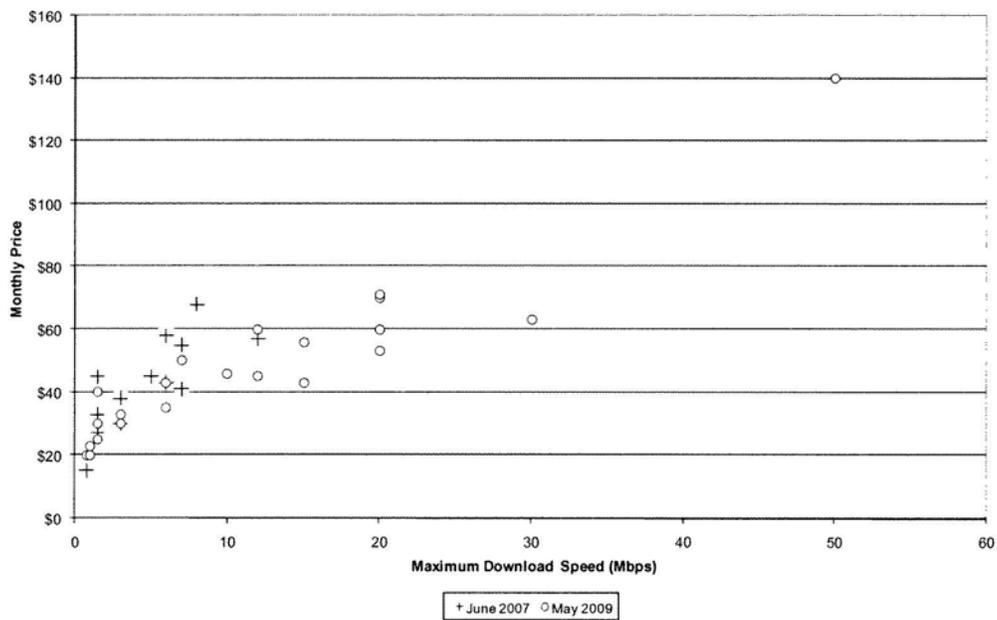


Figure 4
Broadband Pricing Data: June 2007 and May 2009



Against the backdrop of anecdotal evidence that affordability is a problem (*e.g.*, the rush for the library’s computers), and the marketplace evidence that prices have not dropped for basic broadband service, lower-income households are being left behind. Data gathered by the Pew Internet & American Life Project show that lower-income households are much less likely than higher-income households to have access to broadband technology at home.

Table 2

Broadband Adoption by Lower Income Households Is Lagging⁵¹

Household Income	Households with Broadband at Home				Percentage point change, 2007-2008
	2005	2006	2007	2008	
Under \$20,000	13%	18%	28%	25%	-3%
\$20,000 - 30,000	19%	27%	34%	42%	8%
\$30,000 - 40,000	26%	40%	40%	49%	9%
\$40,000 - 50,000	28%	47%	52%	60%	8%
\$50,000 - 75,000	35%	48%	58%	67%	9%
\$75,000 - 100,000	51%	67%	70%	82%	12%
Over \$100,000	62%	68%	82%	85%	3%
All income levels	33%	42%	47%	55%	8%

Though basic economics teaches us to expect this result – lower income households have less discretionary money – it is striking that the survey results show a recent deterioration of “connectedness” in the lowest income level.⁵²

Potential consumer-oriented remedies

Even after the problem of universal availability of broadband is solved, the challenging issue of how to achieve universal affordability remains. Three years ago,

⁵¹ / Pew Internet & American Life Project, Home Broadband Adoption 2008, July 2008, at 3-4.

⁵² / Shifts in the quantities of households among the income brackets could explain some of the decline.

Rate Counsel proposed putting assistance into the hands of consumers, rather than service providers:

The Commission should focus not only on the *supply* of advanced services but also the *demand* for advanced services. A logical first step would be to expand the Lifeline and Linkup programs to encompass a steep discount for broadband access, which a consumer could use for any supplier. Any attempts by the Commission to narrow the digital divide should address not only high cost areas, but also low-income communities.⁵³

Rate Counsel also encourages the Commission to consider that those households with incomes just above the threshold level for Lifeline eligibility might be left out of the broadband economy. Even with possible broadband subsidies for Lifeline and Linkup programs (which Rate Counsel has supported for several years and for which support has been growing), there is still a risk of creating a “doughnut hole” of unaffordability, with the doughnut hole representing those who are not eligible for Lifeline, but also not able to afford broadband service at market rates. Furthermore, during this recession, those who are presently broadband-connected may disconnect to save money. Rate Counsel recommends that eligibility for broadband support be extended further up the economic ladder.

