



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION
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**Before the
Federal Communications Commission
Washington, DC**

March 11, 2004

In the Matter of)
Schools and Libraries Universal Service Support Mechanism) CC Docket No. 02-6
Second Further Notice of Proposed Rulemaking

Comments of the Pennsylvania Department of Education

On behalf of the schools and libraries in the Commonwealth of Pennsylvania, we would like to thank the Commission for this opportunity to provide comments on the proposed changes and other aspects of the E-rate program.

Pennsylvania has 1.814 million public school students in 659 school districts, vocational technical schools and charter schools; 327,000 nonpublic private school students in 2650 nonpublic schools; and 613 public libraries. While we have several large urban districts like Philadelphia and Pittsburgh, most of our applicants are small to medium sized, rural schools and libraries, with requests in the \$20,000 - \$60,000 range.

In these comments, we address the following issues:

- A. Changes to the Discount Matrix
- B. Competitive Bidding/Form 470 Reforms
- C. Record Keeping Requirements
- D. Technology Planning Requirements
- E. Definition of Rural Areas

- F. Eligibility of Bundled Content
- G. Recovery of Infrastructure Investments
- H. Recovery of Funds
- I. Consultants and Conflicts of Interest
- J. National School Lunch Program Eligibility Survey
- K. 30% Unsubstantiated Rule
- L. Timely Issuance of Appeals Decisions and Invoice Payments
- M. Sharing of Unused Bandwidth for Educational Purposes

A. Changes to Discount Matrix

Should the discount matrix be adjusted?

We strongly support the proposed changes to the discount matrix for priority 2 services so the maximum discount permitted is 70%. Under the current rules, the greatest incentive to abuse the program lies at the 80 and 90% discount levels where vendors prey on understaffed, unknowledgeable, high discount applicants. At the same time, those same poor applicants see it as a disincentive not to apply for costly equipment each year, regardless of whether it's needed. Paying ten cents on the dollar is a sale that's too good for anyone to pass up. We urge the Commission to adjust the matrix so the maximum discount permitted for internal connections is 70%, and to not support the Waste, Fraud and Abuse's recommendation of an 80% maximum discount level.

INCOME Measured by % of students eligible for the National School Lunch Program	PRIORITY ONE URBAN LOCATION Discount	PRIORITY ONE RURAL LOCATION Discount	PRIORITY TWO URBAN & RURAL Discount
Less than 1%	20%	25%	20%
1% to 19%	40%	50%	40%
20% to 34%	50%	60%	50%
35% to 49%	60%	70%	60%
50% to 74%	80%	80%	70%
75% to 100%	90%	90%	70%

In Pennsylvania, there are poor districts, yet not a single school district has all of its buildings receiving a 90% discount. In our experience it is those non-90% schools that lack the adequate infrastructure to support high-speed bandwidth. Districts have wired their 90% school buildings with E-rate and other significant state and federal funding, and eagerly are awaiting the year when funding is available to wire their 50% and 60% discount schools.

By lowering the maximum discount for internal connections, the results would be twofold – the incentive to purchase unneeded product would be greatly reduced, and discounts would be available to other poor, non-wired schools. Changes to the discount matrix should begin with Year 8, Funding Year 2005-2006, with as much notice as possible provided to the applicant community in order to help their planning efforts.

We support the proposal to allocate remaining funding to an entire discount band, and guardedly support the Waste, Fraud and Abuse Task Force's suggestion that all applicants in the highest band (70% in our example, 80% in their example) be given equal priority. We agree that there is little difference in the true poverty levels between current 80 and 90% applicants and such equal cost allocation would provide at least some funding for the 50-74% NSLP eligibility discount applicants. Our guarded support is attributed to the fact that it is difficult for schools to know how much to budget for the non-discounted portion of the funding. If the partial allocation distribution method is used, they will be responsible for more than their non-discounted portion of the cost. The SLD will have to recognize this when they ask to see copies of their budgets for verification of their Item 25 certifications.

Priority Given to Non-Wired Applicants

But there must be an additional, fundamental change made to the program, in addition to lowering the maximum discount level to 70%. The program must stop funding replacement of equipment – even three-year old equipment – and providing discounts on video and phone system equipment until all schools and libraries are wired. We believe this was the original intent of the program, but over the years, the eligible services list has grown to include important, but not fundamental equipment, such as video and voice equipment.

It is unfair for any school or library, regardless of their discount level, to not be wired in the year 2004 because funding is being provided to previously-wired 90% applicants as they continue to purchase equipment simply because it's eligible. That's not to criticize applicants for maximizing their E-rate funding, or to minimize the impact of video delivery in the classroom. But the Commission should recognize that the basic wiring of a school should be a primary goal of the E-rate program, not a secondary goal or tertiary goal, as it is now. Therefore we propose a new priority of funding be instituted for non-essential equipment purchases, installation and maintenance, such as video and voice

equipment, and the replacement of any equipment, until all eligible applicants are wired to the classroom level. A T-1 line to a school building is essentially useless unless the school is wired and the broadband can be delivered to the place of instruction – the classroom.

Does the “2 times in 5 years” rule affect the need to change the discount matrix?

We anticipate the 2/5 rule having several effects. It certainly will make applicants re-evaluate how they construct their technology plans. Currently, some districts implement technology decisions based on programs or grade levels rather than on a building-by-building basis. It also has the potential to provide internal connections funding to < 80% discount applicants depending on what year the large 90% discount applicants decide to exercise their 2 funding years.

However, it also may throw solid technology planning efforts into chaos because unlike previous funding years when applicants had a good idea of the range of maximum E-rate funding, the 2/5 rule will create a situation where no one has any sense of demand, and thus applicants will be required to apply for funding each and every year until they happen to hit a year where large, 90% discount applicants have not applied. Therefore instead of implementing a technology plan during the periods the District has recognized would be in the best interest of the District, all < 90% districts will be required to apply year after year and wait for their funding year to come up on the E-rate roulette wheel. This will essentially turn planning efforts into waiting efforts.

