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An Agricultural Law Research Article

**Left Behind: The Lack of Advanced
Telecommunication Services in Rural America
and Its Strain on Rural Communities—Policy
Options for Closing the Digital Divide**

by

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**LEFT BEHIND: THE LACK OF ADVANCED
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I. INTRODUCTION

Bigger, better and faster is the American way. It is no surprise that as the Internet has become a part of our everyday lives, the demand for more information and at faster speeds has also increased. Recognizing this, in the Telecommunications Act of 1996, Congress directed the Federal Communications Commission ("FCC") and state regulatory commissions to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans."¹ According to FCC Chairman Michael Powell, rolling out Advanced Telecommunication Services ("ATS") is the "central communication policy objective of the day."²

A. *Digital Divide and Rural Communities*

The American economy is shifting to one in which a large number of commercial transactions are being handled electronically.³ As this electronic economy develops, it is vital that rural communities have the same access to ATS as their urban counterparts. The development of "state-of-the-art telecommunications infrastructure is fundamental to a community's sustainable economic development."⁴ Communities that do not enjoy ATS will be left behind and suffer the same economic fate as those that were bypassed by the original telephone network, railroads, and interstates.⁵

Unfortunately, a "digital divide" has developed between urban and rural areas. As policy makers and telecommunication providers have struggled with how to fulfill Congress' dream, some areas of the country are not realizing the benefits of having ATS available to them.⁶ Even with efforts to provide incen-

1. Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (codified at 47 U.S.C. § 157 (2000)).

2. *Morning Edition* (National Public Radio broadcast, Feb. 27, 2002) (transcript on file with author).

3. See Edwin B. Parker, *Closing the Digital Divide in Rural America*, 24 TELECOMM. POL'Y 281, 281 (2000).

4. Peter F. Korsching et al., *Rural America and the Information and Communications Revolution*, in *HAVING ALL THE RIGHT CONNECTIONS: TELECOMMUNICATIONS AND RURAL VIABILITY* 5 (Peter F. Korsching et al. eds., 2000).

5. See Parker, *supra* note 3, at 282.

6. See Press Release, FCC, FCC Issues Report on the Availability of High-Speed and Advanced Telecommunications Services (Aug. 3, 2000) [hereinafter FCC, Telecommunications Services Report], available at http://www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2000/nrcc0040.html (last visited

tives for deployment in rural areas, large carriers continue to express minimal interest in rural areas.⁷

In this note, I will discuss the history of recent telecommunications policy, specifically the requirements of the Telecommunications Act of 1996 that require the deployment of ATS to all Americans.⁸ I will examine the problems faced by rural communities that do not have access to ATS and the struggles in getting service providers to recognize rural markets. I will analyze the current statutory and regulatory framework as it applies to ATS deployment.

B. *Narrowing the Gap—Policy Options*

I will also examine the various solutions, primarily from a public policy perspective, for assuring that rural areas have access to ATS. Some argue that, without the proper policies and subsidies, the rural areas will be left behind if deployment of ATS is left to the free market system.⁹ Federal policy makers have attempted to fix the problem through the FCC's rules and decisions implementing the Telecommunications Act of 1996, as well as proposed legislation aimed at closing the digital divide between urban and rural areas.¹⁰ States have also made numerous attempts at narrowing the digital divide.¹¹ Generally, the

Nov. 19, 2002); *see also Rural Broadband Faces Big Challenges*, BROADBAND NETWORKING NEWS (PBI Media LLC, Potomac, M.D.), Nov. 6, 2001, at 1.

7. *See* Emily L. Dawson, Note, *Universal Service High-Cost Subsidy Reform: Hindering Cable-Telephony and Other Technological Advancements in Rural and Insular Regions*, 53 FED. COMM. L.J. 117, 128 (2000).

8. *See* Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (codified at 47 U.S.C. § 157 (2000)).

9. *See* Dawson, *supra* note 7, at 128.

10. *See generally* Adam D. Thierer, *Solving the Broadband Paradox*, 18 ISSUES SCI. & TECH. 57, 59 (2002) (discussing "regulatory roulette").

11. *See, e.g.,* H.B. 2900, 92d Gen. Assem. (Ill. 2001) (creating the Digital Divide Elimination Fund), *available at* <http://www.legis.state.il.us> (enrolled version); H.B. 2659, 71st Leg. Assem., Reg. Sess. (Or. 2001) (establishing the Connecting Oregon Communities Fund), *available at* <http://www.leg.state.or.us> (enrolled version); H.B. 2609, 71st Leg. Assem., Reg. Sess. (Or. 2001) (requiring telecommunications carriers to place 20% of gross, regulated revenue in Telecommunications Infrastructure Account to be used for ATS), *available at* <http://www.leg.state.or.us> (enrolled version); S.B. 229, 71st Leg. Assem., Reg. Sess. (Or. 2001) (providing a tax credit to telecommunications carriers for installation of ATS), *available at* <http://www.leg.state.or.us> (enrolled version); S.B. 1783, 77th Leg., Reg. Sess. (Tex. 2001) (requiring ATS deployment in rural communities upon a showing of demand by customers and providing funding through taxes on phone bills), *available at* <http://www.capitol.state.tx.us> (engrossed version).

attempts fall into two broad categories: (1) Those that use funding as an incentive, either from state or other sources, to provide deployment of ATS in rural areas; and (2) those that attempt to create a regulatory climate that is conducive to deployment of ATS.

The marketplace also provides potential solutions to the problem through the development of new technologies. In addition to the various policy options, there will be brief discussion of the various technologies available and those that are better suited to meet the needs of sparsely populated rural areas.

Finally, because the correct solution for each community and state will vary based on the needs of that community, the political climate in the state and community, and the service providers involved, it will be impossible to craft one solution that will solve the problem nationwide. Instead, policy makers and others should attempt to have a better understanding of the problem and its impact on rural communities so that an appropriate solution can be crafted to make sure rural communities are not left behind as we move ahead in the twenty-first century.

II. HISTORY OF THE TELECOMMUNICATIONS ACT OF 1996

To understand the policy concerns and options around the specific issue of closing the digital divide, it is necessary to have an understanding of the current climate and recent trends in telecommunications policy, in general, across the United States.

In the early to mid 1990s, a number of states passed legislation altering the traditional way in which local telecommunications providers were regulated. Generally, this legislation provided the flexibility in pricing for local telecommunications providers so that an incentive was created for the deployment of new products and services. The traditional form of rate-making "punished" efficiencies by requiring any "excess profits" to be returned to customers. Price regulation provides an incentive for efficiency and better service by allowing these realized savings to be retained by the company. These were the early policy steps toward creating a competitive marketplace for local telecommunication services.

In 1996, Congress passed the Telecommunications Act of 1996 ("TA 96").¹² Signed by President Clinton on February 8, 1996, this law began the next generation of telecommunications policy in the United States by establishing the

12. Telecommunications Act of 1996, Pub. L. No. 104-104, § 1-710, 110 Stat. 56 (1996).

framework under which local competition could develop.¹³ Specifically, the law established mechanisms and requirements on incumbent local exchange carriers (“ILECs”) for opening networks to competitive local exchange carriers (“CLECs”).¹⁴ With that mandate from Congress, it fell upon the FCC and the state regulatory commissions to do what they could to encourage the deployment of ATS.¹⁵ This was a victory for American consumers because of the provisions that laid the foundation for the creation of a telecommunications industry for the twenty-first century.¹⁶

In addition to providing for local competition and a mechanism for the Baby Bells¹⁷ to get back into the long distance business,¹⁸ TA 96 requires the availability of ATS “on a reasonable and timely basis . . . to all Americans.”¹⁹

III. THE DIGITAL DIVIDE

A. Current Penetration Rates

Even with a mandate from Congress to make ATS available to everyone, that dream has not been realized.²⁰ In fact, in a report issued in July 2002, the FCC reported that 7.4 million customers in America could be classified as advanced service subscribers.²¹ Of those, about 5.8 million were residential or

13. *See id.*

14. *Id.* § 101.

