# TEXAS PUBLIC POLICY FOUNDATION PolicyPerspective

## **Network Neutrality: Far from Neutral**

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## Key Points

- Net neutrality shifts control of the Internet from the private sector to the government.
- Net neutrality will result in government censorship of speech on the Internet.
- There are 8,745,653 Texans with high-speed Internet and over 95.6% of U.S. Zip codes are served by three or more providers.
- Net neutrality will reduce investment in the Internet. There was \$70 billion invested last year alone by network management companies that will have no incentive to invest in a network they no longer manage.
- Private investment and management has reduced congestion and kept prices low. Without it, the Internet traffic will look like Houston freeways during rush hour.

900 Congress Avenue Suite 400 Austin, TX 78701 (512) 472-2700 Phone (512) 472-2728 Fax www.TexasPolicy.com The Federal Communications Commission (FCC) has announced its intention to adopt regulations to govern the Internet in the name of network neutrality.<sup>1</sup> It has proposed to codify four general Internet policy principles adopted informally in 2005 plus two new principles.

The six "net neutrality" principles the FCC seeks to codify are:

- 1. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from sending or receiving the lawful content of the user's choice over the Internet.
- 2. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from running the lawful applications or using the lawful services of the user's choice.
- 3. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from connecting to and using on its network the user's choice of lawful devices that do not harm the network.
- 4. Subject to reasonable network management, a provider of broadband Internet access service may not deprive any of its users of the user's entitlement to competition among network providers, application providers, service providers, and content providers.

- 5. Subject to reasonable network management, a provider of broadband Internet access service must treat lawful content, applications, and services in a nondiscriminatory manner.
- 6. Subject to reasonable network management, a provider of broadband Internet access service must disclose such information concerning network management and other practices as is reasonably required for users and content, application, and service providers to enjoy the protections specified in this part.

The FCC's Notice of Proposed Rulemaking states that codifying these principles will achieve several goals. These goals are to promote investment and innovation with respect to the Internet, promote competition for Internet access and Internet content, and to protect users' interests (including consumer protection).<sup>2</sup>

The Texas Public Policy Foundation recently filed the following comments with the FCC opposing the adoption in rule of the proposed principles. The principles are unneeded and, worse, will hinder the achievement of the very goals they are intended to promote. In fact, the current marketplace has fostered investment and innovation, protected users' interests, and promoted competition, so there is no need for the FCC to step in and create burdensome regulation.

Thomas Hazlett, former chief economist for the FCC, published an examination of the past decade of open access regulation in the U.S. He compared subscription growth for cable and DSL service and found that at each stage of reduced regulation, growth in DSL subscriptions accelerated.<sup>3</sup> Growth is the end result of investment and innovation spurred by competition in a free market.

## Net Neutrality Regulations Are Unnecessary and Will Harm Innovation, Competition, and Consumer Welfare

The following discussion examines the Internet marketplace in order to show that the proposed rule is unnecessary and will harm innovation, competition, and consumer welfare. The discussion is centered on four areas.

### Network management and prioritization by providers in a competitive environment preserve Internet access and traffic efficiency

The FCC states in their notice of proposed rulemaking that the volume of Internet traffic is increasing rapidly, and providers are dealing with this traffic by prioritizing transmissions of particular content, applications, and services.<sup>4</sup> From this, they infer that although the Internet has worked well until this point, the increasing traffic indicates that changes need to be made.<sup>5</sup> FCC Chairman Genachowksi has stated that net neutrality regulations are needed so that all Internet traffic, regardless of speed, origin, or bandwidth, is treated equally.<sup>6</sup>

Even so, most proponents of net neutrality rules concede that some prioritization of traffic is necessary. Internet networks have always prioritized traffic on the Internet.<sup>7</sup> In a neutral network, all bits contend with each other to pass through the lines, causing bits to collide. When bits collide they slow down. Sometimes they don't reach their destination and need to be retransmitted. Often they don't make it at all.<sup>8</sup> If every content creator had access through the Internet lines without prioritization, there would be a significant possibility of increased line jamming and consumers not getting the information they need. The Internet would soon start looking like urban freeways during rush hour traffic.