We commend the Commission for implementing the 2/5 rule where 90% discount applicants are weaned from receiving internal connections funding on an annual basis, and for attempting to drive funding to other needy, < 90% discount applicants. However, we feel it will not reduce applicants' urges to purchase more than they need. Instead of purchasing equipment each year, now districts will do it all in 2 out of 5 years. Therefore the 2/5 rule should not be implemented alone; rather, it must be implemented with a significant change in the discount matrix and a new priority placed on basic wiring, as described above.

B. Competitive Bidding Process

Does the current 470 process result in competitive bids? What kind of applicants and services do not ordinarily receive competitive bids? What better application process could be used? Should specific services be exempt from the 470 process?

In the past two years, we have observed that E-rate's rules are getting much more stringent when it comes to competitive bidding and procurement. We are seeing constant modifications and varying interpretations to the competitive bidding rules, all which require more work and extreme worry on the part of the applicant, in an apparent effort to try to control abuse or fraud.

In order to foster competition and ensure that pre-discounted prices were as low as possible, the Commission established a requirement in its original Order, that mandated applicants to competitively bid the services for which they were seeking discounts for at least 28 days on the administrator's website. While we applaud the Commission's *goals* of this requirement, we believe that the posting of services has not produced the intended outcomes. Six years' experience has proven that very few, if any, entities receive viable bids as a result of their Form 470 postings. In fact, most entities do not receive bids from their incumbent providers, let alone from competitors. What the 470 has produced is a mechanism by which any vendor - from computer salesmen to stadium bleacher vendors - can access the phone, fax and/or e-mail address of 36,000+ entities. These solicitations usually have absolutely nothing to do with the services requested on the 470 and the form's contact is left spending valuable time trying to get off e-mail lists, fax lists or the phone.

This has caused applicants to view the Form 470 as merely a stumbling block and meaningless administrative burden to achieving discounted services rather than an opportunity for broader access to relevant and competitive services at competitive prices, yet the 470 remains the most common reason for denial, according to SLD statements at the two most recent train-the-trainers sessions.

We believe competitive bidding may achieve cost savings on certain services if several vendors compete for the business. But because vendors -- vendors that actually supply the products/services listed on the 470 -- aren't responding to bids, we assume the SLD is not seeing the cost savings as the Commission originally had hoped. By adding additional competitive bidding mandates, the Commission and the SLD are trying to fix a perceived problem (lack of competition) by tightening the noose on a non-effective solution (the Form 470).

The competitive bidding requirement pendulum needs to shift from the blanket 470 process that is required of all applicants for all services, regardless of their size, to a Form 470 requirement for only priority 1 services over a certain dollar threshold and a Form 470/bid solicitation requirement for all internal connections services and equipment. We, therefore, propose an alternative to the blanket Form 470/competitive bidding process that we believe will achieve the goals set forth in the original Order.

Priority 1 Services: A Form 470 would be required for all services over a certain dollar amount. Most states have dollar thresholds over which competitive bidding must occur and the FCC should adopt a similar rule. This would save the small applicants from having to post a meaningless Form 470 and countless applicants from being denied for minor 470 infractions. We believe that a fair threshold for priority 1 services prior to competitive bidding would be \$75,000. Based on an informal survey of 10 randomly selected small districts in Pennsylvania, we found that applicants spending less than \$75,000/year on a given service did not receive competitive bids.

Priority 2 Services: Form 470 and bid solicitation from at least 3 vendors required. We believe that a minimum number of bids, such as three, must be solicited before a vendor is selected to provide priority 2 products and services. A simple 470 posting cannot be the only requirement for a \$2 million equipment or wiring contract. With great amounts of funding should come great responsibility, or at least much more than is currently required.

Please note that there must be two exceptions to the minimum three-bid requirement. 1) In cases where state master contracts are used for purchasing – whether by choice or rule of law, applicants should not be required or expected to seek additional bids. This is because of the extensive bid solicitation and price negotiation that is involved when such state contracts are signed. The FCC should realize that any purchase made from these contracts has been competitively bid and no additional bid solicitation is warranted. 2) In cases where applicants have attempted to locate qualified vendors, but where none exist, applicants cannot be held to a minimum 3-bid rule.

How would such a process address minimizing WFA?

It's well documented that WFA is occurring almost entirely at the highest discount level, because these schools are the only ones receiving internal connections discounts. By adopting this recommendation, the SLD will be placing greater competitive bidding emphasis on the program areas where such abuse exists, and by lessening the bidding requirements on the services that are not prone to abuse or that are not benefiting from the Form 470 process anyway.

Should service providers have to certify that their bids are developed independently?

We don't view this as a problem and an additional certification won't stop this practice if it does occur.

C. Record keeping Requirements.

Should record keeping requirements be made more stringent and more specific for applicants and/or service providers? Should service providers have to maintain bid records for 5 years as applicants do?

Service Providers

In our discussions with vendors, we have found that very few vendors maintain copies of losing bid documents for an extended period of time, if at all. Furthermore, we believe that such a requirement would discourage vendors from submitting proposals to districts. Vendors, particularly small, local wiring companies already view the E-rate program as burdensome and are hesitant to apply for an E-rate SPIN

number after they learn the program's current requirements, forms, timelines and delays in payments. But the strongest reason to oppose this recommendation is because some districts post the RFP in the local paper or on their public website with other non-E-rate related RFPs. Local vendors responding to an RFP would have no idea that they are submitting a bid for an E-rate proposal when they see it in the local paper and therefore would have no idea they were falling under a new federal mandate in terms of record-keeping.

Applicants

While we understand what the Commission is intending to do by imposing more stringent record keeping rules on applicants, we don't believe this will lessen waste, fraud and abuse of program funds. It has been our experience that where incomplete records are maintained by an applicant, it is due to two reasons: 1) the E-rate contact is doing 20+ other duties in addition to E-rate and keeping accurate records of all vendor contacts for five years is unrealistic, and 2) the turnover in E-rate contacts from year to year is about 50%, making record keeping a difficult task.