15. *See id.* § 706.

16. *See* Al Gore, *Bringing Information to the World: The Global Information Infrastructure*, 9 HARV. J.L. & TECH. 1, 6 (1996).

17. Following the break-up of AT&T in 1984, several local service monopolies known as Baby Bells were created. The Baby Bells were not allowed to provide long distance service and AT&T and the other long distance carriers were not allowed to provide local services. At the time of the passage of TA 96, seven Baby Bells, Bell Atlantic, NYNEX, BellSouth, Southwestern Bell, Pacific Bell, US WEST, and Ameritech, remained. Today only four Baby Bells remain: Qwest, BellSouth, Verizon, and SBC/Ameritech.

18. *See* Telecommunications Act of 1996 § 271 (1996).

19. *Id.* § 706.

20. *See generally* Press Release, FCC, Federal Communications Commission Releases Data on High-Speed Services for Internet Access (July 23, 2002) (evaluating trends of high-speed internet subscriptionship) [hereinafter FCC, Internet Access Data], available at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd0702.pdf (last visited Nov. 19, 2002).

21. *Id.* (reporting that of the 12.8 million high-speed lines in service, 7.4 million were “advanced service lines that provide services at speeds exceeding 200 kilobits per second (kbps) in both directions).

small-business customers.²² It could be argued that the market is working, at least as far as the overall nation is concerned, because the number of ATS subscribers has increased six-fold since similar data were released by the FCC in August 2000.²³

While the FCC was generally pleased with penetration rates and the progress being made in deploying ATS, certain groups, including customers in rural areas, continue to be identified as being vulnerable to not receiving ATS in a timely manner.²⁴ While there was at least one ATS subscriber in ninety-eight percent of the most densely populated ZIP codes, there was only one ATS subscriber in only forty-three percent of the most sparsely populated ZIP codes.²⁵ However, at the end of 2000, ATS subscribers were only reported in twenty-eight percent of the sparsely populated ZIP Codes, indicating that ATS deployment is continuing to increase in the rural areas.²⁶ Given the early disparity in deployment between urban and rural areas, it is not hard to imagine how the digital divide will grow wider if policy action is not taken to address the deployment of ATS in rural areas.

Narrowing the focus on a rural state like Iowa yields similar results.²⁷ Even without specific incentives from the state, deployment of ATS in rural areas continues to increase. From the First Assessment of ATS in Iowa released in October 2000 to the Second Assessment released in February 2002, there was a seventy percent increase in the number of rural communities in Iowa in which there was at least one provider of ATS.²⁸ Through 2001, forty-seven percent of

22. *Id.*

23. *See id.*, available at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd0702.pdf; *see also* FCC, Telecommunications Services Report, *supra* note 6, available at http://www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2000/nru0040.html.

24. *See* FCC, Telecommunications Services Report, *supra* note 6, available at http://www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2000/nru0040.html.

25. FCC, Internet Access Data, *supra* note 20, available at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd0702.pdf.

26. *Id.*

27. *See* IOWA UTIL. BD., ASSESSING HIGH-SPEED INTERNET ACCESS IN THE STATE OF IOWA: SECOND ASSESSMENT (Feb. 2002), available at http://www.state.ia.us/government/com/util/Misc/InternetAccess_2002.pdf (last visited Nov. 19, 2002). This report was submitted to the Legislative Oversight Committee of the Legislative Council in compliance with Senate File 2433, which seeks to "ensure that high speed broadband internet access is available to rural areas of the state where such access is not currently available." *See* S.F. 2433, 78th Gen. Assem., Reg. Sess. (Iowa 2000), available at <http://www.legis.state.ia.us/> (available under "Archives" link).

28. IOWA UTIL. BD., *supra* note 27, available at http://www.state.ia.us/government/com/util/Misc/InternetAccess_2002.pdf.

rural communities in Iowa had access to ATS.²⁹ The survey also reflects national trends in that it is the communities served by the large ILECs that are lagging behind in the deployment of ATS.³⁰

In the competitive telecommunications marketplace of the twenty-first century, investment decisions by telecommunications providers have been largely market driven.³¹ Because of the cost of deploying ATS, telecommunications providers tend to shy away from sparsely populated areas where they are less able to recoup their investment.³² This has been especially true of the larger ILECs, who choose to serve a larger geographic area than the smaller, independent ILECs.³³ However, smaller, independent carriers seem to be more likely to provide ATS to their customers in rural areas than the larger carriers.³⁴ Nearly six years after the passage of TA 96, rural communities continue to be plagued by the unavailability of ATS largely because they cannot offer the large customer base of urban areas. In other words, “density [of people] matters.”³⁵

B. *The Plight of Rural Communities*

In addition to the many personal and entertainment opportunities ATS access provides, rural communities are finding it more and more difficult to compete from an economic development standpoint when ATS is not available.³⁶ While having access to ATS will not guarantee the economic viability and success of rural communities, growth and success without it is incredibly difficult.³⁷ The advent and rapid deployment of ATS has created a double whammy for rural communities—it has led to increased competition in the rural communities from businesses across the country and around the world, and, at the same time, the communities are disadvantaged because they cannot compete due to the lack of deployment of ATS in rural areas.³⁸ Competition for the “last mile”, or the loop

29. *Id.*

30. *Id.*

31. *See Parker, supra* note 3, at 282.

32. *See id.* at 283.

33. Dawson, *supra* note 7, at 128.

34. *See id.* at 129.

35. *Rural Broadband Faces Big Challenges, supra* note 6, at 1.

36. *See Parker, supra* note 3, at 282.

37. Peter F. Korsching & Sami El-Ghamrini, *Telephone Companies: Providing All the Right Connections for Viable Rural Communities*, in *HAVING ALL THE RIGHT CONNECTIONS, TELECOMMUNICATIONS AND RURAL VIABILITY* 39 (Peter F. Korsching et al. eds., 2000).

38. *See EDWIN B. PARKER ET AL., ELECTRONIC BYWAYS: STATE POLICIES FOR RURAL DEVELOPMENT THROUGH TELECOMMUNICATIONS* 35 (2d ed. 1995).

between the central office switch and the customer's home, continues to lag.³⁹ This is critical because ATS is often provided over this last mile; as competition for local service in rural areas is minimal, so is deployment of ATS in rural areas. The availability of ATS can serve as an equalizer for rural communities who are often at a disadvantage with their urban counterparts because of distance and their lack of economies of scale.⁴⁰ From the beginning, if rural communities are going to compete, they must have a telecommunications infrastructure, including ATS, on par with urban areas.⁴¹ As will be discussed later, a number of possible solutions exist for ensuring ATS is available in rural areas, ranging from state and federal legislation to local consumers banding together to create a community of influence and demand sufficient to entice a provider to bring ATS to a community.

The very policies and regulations designed to ensure ubiquitous telecommunications services may well be hindering the deployment of ATS, especially in rural areas.⁴² Regulation, by establishing (most likely limiting) the price for telecommunication services, can unreasonably delay either the bringing of new products to the market place, or their widespread deployment.⁴³ Studies have suggested that complete deregulation of the telecommunications industry could add over \$1 trillion to the Gross Domestic Product over a ten-year period.⁴⁴ That reason alone should motivate policy makers to establish incentives for the deployment of ATS nationwide.