As such, each of the proposed FCC principles contains a "reasonable network management" exception that allows for some prioritization as follows:

- to reduce or mitigate the adverse effects of congestion on its network or to address quality-of-service concerns;
- to address harmful traffic or traffic unwanted by users;
- to address unlawful conduct on the Internet; and
- to maintain the proper functioning of their networks.<sup>9</sup>

There is no "brightline" or threshold for what qualifies as "reasonable" under the statute.<sup>10</sup> In fact, the notice of proposed rulemaking states that the term "reasonable" has a circular definition. The "reasonableness" exemption is so vague that the ambiguity will lead to more confusion and eventually increase the amount of litigation over Internet issues. Arguments by proponents of regulation show it is also likely that this vagueness will be used to lead to a practical standard of reasonableness that will deter innovation and investment, as well as serve as a roadblock for start-ups, thus inhibiting competition and ultimately creating the very problems that these rules are intended to prevent.<sup>11</sup>

The FCC's own regulatory actions also lead to this conclusion. It found that Comcast violated "federal Internet policy" in interfering with use for certain subscribers; in this case, consumers who were using peer-to-peer software to exchange bandwidth-heavy video.<sup>12</sup> Comcast was trying to manage the growing trend of a few users creating congestion that interfered—or threatened to interfere—with the usage of the vast majority of its subscribers. Yet the FCC's action against Comcast clearly shows that it has determined that this effort "to reduce or mitigate the adverse effects of congestion" is not reasonable.

The FCC has not demonstrated why network management cannot be left in the hands of service providers. Nor has it demonstrated that its regulation of network management or prioritization would serve any valid purpose. Instead, it has demonstrated that this regulation would significantly interfere with proper network management of the Internet.

## II. The current competitive environment has created significant growth

Increasing the number of Internet users is a priority for the FCC. The FCC states in their notice of rulemaking that in many parts of the U.S., customers have limited options for high-speed broadband Internet access service.<sup>13</sup>

Creating these rules to increase the number of users presupposes the argument that the number of users is not already increasing in the current market. However, the FCC data shows that under the status quo, the number of Internet users has shown significant growth over the last decade, with the rate of growth increasing even more in the last four years.

The latest FCC data shows that Texas had 137 high-speed Internet Service Providers (ISPs) offering service to 9,110,055 customers in 2008—up from 3,466,494 customers in 2005. In addition, 88 percent of end-user premises have access to DSL and 96 percent to cable broadband. Since 2001, the number of broadband subscribers in Texas has grown more than 1015 percent.<sup>14</sup> That is a growth of more than 5.6 million customers in the last nine years. Additionally, the numbers show that of the 9 million total customers, 8,745,653 have access to cable broadband speed or better. To put this in perspective, the current number of Internet subscribers with broadband access totals more than 2.5 times the total number of all Internet users just four years ago.<sup>16</sup>

The Public Utility Commission of Texas (PUCT) confirms the FCC data. In 2007, the PUCT determined that "no evidence exists that any broadband provider has yet affected customer choice of Internet-enabled applications employed in association with broadband service in Texas."<sup>17</sup> The PUCT went on to find that there were "no compelling reasons" to add any additional restrictions or regulations to current law.

Texas is not the only state to experience this tremendous growth over the last several years.