D. Technology Plans

Should the current guidelines for technology plans be codified? Should the tech plan requirements be amended to be more consistent with the USDOE and USIML planning requirements? Should approving agencies, including states, have more or different qualifications imposed?

We are gravely concerned with the technology planning guidance that the SLD has developed and imposed upon applicants and states over the past year. The technology plan requirements were changed without notice, are not consistent with plans required by the US Department of Education, and are out of step with the extensive, solid strategic education and technology planning efforts that many states, including Pennsylvania, have taken in recent years. We also are concerned that these technology plan changes were done entirely without school or library input or consultation and thus the real-world effect of the changes was not considered.

Unexpected Changes to Technology Plan Requirements

Until September 2003, applicants and technology plan approvers were consistently told that technology plans were simply required to be approved by start of services or submission of the Form 486, whichever was earlier, with no guidance on the SLD website or provided verbally, about when plans had to be written. In September 2003, the SLD announced that technology plans were required to be written prior to the submission of the Form 470.

While we understand the reasoning behind the revised requirement – that applicants should only request bids on services contained in their technology plans – it is completely out of step with the real world of school planning and budgeting, and state approval processes.

In Pennsylvania, as in most every state, school budgets aren't passed until May or June, thus leaving districts to struggle with how to complete the technology planning and budgeting process so far in advance of the funding year. In order to help alleviate this concern, the Pennsylvania Department of Education (PDE) has made a deliberate decision to require technology plans to be submitted on or before April 30. This is not to say that plans are not developed until April. In fact, PDE begins assisting districts develop their plans in early fall. The full planning process for a District takes approximately six months to complete if done well.

We believe it would be shortsighted for the Commission to mandate applicants have technology plans completed prior to the posting of the Form 470. Form 470s are submitted in the September – early December time frame. To require applicants to have fully-developed technology plans, even unapproved technology plans, by fall would mean that schools would be developing plans in the spring and summer – a full 12 –14 months prior to the actual funding year. This is unrealistic, and would have the opposite effect of what the Commission, and certainly states, are seeking to achieve which is well planned, thoroughly developed plans for using technology in the classroom. We encourage districts to set aside a full six months to review their existing plans, assemble stakeholders and committee members, and align their technology goals with their strategic planning and educational goals.

Pennsylvania believes strongly that moving back the date by which districts must have technology plans developed will be counterproductive to the years of hard work and effort that Pennsylvania and other states have undertaken to develop a thorough process for technology planning that begins in the fall and ends no later than April 30 – not begins and ends on the fall. Technology planning should not be a 60 day process, which is what would happen if the Commission codifies the SLD's deadlines for when the technology plan must be written. The other unintended result will be for applicants to wait until the very last minute to post their 470s, which, in turn, will result in applicants submitting Form 471 the last week of the application window – a practice the SLD is trying hard to reduce.

Content of plans

Also prior to September 2003, applicants were not required to have every item on their Form 471 application also addressed in their technology plans, except basic phone service. This guidance suddenly changed in September, when applicants and states were informed that technology plans must be extremely specific and that if plans did not list every item on the Form 471, the application could be denied.

No other federal or, to our knowledge, state technology grant has a one-to-one grant application/technology plan match. Technology planning requirements are typically made to provide assurances to policymakers that applicants have thought through technology deployment and usage; tech plans have never been, nor should ever be, a hammer by which applicants are denied funding.

The SLD's new requirements for technology plans went so far as to mandate that applicants include such services as Centrex, voice mail and direct inward dialing, to name a few. This level of detail required for plans must be dropped. Technology plans are about ensuring that districts are prepared to use the Internet in the classroom, and as such, we find no plausible reason why Centrex service and voice mail should be a technology plan requirement.

And finally, technology plans as developed in many states are three year prospective plans, not documents that list what the district currently is doing. In fact, even services once considered advanced, such as T-1 lines, are now considered as basic as POTS -- an essential to communications, not a new technology needed to enhance education. And as such districts often don't include these lines in their technology plans, as it is a service that is currently being purchased -- not a new service that is going to be needed in the next three years.

As far as we can tell, the SLD is not seeking a technology plan, as known by the US Department of Education and all 50 states. They have described and are seeking what can only be called an 'E-rate implementation plan' -- which is entirely different than a strategic technology plan for implementing technology into the curriculum. Until this fact is recognized and dealt with by the Commission, you will see states, including Pennsylvania, continue to voice our extreme opposition to the new deadlines and mandates as imposed by the E-rate program.

Should an analysis of the benefits of purchase vs. lease be required as part of the tech plan? Should a discussion of the most cost-effective way of meeting the educational objectives be required as part of the tech plan?

We see no value in imposing yet an additional technology plan requirement on applicants. For a priority 1 purchase to be E-rate eligible, it must be leased. Therefore unless the cost of purchasing a network is equal to or less than the value of the applicant's E-rate discount, it will always be more cost effective for the applicant to lease the network on a yearly basis.

We view the Commission's suggestion of including purchase vs. lease analysis and cost-effectiveness of technologies as merely attempting to make sure that applicants are seeking the lowest possible pre-

discount price. We wholeheartedly believe that requiring additional steps in a technology plan will not meet this goal. Rather, adopting our previous suggestion of lowering the maximum discount for internal connections to 70% will provide the Commission with the intended results.

EETT-approved technology plans not acceptable

The original May 8 Order states:

“We understand that many states have already undertaken state technology initiatives and we expect that more will do so and will be able to certify the technology plans of schools and libraries in their states. Furthermore, plans that have been approved for other purposes, e.g., for participation in federal or state programs such as “Goals 2000” and the Technology Literacy Challenge, will be accepted without need for further independent approval.”

Contrary to the statement in this Order, the SLD has informed states that simply because a technology plan has been approved for EETT (formerly NCLB), it is not automatically approved for E-rate purposes. We strongly recommend that the SLD, once again, recognize that if a district has an approved EETT plan, it is considered approved for E-rate. If such plans are not automatically eligible for E-rate, it will force Districts to have two technology plans, or to amend their current plan, thus placing a hardship on technology plan approvers. Currently, the US Department of Education provides administrative funding to states to approve EETT technology plans, and the SLD provides no administrative funding for the approval of E-rate-related plans.