There is growing consensus that FCC must address not only the supply side of broadband connectivity, but also the demand side, which is a function of the price that a consumer confronts and a consumer’s disposable income. On April 24, 2009, the National Association of Regulatory Utility Commissioners (“NARUC”) sent a letter to Acting Chairman Copps and the other Commissioners attaching its recently passed resolution that “strongly encourages” the FCC to declare broadband Internet access

⁵³ / In the Matter of Federal-State Joint Board on Universal Service, High Cost Universal Service Support, CC Docket No. 96-45, WC Docket No. 05-337, Comments of the New Jersey Division of Ratepayer Advocate, March 27, 2006 (“Ratepayer Advocate 2006 USF Initial Comments”), at 22-23.

service as eligible for universal service fund (“USF”) support. The resolution asks the FCC to immediately create a three-year federal Lifeline and Link-Up Pilot Program for broadband Internet access services and enabling access devices and ensure the Pilot Program is open to all broadband Internet access service providers. NARUC stated: “The Commission’s Lifeline and Link Up programs have made local telephone service widely available at an affordable rate. In an era defined by broadband access to the Internet, those same Commission mechanisms should now be applied to bring broadband services to low-income Americans.”⁵⁴

Consumers may require training and specialized equipment to avail themselves of broadband service: “inclusive communications” should be an integral element of a national broadband plan.

If consumers lack computers, the technical knowledge, or the resources to subscribe to broadband, they should be considered unserved.⁵⁵ Furthermore, those with disabilities and the elderly may require specialized training and equipment in order to avail themselves of broadband access, and the access to economic and social activities that such connection provides. Among other things, as the Commission aptly observes, broadband infrastructure and services can assist citizens participate in government meetings who could not participate in person (“because of distance, cost, disability,

⁵⁴ / The letter is available on the NARUC website at the following address: <http://www.naruc.org/Testimony/08%200424%20NARUC%20BB%20LL%20LINKUP%20SUPPORT%20EX%20PARTE.pdf>.

⁵⁵ / Also, if there is insufficient competition (without compensating regulatory oversight), areas are inadequately served. By this definition, all Americans are underserved because effective competition has not yet emerged.

illness and the like”).⁵⁶ Training and equipment may be necessary to facilitate such civic participation.⁵⁷

Rate Counsel also recommends that grant monies be made available to provide training and computers for vulnerable populations such as the disabled, elderly, etc. In some cases, simple outreach such as demonstrating the benefits of using e-mail to overcome isolation, setting up a Netflix movie list for a consumer, explaining how to pay bills online, or demonstrating how to find information about events in the community, can provide the impetus for a consumer to join the broadband community.

As mentioned by the FCC, among the NTIA grant program purposes is to “provide broadband education, awareness, training, access, equipment, and support to -... organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by low-income, unemployed, aged, and otherwise vulnerable populations.”⁵⁸ A national broadband plan should include provisions for inclusion by all in the digital age.

The FCC’s national broadband plan should address barriers to broadband adoption that persons with disabilities and the elderly may uniquely confront. Rate Counsel urges the Commission, working collaboratively with states and with agencies that are knowledgeable about the needs of disabled citizens, to address specifically and comprehensively ways in which to ensure that a national broadband plan will “ensure that

⁵⁶ / *NOI*, at para. 70.

⁵⁷ / As one report states: “Finally, after access is available and affordable, what can be done to convince disinterested consumers that broadband is worth their money and effort? Education must play a large role, with technological literacy programs increasing users’ comfort and allaying their fears about online safety.” Weiser, Philip J. (Rapporteur), “A Framework for a National Broadband Policy,” The Aspen Institute, 2008, at 6.

⁵⁸ / *NOI*, at para. 36, quoting ARRA, § 6001(b)(3).

the technical characteristics of current and future broadband networks align with the needs of disabled persons.”⁵⁹ Rate Counsel further recommends that the Commission include a designated individual/agency to assist the Commission in achieving the goal of inclusive communications as part of the development of a national broadband plan.