The table below clearly shows that states across the country are growing at significant rates. Nationally, the number of broadband subscribers has grown by almost 1000 percent between 2001 and 2007.<sup>18</sup> The number of users has continued to grow since 2007 as well. Between 2008 and 2009, adoption in the U.S. soared from 55 percent to 63 percent.<sup>19</sup> In only a few years, if broadband growth continues unabated, the market will be saturated. The increased number of broadband users has led to an increased number of broadband providers. As of June 2006, 95.6 percent of U.S. ZIP codes were served by two or more broadband service providers (including satellite broadband), and 87.4 percent of U.S. ZIP codes were served by three or more broadband service providers.<sup>20</sup>

Even in areas considered slow growth, such as rural areas, the data show an increasing number of providers and endusers. The number of underserved areas is shrinking each year, while the number with two or more providers is growing. From June 2004 through June 2005 alone, the number of U.S. ZIP codes with no provider shrank by nearly twothirds, from 5.7 percent to 2 percent. The number with only one provider shrank by about one-third, from 13.8 percent to 9.2 percent.<sup>21</sup>

Rural areas are not really slow growth. To the extent that market penetration in these areas is behind urban areas, two primary explanations stand out. First, consumer demand for broadband is simply not strong enough in some areas. Yet, the numbers show that market penetration is rising rapidly despite this challenge. Second, government regulations at all levels stifle entry into the broadband marketplace.<sup>22</sup> This

State	June 2001	June 2002	June 2003	June 2004	June 2005	June 2006	June 2007	% Change 2001-07
California	1,639,921	2,527,275	3,378,373	4,608,822	5,954,876	9,395,265	14,466,700	782%
Texas	614,704	1,015,245	1,571,250	2,203,490	2,943,487	4,357,437	6,855,680	1015%
New York	811,386	1,364,556	1,891,457	2,349,956	3,067,983	4,854,803	6,797,126	738%
Florida	634,703	1,103,236	1,634,552	2,236,963	2,958,350	4,408,427	6,349,084	900%
Illinois	325,085	525,817	840,632	1,270,907	1,817,481	2,666,304	4,305,351	1224%
New Jersey	394,198	654,235	924,835	1,194,557	1,605,301	2,654,674	4,150,053	953%
Pennsylvania	249,119	501,950	755,947	1,123,876	1,578,981	2,646,898	4,120,573	1554%
National	9,241,996	15,787,647	22,995,444	31,950,574	42,517,810	65,270,912	100,921,647	<b>992</b> %

#### **Broadband Subscribers in Texas as Compared to Other States**

Source: High-Speed Services for Internet Access, FCC (March 2008)

challenge is a much more serious impediment to growth. In most states, a provider wishing to lay new wire for the purpose of delivering broadband services to residential communities must first obtain approval from a local franchise authority.<sup>23</sup> This process tends to be needlessly cumbersome and expensive—at times preventing companies from continuing with their plans for broadband deployment.<sup>24</sup> Thus, it is excessive government regulation—not the lack thereof that is the issue that needs to be addressed to increase access to broadband Internet.

### III. Growing competitive markets prevent discrimination and increase competition

Proponents of net neutrality laws state that rapid growth of the Internet creates the potential that a few ISPs will also grow large enough to gain significant market share, acting as a monopoly on the system. The FCC has publicly stated its concern that a few large ISPs will manipulate competition and stifle innovation.<sup>25</sup> While this has happened in other markets, the unique nature of this market makes this a near impossibility.

In today's rapidly growing and competitive broadband market, network practices that didn't satisfy consumers would quickly send them to another provider.<sup>26</sup> In fact, the availability of priority services represents an opportunity for start-ups. New firms typically need to differentiate themselves from their established rivals, as well as to establish a good reputation with consumers. The availability of priority service would provide a chance for startup providers that promised not to prioritize certain traffic over others. That opportunity would not exist in a one-size-fits-all world.<sup>27</sup> Additionally, network owners themselves have every incentive to encourage innovation on the Internet because they profit only if the Internet prospers. The competitiveness and incentives in the current market for broadband Internet access services is sufficient to allay any fears of a monopolistic situation.<sup>28</sup>

Additionally, the engineers and scientists who volunteer to develop the evolving set of protocols that govern the Internet collaborate to ensure that Internet capacity continues to grow and adapt to new needs and challenges. This process works remarkably well and shows no signs of falling apart. In a free market environment, competition and innovation will ensure this remains the case. The main threat to the universal access to content is the centralized management of content under net neutrality regulations that create congestion and place national restrictions on content.<sup>29</sup>

