Consumer Federation of America

1620 I Street, N.W., Suite 200 * Washington, DC 20006

TESTIMONY OF

DR. MARK COOPER

DIRECTOR OF RESEARCH

ON

THE CABLE ACT AT 20

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION

JULY 24, 2012

Mr. Chairman and Members of the Committee,

My name is Dr. Mark Cooper. I am Director of Research at the Consumer Federation of America (CFA), which is an association of non-profit consumer organizations that was established in 1968 to advance the consumer interest through research, advocacy, and education. Today, nearly 300 of these groups participate in CFA and govern it through their representatives on the organization's Board of Directors and the annual Consumer Assembly. CFA has been involved in communications, media and Internet policy for decades in legislative, regulatory and judicial arenas and has advanced the consumer view in policy and academic publications.[1]

I appreciate the opportunity to offer CFA's reflections on the Cable and Consumer Protection Act of 1992, an Act to which CFA devoted a substantial amount of attention during its development. However, in order to provide a fair evaluation of the 1992 Cable Act, we believe it is important to recall that many of the most important policies adopted by the 1992 Act were repealed or superseded by the Telecommunications Act of 1996. It is also important to recall that some of the most important policies that affected the video product space in this time period (like the repeal of the Financial Interest and Syndication Rules) were implemented outside of the Act. Finally, it is important to recognize that the 1992 Cable Act dealt with and integrated rights to two media – wireless and wireline, using media in the broad sense of "storage and transmission channels or tools used to store and deliver information or data… to communicate any data for any purpose."[2] ," The first sentence of the Communications Act demands no less, defining the purpose of the act to be

> to make available to all people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient nationwide and worldwide wire and radio communications service with adequate facilities at reasonable charges.

Dealing with a big issue over a long period, especially one where there has been rapid technological and economic change, also requires that we evaluate the outcome in relation to the

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[1] The analyses that are most directly relevant to this testimony include: Mark Cooper, *The End of the End of Competition for Digital Access Services: The Verizon-Cable Spectrum Sale and Collaborative Agreements Mark the Final Failure of the 1996 Telecommunications Act to Provide Consumers with Effective Competition in Local Markets,* Consumer Federation, July 2012; *Efficiency Gains and Consumer Benefits of Unlicensed Access to the Public Airwaves: The Dramatic Success of Combining Market Principles and Shared Access,* Silicon Flatirons, January 2012; "Structured Viral Communications: The Political Economy and Social Organization of Digital Disintermediation," *Journal of Telecommunications and High Technology Law,* 9 (2011); The Central Role of Wireless in the 21st Century Communications Ecology: Adapting Spectrum and Universal Service Policy to the New Reality," *Telecommunications Policy Research Conference,* September 2011; "Round #1 in the Digital Intellectual Property Wars: Economic Fundamentals, Not Piracy, Explain How Consumers and Artists Won in the Music Sector," *Telecommunications Policy Research Conference*, September 2008.; *The Case Against Media Consolidation* (Donald McGannon Communications Research Center, 2007); "Will the FCC Let Local Media Rise from the Ashes of Conglomerate Failure," *International Communications Association,* May 2007. *The Impact of the Vertically Integrated Television-Movie Studio Oligopoly on Source diversity and Independent Production,* 2006; "Independent Noncommercial Television: Technological, Economic and Social Bases of A New Model of Video Production," T*elecommunications Policy Research Conference*, October 2005; *Broken Promises and Strangled Competition: The Record of Baby Bell Merger and Market Opening Behavior* (Consumer Federation of America, June 2005); "Spectrum as Speech in the 21st Century," *The Public Airwaves as a Common Asset and a Public Good: Implications for the Future of Broadcasting and Community Development in the U.S*., Ford Foundation, March 11, 2005; "Explorations Of Anti-Consumer, Anticompetitive Practices," *Cable TV Rates: Has Deregulation Failed?,* Manhattan Institute, November 2003; *Open Architecture as Communications Policy (*Stanford Law School, Center for Internet and Society: 2004); "Ten Principles For Managing The Transition To Competition In Local Telecommunications Markets," *Triennial Review Technical Workshop National Association of Regulatory Utility Commissioners,* Denver CO, July 27, 2003; *Media Ownership and Democracy in the Digital Information Age: Promoting Diversity with First Amendment Principles and Rigorous Market Structure Analysis* (Stanford Law School, Center for Internet and Society: 2003); *Cable Mergers and Monopolies: Market Power In Digital Media and Communications Networks* (Washington, D.C.: Economic Policy Institute, 2002); "Open Access To The Broadband Internet: Technical And Economic Discrimination In Closed, Proprietary Networks," *University of Colorado Law Review*, Vol. 69, Fall 2000; "Picking Up the Public Policy Pieces of Failed Business and Regulatory Models," *Setting The Telecommunications Agenda,* Columbia Institute For Tele-Information November 3, 2000; "Antitrust As Consumer Protection In The New Economy: Lessons From The Microsoft Case, *Hastings Law Journal,* 52: 4, April 2001; "Evolving Concepts of Universal Service," *The Federalist Society*, October 18, 1996; "Delivering the Information Age Now," *Telecom Infrastructure: 1993, Telecommunications Reports, 1993.*

[2] http://en.wikipedia.org/wiki/Media_ (communication).

broadly defined media sector we have today. Because the video policy of the early 1990s affected wireless (over-the-air terrestrial and satellite) and wireline (cable) distribution media, any effort to write a new policy for the 21st century must affect both. Thus, to evaluate where we have come in the past 20 years, we really need to look at the "Video/Media Policies of the early 1990s

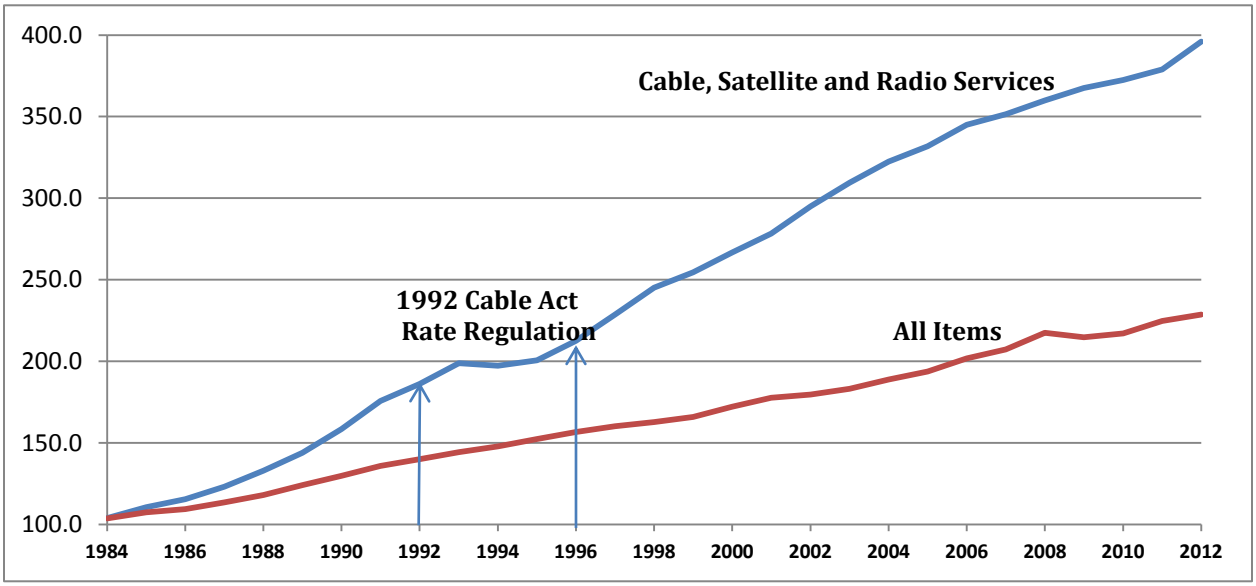
Once we take this broad perspective, we should be open to another possibility. While we hope to learn important lessons from from studying those aspects of wireless and wireline communications that were addressed by the 1992 Act, we should be open to the possibility that we may learn more about what we should do in the future from what happened in the recent past in areas of wireless and wireline communications policy that were not addressed by the 1992 Cable Act.