Another piece of the problem comes on the demand side of the equation. Even though almost half the households in America have ATS available to them, fewer than ten percent of all United States households have ATS in their homes.⁴⁵ Rural communities cannot benefit from the availability of ATS if the citizens of those communities do not know what they want or need. The Bush Administration has recognized the demand side of the problem, and Secretary of Commerce Donald Evans announced plans to "unlock demand for broadband."⁴⁶ Many of

39. See Dom Caristi, *Policy Initiatives and Rural Telecommunications*, in HAVING ALL THE RIGHT CONNECTIONS: TELECOMMUNICATIONS AND RURAL VIABILITY 23 (Peter F. Korsching et al. eds. 2000).

40. See Parker, *supra* note 3, at 282.

41. See Korsching & El-Ghamrini, *supra* note 37, at 42.

42. See THOMAS J. DUESTERBERG & KENNETH GORDON, COMPETITION AND DEREGULATION IN TELECOMMUNICATIONS: THE CASE FOR A NEW PARADIGM 5 (1997).

43. See *id.*

44. See *id.*

45. Paul Andrews, *Big Pipe Dreams*, U.S. NEWS & WORLD REP., May 12, 2002, at 36.

46. U.S. Commerce Secretary Don Evans, Outline of Remarks Prepared for Delivery to the Broadband Technology Expo (Mar. 6, 2002), available at

the state and federal policies have focused on the supply side of the equation without assessing the needs of consumers.⁴⁷

C. *Limits of Technology*

Another contributing factor to the digital divide is the current technology itself. As an example, Digital Subscriber Line ("DSL") technology that uses existing, twisted pair copper phone lines to provide high-speed Internet service has severe technical limitations.⁴⁸ Most importantly, from a rural perspective, customers must be within 15,000 feet (approximately three miles) of the local switch.⁴⁹ This is often not the case in rural communities. In addition to the distance problems, the cost of deploying DSL makes it prohibitive in sparsely populated areas. It costs several hundred thousand dollars to equip a central office with the necessary equipment to provide DSL.

Rural communities must be able to narrow the digital divide if they are going to be competitive in the twenty-first century. Gone are the days when communities were an island to themselves. To compete globally, farmers and rural communities must have access to ATS. As diversification of rural economies continues, access to ATS is vital. And while access to ATS is important throughout the nation, it can be argued that it is more important in rural areas where access to cultural, educational, and medical resources is already limited.⁵⁰ It is vital to attracting and retaining businesses either as a direct need of the business physically locating in the community or in the case of a farmer or his spouse being able to telecommute to a neighboring community. Bringing ATS to rural communities is going to be fundamental to a community's sustainable economic development.

<http://www.ta.doc.gov/GovReleases/DOC-020306.htm> (last visited Nov. 19, 2002).

47. IOWA UTIL. BD. & IOWA DEP'T OF ECON. DEV., *ASSESSING HIGH-SPEED INTERNET ACCESS IN THE STATE OF IOWA* (Oct. 2000), available at http://www.state.ia.us/government/com/util/Misc/InternetAccess_2000.pdf. This report was submitted to the Legislative Oversight Committee of the Legislative Council in compliance with Senate File 2433. See S.F. 2433, 78th Gen. Assem., Reg. Sess. (Iowa 2000), available at <http://www.legis.state.ia.us/> (available under "Archives" link).

48. See James B. Speta, *Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms*, 17 *YALE J. ON REG.* 39, 51-54 (2000).

49. *Id.* at 52.

50. See Dawson, *supra* note 7, at 132.

IV. NARROWING THE DIGITAL DIVIDE

A. *Technological Options*

Establishing a competitive marketplace goes a long way toward addressing the issue of lack of ATS in rural areas.⁵¹ Policy makers need to be careful because inadequate policies and incentives could make the problem worse by leading to disproportionately expensive, low-quality services for customers in rural areas.⁵² The presence of, and opportunities created by, competition drive business decisions and spur investment as companies battle for customers. Customers demanding ATS drive investment and deployment decisions in those markets.

Even though it's been six years since TA 96, time continues to play a role in the deployment of ATS. As the technology has evolved, the price of deploying the technology has decreased dramatically. As the price of deploying technology goes down, it becomes easier for telecommunication providers to make the business case for investing in smaller and rural markets. The decreased cost of deployment also results in decreases in the price providers charge for ATS and that can have a positive impact on consumer demand.

Opening the markets beyond the traditional monopoly provider gives non-traditional providers, like wireless, a shot at providing ATS in rural areas.⁵³ In fact, fixed wireless is an ideal technology for providing ATS in sparsely populated areas because of its relative low cost of deployment and its ability to reach greater distances than traditional wire line solutions.⁵⁴ Evidence of the ease of deployment and customer demand for the service is apparent in the rapid increase in deployment of fixed wireless in recent years.⁵⁵ From January 2001 to June

51. See *Broadband Access in Rural Areas: Hearing Before the Subcomm. on Regulatory Reform & Oversight and the Subcomm. on Rural Enterprises, Agric. & Tech. of the House Comm. on Small Bus.*, 107th Cong. 136 (2001) [hereinafter *Hearing*] (statement of Thorpe "Chip" Kelly), available at <http://www.house.gov/smbiz/hearings/107th/2001/010524/kelly.html> (last visited Nov. 19, 2002).

52. See Dawson, *supra* note 7, at 130.

53. See *Hearing, supra* note 51, at 136, available at <http://www.house.gov/smbiz/hearings/107th/2001/010524/kelly.html>.

54. See *id.*

55. See *In re Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of Telecommunications Act of 1996*, 17 FCC Rcd 2844, 2846 ¶ 7(2) (2002) (third report).

2001, the number of satellite or fixed wireless subscribers increased by seventy-three percent.⁵⁶

As new technologies emerge and the cost of deploying traditional technologies goes down, the deployment of ATS will continue to grow. Nationally, the number of broadband subscribers continues to grow, with 7.8 million residential or small-business subscribers as of June 2001, compared to 5.2 million at the beginning of 2001.⁵⁷ While customer numbers are climbing, the number of areas in which broadband or advanced telecommunication services are available is increasing at a slower rate.⁵⁸ The number of ZIP codes which have at least one ATS provider increased only 4.6% (from 73.2% to 77.8%) during the first half of 2001.⁵⁹ The question is: Will it be soon enough and widespread enough to save rural communities?

B. *Federal Legislative Solutions*

Obviously, legislation can be used to promote advanced telecommunications.⁶⁰ As the Federal Government has used its authority to build everything from post offices to highways, it only follows that federal legislation would be an appropriate vehicle to provide the framework for the twenty-first century information superhighway.⁶¹ Recognizing that deployment is not occurring as rapidly as hoped, some in Congress continue to look for solutions to encourage and/or force deployment of ATS in rural areas. Generally, these bills fall into two categories: (1) Regulatory reform and (2) financial incentives.

1. *Regulatory Reforms*

Some are willing to treat data services differently than traditional voice traffic.⁶² For example, Congressmen Billy Tauzin (R-LA) and John Dingell (D-MI) have repeatedly introduced legislation to deregulate the Internet and high

56. *See id.* at 2934.

57. *See id.*

58. *See id.* at 2943.

59. *See id.* (reporting that as of December 2000, 26.8% of zip codes had zero high-speed line providers and as of June 2001, 22.2% of zip codes had zero high-speed line providers).

60. Caristi, *supra* note 39, at 26.

61. *Id.* at 26-27.