Additional Requirements for Technology Plan Approvers

Technology plan approvals are a free service that state agencies provide to the SLD. In most cases, this can be done because the technology plans already are being approved for the federal EETT program and administrative funding has been provided to the states to approve these plans. We are concerned with the recent suggestions coming from SLD board and the Commission which indicate that additional requirements or new penalties may have to be imposed on technology plan approvers if plans are approved which are not E-rate acceptable.

We believe the SLD already is walking a thin line with the states because of the recent drastic changes to the technology planning requirements, and that any additional requirements could easily be seen as one-too-many, thus leaving states, including and especially Pennsylvania, with the hard decision about whether to continue approving E-rate technology plans. The consequences of such actions by states would be detrimental to the program, and certainly to the resources of the SLD. In order to avoid this situation, we encourage the Commission and SLD to work with the states in developing realistic

technology planning requirements and not attempt to impose penalties on states that have approved technology plans that are not deemed “acceptable” by the SLD.

E. Definition of Rural Areas

With the disappearance of the Goldsmith Modifications, what system of definitions for rural and urban locations should be adopted?

Currently, the rules state that rural/urban designations are made by using the Metropolitan Statistical Area (MSA) codes which basically say that if a county is located in or near a city or largely populated area, the entire county is deemed to be urban, and thus all of the schools and libraries located within that county are considered urban. As Pennsylvania has commented in several previous filings to the Commission, we believe this classification is seriously flawed because it relies on county vs. school district boundaries, and paints an entire county as urban simply because it is somewhat near an “urban” center. We are pleased that the Commission is taking the elimination of the Goldsmith Modifications as an opportunity to seek recommendations for a new definition of rural.

In developing our comments, we turned to the Center for Rural Pennsylvania, a highly respected, bipartisan, bicameral legislative agency that serves as a resource for rural policy within the Pennsylvania General Assembly. Members of the Center’s staff are respected nationwide for their ability to gather and analyze data, and present unbiased recommendations to policymakers, including the National Conference of State Legislatures (NCSL).

The Center researched eight various national definitions of rural and urban and developed pros and cons for each, as outlined below. Based on their findings, we believe the Commission should adopt a definition of rural and urban at the school district level, rather than at the county, or school building level. Furthermore, any definition adopted by the Commission should be easy to understand and reflect the spatial character of the school district. The definition which best meets these criteria is the U.S. Census Bureau’s 2000 Urbanized Area definition.

Data Sources and Methodology

To identify rural and urban areas for all 50 states and the District of Columbia, two data sources were used: U.S. Census Bureau’s *Census 2000* and the National Center for Education Statistics’ (NCES) *Common Core Data* (CCD). The specific variables extracted from the Census 2000 were population, square miles of land area and urbanized population. The variables extracted from the CCD database were for the 2000-01 school year and included the follow variables: number of “regular school” buildings

and total student enrollment. Data to identify counties where school districts are located was also obtained from the CCD.

Except for New Hampshire and Vermont, the unit of analysis was the “local school district” as defined by CCD. In the two New England states, the unit of analysis was CCD defined “local school district component of supervisory unit.” Using the NCES’s “agency identification number” data from both sources were combined into a single database.

The data had four principle limitations:

1. Hawaii and District of Columbia were each reported as a single school district. Hence, all the schools in these two areas will be reported as either rural or urban.
2. Second, approximately 240 school districts could not be matched. Review of these districts showed that the majority were chartered schools and other special types of public-private schools. Because of their unique character and the lack of data, these 240 districts were not included in the analysis. The majority of these districts (73 percent) are in Arizona and Minnesota.
3. Population data was unavailable for four school districts: Canyon Elementary, California; Casmalia Elementary, California; Mountain View Elementary, Montana; and Sargent Public Schools, Nebraska. As a result, these districts were also eliminated from the database.
4. No data was included on the number of libraries. It is recognized that the any definition on rural schools will affect libraries.

All total, the database used in the analysis had 12,739 school districts, 80,763 school buildings and 45.5 million students.

Identifying Rural and Urban Areas at the School District Level

Currently, the FCC defines a school or library as “rural” if it is located in a Non-Metropolitan county (Non-Metro) as defined by the Office of Management and Budget or is specifically identified in the Goldsmith Modification to 1990 Census data. Conversely, schools and libraries inside a Metropolitan county (Metro) are classified as “urban.”

One of the limitations of this definition is the use of counties as the basic unit of geography. Because of their larger size, a county can have both rural and urban areas. Yet all the schools and libraries within a

county are considered urban or rural depending on whether the county is classified as Metro or Non-Metro. Thus, it is not uncommon to find schools and libraries with very rural characteristics defined as urban because they are in a Metro county.

As an example, in 1999, nine of Pennsylvania's 33 Metro counties were predominately rural¹. These nine counties had no "central city" and were less than 50 percent urbanized as defined by the U.S. Census Bureau. The reason these nine counties were considered Metro had to do with commuting patterns and in some cases the edges of a central city in the adjoining county overlapping into the next county. Even though the school districts and libraries in these nine counties shared the characteristics of other rural schools and libraries, they received less of a discount in telecommunications services because they were located in a Metro county.

Nationally, it is estimated that 229 (30 percent) of the nation's 756 Metro counties are predominately rural. The highest proportion of these counties is in states east of the Mississippi River.

An alternative method to identify rural and urban schools and libraries is to use smaller, sub-county, levels of geography. Compared to counties, school districts provide a sharper distinction between areas because of the following factors:

- There are more school districts than counties. In 2000, there were 3,141 counties (or equivalents) in the United States and 12,743 school districts. Nationally, the average county has nearly 4 school districts within its border.
- School districts are geographically smaller than counties: In 2000, the average school district in the United States was 282 square land miles, while the average county was 1,097 square land miles. Half of the nation's school districts are less than 110 square land miles in size.
- Excluding the District of Columbia, only six states have the same number or more counties than school districts. The six states are: Florida, Hawaii, Louisiana, Maryland, Nevada, and West Virginia. Of the 232 counties in these six states, there were only 17 predominately rural counties that were classified as Metropolitan, by OMB, in 1999.