## IV. Providers are uniquely suited to innovate and invest in their networks

The FCC indicates that the current growth may lead to capacity constraints. For example, the average broadband subscriber uses about two gigabytes of data per month. Internet-based television systems would consume more than 100 times as much—224 gigabytes. As we move towards highdefinition formatting, the average user would consumer over one terabyte a month.<sup>30</sup> John Chambers, CEO of Cisco Systems, projects a four to six times increase in Internet traffic over the next decade.<sup>31</sup>

With the increase in Internet traffic, both proponents and opponents of net neutrality regulation agree that the only way to prevent the system from "cracking" is to innovate. Innovation leads to the advancement of applications and services.

Supporters of regulation argue that the fees and other investment arrangements, currently in place by ISPs, would drive small Internet entrepreneurs out of business, hurting competition and innovation.<sup>32</sup> As previously discussed, however, the current market helps start-ups enter the market by allowing them to differentiate themselves from established rivals. Differentiation in pricing or quality of service may enable different types of innovation that might not be feasible with a network lacking such capabilities.<sup>33</sup> By actively managing traffic flow, network owners could use scarce Internet capacity more efficiently. Additionally, traffic fees could spur some much-needed investment in broadband networks.<sup>34</sup>

Even while lobbying for net neutrality rules, the FCC admits that network equipment makers have responded well to the rapid growth, responding with new technologies and more sophisticated routers that enable network operators to distinguish among different classes of traffic.<sup>35</sup> In other words, the FCC has acknowledged that the Internet is growing and that the current ISPs have done a great job advancing with the marketplace. The numbers agree. The broadband companies have invested huge sums in the Internet infrastructure, including \$70 billion last year alone.<sup>36</sup> These funds are available primarily because of the network providers' ability to manage their own networks.<sup>37</sup>

Net neutrality regulations will only stifle innovation. Decentralized knowledge has best been able to synthesize varying consumer preferences and economic interests.<sup>38</sup> Centralizing this knowledge through government mandates will make the Internet vulnerable to political manipulation and stifle the innovation that comes from varied sources in a competitive environment. With existing lines effectively provided by government, there would be no incentive to build new capacity, especially when those new lines would be subject to the same requirements.<sup>39</sup>

#### Conclusion

FCC guidelines state that the goal of any regulatory act must be to utilize measures that promote competition.<sup>40</sup> As previously explained, ISPs have added nearly two million customers per year under the current system. This growth has led to more Internet users and increased the number of Internet providers to the point that 87 percent of users have access to two or more broadband providers. The numbers indicate that the current market is experiencing unprecedented growth, investment, innovation, and competition.

If the FCC begins mandating the flow of content and bandwidth over the ISPs' lines, ISPs will not be able to prioritize traffic and thus cannot properly manage their networks. If the ISPs cannot manage their own lines, there is no incentive for them to invest in the innovation that makes their lines better than the competition. This will ultimately cause price increases and stagnant growth.

By its own admission, the FCC has a duty to preserve and promote the open character of the Internet and the telecommunications marketplace. This duty extends to ensuring that consumers benefit from the innovation that comes from competition. Regulation will only create uncertainty, causing discouragement and delay in investment in planned critical infrastructure.<sup>41</sup>

Imposing a new, separate set of rules on the Internet would invite endless uncertainty and litigation, hurting innovation, investment, and Internet users.<sup>42</sup> While there are concerns that this environment could change in the future, advancing rules that ensure change without ensuring results is premature.

For the reasons listed above, the Texas Public Policy Foundation believes the proposed rules are harmful to the innovative and competitive environment that the Internet is built upon. Specifically, the Foundation opposes the adoption of the proposed rules as follows:

1. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from sending or receiving the lawful content of the user's choice over the Internet.