The mere presence of a broadband pipe does not in and of itself mean that disabled people have broadband access. An elderly woman with Parkinson’s disease may need special equipment so that despite shaky hands she can nonetheless perform keystrokes (or voice-activated commands) that are necessary to obtain Internet access, and may need training to learn how to navigate through the inevitable advertisements that pop up during Internet sessions. There should be funding for technology and for training to make broadband access seamless and easy for elderly, for those with visual, developmental, and hearing disabilities, and for those who are confused and frustrated trying to navigate a computer.

As one web site explains:

Internet users with special needs can benefit tremendously from using broadband Internet. There are many software programs and systems that have been developed over recent years that allow people with special needs to use the Internet.

Some examples of programs for Internet users with special needs include screen readers and Braille screens for the blind and webcams and other video equipment for the deaf. The majority of these programs need a broadband Internet connection to run properly.

Special Needs Programs: For the Deaf and Hearing Impaired

Today, with the help of broadband Internet, there are several ways for the deaf to communicate over the Internet. One popular

⁵⁹ / *NOI*, at para. 28. See also, *NOI*, at paras. 56-57, seeking comment on programs that address consumer training and education, and the role of a centralized clearinghouse for outreach and computer and broadband training initiatives.

technique that many deaf people are turning to involves the use of Web cameras. When people use webcams on both sides of the connection, it is called two-way video, and these people with special needs can communicate through sign-language. Although this requires both users to have Web cameras and broadband Internet, the majority of deaf people say they like it better than any other method.

TRS, or telecommunications relay services, are also available for people with special needs. TRS allows the deaf party to type in a message, and this message is then relayed through the telephone or the Internet in a voice to the other end. VRS, or video relay services, are also now available. VRS is when a certified sign language interpreter helps convey messages through a Web camera and screen.

Special Needs Programs: For the Blind and Visually Impaired

There are two good options for people who are blind when it comes to using the Internet. The first option is getting a screen reader program. These programs will audibly describe Web sites to the user. Although there are a few complications with screen reader programs, such as inconsistencies in layout and language, interference with popup windows, and java elements, they seem to be well-liked among the special needs communities.

Braille screens are another way for those with special needs to surf the Internet with a broadband connection. The screen is interpreted into Braille with the help of special software for people with special needs.

Why Choose Broadband over Dial-Up?

Programs and software for people with special needs, such as two-way video, video response systems, screen readers, and Braille screens require a broadband connection for use. Getting disconnected from a dial-up line or any kind of lag would disrupt the message. Therefore, it would be beneficial for those with special needs to have a broadband connection for their computer.⁶⁰

Another web site explains the value of broadband to those who are not connected:

⁶⁰ / <http://www.broadbandinfo.com/high-speed-internet/special-needs/benefits.html>, site visited May 19, 2009.

If you aren't familiar with broadband technology, it is basically a fast, always-on connection to the internet, and best of all, it is really easy to get and to use.

That's just as true if you are older or have a disability, so there is no reason not to take advantage of what broadband has to offer in terms of finding information, communicating and lots of other aspects of daily life that can also be done online.

On these pages we have put together information to help you understand more about broadband and how it can help you if you are older or have a disability. The Broadband guide section will tell you all you need to know.

For anyone who is hard of hearing or deaf, we have also developed a British Sign Language (BSL) Broadband Guide.

We also have a series of broadband case studies that show how just how much broadband is helping people who are older or disabled.

And if you want to know more, our The Internet: it's easier than you think downloadable booklet shows that there is something for everyone on the Internet.

For anyone who doesn't already have broadband at home, then go to BT Total Broadband to see what we have to offer.

If you order broadband from BT, let us know if you have any special access requirements and we can send you your broadband set-up information in Braille, large print or on audio. We have also re-designed our set-up disks in consultation with visually impaired users to improve usability.

We really believe in the benefits that broadband can bring to everyone. This is why BT is also concerned that our research suggests that 23 million adults might be digitally excluded by 2025 if more is not done to encourage their use of the internet.

As more services are provided online, people who don't have access to this new technology will find themselves disadvantaged in day to day living.

For more information on what we are doing to tackle the Digital Divide have a look at BT's Society and environment website.⁶¹

⁶¹ / <http://www.btplc.com/inclusion/Gettingonline/Broadbandexplained/index.htm>, site visited May 19, 2009.

Rate Counsel urges the Commission to include a detailed plan for reaching out to include all consumers in the national broadband plan, and also urges the Commission to encourage broadband suppliers to designate customer service representatives to assist those who need one-on-one training and education.

Universal service programs should support broadband demand.