With all that said, the 1992 Cable Act does provide an important baseline against which to evaluate the video/media policy of the early 1990s. In the 1992 Act Congress recognized that the cable market was afflicted by severe, anticompetitive problems and anti-consumer practices. Congress knew that access to distribution media and control of marque content are critical inputs that determine the fate of competition and the treatment of consumers. Congress believed the problems were sufficiently grave and so in need of repair that it overrode President Bush's only veto to put the 1992 Cable Act into law. Congress was right to express these concerns; the central lesson of the video/media policy of the early 1990s is that incumbent market power in the video space is pernicious and tenacious and it requires vigorous public policies to prevent abuse of consumers. Checking that market power remains the central policy challenge after twenty years.

WIRELINE SERVICE: THE FAILURE OF COMPETITION TO DISCIPLINE CABLE MARKET POWER

Cable Rates: The market power of the cable operators unleashed by the 1984 deregulation of cable had driven up rates dramatically. The rate regulation sections of the 1992 Act effectively controlled that runaway price escalation (see Exhibit 1). Unfortunately, the 1996 Telecom Act abandoned rate regulation and promised that competition would protect consumers. It did not. In fact, the only time when consumers have had a respite from relentless price increases for multichannel video programming services since the 1984 deregulation of cable was the brief period in which the rate regulation of the 1992 Cable Act was in place.

EXHIBIT 1: BUREAU OF LABOR STATISTICS, CONSUMER PRICE INDEX (1982-83=100)



Thus the heart of the analysis of the video/media policy of the early 1990s must focus on the decision to rely on competition to replace regulation as the essential source of consumer protection in the video space. Unfortunately, the Telecom Act provisions that promised competition failed and when sufficient competition to discipline cable pricing failed to materialize, the abusive pricing returned with a vengeance. Measured by the price consumers pay for multichannel video programming services, the policy failed miserably.

Horizontal Limits: The horizontal and vertical limits policy that congress enacted in the 1992 Cable Act to help control cable market power also failed. Although the Congress told the FCC to impose horizontal and vertical limits, the language was not clear enough in the statue to overcome the steadfast opposition from cable in the courts. The FCC was not able to get a rule past the courts and cable exploited loopholes to undermine competition. The intermodal and intramodal competition that Congress hoped in the 1996 Act would replace regulation also failed to develop with sufficient speed, breadth and depth, to break the stranglehold that the incumbent distribution and content companies had on the video space. New entrants have failed to discipline cable's pricing power at the level of local of distribution and a handful of companies still dominate the prime time dial, which is where the money is in the video space.

Program Access: Congress also recognized that access to marquee content was important, if new distribution media were to have a chance to compete against entrenched incumbents. If a new distribution media is denied access to the programming that people watch most often, it cannot attract the viewers necessary to make it a viable economic operation. Access to popular programming is a huge barrier to entry. The Congress recognized that antitrust law and practice were insufficient to prevent this barrier from being used to undermine competition, so it wrote specific provisions to promote and ensure access to content under the broader, public interest standard of the Communication Act. The 1992 Act recognized that potential satellite distributors of video content had been the victims of the withholding of content by cable operators. The Act included a number of provisions to check this anticompetitive behavior.

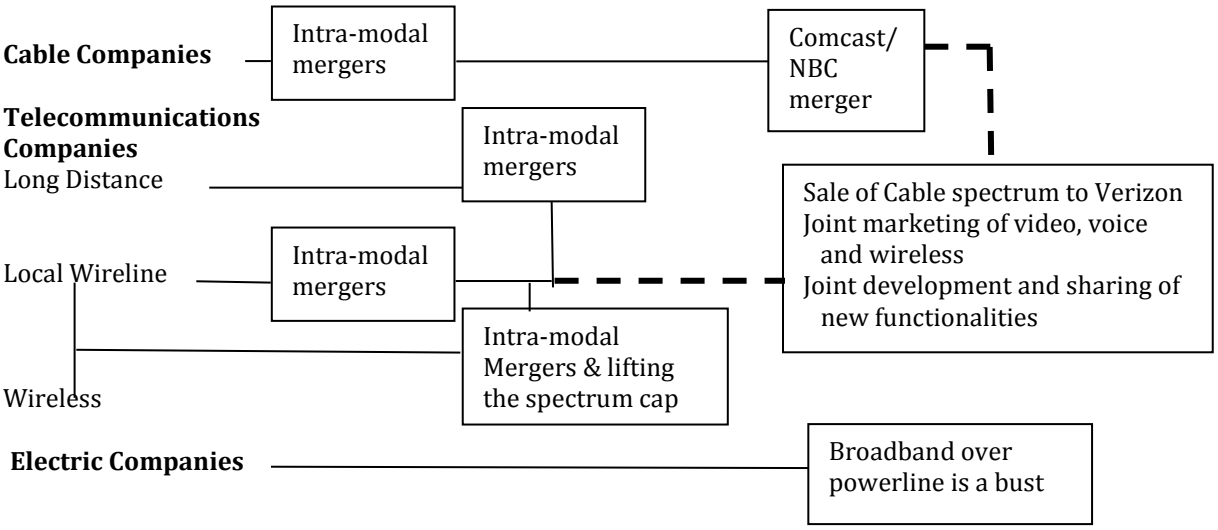
The program access rules were among the most effective aspects of the 1992 Act that were not replaced by the 1996 Act. The program access rules did free satellite from the stranglehold of vertically integrated cable operators, but that success was limited by the weakness of intermodal competition. Because of differences in technology, satellite made its greatest inroads in rural areas, where cable was weakest, but never did discipline cable's pricing power anywhere. In urban areas, it did push cable to digitize and expand its capacity, but ultimately, that undermined satellite's ability to compete because satellite cannot deliver broadband connectivity. The cable broadband pipe now dominates the market for local digital connectivity.

The impact of the program access rules was also limited in the case of intramodal competition. Head-to-head competition between cable operators and overbuilders was undermined when cable claimed a "terrestrial loophole," which allowed it to withhold "must have" content, like local sports from overbuilders. Even large potential entrants like telephone companies have complained about the problem of access to programming.