There are other sub-county levels of geography commonly available, namely: Municipal, Census Tract, Census Block Group, and Census Block and ZIP Code. Except for municipal, which are not common in every state, none of these other sub-county levels has any administrative capacity. Moreover, many school districts may extend across multiple levels of geography within the same county. In Pennsylvania,

¹ A county is considered predominately rural if less than 50 percent of its population was Urbanized as defined by the U.S. Census Bureau. The nine Pennsylvania counties were: Butler, Carbon, Columbia, Fayette, Lebanon, Perry, Pike, Somerset, and Wyoming

for example, the average school district encompasses five municipalities, three ZIP Codes, three Census defined “places²”, and six Census Tracts. The geography used by the Commission should make it easy for school district officials to complete the applications for all the district’s buildings, not just those in selected areas.

Identifying Rural and Urban Schools and Libraries

To identify rural and urban schools and libraries more accurately, the Commission requested comments on a definition of rural areas in the matter of school and libraries Universal Service Support Mechanism³.

Among the methods the Commission listed to potentially identify rural areas were:

1. Rural-Urban Commuting Areas (RUCAs)
2. USDA’s Economic Research Service definition of rural based on Census Tracts
3. County density below 100 persons per square mile
4. Rural Service Areas
5. Non-Nodal Counties within an Economic Area
6. USDA’s Rural Utility Service area for broadband program
7. Census Tracts not within ten miles of incorporated or census designated place containing more than 2,500 residents and is not within a county that has an overall population density greater than 500 persons per square mile.
8. Non-Urbanized areas

Two criteria will be used to evaluate this list of definitions:

1. Simplicity: A definition for rural and urban should be easy to understand and intuitive. The more complex the definition, the more difficult it is to understand. To assess each definition’s simplicity, the number of data variables and steps needed to calculate an area’s rural/urban status will be determined. The fewer the variables and calculation steps, the more simplistic the definition.
2. Accuracy: A definition must precisely distinguish rural areas from urban areas. As discussed above, the most effective way to accomplish this is to use the smallest geographic unit possible. A geographic unit such as a Census Tract, municipality, county, etc. The accuracy of each definition will be assessed on what level of geography it uses to calculate an area’s rurality.

² According to the U.S. Census Bureau, a “place” is defined as a concentration of population either legally bounded as an incorporated place, or identified as a Census Designated Place (CDP). Incorporated places have legal descriptions of borough (except in Alaska and New York), city, town (except in New England, New York, and Wisconsin), or village. It is a type of governmental unit incorporated under state law and has legally prescribed limits, powers, and functions. A CDP is a statistical entity, defined for each decennial census according to Census Bureau guidelines, comprising a densely settled concentration of population that is not within an incorporated place, but is locally identified by a name. CDPs are delineated cooperatively by state and local officials and the Census Bureau, following Census Bureau guidelines.

³ Paragraphs 10-12, CC Docket No. 02-6; FCC 03-323.

Below is a brief discussion of each definition and its outcome in meeting the above criteria.

Definition #1: Rural-Urban Commuting Areas (RUCAs)

Overview: Rural-Urban Commuting Areas (RUCAs) were developed by the federally funded Rural Health Research Center at the University of Washington School of Medicine. RUCAs are based on the sizes of cities and towns and their functional relationships. These relationships are measured by work commuting flows. RUCA classifications are calculated at the Census Tract level but are available and generally used at the ZIP Code level.

Simplicity: With a taxonomy of 30 separate codes, RUCAs are considerably complex. The two basic data variables of RUCAs are: (1) Census Tract population and its status as a Census defined rural, urban cluster, or urbanized areas; (2) place of work and its status as a rural, urban cluster or urbanized areas. These two variables are then used to calculate rural and urban based on the place where different percentages of residents are employed.

Accuracy: The smallest level of geography used by RUCAs is ZIP Codes. While this information enables more accurate sub-county analysis, commuting patterns of residents plays a larger role determining whether a ZIP Code is rural or urban. Additionally, it is possible to have one ZIP Code classified as rural and the adjoining area classified as urban. For school districts that span multiple ZIP Codes, each school building would have to be classified as either rural or urban. This building classification would create undue administrative hardship and complexity for the school district. Hence, RUCAs are only partly accurate according to the above criteria.

Number of School Districts: Currently there is no practical way to determine how many school districts would be considered rural using the RUCA definition.

Other Issues: One of the principle limitations of RUCAs is that commuting is not a spatial issue. For most of rural America, commuting is a symptom of job availability. The lack of local jobs may forces rural residents to commute into more urban areas. In addition, urban goods and services do not follow rural commuters home. Rural residents who commute into urban areas do not enjoy the same level of access to telecommunication and health care services at home as they do at work. Nor do the children of commuters and those using library services. The availability of affordable telecommunication services is a spatial issue, not a commuting issue.

Conclusion: RUCAs are ineffective method to determine rurality.

Definition #2: USDA's Economic Research Service's Rural Areas Based on Census Tracts

Overview: USDA's Economic Research Service's (ERS) rural areas based on Census Tracts are nearly identical to RUCAs. The principal difference is that ERS uses Census Tracts as the core unit of geography, while RUCAs use ZIP Codes. As discussed above, both methods are used to measure the sizes of cities and towns and their relationships as measured by work commuting flows.

Simplicity: ERS's definition uses a taxonomy with 30 separate codes to identify the size of a Census Tract and the commuting "flow" to and from the Census Tract. The two basic data variables are: (1) Census Tract population and its status as a Census defined rural, urban cluster, or urbanized areas; (2) place of work and its status as a rural, urban cluster or urbanized areas. These two variables are then used to calculate rural and urban based on the place where different percentages of residents are employed.