Rate Counsel reiterates its recommendation that the non-rural high cost fund be eliminated.⁶² Instead the funds should be used to subsidize broadband deployment in unserved and underserved areas. In its *NOI*, the Commission refers to its recent request for comment on a pilot project designed to make broadband affordable to low-income consumers.⁶³ Rate Counsel urges the Commission to subsidize broadband for *all* low-income consumers, not just some households through a pilot program.

The structure of markets affects broadband affordability: potential supply-oriented remedies.

Another part of the affordability problem stems from the lack of competition: without competition, there is no incentive for the only service provider in a market to reduce the price of broadband access. FCC data has shown and continues to show that cable modem service and DSL are the major technologies used to provision broadband. Together, these technologies account for over 83% of residential “advanced services” connections.⁶⁴ Because many areas have only one cable provider and only one provider

⁶² / April 2008 USF Comments, at 44.

⁶³ / *NOI*, at para. 39.

⁶⁴ / FCC, High Speed Services for Internet Access: Status as of December 31, 2007, January 2009, Table 4.

of DSL service, the market for broadband is a duopoly, providing consumers with little real choice.⁶⁵

Rate Counsel offers several suggestions to partially address the lack of competition, which leads to a lack of affordability. The first is that that Commission re-evaluate its decision not to require line sharing for DSL service.⁶⁶ Requiring LECs to offer last mile connectivity at nondiscriminatory wholesale rates could encourage new service providers to enter the broadband market. Second, the Commission should address the enormous returns that LECs make on special access, as is discussed in more detail in Section IV. Because special access is an essential element of providing broadband service, the monopolistic rates charges by the LECs represent a bottleneck, and a barrier to the creation of a vibrant marketplace for broadband service. Third, the Commission should consider constructing policy that would clearly authorize states to monitor and regulate broadband pricing, if only for a basic broadband tier of service. The Commission should also recognize the responsibility of cable operators to participate in

⁶⁵ / See, Susan M. Baldwin, Sarah M. Bosley and Timothy E. Howington, "The Cable-Telco Duopoly's Deployment of New Jersey's Information Infrastructure: Establishing Accountability," White Paper prepared for the Public Advocate of New Jersey Division of Rate Counsel, January 19, 2007 ("Cable-Telco Duopoly White Paper"). Rate Counsel included this report in its filing in Docket No. 07-45. Inquiry Concerning the Deployment of 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, FCC GN Docket No. 07-45, Comments of the New Jersey Division of Rate Counsel, May 16, 2007. The Cable-Telco Duopoly White Paper was prepared on behalf of the Public Advocate of New Jersey Division of Rate Counsel and originally submitted in the New Jersey Board of Public Utilities proceeding considering new cable rules. *In the Matter of the Board's Regulations of Cable Television, Proposed Readoption with Amendments and New Rules: N.J.A.C. 14:18-14 and 15*, New Jersey BPU Docket Nos. CX06030141 and CX06080580, Proposal Number: PRN 2006-384. Section 2.5 discusses the evidence, economics and implications of the cable-telecommunications duopoly for consumers.

⁶⁶ / Also, Rate Counsel continues to disagree respectfully with the Commission's landmark decision in 2005, in which it determined that broadband is an information service, and thereby thwarted national and federal state policy makers' opportunities for requiring ubiquitous broadband deployment. *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers*, CC Docket No. 02-33, et al., *Report and Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 14853 (2005) ("Wireline Broadband Order").

the task of achieving universal service, and require them to offer an affordable standalone broadband product. These few changes in policy could benefit millions of Americans by providing more competition in the market for broadband services, and lower prices for consumers.

Broadband is now an essential service and therefore should be a USF-supported service.

Rate Counsel has been a long-time advocate of expanding universal service to include affordable broadband access. Therefore Rate Counsel supports the Commission's proposed inclusion of affordable broadband as a supported service. Furthermore, any grants to improve broadband availability should be awarded to states proportionally, based either on population or households, to recognize that consumers' ability to pay for broadband presents as much of a barrier to connectivity as does suppliers' willingness to deploy infrastructure.⁶⁷

Rate Counsel agrees with the recommendation of the Federal-State Joint Board on Universal Service that the nation's universal service goals should include the universal availability of broadband services.⁶⁸ Furthermore, any expansion of national universal service support to encompass broadband should ensure that broadband support is disbursed in proportion to states' populations, and that broadband access is affordable. Although, for example, New Jersey may lack high-cost areas, there are many areas in New Jersey that lack broadband access that is affordable to the consumers in those communities. Rate Counsel has previously supported inclusion of affordable broadband

⁶⁷ / April 2008 USF Comments, at 7. *See also* In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Comments of the New Jersey Division of The Ratepayer Advocate, September 30, 2005 ("Rate Counsel 2005 USF Initial Comments"), at 26.