62. *See, e.g.,* Internet Freedom and Deployment Act of 2001, H.R. 1542, 107th Cong. (2001) (providing for deregulation of the Internet and high speed data services), available at <http://thomas.loc.gov>.

speed data services.⁶³ Such deregulation legislation would ease many of the burdens placed on the Baby Bells and others in terms of hauling traffic across artificial boundaries known as LATAs (Local Access Transport Areas). Since the breakup of AT&T, Baby Bells have been prohibited from carrying long distance traffic on an interLATA basis. TA 96 provides a mechanism for Baby Bells to enter the interLATA market, but only after successfully demonstrating to state regulators and the FCC that their local network is open for competition.⁶⁴ Tauzin and Dingell's legislation would lift the interLATA restrictions on data traffic, thus clearing the way for innovative solutions and deployment of ATS.⁶⁵

Tauzin and Dingell's first bill, House Resolution 2420, was introduced on July 1, 1999.⁶⁶ The bill, known as Tauzin-Dingell 1999, drew 224 co-sponsors, more than half of the 435 members of the House of Representatives, yet failed to make it out of the House committee.⁶⁷ On April 18, 2001, Tauzin and Dingell reintroduced the bill, House Resolution 1542, known as Tauzin-Dingell 2001.⁶⁸ The bill is substantially the same as the 1999 version in that its primary focus is to deregulate the Internet and high-speed data services.⁶⁹ As the bill states, "the imposition of regulations by the FCC and the States has impeded the rapid delivery of high speed Internet access services [and Internet backbone services to the public], thereby reducing consumer choice and welfare."⁷⁰ The bill recognizes the differences in the marketplace and technology between voice and data services and concludes that regulations of those services should not be handled in the same manner as traditional voice telecommunication services.⁷¹ With slight exceptions for line sharing and resale requirements, the bill completely prohibits the FCC or the States from regulating "the rates, charges, terms, or conditions for . . . the provision[s] of [ATS]."⁷² The bill also prohibits the FCC from imposing taxes, fees, charges or tariffs upon ATS.⁷³ Finally,

63. See, e.g., H.R. 1542; Internet Freedom and Deployment Act of 1999, H.R. 2420, 106th Cong. (2000), available at <http://thomas.loc.gov>.

64. Telecommunications Act of 1996, Pub. L. No. 104-104, § 271, 110 Stat. 56, 86-92 (1996).

65. See H.R. 1542 § 2(a)(6).

66. See H.R. 2420.

67. See David McGuire, *Bells, Rivals Gear Up for Battle; Jockeying Focuses on Rewriting of Broadband Rules*, WASH. POST, Feb. 28, 2001, at G13.

68. H.R. 1542.

69. See *id.*

70. *Id.* § 2(a)(2).

71. *Id.* § 2.

72. *Id.* § 4(a).

73. *Id.*

Tauzin/Dingell 2001, with limited exceptions, provides that local exchange carriers that deploy advanced telecommunication services do not have to make those elements of their networks available to competitors, as they do with traditional dial tone or POTS (Plain Old Telephone Service).⁷⁴ While on the surface this may seem anticompetitive and an impediment to rural deployment, it actually is not. The high costs of deploying ATS to rural and sparsely populated areas combined with the limited demand would lead to little, if any, deployment of ATS in rural areas if the providers were not provided at least some incentive, even if the only guarantee is that a competitor will not be able to come in and beat them with their own investments.

On February 27, 2002, Tauzin-Dingell 2001 passed the House by a vote of 273-157.⁷⁵ Now in the Senate Commerce Committee, the bill's fate is uncertain due to opposition from Senate Commerce Committee Chair Ernest Hollings (D-SC).⁷⁶ Hollings has stated that the bill would leave competitors and consumers at the whim of the market, much to their detriment.⁷⁷ On the other hand, Rep. Tauzin is hopeful that the Senate will consider and pass House Resolution 1542.⁷⁸

Other legislation to lift the regulatory burden from smaller carriers, especially those defined as "two-percent" local exchange carriers, which are those controlling less than two percent of the aggregate access lines in the United States, has been introduced in both chambers.⁷⁹ The House of Representatives' version, House Resolution 496, passed the House on March 21, 2001 and was referred to a committee in the Senate where no further action has been taken.⁸⁰ Since these carriers tend to serve rural and less densely populated areas, providing regulatory relief for them would help to encourage deployment of more services including ATS.

Along the same lines, Senator Sam Brownback (R-KS) introduced Senate Bill 1127 which would make the provisions of TA 96 as they relate to ATS inapplicable to carriers serving rural communities, defined as those with popula-

74. *Id.* § 4(b).

75. D. Ian Hopper, *Regional Bells Win House Internet Tussle*, CHI. TRIB., Feb. 28, 2002, at 15.

76. *Id.*

77. 148 CONG. REC. S995-66 (daily ed. Feb. 25, 2002) (statement of Sen. Hollings).

78. *Supporters Hopeful of Tauzin-Dingell Chances in the Senate*, COMM. DAILY, Mar. 1, 2002, available at 2002 WL 5240722.

79. See Independent Telecommunications Consumer Enhancement Act of 2001, H.R. 496, 107th Cong. (2001), available at <http://thomas.loc.gov>; Facilitating Access to Speedy Transmissions for Networks, E-commerce and Telecommunications (FASTNET) Act, S. 1359, 107th Cong. (2001), available at <http://thomas.loc.gov>.

80. See H.R. 496, 107th Cong. (2001).

tions of fifty thousand or fewer.⁸¹ This bill also was referred to committee and was not acted upon. Obviously, the removal of these burdens would provide an incentive to telecommunication providers by making it less burdensome for them to deploy ATS in rural communities.

In addition, Senators Breaux (D-LA) and Nickles (R-OK) introduced Senate Bill 2430 on April 30, 2002.⁸² The bill would require that cable modem and DSL service be regulated the same, but would prohibit the increasing of regulation on cable modem services to achieve that result.⁸³ The bill would also preempt state regulatory commissions from asserting jurisdiction over broadband services.⁸⁴ The bill was referred to the Senate Committee on Commerce, Science, and Transportation and is awaiting further action.⁸⁵ It is unlikely Congress will act on this legislation given the limited time remaining in the 107th Congress.

2. *Financial Incentives*

In addition, several bills were introduced in early 2001 to encourage companies to invest in ATS deployment in rural and underserved areas.⁸⁶ Rather than the regulatory approach taken by the Tauzin-Dingell bills and others, the new bills generally propose providing tax credits or other financial incentives to encourage or assist with the deployment of ATS in rural areas. The bills can be divided into three broad categories: (1) Tax credits;⁸⁷ (2) grants or direct funding from the federal government;⁸⁸ and (3) loans.⁸⁹

81. See Rural Broadband Deployment Act of 2001, S. 1127, 107th Cong. (2001), available at <http://thomas.loc.gov>.

82. See Broadband Regulatory Parity of 2002, S. 2430, 107th Cong. (2002), available at <http://thomas.loc.gov>.

83. See *id.*

84. See *id.*

85. 148 CONG. REC. S3560 (daily ed. Apr. 30, 2002).