The Foundation objects to the overly regulatory nature of the rule, effectively preventing network operators from managing the traffic over their own lines. Preventing network management will slow growth, decrease competition, and stifle innovation. In other respects as well, it is wrong to suggest, as pro-regulation advocates do, that the Internet would be "neutral" in its treatment of different applications and content if only broadband networks were turned into a collection of dumb pipes. For several independent reasons, many of the outcomes that pro-regulation advocates would impose on the Internet would make it, if anything, *less* neutral under any meaningful definition of that term.

2. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from running the lawful applications or using the lawful services of the user's choice.

Overwhelming evidence shows that the increasing Internet traffic does not prevent users from running applications, but actually promotes more users running applications, increasing the number of providers, and creating investment. The sheer magnitude of broadband capital expenditures likewise undermines any argument that broadband competition is somehow "stagnant." Wireline carriers and the cable industry have spent more than a hundred billion dollars to lay millions of miles of fiber, copper, and coaxial cable, and to purchase and deploy countless routers, multiplexers, and other equipment.43 And as anyone who watches television is aware, broadband providers are spending enormous sums on warring advertisements targeted at one another's services, which is itself strong evidence of competition. They are spending those advertising dollars for good reason: Consumers will readily cancel their broadband service whenever they believe they can get better service or a better price from a new provider.

3. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from connecting to and using on its network the user's choice of lawful devices that do not harm the network.

Adoption of this rule presupposes the market is failing in the status quo, even with no evidence to support such a finding. In fact, adopting this rule could prevent users from connecting by regulating the amount of providers currently, and thus decreasing competitive choices for consumers.

4. Subject to reasonable network management, a provider of broadband Internet access service may not deprive any of its users of the user's entitlement to competition among network providers, application providers, service providers, and content providers.

The proposed rule is based on the assumption that users are entitled to a property right in the providers' property beyond any contractual obligations of the providers. This is a false assumption. Rule number four is in essence tortious interference in the relationship between providers and their users and a taking of the providers' property.

5. Subject to reasonable network management, a provider of broadband Internet access service must treat lawful content, applications, and services in a nondiscriminatory manner.

This proposed rule forces the FCC to discriminate "socially beneficial discrimination from socially harmful discrimination."<sup>44</sup> The problematic nature of this discrimination is evidenced in the FCC's proposed rule. It prohibits a "broadband Internet access service provider [from charging] a content, application, or service provider for enhanced or prioritized access to ... subscribers."<sup>45</sup> Instead, it allows providers to charge consumers for the services of these different providers, "We propose that this rule would not prevent a broadband Internet access service provider from charging subscribers different prices for different services."<sup>46</sup> Not only does this proposed principle shift costs from content providers to consumers, it may also interfere with discrimination, i.e., prioritization, based on reasonable network management. Prioritization is crucial for the upkeep and successful dispersion of data. The artificial distinction the FCC attempts to make between discrimination and prioritization will lead to congestion and loss of data.

6. Subject to reasonable network management, a provider of broadband Internet access service must disclose such information concerning network management and other practices as is reasonably required for users and content, application, and service providers to enjoy the protections specified in this part.

This proposed rule does not define what language or activity is to be disclosed or otherwise reported. As such, the proposed rule falls on its face. Additionally, this sort of vagueness will only cause more litigation among the organizations, increase costs, deter new competitors, and ultimately stifle innovation and the Internet entirely. The Foundation opposes this rule on the basis that the court system has already determined this type of forced disclosure and rulemaking is unconstitutional. In Comcast Cablevision v. Broward County, the court struck down a county ordinance that forced a cable company to give its competitors equal access to its communication infrastructure.47 The government argued that its "open access" ordinance did not offend the First Amendment. The Court disagreed, holding that the First Amendment prohibits government from forcing owners of communication infrastructure to transmit information against their will. Most importantly, the Comcast court went on to hold that the government has no power to force the circulation of information because "liberty of circulating is not confined to newspapers and periodicals, pamphlets and leaflets, but also to delivery of information by means of fiber optics, microprocessors, and cable."48 \*

*The Texas Public Policy Foundation filed these comments with the Federal Communications Commission on January 13, 2010.* 

## Endnotes

<sup>1</sup> Federal Communications Commission, Notice of Proposed Rulemaking, FCC 09-03, GN Docket No.09-191 (22 Oct. 2009).