Accuracy: The smallest level of geography used by ERS is the Census Tract. While this information enables more accurate sub-county analysis, commuting patterns of residents play a larger role in determining the taxonomy of a Census Tract. For school districts that span multiple Census Tracts, each school building would have to be classified with its own taxonomy. This building classification would create undue administrative hardship and complexity for the school district. Hence, ERS's definition is partly accurate, based on the above definition.

Number of School Districts: Currently there is no practical way to determine how many school districts would be considered rural using the ERS definition.

Other Issues: As discussed above in the RUCA section, one of the principle limitations of incorporating commuting patterns is that access to telecommunications services is a spatial issue. Urban goods and services do not follow rural commuters home. Rural residents who commute into urban areas do not enjoy the same level of access to telecommunication and health care services at home as they do at work. Nor do the children of commuters and those using library services. The availability of affordable telecommunications services is a spatial issue, not a commuting issue.

Conclusion: ERS's Census Tract definition is an ineffective method to determine rurality.

Definition #3: County Density Below 100 Persons Per Square Mile

(See Table 2 and Map 1)

Overview: Population density is a useful indicator for understanding the spatial relationship between geographical area and its residents. Generally, the more densely settled an area, the more inexpensive it is for businesses to provide goods and services. The opposite is generally true for less densely settled areas, where businesses must travel greater distances to deliver their goods or services. In 2000, the U.S. Census Bureau reported that there were 3,141 counties (or equivalent) in the United States. The average county had a population density of about 80 persons per square mile. There were 2,330 counties (74 percent) that had a population density of less than 100 persons per square mile.

Simplicity: The variables required to calculate population density are population and square land miles. To compute density, only one step is required: Divide the population by the square land miles. If the resulting product is below 100, then the county is considered “rural.”

Accuracy: The smallest level of geography used by this density model is the county. School districts in low density counties are considered rural by default.

Number of School Districts: In 2000, according to the U.S. Census Bureau, there were 7,272 school districts in counties with a population density of less than 100 persons per square mile, or 59 percent of the nation’s 12,743 school districts. The low-density county had an average of 3.3 school districts. Among school districts in low-density counties, there was a total of 27,678 school buildings or average of 3.7 buildings per district. Approximately 10.2 million students were enrolled in school districts in low-density counties. The average enrollment per district was 1,389.

Other Issues: Using the density model, five states⁴ have no counties with less than 100 persons per square mile. Additionally, this model favors states with many counties. In particular, Southern and Midwestern states contain 79 percent of the nation’s counties. Within these two regions, more than 75 percent of the counties have a population density of less than 100 persons per square mile. In comparison, the Northeast with its different settlement and incorporation patterns, has only 79 counties (36 percent) with low density.

The density model also ignores the urban character of some low-density counties. For example, among the 2,330 counties with a population density of less than 100 persons per square mile, 182 have urbanized residents.

Conclusion: The density model does not adequately identify rural school districts nor does it take into account the unique rural conditions in different parts of the United States.

⁴ Connecticut, Delaware, Massachusetts, New Jersey, and Rhode Island.

Definition #4: Non-Nodal Counties Within an Economic Area

(See Table 3 and Map 2)

Overview: The U.S. Bureau of Economic Analysis (BEA) first established the “Economic Areas” (EA) in 1977, and updated them using the 1990 Census in 1994⁵. Each EA consists of one or more economic nodes--metropolitan areas or similar areas that serve as centers of economic activity--and the surrounding counties that are economically related to the nodes. Commuting patterns are the main factor used in determining the economic relationships among counties. The EA definition procedure requires that, as far as possible, each area include both the place of work and the place of residence of its labor force. To go below the regional level, BEA created what it calls Component Economic Areas" (CEAs) and then uses these as building blocks for redefining the larger EAs. Each CEA consists of a single economic node and the surrounding counties that are economically related to the node. Of the nodes, 90 percent are Metro, and 10 percent are Non-Metro. Each Metro area is the node of a different CEA; with minor exceptions, the Non-Metro nodes are Non-Metro counties where newspapers widely read in these areas are published⁶.

Simplicity: BEA first defines nodal counties, which can be Metro or Non-Metro. Any county not defined as nodal is labeled non-nodal. To identify nodal counties, BEA used three data variables: Metro counties, commuting patterns and newspaper circulation. The first step is to identify all Metro counties as nodal. The next step is to examine Non-Metro counties to determine if they meet one of two criteria:

(A). Non-Metro counties that have “closely related commuting patterns” to Metro counties are considered nodal.

(B). Using Audit Bureau of Circulation⁷ data, Non-Metro counties are considered nodal if they have a widely read newspaper circulation from a county with a population of at least 50,000. If the newspaper published in that Non-Metro county is widely read in at least five other counties, it is also considered nodal.

From the published materials, the exact ratios used to determine non-closely related commuting patterns and newspaper circulation were not readily apparent. Conceptually, however, the BEA’s definition is adequate. As mentioned above, OMB no longer defines Metro and Non-Metro counties. Additionally, using newspaper’s regional circulation to determine nodal connectivity may no longer be relevant in the age of cable television and on-line newspapers.

⁵ Federal Register. Vol. 59 No. 214 Monday, November 7, 1994 p 55416.

⁶ Ibid.

⁷ A nonprofit organization whose membership includes approximately 98 percent of the U.S. newspapers in 1994.

Accuracy: The core geography of nodes and non-nodes are counties. As discussed above, the inability to identify areas below the county level can often results in some schools and libraries with rural characteristics being defined as urban.

Number of Schools: Within non-nodal counties, there were a total of 6,728 school districts, or 53 percent of the nation's total. There were a total of 23,991 school buildings - the average district had 3.6 buildings. The total number of students was nearly 8.4 million, or an average of 1,274 per district.

Other Issues: Nationally, there are 836 nodal counties. Of these counties, only 38 are Non-Metro. As a result, this definition primarily defines schools and libraries through a Metro-Non-Metro lens. In addition, BEA is undecided whether or not to update the Economic Areas and nodal concepts⁸. If BEA decides not to update the information, then Universal Service Support Mechanism will be left with an antiquated definition. Finally, Economic Areas and nodes are not widely used. To inform users, the Commission will have to conduct education and training on this definition.