86. See, e.g., H.R. 3057, 107th Cong. (2001); Rural America Technology Enhancement Act of 2001, H.R. 2847, 107th Cong. (2001); Rural America Broadband Deployment Act, H.R. 2139, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

87. See generally H.R. 3057, 107th Cong. (2001); H.R. 2981, 107th Cong. (2001); Expanding Technology Reform Act of 2001, H.R. 1411, 107th Cong. (2001); Broadband Internet Access Act of 2001, H.R. 267, 107th Cong. (2001); Technology Bond Initiative of 2001, S. 426, 107th Cong. (2001); Broadband Deployment Act of 2001, S. 150, 107th Cong. (2001); Broadband Internet Access Act of 2001, S. 88, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

88. See generally H.R. 2847, 107th Cong. (2001); Broadband Expansion Grant Initiative of 2001, H.R. 1416, 107th Cong. (2001); Broadband Expansion Grant Initiative of 2001, S. 428, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

a. Tax Relief

The tax bills have taken primarily two forms, credits and accelerated depreciation.⁹⁰ Senate Bill 88 introduced by Senators Rockefeller (D-VA) and Snowe (R-ME) and sixty-two other Senators would provide a tax credit for the deployment of ATS in rural and underserved areas.⁹¹ In its findings, the bill recognizes “growing disparity in the speed of access to the Internet and the opportunities it creates between subscribers located . . . in rural areas and subscribers located in . . . urban and suburban areas.”⁹² Also, the bill states “the disparity [between rural and urban deployment of ATS] . . . will likely prove detrimental to economic expansion.”⁹³ The tax credits will be based on the amount of money expended by the providers of ATS and would be equal to ten percent of expenditures on equipment for the deployment of ATS to rural subscribers.⁹⁴

Nearly identical legislation, Senate Bill 150 and House Resolution 267 have also been introduced. None of these tax credit bills have seen any action other than being referred to their respective committees, the Senate Finance and House Ways and Means. A slightly different approach would be taken if Senate Bill 426, introduced by Senator Clinton (D-NY), were enacted. Senate Bill 426 would provide tax credits against income earned on state and local bonds that are issued specifically for the purpose of providing ATS in rural and underserved areas.⁹⁵ State and local government could issue the bonds and then partner with private ATS providers to increase deployment.⁹⁶ This bill also has seen no action beyond referral to committee. Unlike grants or loans that provide funding up-front, a tax credit is issued after the providers make the expenditures. This works to the advantage of policy makers because no public funds are expended until the

89. See generally H.R. 2139, 107th Cong. (2001); Rural Broadband Enhancement Act, S. 966, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

90. See generally H.R. 3057, 107th Cong. (2001); H.R. 2981, 107th Cong. (2001); H.R. 267, 107th Cong. (2001); S. 426, 107th Cong. (2001); S. 150, 107th Cong. (2001); S. 88, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

91. S. 88, 107th Cong. § 2(b) (2001), available at <http://thomas.loc.gov>.

92. *Id.* § 2(a)(6).

93. *Id.* § 2(a)(9).

94. *Id.* § 3(b)(1).

95. See S. 426, 107th Cong. § 2(4) (2001), available at <http://thomas.loc.gov>.

96. See *id.*

necessary private funds are spent and actions are taken. In this case, that would be the deployment of ATS in rural areas.

Another type of tax legislation that has been introduced to provide incentive to deploy ATS in rural areas are bills that provide accelerated depreciation for equipment needed to deliver ATS.⁹⁷ House Resolution 3057 would reduce the depreciation recovery period from five years to three years for qualified equipment used to provide ATS.⁹⁸ The other depreciation bill, House Resolution 2981, is similar to House Resolution 3057 but specifically reduces the depreciation time for computer equipment and software used in the provision of ATS from five to two years.⁹⁹ Both of these bills have been referred to the House Ways and Means Committee where they await action. Given the rapid advances in technology, it makes sense to accelerate the depreciation schedule on this equipment to allow a quicker recovery for providers and give them incentives to continue to upgrade and roll out new products and services. Like the tax credits, the accelerated depreciation only applies when the provider makes the expenditures on equipment for ATS.

Unlike the regulatory reform bills discussed above, legislation that provides for tax credits or accelerated depreciation has an impact on the federal budget. As the economy has softened in the months leading up to and after September 11, 2001, the likelihood of the passage of legislation that puts a strain on the treasury and would likely increase the federal deficit is slim.

b. Grants

Another approach which proposed federal legislation has taken is to provide grants to providers for the deployment of ATS in rural and underserved areas.¹⁰⁰ House Resolution 2847 by Congressman Leonard Boswell (D-IA) is titled the Rural America Technology Enhancement Act of 2001. This bill includes a combination of grants, loans, and tax credits.¹⁰¹ The grants that are provided in

97. H.R. 3057, 107th Cong. (2001); H.R. 2981, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

98. H.R. 3057.

99. H.R. 2981.

100. See Rural America Technology Enhancement Act of 2001, H.R. 2847, 107th Cong. (2001); Broadband Expansion Grant Initiative of 2001, H.R. 1416, 107th Cong. (2001); Broadband Expansion Grant Initiative of 2001, S. 428, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

101. See H.R. 2847, 107th Cong. (2001), available at <http://thomas.loc.gov>.

the bill are designed to fund programs that study and facilitate the use of technology for teleworking or telecommuting in rural areas.¹⁰² In addition, the bill would provide a Rural Telecommunications Facilities Credit.¹⁰³ This credit would be for ten to fifteen percent of the expenditures made for the deployment of ATS in rural areas.¹⁰⁴ The bill defines rural areas as any incorporated or unincorporated areas not defined as a metropolitan area by the Office of Management and Budget.¹⁰⁵ In addition, the bill would open up the Federal Universal Service Fund to support deployment of ATS in rural areas¹⁰⁶ and would authorize the Rural Utilities Service of the Department of Agriculture to make loans or extend credit to telecommunications or other providers for the deployment of ATS in rural communities.¹⁰⁷

Two other bills, House Resolution 1416 and Senate Bill 428, are almost identical and would provide grants and loans to facilitate the deployment of ATS in rural areas.¹⁰⁸ The bill recognizes that the availability of ATS in rural areas would allow small businesses to compete nationally and internationally.¹⁰⁹ The program would be administered by the Secretary of Commerce and the total aggregate amount of loans and grants would be limited to \$100 million.¹¹⁰ Finally, the bills would direct the Secretary of Commerce to give preference to those applications which leverage non-Federal funds and use ATS to stimulate economic development in rural areas.¹¹¹ These bills are still awaiting committee action. Like the tax credit legislation, the impact on the federal budget by these bills is likely to make passage difficult.

102. *See id.* § 101.

103. *See id.* § 201.

104. *Id.*

105. *Id.*

106. *See id.* § 301.

107. *See id.* § 302.

108. Broadband Expansion Grant Initiative of 2001, H.R. 1416, 107th Cong. (2001); Broadband Expansion Grant Initiative of 2001, S. 428, 107th Cong. (2001). (Bills available at <http://thomas.loc.gov>).

109. H.R. 1416 § 2(3); S. 428 § 2(3).

110. H.R. 1416 § 3; S. 428 § 3.

111. H.R. 1416 § 3; S. 428 § 3.

c. Loans

The final type of economic incentive legislation provides loans to providers for the deployment of ATS.¹¹² On May 13, 2002, President Bush signed House Resolution 2646, the “Farm Security and Rural Investment Act of 2002,” into law.¹¹³ Known throughout the country as the “Farm Bill,” the bill does much more than provide continuation of various farm subsidy and agriculture related programs.¹¹⁴ Section 6013(a) of the bill amends the Rural Electrification Act of 1936, adding to it Title VI, titled “Rural Broadband Access.”¹¹⁵ Section 601 of the Rural Electrification Act, as amended in section 6013(a) of the Farm Bill, establishes a loan and loan guarantee program to “provide funds for . . . broadband services in eligible rural communities.”¹¹⁶ In the case of this bill, rural communities are any community with a population of less than twenty thousand that is not designated a metropolitan statistical area.¹¹⁷ The bill provides \$100 million over six years for these loans and loan guarantees.¹¹⁸ These provisions may not be the saviors for rural communities that their supporters tout. The bill limits eligibility for the funds to carriers who serve no more than two percent of the telephone subscriber lines in the United States.¹¹⁹ This essentially shuts out the large subscribers who are the most reluctant to provide service in the rural areas. In addition, the smaller carriers are already providing ATS in the majority of their exchanges.¹²⁰ Congress may have just given money to those who would already make the investment while doing nothing to motivate the larger carriers to invest in ATS in rural areas. It remains to be seen if this \$100 million will be a prudent investment.