<sup>2</sup> Ibid, 20-23, 25.

<sup>3</sup> Thomas W. Hazlett, "Natural Experiments in U.S. Broadband Regulation," Review of Network Economics, Vol. 7, Issue 4 (Dec. 2008).

<sup>4</sup> Ibid, 4.

<sup>5</sup> FCC, Notice of Proposed Rulemaking, paragraph 15.

<sup>6</sup> David Nicklaus, "Net Neutrality isn't a neutral term, and it isn't good for the Net," St. Louis Post-Dispatch (25 Sept. 2009).

<sup>7</sup> Cecilia Kang, "Computer Science Professor, Former FCC Official Warns Against Net Neutrality," *Washington Post* (25 Sept. 2009) http://voices.washington-post.com/posttech/2009/09/computer\_science\_professor\_for.html.

<sup>8</sup> Nick Schulz, Net Neutrality's Threat to the Future of Media, Real Clear Markets (11 Aug. 2009) AEI.

<sup>9</sup> FCC, Notice of Proposed Rulemaking, paragraph 137 ff.

<sup>10</sup> Ed Felten, "Net Neutrality: When is Network Management 'Reasonable'?" (26 Oct. 2009) http://www.freedom-to-tinker.com/blog/felten/net-neutrality-when-network-management-reasonable.

<sup>11</sup> Ibid.

<sup>12</sup> Mike Scarcella, "Appeals Court Warm to Comcast in Fight Against FCC" Typepad.com (8 Jan. 2010); summarizing D.C. Appellate argument at www.dcap-peals.gov.

<sup>13</sup> FCC, Notice of Proposed Rulemaking, paragraph 29.

<sup>14</sup> Federal Communications Commission, Wireline Competition Bureau, Presentation of the Section 706 Report (19 Mar. 2008) http://www.fcc.gov/ WCB\_031908\_open\_meeting\_slides.pdf.

<sup>15</sup> FCC, Wireline Competition Bureau.

<sup>16</sup> FCC, High-Speed Services for Internet Access: Status as of Dec. 31, 2005.

<sup>17</sup> Public Utility Commission Self-Evaluation Report, "A Report to the Texas Sunset Advisory Commission" (Sept. 2009) 78.

<sup>18</sup> Federal Communications Commission, Presentation of § 706 Report (19 Mar. 2008).

<sup>19</sup> Wayne Crews, Comments of the Competitive Enterprise Institute, Before the FCC GN Docket No. 09-51 (In the Matter of A National Broadband Plan for our Future, p. 3.

<sup>20</sup> Danny Adams, "Broadband Deployment Likely to be Key Topic At FCC," *IP Business News* (7 Jan. 2010); see also Singer, Hal J., *Net Neutrality: A Radical Form of Non-Discrimination*, Criterion Economics (Summer 2007).

- <sup>21</sup> James L. Gattuso, Broadband Regulation: Will Congress Neuter the Net? (2006).
- <sup>22</sup> Crews, Comments of the Competitive Enterprise Institute, p. 16.
- <sup>23</sup> Diane Katz, Assessing the Case for Cable Franchise Reform (2 July 2007).
- <sup>24</sup> Crews, Comments of the Competitive Enterprise Institute, p. 16.
- <sup>25</sup> Allan Leinwand, "Why Net Neutrality Is Important for Startups, Innovation," Gigaom, Dec. 6, 2009.
- <sup>26</sup> Gattuso, Broadband Regulation: Will Congress Neuter the Net? (2006) p. 4.
- <sup>27</sup> Ibid.