⁶⁸ / April 2008 USF Comments, at 20. *See also* Joint Board Comprehensive Reform NPRM, at para. 1; Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, Recommended Decision, FCC 07J-4, rel. November 20, 2007 ("Recommended Decision"), at para. 56.

in supported services, for example, stating in comments filed in the 2006 USF proceeding that “[i]n order to fulfill the nation’s objective of universal service, advanced services must be available to and affordable by all consumers, regardless of geography or income.”⁶⁹

Rate Counsel, however, opposes subsidizing more than one provider in areas with low population density.⁷⁰ If the market cannot support even a single provider, it would be an inefficient and imprudent use of public monies for the Commission to support programs under which multiple suppliers are subsidized.⁷¹ Therefore, to restrain growth of the high cost components of the USF (which, in turn, affects consumers’ telecommunications bills), Rate Counsel recommends that any broadband fund provide support to only one broadband service provider in a given area. Areas that require broadband support (that is, areas with market failure, i.e., in which a plausible economic case cannot be made) likely will have only a single service provider. Therefore, continuing oversight of the quality of the broadband service provided by the carrier that receives USF support is essential so that, in those areas that lack competition, a digital divide is not created. Furthermore, audits and enforcement mechanisms may be necessary to ensure that suppliers receiving broadband fund support are accountable for their use of funds.⁷²

The Joint Board recommends that “the Commission request comment as to the appropriate transition plan to wean a provider from Mobility or Broadband support once

⁶⁹ / April 2008 USF Comments, at 20. *See also* Rate Counsel 2005 Initial USF Comments, at 25.

⁷⁰ / *Id.*, at para. 49.

⁷¹ / *See* April 2008 USF Comments, at 31; November 2008 USF Comments, at 42-43.

⁷² / April 2008 USF Comments, at 31-33.

the objectives of geographic coverage in an area have been met.”⁷³ Rate Counsel agrees that support should end when the goals of deployment in a given area have been met. The major barrier to providing service in these areas is the large initial sunk cost. Ongoing operational costs should be minor in comparison. Rate Counsel therefore supports aid for the build-out of facilities, but opposes a permanent stream of subsidies to service providers.⁷⁴

IV. MARKET STRUCTURE

Rate Counsel supports the Commission’s inquiry into market analyses.

In response to the Commission’s questions regarding the role of market analysis,⁷⁵ Rate Counsel urges the Commission to monitor and analyze the structure of broadband markets regularly. Barriers to entry are significant, with cable and telecommunications companies dominating geographic markets. The fact that broadband providers not only supply the pipe over which information is transmitted but also supply the video content creates economic incentives that are inconsistent with those of consumers. Residential markets should be examined separately from business markets. Furthermore the “on-the-go” market should be examined separately from static markets.

As one recent article states:

Moreover, increased broadband competition is by no means a panacea for solving perceived or real limitations in the nation’s broadband infrastructure. As a result, policymakers need to balance the desire for more competition to enhance consumer

⁷³ / Recommended Decision, at para. 38.

⁷⁴ / April 2008 USF Comments, at 36-37

⁷⁵ / *NOI*, at para. 35. See also, *id.*, at para. 49.

welfare in the broadband realm with the need for the most efficient broadband industry structure.⁷⁶

Multiple imperfections in the broadband market underscore the need for judicious regulatory intervention or oversight.

Market forces alone cannot be relied upon to ensure ubiquitous affordable broadband access.⁷⁷ Multiple imperfections in and attributes of the broadband market underscore the need for regulatory intervention or oversight. Table 3 identifies some of the major aspects of the broadband market structure that merit regulatory attention.