Conclusion: Non-nodal counties will not adequately define rural schools and libraries.

Definition #5: Rural Service Areas

(See Table 4 and Map 3)

Overview: Rural Service Areas (RSA) are those areas outside Metropolitan Service Areaa (MSA). These areas represent major and minor markets for cellular phone service providers. These areas are determined by the Rand McNally Corporation. No additional information is currently available on how these areas were calculated.

Simplicity: No information on the variable types and calculations are available.

Accuracy: RSAs are county, and in some cases multi-county in nature. They do not provide information on school districts or libraries below the county level. Consequently their ability to pinpoint rural areas is limited.

Number of School Districts: Applying the RSAs definition, there are 7,400 rural school districts in the United States. The total number of buildings would be 28,033, or an average of 3.8 buildings per distinct. The total enrollment would 10.5 million students, or an average of 1,425 students per district.

⁸ Conversation with Kenneth P. Johnson, Bureau of Economic Analysis, March 3, 2004

Other issues: The MSA and RSA definition of rural is very similar to the Office of Management and Budget definition of Metropolitan and Non-Metropolitan. The definition identifies 43 Metro counties as RSAs and 149 Non-Metro counties as MSAs. Hence this definition would do little to expand beyond the current definition used to identify rural schools and libraries.

Conclusion: Because RSAs does not include data below the county level, it is an unsuitable definition for identifying rural schools and libraries.

Definition #6: Census Tracts Not Within 10 Miles of Incorporated or Census Designated Place Containing More than 2,500 Residents and Not Within a County with a Population Density of 500 Persons Per Square Mile

(See Table 5)

Overview: The intent of this definition is to quantify the spatial relationship between places with larger populations and the surrounding areas. It is based on the assumption that the further a school or library is from a place with more than 2,500 residence, the more expensive it is to access telecommunication services.

Simplicity: There are five data elements to this definition: places over 2,500, county population, county square land miles, Census Tracts, and the spatial relationship between each variable. The most effective method to calculate "rural" Census Tracts is to use a geographic information system (GIS). The use of such advanced software, as well as gathering the necessary data for the line files, would make identification of rural areas difficult and complex.

Accuracy: The smallest level of geography used by this definition is Census Tracts. While this level of analysis could provide a more refined distinction between rural and urban areas, there are a number of limitations with this definition. First, it is unclear why places with more than 2,500 residents are excluded. It could be argued that schools and libraries in places that have 2,501 residents do not have less expensive telecommunications costs than their counterparts in places with 500 residents. The 2,500-population cut-off appears to be arbitrary. Similarly, classifying schools and libraries that are inside a 10-mile radius of places with more 2,500 residents as urban also appears to be arbitrary.

Number of School Districts: Without a GIS program and the associated line file data, it is not readily possible to calculate the number of school districts that would be classified as rural or urban.

Other Issues: This definition overlooks the impact that mountains, rivers, lakes and other natural physical barriers have on a region. To simply draw a ten-mile circle around a large place and say that the area inside is ineligible ignores the fact that some areas may be separated by insurmountable physical barriers. Telecommunications providers may not provide the same level of connectivity on one side of the barrier as they do on the other.

Conclusion: This definition is too difficult to apply.

Definition #7: USDA's Rural Utility Service Area for the Broadband Program

(See Table 6 and Map 4)

Overview: According to the loan application for USDA's Rural Utility Service (RUS) Broadband Access Loan and Loan Guarantee Application Guide, an eligible rural community "means any incorporated or unincorporated place in the United States...that: (1) has no more than 20,000 inhabitants based on the most recent available population statistics of the Bureau of the Census and (2) is not located in an area designated as a standard metropolitan statistical area. For purposes of this program, place may include any area located outside the boundaries of any incorporated or unincorporated city, village or borough having a population exceeding 20,000⁹".

Simplicity: To apply RUS's Broadband Program rural definition, three different variables are needed: (1) places with more than 20,000 residents; (2) Non-Metropolitan counties; and (3) population of areas outside places with less than 20,000 residents. To calculate eligible areas (i.e. rural) the first step is to identify areas in Non-Metro counties and the places in these counties that have more than 20,000 residents. The next step is to identify those areas outside places with more than 20,000. These are the areas that will be eligible for the program. While this definition appears simple, one of its key variables, Non-Metro counties, is no longer in use. In June 2003, the Office of Management and Budget replaced its Metro/Non-Metro delineation with a completely new system¹⁰. Hence, RUS's Broadband Program rural definition is obsolete.

Accuracy: RUS's Broadband Program rural definition uses two levels of geography: Non-Metro counties and areas outside places with more than 20,000 residences. As discussed above, the first level, Non-Metro counties, excluded schools and libraries in Metro counties that have large rural components. It is estimated that this exclusion would affect 1,932 school districts or 33 percent of the 5,899 school districts in Metro counties. The second level of geography is areas outside places with more than 20,000

⁹ RUS Bulletin 1738-1 – Rural Broadband Access Loan and Loan Guarantee Application Guide.

¹⁰ The new definition can be found in the Federal Register: December 27, 2000 (Volume 65, Number 249) Pages 82227-82238.

residents. While this provides a smaller level of geography, it is unclear how it would affect countywide school districts that have a large place.

Number of School Districts: There are approximately 6,918 school districts in Non-Metro counties. Among these districts, 6,184, or 89 percent, are in counties where there is no place(s) with a population great than 20,000. Among these districts, there was a total of 21,375 school buildings, or an average of 3.5 buildings per district. Total enrollment in these districts in 2000-01 was nearly 7.2 million students, or an average of 1,163 per district.