The Failure of Competition Policy

Relying on the theory that intermodal competition from satellite and entry by telephone companies would discipline cable's market power, a series of mergers was approved that consolidated the cable's control over both the video and broadband markets in its local service area (see Exhibit 2). The long standing failure of intramodal video competition (between cable companies, between broadcasters, between telephone companies) has been joined by the dramatic failure of intermodal competition between (broadcasters and cable, between satellite and cable, between cable and telephone companies).

EXHIBIT 2: THE TELECOM ACT PATH TO A "COLLABORATING" DUOPOLY IN LOCAL DIGITAL CONNECTIVITY



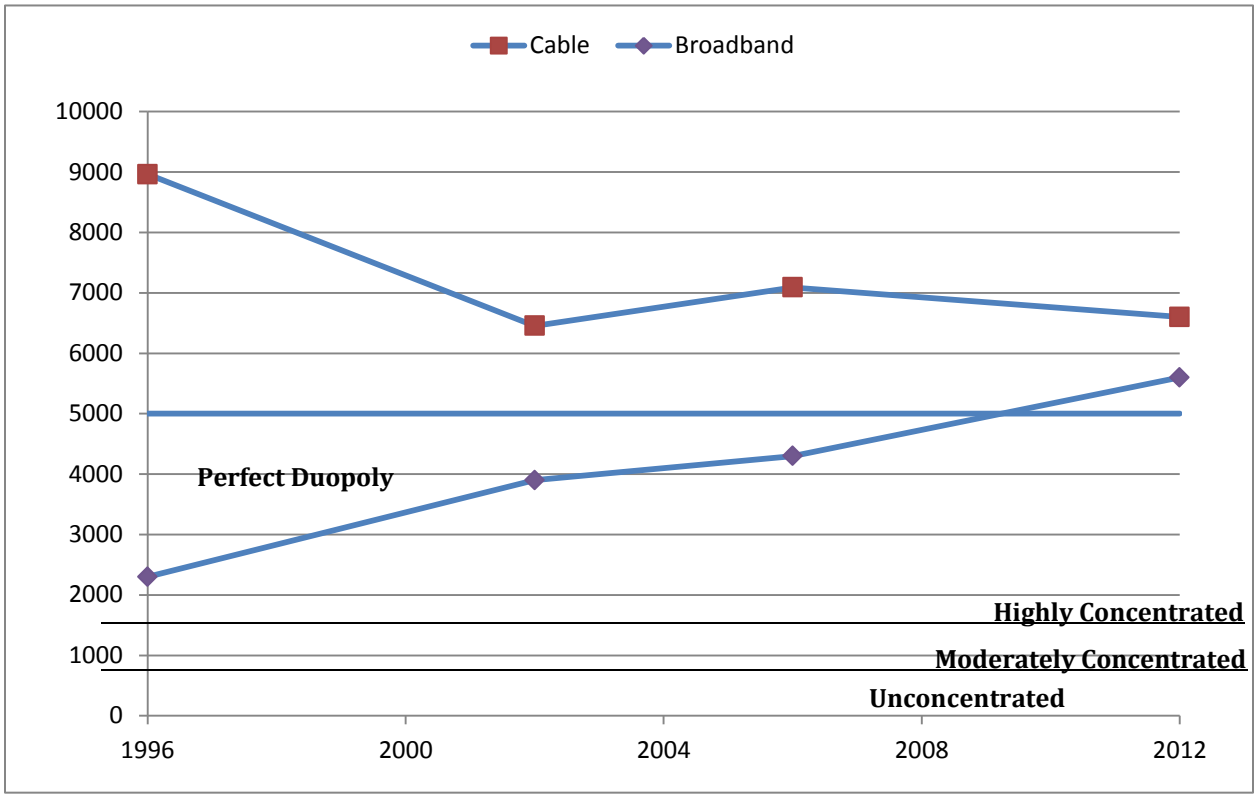
Source: Author based on *Cable Mergers and Monopolies* (Economic Policy Institute, 2002*), Broken Promises and Strangled Competition: The Record of Baby Bell Merger and Market Opening Behavior* (Consumer Federation of America, June 2005); "Picking Up The Public Policy Pieces Of Failed Business And Regulatory Models," *Setting The Telecommunications Agenda,* Columbia Institute For Tele-Information November 3, 2000.

The measure of market structure that has been used by the Department of Justice and the Federal Trade Commission for decades is the HHI index. The DOJ/FTC recently raised the threshold they use for considering a market to be highly concentrated. They have declared that when the HHI is at a level equivalent to four equal sized firms (HHI=2500) a market is considered to be highly concentrated market and likely to get close scrutiny in transactions like mergers and joint ventures.

The HHI index for local distribution shows that local distribution for MVPD service remains very highly concentrated, affording less competition than even a pure duopoly (see Exhibit 3). The fact that there is more competition than there was before the 1992 cable Act is not the most important point; the central lesson in these statistics is the fact that there is not enough competition to produce the beneficial results that competition is supposed to deliver and Congress promised.

Moreover, this simple statistic does not even fully capture how bad the situation is at the local level, as discussed below, because the competitors are not evenly matched in terms of the technologies used to supply services. The cable operators have added broadband to their video bundle and in at least three-quarters of the country they have the network that will dominate the broadband space in speed and capacity. The steady increase in the concentration of local connectivity for broadband access is evident in Exhibit 3.

EXHIBIT 3: HHI FOR LOCAL DIGITAL WIRELINE CONNECTIVITY



Source: Mark Cooper, *The End of the End of Competition for Digital Access Services: The Verizon-Cable Spectrum Sale and Collaborative Agreements Mark the Final Failure of the 1996 Telecommunications Act to Provide Consumers with Effective Competition in Local Markets,* Consumer Federation, July 2012; Eli Noam, *Media Ownership and Concentration in America,* 2009, for pre-2008; author estimates based on national trends in Federal Communications Commission reports on, High Speed Internet and Wireless applied to local market shares data in International Strategy and Investment Group, *Media and Cable,* October 24, 2011.

THE 21ST CENTURY POLICY CHALLENGE: ENSURING THE EMERGING QUASI-MONOPOLY IN WIRELINE BROADBAND SERVICES THE PUBLIC INTEREST

When cable competition policy failed, it opened the door to the dangerous possibility that these problems will persist in the age of digital distribution. The failure to introduce vigorous and effective competition into local video distribution now threatens the new distribution medium – broadband. We are repeatedly told that the broadband Internet will solve everything, but in the production and distribution of professional video, it has not yet done so and the dominant players are engaged in vigorous efforts to ensure that their dominance is preserved by manipulating access to consumers or withholding content from Internet video distribution.

The end of the end of the fairy tale of competition has been highlighted in the past two years by cross-technology mergers (Comcast-NBC) and joint ventures (Verizon and big cable). It is no longer possible to maintain the fiction that competition will protect consumers in the video market. The lesson for policymakers is quite clear.