**Table 3
Structure of Broadband Market: Flaws and Remedies**

Market Imperfection or Attribute	Remedy
Lack of information about broadband capabilities and use (consumers)	Education, training
Lack of information about the existing broadband infrastructure and prices (suppliers/government)	Detailed mapping, data gathering, and data analysis
Barriers to use by disabled and elderly	Provide specialized equipment and training to ensure inclusive communications
Underserved or unserved areas	Use USF funds for broadband rather than for POTS
Duopoly	Monitor prices, quality, and network management practices; reclassify broadband as telecommunications services; require open access
Network externalities: as the number of broadband connections increase, the value of connectivity for any individual consumer increases	Subsidize access; make access affordable; ensure ubiquitous availability
Exorbitant special access rates	Resolve pending investigation of exorbitant rates of return; lower rates

⁷⁶ / “The Role of Competition in a National Broadband Policy,” Robert D. Atkinson, *Journal on Telecommunications and High Technology Law*, Volume 7, March 16, 2009.

⁷⁷ / See questions raised in *NOI*, at para. 37.

- *An efficient market requires informed consumers and informed suppliers:* in order to achieve broadband connections to all citizens, consumers need information about relevant applications, technology, prices, and suppliers, and suppliers require information about gaps in coverage and costs of deployment.
- *Unserved and underserved areas underscore the fact that the FCC cannot rely on private investment to achieve the national goal of broadband ubiquity:* the fact that consumers in many areas of the country cannot yet obtain broadband access demonstrates clearly that private investment alone will not yield a national broadband infrastructure.
- *In some locations, two suppliers are present, but this duopoly does not equate to effective competition:* although it is preferable that consumers can choose between two suppliers (as opposed to having a single option), a duopoly does not represent effective competition.
- *Broadband connections exhibit network externalities:* the value to any individual of broadband access grows as the total number of connections throughout society increases.

Furthermore, federal and state regulators should be wary of promises by incumbent telecommunications companies to deploy broadband to unserved and underserved areas as a *quid pro quo* for obtaining regulatory approval for deregulation or for a major transaction (such as sale of assets). In New Hampshire, FairPoint made commitments to make the transaction more attractive to intervenors and to the New Hampshire Public Service Commission, but despite the best efforts of regulators, commitments can be difficult or impossible to enforce. In order to obtain regulatory

approval, among many other conditions FairPoint agreed to spend “at least \$56.4 million within five years of the closing on broadband infrastructure in New Hampshire, plus any additional expenditures required to meet the [broadband] availability requirements.”⁷⁸ (Even this effort still leaves some residents of New Hampshire without options for broadband service.⁷⁹)

As some intervenors observed,⁸⁰ the financial precariousness of the transaction for FairPoint would likely hinder the ability of FairPoint to meet the promises it made to regulators when it sought approval of the transaction. The “cutover” from Verizon and FairPoint systems occurred on January 31, 2009. However, the transition has not been smooth and in a recent FairPoint filing, the company states:

As we started to utilize our new systems to run the business, we encountered some areas that did not work as well as anticipated. This was primarily in our billing processes, order flow and call center response for both our retail and wholesale business. Since that time, many improvements, system corrections and additional training have been put into place and some areas have shown marked improvement. The end result; however is we are not servicing our customers at an acceptable level, and we are not improving fast enough.⁸¹

⁷⁸ / New Hampshire Public Utilities Commission Docket No. DT 07-011, Verizon New England, Inc., Bell Atlantic Communications, Inc., Nynex Long Distance Co., Verizon Select Services, Inc. And Fairpoint Communications, Inc. - Petition for Authority to Transfer Assets and Franchise, Order Approving Settlement Agreement with Conditions, Order No. 24,823, February 25, 2008, at 25.

⁷⁹ / *Id.*, at 22.

⁸⁰ / *See, e.g.*, Verizon New England, Inc., Bell Atlantic Communications, Inc., Nynex Long Distance Co., Verizon Select Services, Inc. and Fairpoint Communications, Inc. Joint Petition for Authority to Transfer Assets and Franchise to FairPoint Communications, Inc., New Hampshire Public Utilities Commission Docket No. DT 07-011, Direct Testimony of Susan M. Baldwin on behalf of the Office of Consumer Advocate, August 1, 2007, at 40-41.

⁸¹ / Letter from Patrick C. McHugh, Devine Millimet Attorneys at Law, on behalf of FairPoint Communications, Inc. to Debra A. Howland, Executive Director & Secretary, New Hampshire Public Utilities Commission, Re: DT 07-11 Verizon New England Inc., et al. and FairPoint Communications, Inc. Transfer of Assets, April 1, 2009, attaching FairPoint Stabilization Plan, March 31, 2009. FairPoint submitted a Stabilization Plan Update and Milestones document on April 17, 2009 as well.