112. See generally Farm Security and Rural Investment Act of 2002, Pub. L. No. 107-171, § 6103(a), 2002 U.S.C.C.A.N. (116 Stat.) 134, 415 (to be codified at 7 U.S.C. § 950bb); Rural America Broadband Deployment Act, H.R. 2139, 107th Cong. § 3(a)(1) (2001), available at <http://thomas.loc.gov>; Rural Broadband Enhancement Act, S. 966, 107th Cong. § 2(e)(3) (2001), available at <http://thomas.loc.gov>.

113. Statement of Signing the Farm Security and Rural Investment Act of 2002, 2002 U.S.C.C.A.N. 413, 413.

114. See generally Farm Security and Rural Investment Act of 2002 § 6103(a).

115. *Id.*

116. *Id.*

117. *Id.*

118. *Id.* (providing \$20 million per year through 2005 and \$10 million for each of 2006 and 2007).

119. *Id.*

120. See Dawson, *supra* note 7, at 129.

House Resolution 2139 would allow the Secretary of Agriculture to make loans to persons and entities for the provision of ATS in rural areas where it is determined that ATS is not adequate.¹²¹ The total aggregate amount of the loans in this program would be \$100 million.¹²² Another attempt at a loan program is found in Senate Bill 966.¹²³ This bill also provides for loans to entities for the deployment of ATS in rural areas, but defines rural areas as those areas with populations of less than twenty thousand.¹²⁴ It would also provide for an aggregate amount of loans of \$3 billion.¹²⁵ Both bills provide for very low interest rates as well, with the rate in House Resolution 2139 to be set by the Secretary of Agriculture at a rate similar to that paid on U.S. Treasury Securities¹²⁶ and the rate in Senate Bill 966 being capped at two percent.¹²⁷ Both bills have yet to be considered by the committees to which they were assigned, however similar components are in the 2002 Farm Bill discussed above.

The simple fact that dozens of bills have been introduced to address the problem signifies that Congress recognizes the problem and the potential detrimental impact on rural America if it is not addressed soon. The challenge will be for members of Congress to craft legislation that is flexible enough to accommodate the various providers, technologies, and communities affected. Regulatory reforms may be appealing to large incumbent providers like the Baby Bells, while grants and loans can be of great benefit to start-up companies trying to scrape together capital and get their foot in the door.

Finally, tax credits appeal to existing providers who have capital but may need a nudge from Congress to deploy in a rural area where return and customer base are less certain.

C. Federal Regulatory Actions

Up to this point, the role of the FCC in encouraging and facilitating the deployment of ATS has been minimal. Six years after receiving a mandate from

121. Rural America Broadband Deployment Act, H.R. 2139, 107th Cong. § 3 (2001), available at <http://thomas.loc.gov> (defining rural areas as "any area of the United States not included within the boundaries of any incorporated or unincorporated city, village, or borough having a population in excess of 50,000 inhabitants").

122. *Id.* § 3(e).

123. Rural Broadband Enhancement Act, S. 966, 107th Cong. (2001), available at <http://thomas.loc.gov>.

124. *See id.* § 2.

125. *See id.* § 2(g).

126. *Id.* § 3(b)(1).

127. *Id.* § 2(f)(2).

Congress to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans,”¹²⁸ the FCC has done little in the area to specifically facilitate deployment. Semi-annual reports have been issued by the FCC which do a good job of outlining the problem,¹²⁹ but the policy solutions have not been forthcoming from the FCC. However, the most recent reports from the FCC indicate that the availability of ATS to residential customers continues to increase, indicating that the markets are working and companies are rolling out broadband services without heavy-handed regulations. The problem still exists in the gaps of service that remain in less densely populated and rural areas.

In February 2002, the FCC initiated a proceeding to determine the appropriate regulatory framework for ATS.¹³⁰ The goals of the rulemaking are to develop a regulatory framework that is flexible, does not favor a particular technology, promotes competition, and creates a minimal regulatory burden on providers.¹³¹ The rule making will give the FCC the ability to develop a more consistent regulatory approach across the various ATS platforms.¹³²

In March, the FCC declared that ATS provided via cable modem were “information services” rather than “telecommunication services.”¹³³ The result of this ruling is to subject cable ATS to FCC jurisdiction.¹³⁴

Although not specifically directed toward rural ATS deployment, two proceedings or types of proceedings by the FCC have the potential to ultimately pave the way for ATS for rural America. These include a revamping of the Universal Service Fund (“USF”) to include ATS,¹³⁵ and providing Section 271 inter-LATA relief for the Baby Bells (and their merged successors).¹³⁶

128. Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (codified at 47 U.S.C. § 157 (2000)).

129. See FCC, Telecommunications Services Report, *supra* note 6, available at http://www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2000/nrcc0040.html.

130. See Press Release, FCC, FCC Launches Proceeding to Promote Widespread Deployment of High-Speed Broadband Internet Access Services (Feb. 14, 2002), available at http://www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2002/nrcc0202.html (last visited Nov. 19, 2002).

131. See *id.*

132. See *In re* Framework for Broadband Access to the Internet Over Wireline Facilities, 17 FCC Rcd 3019, 3069-71 (2002) (separate Statement of Commissioner Kathleen Q. Abernathy).

133. See Press Release, FCC, FCC Classifies Cable Modem Service as “Information Service” (Nov. 19, 2002), available at http://www.fcc.gov/Bureaus/Cable/News_Releases/2002/nrcb0201.html (last visited Sept. 19, 2002).

134. See *id.*

135. See Judith A. Endejan, 1999's Preview to the Millennium: Continuing Convergence

As part of TA 96, the FCC was required to modify the USF that provides funding for companies who provide service to customers in traditionally high-cost and hard to serve areas.¹³⁷ Part of the revamp has included the creation of a joint Federal-State Board to deal with USF issues.¹³⁸ Parts of the recommendations of the Joint Board include expanding USF to provide funding for ATS deployment.¹³⁹

Although not directly related to the deployment of ATS in rural areas, the grant of Section 271 relief to the Baby Bells by the FCC does remove one of the regulatory hurdles. To date, the Baby Bells have received permission from the FCC to provide in-state, interLATA service in thirty-eight states.¹⁴⁰ Removal of this restriction allows the Baby Bells to move traffic across LATA boundaries, thus reducing the cost of deployment in those states.

The FCC has taken steps to ensure ATS is available to all Americans on a reasonable and timely basis.¹⁴¹ While deployment of ATS throughout the country continues to grow and markets continue to develop, gaps remain in rural areas.¹⁴² The next step for the FCC is to develop a framework that will get ATS into the rural areas in a timely manner and at rates affordable to the consumers.

D. State Legislative Solutions

States have an additional incentive to ensure that ATS are available.¹⁴³ Section 706 of the TA 96 requires the FCC to regularly monitor the deployment of ATS in the states and to “[t]ake immediate action to accelerate deployment of [ATS] by removing barriers to infrastructure investment and by promoting com-

and Consolidation in Telecom and Cable, in CABLE TELEVISION LAW 2000: COMPETITION IN VIDEO, INTERNET & TELEPHONY 729, 738 (2000).

136. Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (codified at 47 U.S.C. § 157 (2000)).

137. See Endejan, *supra* note 135, at 738.

138. See *id.*

139. See *id.*

140. See FCC, RBOC Applications to Provide In-Region, InterLATA Services under § 271, at http://www.fcc.gov/Bureaus/Common_Carrier/in-region_applications/ (last visited Mar. 24, 2003).

141. See Telecommunications Act of 1996 § 706.

142. See generally *In re Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 14 FCC Rcd 2398, 2432-39 (1999) (first report) (discussing rural ATS).

143. See Caristi, *supra* note 39, at 29-30.

petition in the telecommunications marketplace.”¹⁴⁴ State legislatures must ensure that barriers to deployment of ATS are removed. Laws that give telecommunications providers access to property for the laying of wires and other infrastructure work allow providers to continue to build out.¹⁴⁵ On the other hand, zoning restrictions on the citing of cellular towers can impede the deployment.¹⁴⁶

Like the federal legislation, efforts at the state level can be divided into two main categories: (1) removal or restructuring of regulatory policies,¹⁴⁷ and (2) the provision of financial incentives (e.g. tax credits, grants, and loans).¹⁴⁸

Governor Gary Locke of Washington has made the deployment of ATS to rural areas a key part of his rural economic development agenda.¹⁴⁹ In response, the Washington legislature enacted legislation that restructures the way in which ILECs are regulated, in exchange for the reduced regulatory burden, by allowing the ILECs to move from traditional rate-setting regulation to a regulatory plan negotiated with the Washington Utilities and Transportation Commission.¹⁵⁰ The plans could include requirements to invest in rural areas.¹⁵¹ Many other states have enacted similar “price regulation” laws since the mid-1990s. At

144. *Id.* at 30.

145. *See id.*

146. *See id.*

147. *See* S.F. 429, 79th Gen. Assem., Reg. Sess. (Iowa 2002) (allowing Iowa Telecom to increase prices under price regulation for, among other things, the deployment of ATS), *available at* <http://www.legis.state.ia.us> (available under “Archives” link); H.R. 2881, 56th Leg., Reg. Sess. (Wash. 2000) (Senate companion bill S.B. 6667, allowing for relaxed regulations on ILECs), *available at* <http://www.leg.wa.gov>; H.R. 2880, 56th Leg., Reg. Sess. (Wash. 2000) (Senate companion bill S.B. 6675, allowing public utility districts and rural port districts to provide wholesale telecommunication services), *available at* <http://www.leg.wa.gov>.

148. *See generally* H.B. 2900, 92d Gen. Assem. (Ill. 2001) (creating the Digital Divide Elimination Fund), *available at* <http://www.legis.state.il.us> (enrolled version); L.B. 1211, 97th Leg., 2d Sess. (Neb. 2002) (establishing the Nebraska Internet Enhancement Fund); H.B. 2659, 71st Leg. Assem., Reg. Sess. (Or. 2001) (establishing the Connecting Oregon Communities Fund), *available at* <http://www.leg.state.or.us> (enrolled version); H.B. 2609, 71st Leg. Assem., Reg. Sess. (Or. 2001) (requiring telecommunications carriers to place 20% of gross, regulated revenue in Telecommunications Infrastructure Account to be used for ATS), *available at* <http://www.leg.state.or.us> (enrolled version); S.B. 229, 71st Leg. Assem., Reg. Sess. (Or. 2001) (providing a tax credit for installation of ATS), *available at* <http://www.leg.state.or.us> (enrolled version); S.B. 1783, 77th Leg., Reg. Sess. (Tex. 2001) (requiring ATS deployment in rural communities upon a showing of demand by customers and providing funding through taxes on phone bills), *available at* <http://www.capitol.state.tx.us> (engrossed version).

149. Robert Gavin, *Critics Fear US West Bill Hurts Consumers*, SEATTLE POST-INTELLIGENCER, Feb. 25, 2000, at C1.

150. *Id.*

151. *Id.*

the time they were enacted it was more for the purpose to increase competition for local telephone service and to get products and services like callerID, voice messaging and the like deployed faster. By not “penalizing” an ILEC for becoming more efficient and thus forcing refunds, under price regulation the companies can use the increased savings from efficiencies for investments in infrastructure, products and services. As these plans come up for renewal, state regulators may be able to negotiate deployment of ATS in rural areas as part of the deal.

Another proposal out of Washington includes allowing public utility districts (“PUD”), established primarily for the provision of water and energy services, to enter the telecommunications market.¹⁵² The bill would limit the PUDs to competing only on a wholesale basis by leasing any extra fiber optic capacity to private providers for the provision of ATS in rural areas.¹⁵³ This would at least solve part of the problem by getting capacity to rural areas, but would still not be a complete solution because the private providers would still have to provision the necessary equipment to provide the services.

States like Iowa have also opened the local telecommunications market to public sector utilities.¹⁵⁴ By allowing municipally owned utilities to offer telecommunication services, policy makers have added an additional competitive choice to the marketplace. This is a great advantage to rural areas where the larger providers are sometimes reluctant to invest in ATS. The municipal utility either provides a competitive incentive for the incumbent to also deploy ATS, or the incumbent may “roll over” and let the municipal utility shoulder the burden. In either case, the community wins. Such has been the case in Harlan, Iowa, where the community took advantage of the Iowa law and built its own system that now provides ATS to that community.¹⁵⁵

In addition, the Iowa legislature gave special treatment to Iowa Telecom, the successor to GTE in Iowa.¹⁵⁶ Senate File 429 amends the price regulation statute only as it relates to Iowa Telecom and allows the company to raise its basic rates ahead of the schedule and at rates higher than three percent allowed currently in the case of exogenous factors.¹⁵⁷ Included in the exogenous factors

152. Peter Neurath, Editorial, *Bills Could Put PUDs, Ports in the Telecom Biz*, PUGET SOUND BUS. J., Feb. 18-24, 2000, at 71.

153. *Id.*

154. See IOWA CODE § 476.29 (2001).

155. Barnaby J. Feder, *A Few Towns Build Their Own Cable Companies*, NATION'S CITIES WKLY., Nov. 10, 1997, at 4.

156. See S.F. 429, 79th Gen. Assem., Reg. Sess. (Iowa 2002), available at <http://www.legis.state.ia.us> (available under “Archives” link).

157. See *id.*

for which these extraordinary rate increases are allowed is “deploy[ment of] advanced telecommunications services.”¹⁵⁸ No other carrier was given that favorable treatment of incentive by the legislature. As a result, Iowa Telecom has petitioned the Iowa Utilities Board for a rate increase that would further upset the competitive landscape in Iowa.¹⁵⁹ The Iowa Telecom request would increase rates for residential customers in areas not served by a competitor by more than one hundred percent, while in areas served by competitors, rates would stay the same.¹⁶⁰ Playing favorites with one provider at the expense of others does nothing to create incentives for investment in the marketplace by the industry as a whole. The Iowa legislature and Utilities Board should carefully watch Iowa Telecom to make sure the citizens of Iowa, and especially the captive customers of Iowa Telecom, get their money’s worth.

Rather than relaxing the regulatory grip, a bill in Texas was introduced in 2001 that would actually require the deployment of ATS if communities could demonstrate sufficient demand.¹⁶¹ Under the bill, rural communities would be required to file with state regulators a showing that at least fifty customers in the community would purchase ATS.¹⁶² Once the showing was made, the provision of the service would be put out to bid, but if no one bid, the incumbent provider would be *required* to provide ATS to that community.¹⁶³

On the other side are state legislative solutions that provide some type of financial incentive to providers for the deployment of ATS.¹⁶⁴ A bill introduced

158. *See id.*

159. *See* IOWA UTIL. BD., IOWA TELECOM RPU-02-4 TELEPHONE RATE INCREASE REQUEST (2002), available at <http://www.state.ia.us/government/com/util/rpu024.html>.