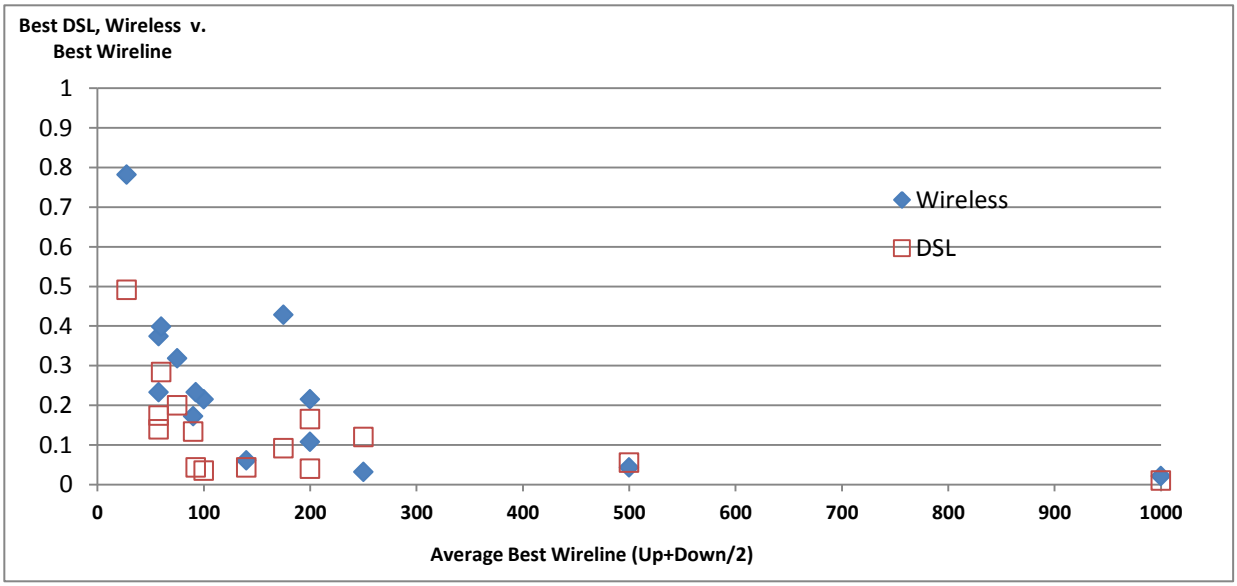
- In those parts of the nation where there are two networks that are well-matched in capacity, the competitors have waved the white flag and proposed a joint marketing agreement and strategic produce development joint venture.

- Poorly matched intermodal technologies are no substitute for head-to-head competition. Telco DSL or 4G wireless networks cannot deliver the speed and bandwidth that fiber and hybrid fiber coaxial cable networks can.

The difference between wireless broadband and wireline is quite clear. The fourth generation wireless technology aspires to deliver capacity and speed in the range of 10 to 20 megabits per second (mbps). The technologies used by advanced wireline service deliver 50 to 100 mbps. As a real world reminder of this difference, the wireline broadband service providers set their caps about 125 times as high as the wireless carriers. While none of the caps, as implemented, makes economic sense, the dramatic difference in their levels reflects the fundamental differences between the technologies.

Exhibit 4 shows a recent comparison of the best available broadband services available from each technology in fifteen cities across the globe, based on a recent analysis by the New America foundation. These 15 cities had complete data on upload and download speeds for each of the major technologies. These are very dense areas ranging from 2300 per square mile in Riga Latvia to almost 30,000 per square mile in New York. The Exhibit 4 shows that DSL and Wireless broadband delivers a fraction of the speed that cable/fiber does. As cable and fiber move to higher speed, DSL and wireless fall farther behind.

EXHIBIT 4: AVERAGE SPEED FOR "BEST" AVAILABLE TECHNOLOGIES IN 15 CITIES



Source: Hibah, Husain, et al., *The cost of Connectivity,* New America Foundation, July 23, 2012.

Policy Lessons

I believe mobile broadband is a terrific technology that will be at the center of the communications ecology of the 21st century digital economy, but it is not a substitute for wireline broadband. On the contrary, wireline broadband is a vitally important complement and a necessary input for wireless broadband. It is the "fat pipes" of wireline broadband that bring the exaflood of data close to the consumer, data which covers the first mile through wireless. This critically important role of wireline broadband makes it all the more alarming that we are headed to at best a quasi-monopoly of full capacity broadband networks (a duopoly with either two poorly matched or

collaborating rivals). Moreover, to the extent that wireless broadband might provide competition for cable, it has the added problem in the U.S. that the dominant telephone companies also dominate the wireless broadband space. Worse still, one of he two dominant wireless broadband providers has signed a peace treaty with the major cable operators. I believe that this is illegal under the Communications Act, but if the courts find that the Act is ambiguous in this area, the Congress should make it clear that this type of close collaboration between two wireless broadband networks is unacceptable if competition is to remain the primary thrust of public policy. One and a half firms is not enough competition to protect consumers, but that is what we have in the U.S.

Twenty years of failure to break the strangle hold of the incumbent broadcasters and cable operators should have reinforced the premises on which the 1992 Cable Act rested: access to the means of distribution and "must have" content are key bottlenecks. The campaign by the cable operators and content producers to prevent content from going online or ensure that it is behind a pay wall if it gets online, is intended to defend the rents of their offline businesses. In the absence of effective competition, this rent collection is not socially productive. Rather than support the necessary infrastructure, it contributes to outrageously high rates of profit and undermines the competitiveness of and innovation in the digital distribution models.

The pattern of anti-competitive, anti-consumer behavior that cable exhibited in the pre-broadband era has been transferred to the broadband product space. Comcast was caught red-handed degrading the quality of service of applications that competed against its core product. It has recently begun to charge consumers who use competing digital distribution service over their broadband connections. In both cases, it gave its own, identical services better treatment. I believe that this is illegal under the Communications Act, but if the courts find that the Act is ambiguous in this area, the Congress should make it clear that broadband communications networks must be operating in a nondiscriminatory manner, the way all of the major communications networks have been throughout the history of the Republic.

If Congress intends to rely on competition to fix the video space, it must ensure that the Internet is not starved of content or strangled by cable gatekeepers. The very small number of distribution networks means that competition between platforms will be feeble at best. "Dynamic" duopolies just won't cut it, "collaborative" duopolies are a joke and "benevolent" monopolies are a fiction. If policymakers intend to rely to the greatest extent possible on competition, then public policy must ensure that competition on the small number of platforms is unimpeded by the market power of the network owners or the dominant content producers.

WIRELESS: THE FAILURE OF BROADCAST SPECTRUM POLICY

Retransmission Consent: Twenty years ago, when Congress chose to extend the lucrative transmission rights it had granted to broadcasters by adding retransmission rights, it was attempting to protect the national broadcast networks that had come to play an important part in democratic discourse in America. The retransmission consent provisions of the 1992 Act were intended to ensure that national broadcast networks were available over cable and supported by broadcasters. Unfortunately, Congress gave the broadcasters these new rights without new responsibilities and they abused them. They were not used to strengthen the broadcast networks; they were used by the broadcasters to build suites of cable programming that were crammed into the bundles that cable offered. Consumers were forced to purchase large bundles of programs, most of which they do not watch.