The Commission and parties to the proceeding have been actively involved in resolving these issues, holding several conferences over the past several months. On May 18, 2009, the Commission found that “FairPoint has provided, in some instances, insufficient information required by the Commission and, according to Staff’s compliance review, has not provided certain information required by the Settlement Agreement. Further, in light of recent events including the release of FairPoint’s 10-Q quarterly report, the payment of executive compensation in the form of bonuses, and the failure by FairPoint to meet some of the established benchmarks for operational issues, the Commission has determined that further information is required.”⁸² Accordingly, FairPoint was directed to provide several items by May 26, 2009, including:

- “a date by which the Company will file a full Network Improvement Plan based on root cause analysis required by section 10.2 of the Settlement Agreement”;
- “capital spending projections for the remaining three quarters of 2009 and for each quarter in 2010” including a break-down of “the spending by state and by major category, with spending towards the Company’s broadband build out commitment shown separately from any other category”; and
- A “written description of any and all steps FairPoint has taken and plans to take to apply for or otherwise obtain funds from the National Telecommunications and Information Administration pursuant to the

⁸² / Letter from Debra A. Howland, Executive Director, New Hampshire Public Utilities Commission, to Jeff Allen Executive Vice President External Relations, FairPoint Communications, May 18, 2009, Re: DT 07-011 Verizon New England, et al Transfer of Assets to FairPoint Communications, Inc.

American Recovery and Reinvestment Act of 2009 and other related funds.”⁸³

FairPoint responded by noting that it has been “consumed by cutover and stabilization efforts” but that it will submit a Plan of Action for Network Improvements by September 15, 2009 for work to be initiated in the fourth quarter of 2009 and a 2010 Plan of Action for Network Improvements by December 10, 2009.⁸⁴ Budget projections and stimulus strategy documents were filed confidentially.

The Nashua Telegraph reports that: “FairPoint executives also said Wednesday they expect to receive a large chunk of the stimulus money slated for rural broadband deployment. FairPoint has not only pledged to expand broadband to rural areas, but is obligated to do so by regulatory agreements with all three states. Many of the projects are ‘shovel ready,’ the company said.”⁸⁵ The New Hampshire Office of Consumer Advocate filed a letter with the New Hampshire PUC on June 1, 2009 requesting that a status conference address several questions including whether FairPoint is on track to meet the merger approval requirement that 75% of lines have DSL available within 18 months of closing, or September 30, 2009.⁸⁶

⁸³ / *Id.*

⁸⁴ / Letter from Patrick C. McHugh, Devine Millimet Attorneys at Law, on behalf of FairPoint Communications, Inc. to Debra A. Howland, Executive Director & Secretary, New Hampshire Public Utilities Commission, Re: DT 07-11; Verizon New England, Inc. et al. and FairPoint Communications, Inc. Transfer of Assets, May 26, 2009, at 3.

⁸⁵ / Ashley Smith, “FairPoint says its rough start wasn’t that bad,” *Nashua Telegraph*, May 7, 2009.

⁸⁶ / Letter from Meredith A. Hatfield, Consumer Advocate to Debra A. Howland Executive Director and Secretary, New Hampshire Public Utilities Commission, Re: DT 07-011 Fairpoint Communications June 1, 2009 Status Conference, Attachment: OCA Questions for FairPoint on Operation Issues.

A duopoly does not represent effective competition, and without effective competition, broadband service likely will not be offered at just and reasonable rates.

The Commission should consider prices, pricing trends, and marketplace competition in considering whether people have broadband access.⁸⁷ Clearly the competitive benefits resulting from having one or more providers using similar or different technologies are greater than the benefits to consumers in an area with only one provider using only one form of technology.⁸⁸ However, if a given market cannot support more than one (or cannot even support one) supplier, Rate Counsel cautions the Commission against propping up artificial competition. Where competition is limited, state and federal monitoring of the price and quality of broadband service is essential. Also, the desire for robust broadband competition should not cause regulators to find competition where it does not yet exist.

Rate Counsel has previously cautioned the FCC to monitor the impact of the cable-telecommunications duopoly on consumers and recommends that the FCC incorporate concerns about the duopoly in its national broadband plan.⁸⁹

⁸⁷ / *NOI*, at para. 25.