160. *See id.*

161. *See* S.B. 1783, 77th Leg., Reg. Sess. (Tex. 2001), available at <http://www.capitol.state.tx.us> (engrossed version).

162. Sanford Nowlin, *Bill Seeks Fast Net in Rural Areas*, SAN ANTONIO EXPRESS NEWS, Mar. 30, 2001, at 1E.

163. *Id.*

164. *See generally* H.B. 2900, 92d Gen. Assem. (Ill. 2001) (creating the Digital Divide Elimination Fund), available at <http://www.legis.state.il.us> (enrolled version); H.B. 2659, 71st Leg. Assem., Reg. Sess. (Or. 2001) (establishing the Connecting Oregon Communities Fund), available at <http://www.leg.state.or.us> (enrolled version); H.B. 2609, 71st Leg. Assem., Reg. Sess. (Or. 2001) (requiring telecommunications carriers to place 20% of gross, regulated revenue in Telecommunications Infrastructure Account to be used for ATS), available at <http://www.leg.state.or.us> (enrolled version); S.B. 229, 71st Leg. Assem., Reg. Sess. (Or. 2001) (providing a tax credit to telecommunications carriers for installation of ATS), available at <http://www.leg.state.or.us> (enrolled version); S.B. 1783, 77th Leg., Reg. Sess. (Tex. 2001) (requiring ATS deployment in rural communities upon a showing of demand by customers and providing funding through taxes on phone bills), available at <http://www.capitol.state.tx.us> (engrossed version).

in Texas in 2001 would require a local telecommunications provider to respond to a request from local officials for the provision of ATS.¹⁶⁵ If the local provider refused to provide ATS in the community, the community would then be able to apply for funds from the Telecommunications Infrastructure Fund ("TIF") for assistance in providing ATS on its own.¹⁶⁶ Funding for the TIF comes from an annual assessment to local phone companies equal to 1.25% of their taxable revenues.¹⁶⁷ In addition, Illinois and Oregon have created state funds to provide financing and funding for the deployment of ATS in rural areas.¹⁶⁸

V. CONCLUSION

Slightly more than six years after the passage of TA 96, Congress's dream of deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans has not been fully realized. Providers continue to compete with ATS in urban areas while the small and even medium sized rural communities are left behind. However, recent surveys at the state and federal level continue to show inroads being made in rural communities. The challenge continues to be those areas served by the large incumbent providers. There are pockets of activity in places where small independent companies provide service. Federal and state policy makers have recognized the problem, but have yet to come up with a solution that works. Part of the problem is that different solutions appeal to different providers. For example, a large Baby Bell would respond better to regulatory relief than a small tax credit of ten percent of its investment in ATS. On the other hand, small competitors trying to make in-roads and offer services need capital and are more interested in grants and loans.

Further complicating the picture are the recent bankruptcies and accounting irregularities facing the industry. Large competitive providers like McLeod and Covad have filed for bankruptcy. More shocking is the downfall of the nation's number two long distance provider, WorldCom. WorldCom also runs UUNET which carries over half of the nation's Internet traffic. Qwest, the suc-

165. Anne Marie Kilday, *House Gives "Digital Divide" Proposal Initial OK*, THE DALLAS MORNING NEWS, May 23, 2001, at 20A.

166. *Id.*

167. TEX. UTIL. CODE ANN. § 57.048 (Vernon 2002).

168. See H.B. 2900, 92d Gen. Assem. (Ill. 2001), available at <http://www.legis.state.il.us>; H.B. 2659, 71st Leg. Assem., Reg. Sess. (Or. 2001), available at <http://leg.state.or.us>; H.B. 2609, 71st Leg. Assem., Reg. Sess. (Or. 2001), available at <http://leg.state.or.us>; S.B. 229, 71st Leg. Assem., Reg. Sess. (Or. 2001), available at <http://leg.state.or.us>; S.B. 1783, 77th Leg., Reg. Sess. (Tex. 2001), available at <http://www.capitol.state.tx.us>.

cessor to Baby Bell US WEST continues to teeter on the brink of financial disaster. Policymakers now need to figure out how to keep dial tone flowing in some parts of the country.

If nothing else, the vast number and array of options introduced at both the state and federal level should give rural communities hope that this is an issue that needs attention and needs a solution. Hopefully, that solution will come before the communities are placed in a position where they can no longer compete economically.

VI. EPILOGUE

The debate over rural advanced telecommunications services continues to consume a large portion of telecommunication policy discussion. In the months since this Note was completed, there have been developments in this area – some major, and some not-so major. The Tauzin-Dingell Bill, which had the primary purpose of deregulating high-speed internet and advanced telecommunications services,¹⁶⁹ passed the House in February 2002 but died for lack of action in the Senate.¹⁷⁰ No other significant actions were taken by Congress in the balance of 2002 to foster deployment of ATS in rural areas.

As part of a larger rule making related to the opening of local telephone networks for competition, the FCC took steps that are likely to accelerate deployment of ATS. The new rules remove many of the elements from the network that are used to provide ATS from the elements that incumbent providers are required to make available to their competitors.¹⁷¹ This action will likely result in a greater deployment of ATS by incumbents because their fear that these investments would have to be shared with competitors at deeply discounted rates are mitigated by the FCC's action.

In addition to the federal action and inaction, a few states passed legislation designed to spur deployment of ATS. Specifically, Michigan enacted S.B. 881 creating the Michigan Broadband Development Authority with the purpose of fostering broadband infrastructure development.¹⁷² North Carolina modified

169. See H.R. 1542, 107th Cong. (2001), *available at* <http://thomas.loc.gov..>

170. Bill Summary and Status for the 107th Congress: H.R. 1542, *at* <http://thomas.loc.gov>

171. See Press Release, FCC, FCC Adopts New Rules for Network Unbundling Obligations of Incumbent Local Phone Carriers (Feb. 20, 2003), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-231344A1.pdf.

172. See S.B. 881, 91st Leg., Reg. Sess. (MI 2002), *available at* <http://www.michiganlegislature.org>; National Conference of State Legislatures, *2002 Telecommunications Laws*, *available at* <http://www.ncsl.org/programs/lis/legislation/telcom02.htm> (last visited

its Industrial Development Fund to allow broadband equipment purchases to be made from the fund.¹⁷³ In an action that could ultimately go either way by chilling or encouraging investment in rural ATS, the Oklahoma Legislature enacted legislation to allow the Oklahoma Corporations Commission to impose regulations on high-speed Internet access.¹⁷⁴

At this point no legislative or regulatory body has come up with the magic bullet for getting ATS to rural areas. The problem continues to be at the forefront of policy discussions, and steps are being taken to attain the goal of the 96 Act to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”¹⁷⁵

Mar. 4, 2003).

173. See National Conference of State Legislatures, *2002 Telecommunications Laws*, available at <http://www.ncsl.org/programs/lis/legislation/telcom02.htm> (last visited Mar. 4, 2003).

174. See National Conference of State Legislatures, *2002 Telecommunications Laws*, available at <http://www.ncsl.org/programs/lis/legislation/telcom02.htm> (last visited Mar. 4, 2003).

175. Telecommunications Act of 1996, Pub L. No. 104-104, § 706, 110 Stat. 56 (1996) (codified at 47 U.S.C. § 157).