<sup>28</sup> Daniel F. Spulber & Christoper S. Yoo, Rethinking Broadband Internet Access, 22 Harv. J.L & Tech. 1 (2008).

- <sup>29</sup> Nick Schulz, Net Neutrality's Threat to the Future of Media, Real Clear Markets (11 Aug. 2009) AEI.
- <sup>30</sup> Gattuso, Broadband Regulation: Will Congress Neuter the Net? (2006) p. 4.
- <sup>31</sup> Ibid.
- <sup>32</sup> Ibid.

<sup>33</sup> Christopher S. Yoo, Network Neutrality, Consumers, and Innovation (2008) U.Chi. Legal F. 179, 227-38 (2008).

<sup>34</sup> Gattuso, 22.

<sup>35</sup> Ibid, 24.

<sup>36</sup> Nicklaus, "Net Neutrality isn't a neutral term, and it isn't good for the Net."

<sup>37</sup> Ibid.

<sup>38</sup> Competitive Enterprise Institute, "Net Neutrality rules depress investment, reduce competition", Cei.org/issue/2.

<sup>39</sup> Crews, Comments of the Competitive Enterprise Institute, Before the FCC, p. 3.

<sup>40</sup> Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat. 56 § 706 (1996).

<sup>41</sup> Kay Bailey Hutchison, U.S. Senate, Open Letter to Julius Genachowkski FCC Commissioner (13 Oct. 2009).

<sup>42</sup> Gattuso, Broadband Regulation: Will Congress Neuter the Net?

<sup>43</sup> See, e.g., Fifth Report, Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 23 FCC Rcd at 9651, 9651 ¶ 74 (2008) ("Fifth Section 706 Report") (noting that the industry plans \$50 billion in capital expenditures in 2008 and 2009).

- <sup>44</sup> FCC, Notice of Proposed Rulemaking, paragraph 103.
- <sup>45</sup> Ibid, paragraph 106.
- <sup>46</sup> Ibid.

<sup>47</sup> Comcast et al v. Broward County, Case No. 99-6934 Civ., U.S. District Court, S.D.FI (2000).

<sup>48</sup> Ibid, 13.

## **About the Author**

**Ryan Brannan** joined the Texas Public Policy Foundation in 2009 as a policy analyst in the Center for Economic Freedom.

Ryan graduated with honors from Southern Methodist University with a Bachelor's in Political Science and minor in History. He received his Juris Doctorate at the University of Oklahoma where he was a member of the American Indian Law Review, Dean's List, Dean's Counsel, and several trial teams including the National Trial Team. He received special recognition in advocacy and public service by receiving the Dean's Award for Advocacy and the Dean's award for Service, respectively.

Upon returning to Texas, Ryan continued his love for public service and philanthropy by establishing and serving as Director of The Dallas Philanthropic Society, a 501(c)(3) non-profit. He also returned to school in the evenings to earn his M.B.A. from the Cox School of Business at Southern Methodist University, concentrating in Strategy and Entrepreneurship. At SMU, Ryan was a member of the Cox Leadership Forum and contributed to the SMU business plan competition.

Ryan was born in Galveston and grew up in Dallas, where he has lived most of his life.

## **About the Texas Public Policy Foundation**

The Texas Public Policy Foundation is a 501(c)3 non-profit, non-partisan research institute guided by the core principles of individual liberty, personal responsibility, private property rights, free markets, and limited government.

The Foundation's mission is to promote and defend liberty, personal responsibility, and free enterprise in Texas by educating and affecting policymakers and the Texas public policy debate with academically sound research and outreach. Our goal is to lead the nation in public policy issues by using Texas as a model for reform.

The work of the Foundation is primarily conducted by staff analysts under the auspices of issue-based policy centers. Their work is supplemented by academics from across Texas and the nation.

Funded by hundreds of individuals, foundations, and corporations, the Foundation does not accept government funds or contributions to influence the outcomes of its research.

The public is demanding a different direction for their government, and the Texas Public Policy Foundation is providing the ideas that enable policymakers to chart that new course.