Repeal of FinSyn: The repeal of the FinSyn rules also contributed to this consolidation, allowing the broadcasters to eliminate independent programming from prime time, which provided the broadcasters with the incentive to purchase movies studios. The result of these policies was to unleash a wave of horizontal mergers and vertical integration, as shown in Exhibit 5.

EXHIBIT 5: THE EVOLUTION OF THE CABLE/BROADCAST CONTENT OLIGOPOLY

Year	Disney/ABC	Time Warner	Viacom/CBS	G.E-NBC	Fox	Cable Mergers
1993		Turner acquires Castle Castle/New Line			Fox acquires	
			NFL rights			
1994			Viacom acquires Paramount			
1995		Time Warner launches WB	CBS launches UPN			Time Warner / Turner
1996	Disney acquires ABC	Time Warner acquires Turner				
1998						ATT-TCI
1999			CBS acquires King World Viacom acquires CBS	NBC acquires 30% of Paxson		
2000						ATT-MediaOne
2001					Fox duopolies LA, Minn. DC Houston	Comcast-ATT
2002				NBC acquires Telemundo NBC duopolies	Fox duopolies Chic. Orl.	
2003				GE Acquires Universal		
2005						Adelphia Comcast- Time Warner

Source: Mark Cooper, *The Impact of the Vertically Integrated Television-Movie Studio Oligopoly on Source diversity and Independent Production,* 2006; Columbia Journalism Review, *Who Owns What,* August 22, 2006.

Today the video dial is dominated by a handful of companies, many of which have proposed to collaborate, as shown in Exhibit 6.

EXHIBIT 6: PROGRAMMING CONTROLLED BY THE CONTENT OLIGOPOLY AND COLLABORATORS

Comcast/NBCU: A&E, A&E HD, Bio, Bio HD, Bravo, Bravo HD, Chiller, Chiller HD, Cloo, CNBC, CNBC HD, CNBC World, CNBC World HD, Crime & Investigation, Crime & Investigation HD, E! Entertainment TV, E! Entertainment TV HD, EPIX, EPIX HD, FEARnet, FEARnet HD, G4, G4 HD, Golf Channel, Golf Channel HD, History Channel, History Channel HD, History Channel en Espanol, H2, H2 HD, iN Demand, iNDemand HD, ION Life, ION TV, ION TV HD, LMN, LMN HD, Lifetime Real Women, Lifetime TV, Lifetime TV HD, Military HistoryChannel, MLB Network, MLB Network HD, The Mtn, The Mtn HD, MSNBC, MSNBC HD, mun2, Music Choice, NBC Television Network, NBC Entertainment, NBC News NBC Sports Network, NBC Sports Network HD, NHL Network, NHL Network HD, OxygenNetwork, Oxygen Network HD, PBS Kids Sprout, qubo, Retirement Living TV, ShopNBC, Sleuth, SYFY, SYFY HD, Telemundo, TV One, TV One HD, Style Network, Style Network HD, The Weather Channel, The Weather Channel HD, Weatherscan, Universal HD, USA Network, USA Network HD

CBS Corporation: CBS TV, News, Sports Network, CBS Sports Network HD, College Sports Television, College Sports Television HD, FLIX, FLIX HD, MountainWest Sports Network, MountainWest Sports Network HD, Showtime, Showtime HD, Showtime Beyond, Showtime Beyond HD, Showtime Extreme, Showtime Extreme HD, Showtime Family Zone, Showtime Family Zone HD, Showtime Next, Showtime Next HD, Showtime Showcase, Showtime Showcase HD, Showtime 2, Showtime 2 HD, Showtime Women, Showtime Women HD, Smithsonian Channel HD, TMC, TMC HD, TMC Xtra, TMC Xtra HD

Viacom Inc. :BET, BET HD, BET Gospel, BET Hip Hop. CENTIC, CMT, CMT HD, CMT Pure Country, CMT Pure Country HD, Comedy Central, Comedy Central HD, EPIX, EPIX HD, LOGO, MTV, MTV HD, MTV Hits, MTV Jams, MTV2, Nick 2, Nickelodeon/Nick at Nite Nickelodeon/Nick at Nite HD, HD Nicktoons Network, Palladia HD, Spike TV, Spike TV HD, TeenNick, EPIX HD, Tr3s, TV Land, VH1, VH1 HD, VH1 Classic, VH1 Soul

The Walt Disney Company: ABC TV Network,, A&E, A&E HD, ABC Family, ABC Family HD, Bio, Bio HD, Crime & Investigation Network, Crime & Investigation HD, Disney Channel, Disney Channel HD, Disney XD, Disney XD HD, ESPN 3D HD, ESPN Classic, ESPN Classic HD, ESPN Deportes, ESPN, ESPN HD, ESPN2, ESPN2 HD, ESPNews, ESPNews HD, ESPNU, ESPNU HD, H2, History Channel, History Channel HD, History International, History International HD, LMN, LMN HD, Lifetime Real Women, Lifetime TV, Lifetime TV HD, Military History Channel, SOAPnet

Time Warner Inc.: @Max, @Max HD, 5 Star Max, 5 Star Max HD, Action Max, Action Max HD, Boomerang, Cartoon Network/Adult Swim, Adult Swim HD, Cinemax, Cinemax HD, CNN, CNN HD, CNN Airport, CNN Headline News, CNN International, HBO, HBO HD, HBO2, HBO2HD, HBO Comedy, HBO Comedy HD, HBO Family, HBO Family HD, HBO Signature, HBO Signature HD, HBO Zone, HBO Zone HD, More Max, More Max HD, NBA, NBA HD, Outer Max, Outer Max HD, TBS, TBS HD, TMC, TMC HD, Thriller Max, Thriller Max HD, TNT, TNT HD, Tru TV, Tru TV HD, WMAX WMAX HD

News Corporation:Fox Broadcast Network, Big Ten Network, BTN HD, FOX Business Network, FOX Business Network HD, FOX College Sports, FOX College Sports HD, FOX Deportes, FOX Movie Channel, FOX News Channel, FOX News Channel HD, FOX Soccer Channel, FOX Soccer Channel HD, FOX Soccer Plus, FOX Sports Net, FOX Sports Net HD, FUEL TV, FUEL TV HD, FX Network, FX Network HD, Nat Geo WILD, Nat Geo WILD HD, National Geographic Channel, National Geographic Channel HD, SPEED Channel, SPEED HD, TV Guide Network

Other Cable Collaborators

Bright House Networks: Animal Planet, Animal Planet HD, Discovery Channel, Discovery Channel HD, Discovery Espanol, Discovery Familia, Discovery Fit & Health, Discovery Fit & Health HD, HD Theater, Investigation Discovery, Investigation Discovery HD, Military Channel, OWN, OWN HD, Planet Green, Planet Green HD, Science Channel, Science Channel HD, The HUB, The HUB HD, TLC, TLC HD Turbo, Velocity HD, 3ne, House Sports Network HD, Comcast/Charter SportsNet Southwest Metro Sports (Kansas City), Metro Sports HD, Metro Sports (NE), Metro sports (NE) HD, Metro Sports 2 (Kansas City, MO), News 8 Non-Stop Sports (TX), SportsNet New York, SportsNet New York HD, SunSports, SunSports HD, TWC Connection/Sports (Mid-Ohio),TWC Connections/Sports (Southwest Ohio), TWC Sports (Albany, NY), TWC sports (Albany) HD, TWC Sports Central New York, TWC Sports (WI), TWC SportsNet (Buffalo), TWC Sports (Rochester), YNN Non-Stop Sports

