

Defining the Challenge of Broadband Deployment in Rural Areas

Stephen D. McDowell

Associate Professor, Department of Communication
Florida State University

&

Shree Venkatachalam

Doctoral Student, Department of Communication
Florida State University

January 23, 2003

I: Introduction

Strategies to stimulate investment in broadband telecommunications infrastructure at the local level have taken on a heightened importance. The Tauzin-Dingell Bill was introduced in the U.S. House of Representatives in 2001 (the “Internet Freedom and Broadband Deployment Act”), and approved by the House in February 2002. The Federal Communications Commission also released Third Report on the Section 706 Inquiry in February 2002, reporting on the status of the deployment and adoption of broadband services. In March 2002, an FCC ruling classified the cable modem as an information service, and also initiated proposed rulemaking proceedings on additional broadband issues. As well, the Federal Communications Commission, in implementing provisions of the Telecommunications Act of 1996, has considered ways to encourage the development of market structures that will most effectively promote investment in broadband infrastructure and services, with specific emphasis on the “first mile” or “last mile” of connections to residential users.

The National Telecommunications and Information Administration also issued a *Request For Comments on Deployment of Broadband Networks and Advanced Telecommunications Services* in November 2001. Interveners were asked to propose policies to promote the deployment of broadband infrastructure and services, and how they would define broadband services. This set of interventions provides very useful indicators of the shape of the public debate over defining broadband services, and how rural areas fit into these debates.

II: Definitional Issues

Among the wide range of policy questions at stake in debates about appropriate broadband policy is the foundational question of defining what is meant by broadband. The November 2001 NTIA *Request* asked potential interveners: “How should broadband services be defined? Please discuss (1) what criteria should be used to determine whether

a facility or service has sufficient transmission capacity to be classified as "broadband;" (2) how the definition should evolve over time; and (3) the policy implications of how the term is defined.”

The Federal Communications Commission has already provided a definition of broadband services based on carrying capacity. The FCC definition set the agenda or context for other efforts to define broadband. Many respondents that offer definitions make reference to the FCC definition, even if they do not agree. The responses cluster in a number of groups: (i) interveners that accept the FCC definition; (ii) those that accept the FCC definition while recognizing the need for future modifications; (iii) those that are against the FCC definition; (iv) those that argue that the definition should evolve over time; (v) those that provide a “functional” definition; and (vi) those that offer no definition at all.

Table 1: Definitional clusters identified in interventions filed on or before December 19, 2001

| Cluster Identified | Number of Intervenors |
|--|-----------------------|
| Accept FCC Definition | 4 |
| Accept FCC Definition with Modifications | 5 |
| Disagree with FCC Definition | 3 |
| Definition should evolve over time | 6 |
| Provide a “functional” Definition | 6 |
| Offer no definition at all | 26 |
| | |

More than half the companies do not provide an answer to the NTIA’s request for definitions of broadband services. One might predict, based on the predominance of practice in policy debates that interested parties, that definitional debates would be the first thing parties would try to tackle and put their imprint upon. This unwillingness to address a central question on the part of so many interested parties reflects a fundamental uncertainty and ambiguity over the basic starting point of this policy question: the definition of broadband services.

III: Rural Issues in the Responses to the NTIA Request for Comments:

Rural telecommunications issues were not addressed directly in the broadband *Request*. However, there were many open ended questions that asked parties to indicate what issues were important or should be at the center of a broadband policy. The first question in the *Request* asked parties most directly to reflect on these kinds of issues: “What should be the primary policy considerations in formulating broadband policy for the country? Please discuss the relative importance of the following: access for all; facilities-based competition; minimal regulation; technological neutrality; intra-modal competition; inter-modal competition; and any other policy consideration.” NTIA’s *Request* also asks specifically about issues such as “access for all” and the costs

involved “D. Should government adopt as a goal "access for all" to broadband service? What would be the costs of such a goal?”