⁸⁸ / *Id.*

⁸⁹ / *See, e.g.*, Inquiry Concerning the Deployment of 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, FCC GN Docket No. 07-45, Comments of the New Jersey Division of Rate Counsel, May 16, 2007, at 18-21, citing and attaching Susan M. Baldwin, Sarah M. Bosley and Timothy E. Howington, “The Cable-Telco Duopoly’s Deployment of New Jersey’s Information Infrastructure: Establishing Accountability,” White Paper prepared for the Public Advocate of New Jersey Division of Rate Counsel, January 19, 2007 (“Cable-Telco Duopoly White Paper”). Policymakers, analysts and consumer advocates have been raising concerns about the broadband duopoly for some time now. A Congressional Research Service report released in 2006 concluded: “With only limited alternatives to the cable and telephone broadband duopoly for the foreseeable future, and with the cable and telephone companies both pursuing largely the same business plan, the broadband providers might have both the incentive and the ability to exploit their control over access to end users to restrict competition (and the innovation it might bring) and harm consumers.” (Charles B. Goldfarb, *Access to Broadband Networks*, Congressional Research Service, CRS Report for Congress, Order Code RL33496, June 29, 2006, at 17). FCC Commissioner Adelstein, in his statement regarding the FCC’s approval of the merger between AT&T Inc. and BellSouth Corporation, also has taken note of the cable-telco duopoly,

Excessive special access rates deter broadband deployment and diversity

The special access market is not functioning efficiently, the effect of which is, among other things, to stymie the development of an affordable broadband infrastructure. In its *Order and NPRM* in WC Docket No. 05-25, the FCC noted that “the BOCs have earned special access accounting rates of return substantially in excess of the prescribed 11.25 rate of return that applies to rate of return LECs.”⁹⁰ This excessive return has continued, unchecked by the FCC. As Table 4 shows, nationwide, the rate of return for the Bell operating companies’ special access services increased from 38% in 2001 to 101% in 2007.⁹¹

referring to “a market in which telephone and cable operators control nearly 98 percent of the market.” (Statement of Commissioner Jonathan S. Adelstein, Concurring, Re: *AT&T Inc. and BellSouth Corporation Application for Transfer of Control*, WC Docket No. 06-74, *Memorandum Opinion and Order*, December 29, 2006.) Mark Cooper, Director of Research for the Consumer Federation of America described the cable-telco duopoly in detail in testimony before the United States Senate Committee on Commerce, Science and Transportation in hearings regarding Competition and Convergence on March 30, 2006. His testimony is available at <http://commerce.senate.gov/pdf/cooper-033006.pdf>. Dr. Cooper noted that “there are only two local, last mile communications networks that can provide a fully functional broadband network to the residential consumer – the incumbent local telephone companies and the incumbent cable operators. Two is not a sufficient number to ensure vigorous competition, and both sets of incumbents have a miserable record of anticompetitive, anti-consumer behavior.” (*Id.*, at 4.) The Chairman of the House Subcommittee on Telecommunications and the Internet, U.S. House of Representatives, referred to the broadband, or digital, duopoly at a conference in January 2007, stating, in part, “[t]he second piece of bad news is that broadband service to residential consumers in the United States is dominated by a ‘digital duopoly’ of two technologies – cable modem and telephone company DSL service . . . the cable industry’s cable modem and the telephone companies’ DSL technologies are going to be a digital duopoly into residential homes for the foreseeable future. This has implications for affordability, for innovation, and for the need for sensible rules for network neutrality to safeguard the Internet.” (Congressman Ed Markey (7th District Massachusetts) Statement at the Voice On the Net (VON) Conference, January 18, 2007, Boston, Massachusetts, available at http://markey.house.gov/index.php?option=com_content&task=view&id=2116&Itemid=46.) See, most recently, A Plan to Extend Super-Fast Broadband Connections to All Americans, at 6-7.

⁹⁰ / In the Matter of Special Access Rates for Price Cap Local Exchange Carriers; AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, FCC WC Docket No. 05-25; RM-10593, *Order and Notice of Proposed Rulemaking*, rel. January 31, 2005, at para. 35. The FCC stated that the “BOCs’ collective average special access accounting rates of return over the last six years (1998 - 2003) have been 18, 23, 28, 38, 40, and 44 percent, respectively.” *Id.*

⁹¹ / Total interstate rates of return for AT&T, Qwest and Verizon were 35%, 53%, and 25%, respectively, in 2007. Total RBOC interstate rate of return for 2007 was 33%. FCC, ARMIS Report 43-04, Table 1 (query run May 27, 2009). See, also, In the Matter of High-Cost Universal Service Support,