Time Warner Cable: Exercise TV, GameHD, Game2HD, HDPPV, iN Demand, iN Demand HD, MLB Network, MLB Network HD, MLS Direct Kick, NBA League Pass, NHL Center Ice, Team HD, Antelope Valley Channel 3 (Southern CA), Bay News 9, Bay News 9 HD ,BEVOD (TX), Capital News 9 (Albany, NY), Channel 858 (Southern CA), Desert Cities TV (Southern CA), The Green Channel (HI), K-Life(HI), Metro Weather (Kansas City), NEON (OH), News 8 Austin (TX), News 8 Radar Now (TX), News 8 Traffic Now (TX), News 8 Non-Stop Weather (TX), News 10 Now (TX), News 14 Carolina (Charlotte, NC), News 14 Carolina (Raleigh, NC), News 14 Carolina (Greensboro, NC), News 14 Carolina (Wilmington, Jacksonville, Morehead city, NC), Nippon Golden Network (HI), NY1 News (NY), NY1 Road and Rail Report (NY), OC 16 (HI), Oiwi (HI), Rhode Island News Channel, SoCal1 (Southern CA), Texas Channel (Austin, Waco, San Antonio, Corpus Christi, TX), Texas Chanel (Dallas), Texas Channel (El Paso), TWC-TV (New England), YNN (Austin, TX), YNN Austin, YNN Austin Radar Now, YNN Austin Traffic Now, YNN Austin Weather, YNN Buffalo (NY), YNN Capital Region (Albany, NY), YNN Central NY, YNN Hudson Valley (NY), YNN Rochester (NY), Wichita Falls TV (TX)

Cox Enterprises: iN Demand, iN Demand HD, MLB Network, MLB Network HD Travel Channel, Travel Channel HD

Source: Federal Communications Commission, *In the Matter of Annual Assessment of competition in the Market for the Delivery of Video Programming: fourteenth Report,* July 20, 2012, Appendix B; Columbia Journalism Review, *Who Owns What,* July 21, 2012.

The cable operators were not entirely innocent in this process. The broadcasters were confronted with the problem that cable operators, often vertically integrated with cable programming, gave their affiliated programming preference in carriage and high fees. To match the cable operators, who were leveraging the advantage of vertical integration, the broadcaster leveraged their retransmission rights to gain carriage. For a long period the cable operators and broadcasters solved their problem by increasing the bundles and charging higher prices. The bargaining over retransmission has become contentious lately, but no matter who wins between the cable operators and the broadcasters, one thing is certain, the public always loses. The public occasionally loses access to programming, frequently is forced to pay more for programming, and always is forced to pay for massive amounts of programming it never watches.

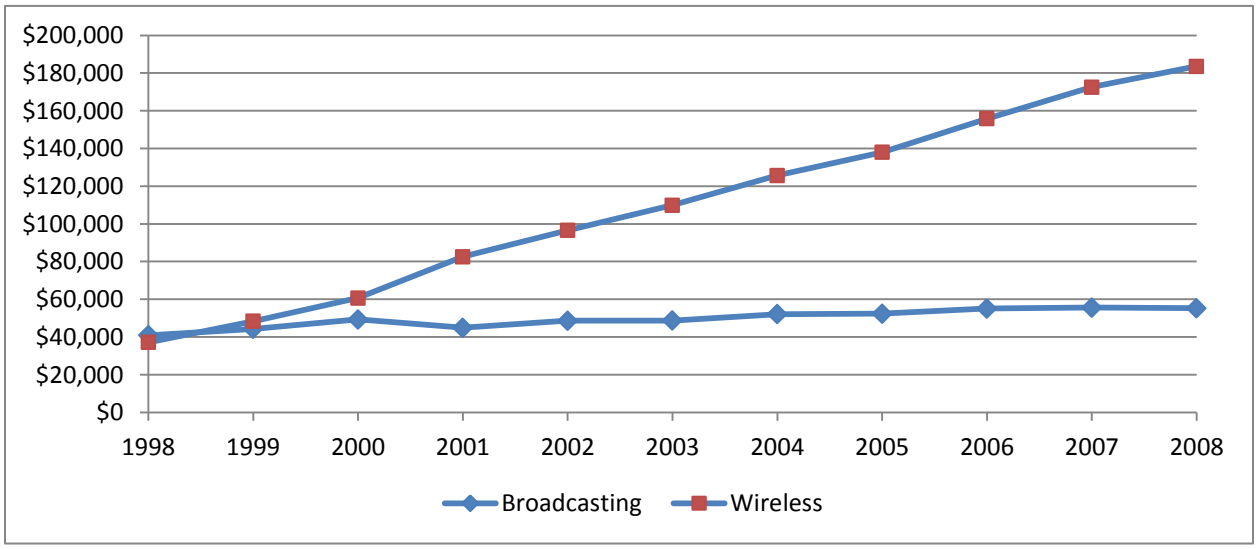
SPECTRUM POLICY BEYOND THE 1992 AND 1996 ACTS: TIME TO RETURN THE PUBLIC AIRWAVES TO THE PUBLIC

Use of the public airwaves (transmission and retransmission rights) is a good place to start a broad and meaningful reform agenda. Spectrum is a shared resource used by humans to communicate. Human speech uses the airwaves, which are accessible to all who have a voice, and people have been using technology to expand the reach of their communications through the spectrum for as long as they have been speaking. The invention of the radio a little over a hundred years ago was a technological breakthrough that vastly increased the ability to transmit signals over long distances to many more people.

Exactly a hundred years ago with the signing of the Radio Act of 1912 (August 13, 1912), public policy started down the road of granting licenses to transmit signals whose range was boosted by electronics. Given the technology of the day, using the spectrum to transmit one signal to many potential listeners appeared to be the best use of the spectrum. Exclusive licenses seemed to be a good way to solve two problems – (1) prevent interference between speakers by designating one, privileged person to use specific frequencies in the spectrum in specific areas and (2) provide incentives to investment in the transmitters, receivers and content that would fill the airways with sound. In exchange for the privilege of an exclusive right to use the public airwaves, broadcaster were asked to shoulder public interest obligations.

Economists have debated for decades whether broadcast licenses were the best use of the spectrum, but two remarkable experiments in the past quarter century have made it clear that, whatever the original rationale may have been, it no longer holds. About a quarter of a century ago, public policy allowed the spectrum to be used in other ways by other technologies to provide many-to-many conversations. The FCC began to issue licenses for cellular communications under the theory that licenses were still necessary to control interference and incent investment in the technology necessary to exploit the resource in this new way. As shown in Exhibit 7, the value of the economic activity in the spectrum used for two-way communications now dwarfs the value of the activity in the spectrum set aside for broadcasting, even though the broadcast spectrum is considered to be of much higher quality.