Assuming that access for all means access for all persons living in both urban and rural areas, it notable that around one-third of respondents do not even mention the word rural. Perhaps the most significant characteristic of the treatment of the issues of broadband and rural in these interventions is the places in which absences appeared. Just as “broadband” was not defined by around one-half of the comments that were filed on time, the term “rural” did not appear in over one-third (33) of the total number of on-time and late-filed interventions (91). A little under half of the total number of interventions have five or fewer uses of rural. Even in the six interventions that include six or more references to rural, the term was not defined explicitly, so we are not entirely sure what conditions and situations we are addressing when referring to rural.

Among the themes that emerged in the examination of each mention of the word “rural” are coverage, cost and finance, DSL, access, developmental issues, and general telecommunications issues, infrastructure, future plans, research studies or surveys, supply and demand, suggestions for improvements in policies and programs, and competition.

These themes could be seen to reflect relatively broad yet relatively weak narrative frames for thinking about rural. This is a set of questions and problems that are most often associated with rural questions. Although this case study is only one example, they do set up a list of criteria with which to compare and examine interventions and debates about rural broadband. If in fact these are the major themes, and they reappear in other instance, what importance does this have for casting policy analysis and public and private responses?

In the course of this interpretation of contexts and themes presented in sentences in which the term rural appeared, in many cases the word “rural” was strongly associated with another term, or presented as being very close to or the equivalent of that term. The word “rural” seems to be strongly associated with and almost equated to words and/or phrases like “the minority”, “the underserved areas”, and “the economically disadvantaged.” Strong associations are made with the term rural and terms such as: low income; minority; smaller areas; inner city areas; suburban; small business customer; underserved areas; economically depressed; vacation home areas; economically disadvantaged; discrete; insular; and underserved users.

These examples, emerging from sentences where a phrase such as “rural and” appears, suggest that a dominant component of the policy frame for rural regions is a rhetoric of disadvantage and marginality. While these assumptions may be useful as a basis for advancing a distributional arguments about support for rural regions, distributional arguments and fairness claims may not be the best narratives for political or policy arguments in the United States at the turn of the 21st Century. Furthermore, the disadvantage frame may limit possibilities for identifying a set of policy and research questions that will move the debate on rural broadband forward, and assist in identifying

forms of public sector, private sector, and voluntary sector research, debate, and action to define and address these issues.

IV: Setting the Rural Broadband Telecommunications Policy Agenda

This overview points to several implications for thinking about and acting upon broadband telecommunications policies in rural areas and rural communities. If the policy frame leads toward certain types of approaches, responses, priorities, then advocates need to pay attention to shaping the policy frame for rural broadband. While many of the terms most strongly associated with rural areas are negative, there are other terms that suggest an active agenda of dealing with rural issues.

The definitional ambiguity may provide an opportunity for rural policy advocates. Since many large organizations interested in telecommunications are unwilling to adopt a specific definition of broadband services, this means that this question is still uncertain and contested by many important actors. Rural advocates can consider what form of definition of broadband will provide the best route to addressing the types of concerns of rural residents and communities. We would propose that a definition based on the functionality, that is access to an evolving range of services and uses comparable to those in urban areas, would be the most beneficial definition of broadband services.

To respond to the framing of rural broadband issues in this light, this would suggest a need to recast some of the challenges and needs facing rural areas in terms of broadband services. Rather than focusing only on the nature of the problem, a policy frame with more potential policy success might actually tie directly to programmatic responses that would seem to work. This might include emphasizing the success stories or E-Rate programs or other initiatives that have been undertaken in rural areas. This also might include an emphasis on the assets that are in place in rural areas, such as social institutions and physical infrastructure investments that are already in place, pointing out the locational advantages of rural areas for investment, such as the people, communities, and educational institutions. Ironically, focusing on actual success and the potential advantages that would be unleashed or made fungible by access to and use of broadband services may contribute to advancing a rural broadband policy agenda more effectively than distributional claims arising from an analysis of the difficulties and disadvantages of rural regions and communities.