EXHIBIT 7: BROADCASTING V. WIRELESS ANNUAL REVENUE (MILLION $)

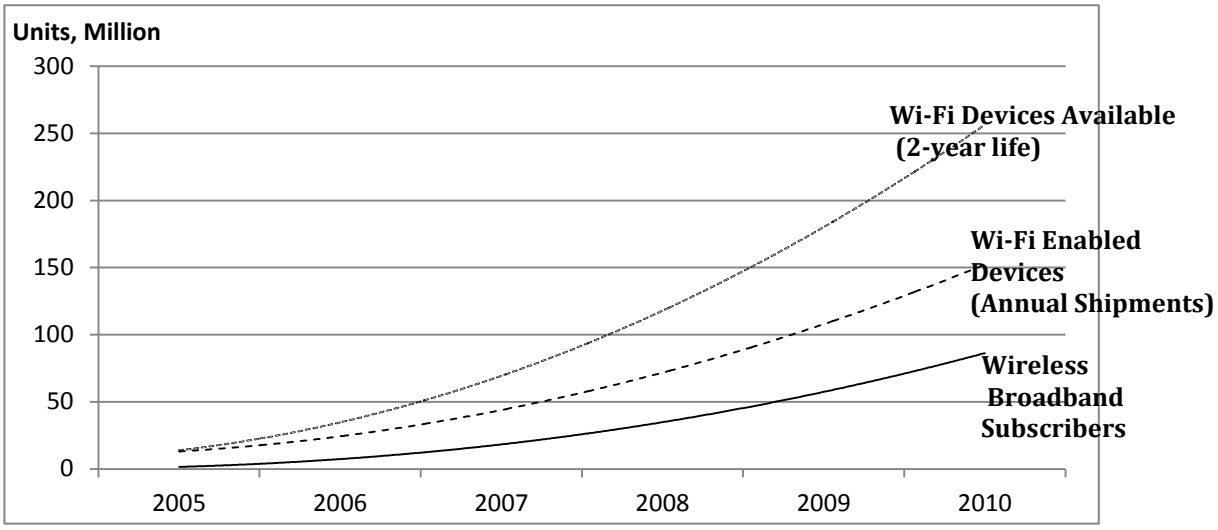


Source: *Statistical Abstract of the United States,* various issues, Information Sector Services – Telecommunications Estimated Revenue and Expenses; Mark Cooper, The Central Role of Wireless in the 21st Century Communications Ecology: Adapting Spectrum and Universal Service Policy to the New Reality," *Telecommunications Policy Research Conference,* September 2011

At roughly the same time, however, the FCC undertook an even more deregulatory free market experiment in the use of the spectrum. It realized that issuing licenses to transmit signals was not the only way to control interference or incent people to invest in the technology to make more communications possible. Given new technology, allowing everyone to use the spectrum to transmit signals, subject to simple rules of sharing, also produces an immense amount of communications without interference. WiFi was born in parts of the spectrum that had been considered "junk" or "garbage" by those wishing to use the spectrum for commercial purposes.

As shown in Exhibit 8, the number of WiFi enable devices deployed has increased at a remarkable pace. In the contemporary world of wireless broadband communications, firms that hold the privileged position of licensed cellular carriers have found it efficient and effective to dump as much as half their data traffic into the unlicensed space.

EXHIBIT 8: U.S. WIRELESS CONNECTIVITY POTENTIAL



Source: Nick Flaherty, "Consumer Wi-Fi drives Global growth," *The Embedded Blog,* May 28, 2010, Peter King, *Digital Home Wi-Fi Enabled Devices: Global Market Forecast and Outlook,"* July 2007; FCC, *Internet Access Services,* various issues; Mark Cooper, *Efficiency Gains and Consumer Benefits of Unlicensed Access to the Public Airwaves: The Dramatic Success of Combining Market Principles and Shared Access,* Silicon Flatirons, January 2012.

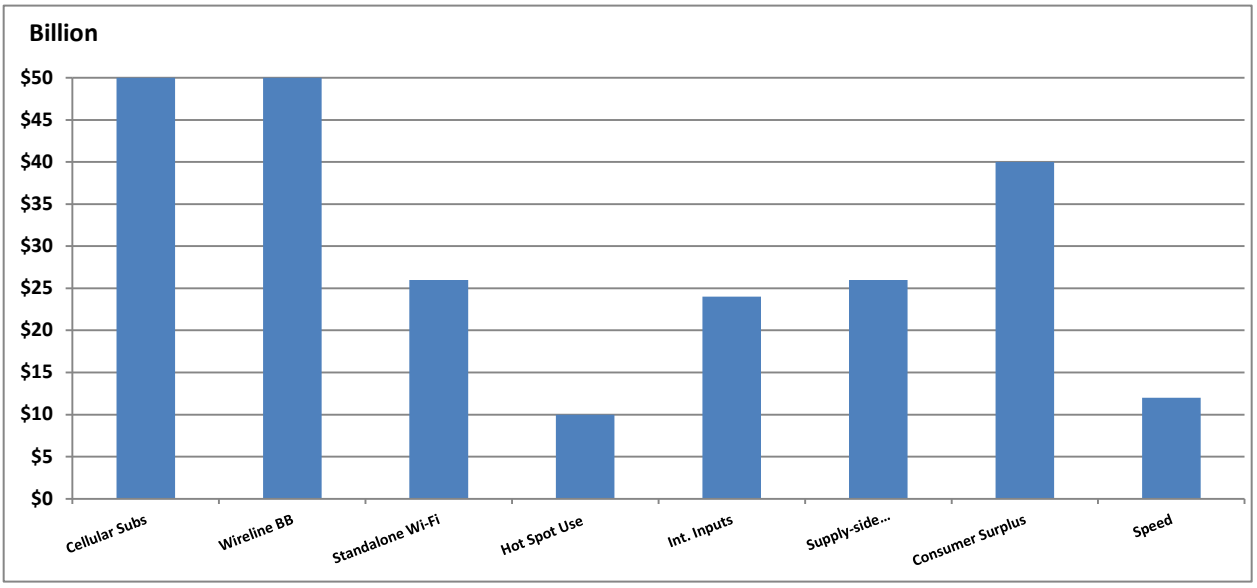
The value of unlicensed spectrum goes well beyond a convenient place for cellular services to offload their traffic. It provides a variety of services that have unique value. In a recent paper I showed that the value of the many uses of WiFi has grown to equal or exceed the value of wireless broadband and wireline broadband (as shown in Exhibit 9).[3] As the Internet of things expands, to tens of billions of transmitters, unlicensed spectrum will fill a larger and larger role. WiFi is a central feature of the 21st century communications technology.

The remarkable success of unlicensed spectrum requires a radical, deregulatory, free market shift in public policy thinking about how to use spectrum. It is now possible to return the public airwaves to the public for much more direct use than at any time since the passage of the Radio Act a hundred years ago.

The unlicensed model has succeeded because it is not free. In order to utilize the unlicensed spectrum, device manufacturers must design, build and market devices that consumers buy. To induce consumers to do so, useful applications must be written and distributed. Service provides must deploy hundreds of thousands of base stations and they must pay for the transport of traffic to and from the Internet. The unlicensed model succeeded by bringing new and unique services to market, increasing the value of broadband by extending it to new devices, and providing a lower cost, more efficient avenue to deliver data to consumers.

[3] Mark Cooper, Efficiency Gains and Consumer Benefits of Unlicensed Access to the Public Airwaves: The Dramatic Success of Combining Market Principles and Shared Access, Silicon Flatirons, January 2012.

EXHIBIT 9: USE OF UNLICENSED SPECTRUM ACCOUNTS FOR A SIGNIFICANT PART OF THE VALUE OF BROADBAND



Sources: Cellular data estimated as $50/month for 84,000 million subscribers year-end 2010 Industry Analysis and Technology Division, *Internet Access Services: Status as of December 2010,* Federal Communications Commission, October 2011. WiFi standalone value is calculated as 110 million users are $20 per month value based on charges for standalone Wi-Fi services (as advertised in web sites of Boingo, AT&T, T-Mobile). Most cellular providers bundle Wi-Fi with cellular broadband subscriptions. Hot Spot Connectivity estimated by scaling up AT&T 1.2 billion per year to 3.6 national total valued at average per session charge of $3. Consumer surplus is from Richard Thanki, *The Economic Value Generated by Current and Future Allocations of Unlicensed Spectrum,* Perspective, 2009 (adjusting his 30% scenario for the current level of broadband subscribers). Speed is from, Paul Milgrom, Jonathan Levin and Assaf Eilat, *The Case for Unlicensed Spectrum,* October 12, 2011). Intermediate Inputs from Richard Thanki, *The Economic Value Generated by Current And Future Allocations of Unlicensed Spectrum,* Perspective, 2009 and Yochai Benkler, *Unlicensed Wireless vs. Licensed Spectrum: Evidence from Market Adoption,* 2011. Mark Cooper, *Efficiency Gains and Consumer Benefits of Unlicensed Access to the Public Airwaves: The Dramatic Success of Combining Market Principles and Shared Access*, Silicon Flatirons, January 2012.

- The unlicensed model removes the spectrum barrier to entry, which is the primary obstacle by allowing anyone to transmit signals for any purpose, as long as the devices used abide by the rules.
- Removing this barrier to entry removes the threat of hold up, in which the firm that controls the bottleneck throttles innovation by either refusing to allow uses that are not in its interest, or appropriating the rents associated with innovation.
- It lowers the hurdle of raising capital, by reducing the need for network investment and focusing on devices and applications.
- It fosters an end-user focus that makes innovation more responsive to consumer demand; indeed, it allows direct end-user innovation.
- It de-concentrates the supply of services compared to the exclusive licensed model, especially for high bandwidth services which tends to result in a very small number of suppliers, particularly in lower density markets.

Policy Lessons: Moving the Broadcasters out of the Way

This historical background must be the starting point for policies to address the problem of the retransmission consent. Retransmission of broadcast signals may or may not be a necessary

extension of the early twentieth century broadcast license approach to using the spectrum, but the fundamental problem at the start of the 21st century is that the underlying broadcast licenses are an anachronism born of an antiquated technology. They use far too much spectrum to provide a specific form of communications that is of relatively little value compared to the alternative uses of the public airwaves that technology now makes possible. Simply put, the U.S. is wasting tens of billions of dollars a year because the broadcast licenses prevent people from using the public spectrum in much more valuable ways.

If Congress reforms retransmission rights without reforming the underlying transmission rights, it will have done only a small part of what is necessary and in the public interest. If Congress reforms the underlying transmission rights without providing the maximum opportunity for all the people to use the spectrum in the freest manner possible, it will have failed miserably to bring the management of spectrum in to the 21st century. Congress will make another hundred year mistake.

Using 21st century technology, broadcasters can continue to transmit their signals while using much less spectrum. They should be required, not bribed, to do so. To be fair, the cost of retooling their equipment to transmit more efficiently might be defrayed with public funds, but that is it. They have no claim to the value that the spectrum can generate with other uses. Since the signals they will be able to transmit will be just as strong and clear (perhaps even better in both regards), there will be no harm to them and they deserve no special compensation. The exclusive right to transmit in the public airwaves is already a privilege of immense value. If a broadcaster does not move, the next time the broadcast license is up for renewal, part should be set aside for unlicensed use and the other part should be auctioned. If the broadcasters want it badly enough, they will win the auction and make the investment necessary to use the spectrum, just like every other potential bidder. The spectrum that is freed up by relocating the broadcasters should be split between cellular licenses and unlicensed use.

Reforming the management of the public airwaves in this way is the most important step policymakers can take, but reforming transmission rights in this way will not solve the problem of retransmission rights. Broadcasters will still have the privilege of holding exclusive rights to use the public airwaves to transmit their signals and the current law gives them retransmission right, too.

Congress could simply eliminate retransmission rights and the public interest would be no worse off. The original license to transmit was a valuable privilege. The broadcasters received the right to transmit signals over-the-air for free to the public. That is all they deserved and should have expected.

In the alternative, Congress could tie retransmission right to other public purposes for those who choose to continue their current licenses and accept the offer to move their transmission signals, much as it tied the original transmission rights to public interest obligations. In order to exercise retransmission right on multichannel video distribution platforms, broadcasters should be required to make those programs available over the Internet at the same time and on the same terms as they make their programming available over-the-air. This would replicate the original deal between the public and broadcasters – the right to transmit signals that are freely available to the public.

CONCLUSION

Digital distribution is a powerful, consumer-friendly, competition-friendly force in the 21st century media sector, but it is not immune to the abuse of market power by entrenched physical space incumbents. Media policy in the 21st century will have to be sensitive to the new economic reality, where small numbers of platforms play an important role. Large firms dominate platforms at the center of the digital economy because of the superior economics made possible by dramatic reductions in transaction costs and the ease and importance of vertical linkage in digital production. The economics that dictate a small number of platforms with market power, do not prevent the abuse of that market power. It becomes vitally important to ensure competition for the complements that flow on those platforms is not undermined by market power.

The need for access is a two edged sword. The owners of the platforms must not be allowed to leverage their market power to distort competition on the platform. The suppliers of the complements (content) must not be allowed to manipulate the supply of "marque" content to distort platform competition or extract monopoly rents, especially in the name of defending inefficient, outdated physical space business models.

The media policy of the early 1990s failed in large measure because it pinned its hopes on competition between media distribution platforms and gave broadcasters more rights, while failing to control cable market power. After the Comcast-NBC merger and in light of the Verizon-cable joint venture, the prospects that platform competition will provide the necessary check on the market power of incumbent content producers and network owners are dimmer than ever.

If Congress intends to legislate in the media and spectrum area, it must get back to the principle that the primary means of communications must be available to all on a non-discriminatory basis, a principle that has been successfully applied to the dominant means of communications throughout U.S. history, regardless of the dominant technology – roads, canals, steamships, railroads, and the telephone network. It would be a grave mistake, another hundred year mistake, to allow the information superhighway to be turned into a private toll road dominated by one or two network owners.