Other Issues: The RUS's rural definition was designed to provide resources to build a broadband telecommunications network, not provide discounted telecommunications services. One of the implicit intents of the RUS definition is to encourage businesses to build the rural telecommunications infrastructure. While its intent parallels the goals of the Universal Service Support Mechanism, it is not complimentary. Schools and libraries simply need access, not the infrastructure. By targeting areas identified by RUS as needing infrastructure, it overlooks areas that may currently have limited or poor access. Therefore, using RUS's definition is like using oranges to define apples.

Conclusion: The RUS Broadband Program rural definition use of Metro/Non-Metro delineation make the definition obsolete and therefore unusable for the School and Libraries Universal Service Support Mechanism.

Definition #8: Non-Urbanized Areas

(See Table 7)

Overview: As the name suggests, a non-urbanized area is an area outside Census Bureau defined urbanized areas. An urbanized area is defined as an area consisting of a central place(s)¹¹ and adjacent territory with a general population density of at least 1,000 people per square mile of land area that together have a minimum residential population of at least 50,000 people. In simpler terms, non-urbanized areas can be thought of as the areas outside large cities and their suburbs.

Simplicity: Defining non-urbanized areas is relatively easy—areas outside urbanized areas. Calculating urbanized areas is a little more complex. Three variables are needed to determine an urbanized area: central city, population and square land miles. It starts with identifying central places then determining which adjacent territory has a population density of at least 1,000 persons per square mile. This task becomes even more complicated when including territories that are only adjacent via

¹¹ The U.S. Census Bureau defines a "Central place" as the core incorporated place(s) or a census designated place of an urban area, usually consisting of the most populous place(s) in the urban area plus additional places that qualify under Census Bureau criteria. If the central place is also defined as an extended place, only the portion of the central place contained within the urban area is recognized as the central place.

bridges or densely settled areas that are separated by pockets of less densely settled areas (i.e. parks, greenways, mountains, etc.). However, this complexity is irrelevant because urbanized areas already have been outlined by the Census Bureau.

Accuracy: Urbanized areas are defined at the lowest level possible, Census Blocks. Using these as the building blocks, it is possible to add up Census Blocks to identify any type of geography (municipalities, school districts, counties, etc.) as either urbanized or non-urbanized or mixed.

Number of School Districts: Applying the non-urbanized definition, it is estimated that in 2000-01, there are 8,636 non-urbanized school districts, or 68 percent of the nation's 12,739 school districts. These non-urbanized school districts have a total of 30,131 school buildings, or an average of 3.5 buildings per district. Approximately 10.8 million students attend non-urbanized schools, or 24 percent of the nation's 45.5 million students. The average non-urbanized school district has 1,254 students.

Other Issues: Historically, non-urbanized areas in the United States have had fewer economic opportunities and less access to goods and services. While there may be large urban clusters within non-urbanized areas, they too have lagged behind their urbanized counterparts.

Conclusion: The Non-urbanized areas definition best defines areas in need of access to discounted telecommunications services.

Justification for Selection of Definition 8

The non-urbanized areas definition allows for classification of school districts by rural and urban. This level of geography is the most simplistic for schools administrations to work with. The school district level is also more precise than a county level designation and more understandable than a Census Tract based definition.

Other positive attributes of this definition include:

- Data needed to classify districts is available nationally and calculations already have been made by the Census Bureau.
- Classification criteria are not obsolete and will be updated with each census and possibly even more frequently with the upcoming full implementation of the American Community Survey.
- A spatial definition that does not incorporate commuting to work patterns better defines the actual telecommunication service availability for schools and libraries.

Need for Database Development

Access to affordable telecommunications services is uneven across the United States. While this situation usually correlates with rural and urban status, there are exceptions. There are pockets in rural America with access to low cost broadband services, just as there are pockets within urban areas with limited and costly broadband services.

In the future, the Commission is encouraged to develop a detailed database that measures the level of connectivity as well as cost of connectivity across the United States. This data should be available at the lowest level of geography possible. With this information, it will be possible to target areas—both rural and urban—that have below average connectivity and who are paying higher costs.

TABLE 1: Summary of Districts, Counties, School Buildings, and Student Enrollment by State

	# School Districts, 2000-01	# Counties, 2000	Ratio of School Districts to Counties	SCHOOL BUILDINGS		STUDENT ENROLLMENT	
				Est. # of School Buildings, 2000-01	Avg. # School Buildings Per District	Est. Students Enrollment 2000-01 (1,000)	Avg. # Students Per Building
United States	12,739	3,141	4.1	80,763	6.3	45,555	564.1
Alabama	128	67	1.9	1,345	10.5	726	540.0
Alaska	53	27	2.0	483	9.1	133	275.4
Arizona	207	15	13.8	1,284	6.2	841	654.6
Arkansas	310	75	4.1	1,122	3.6	449	400.3
California	958	58	16.5	7,472	7.8	5,943	795.3
Colorado	174	63	2.8	1,534	8.8	739	482.0
Connecticut	166	8	20.8	968	5.8	544	561.8
Delaware	16	3	5.3	161	10.1	106	656.8
District of Columbia	1	1	1.0	150	150.0	68	456.3
Florida	67	67	1.0	3,059	45.7	2,500	817.3
Georgia	180	159	1.1	1,940	10.8	1,471	758.1
Hawaii*	1	5	0.2	275	275.0	185	671.1
Idaho	112	44	2.5	595	5.3	246	413.1
Illinois	889	102	8.7	3,919	4.4	2,045	521.8
Indiana	285	92	3.1	1,810	6.4	987	545.3
Iowa	371	99	3.7	1,474	4.0	486	329.7
Kansas	304	105	2.9	1,431	4.7	470	328.6
Kentucky	176	120	1.5	1,264	7.2	654	517.7
Louisiana	66	64	1.0	1,382	20.9	725	524.6
Maine	136	16	8.5	562	4.1	179	319.1
Maryland	24	24	1.0	1,244	51.8	861	691.8
Massachusetts	189	14	13.5	1,476	7.8	791	535.8
Michigan	554	83	6.7	3,342	6.0	1,662	497.4
Minnesota	338	87	3.9	1,520	4.5	829	545.3
Mississippi	149	82	1.8	878	5.9	491	559.3
Missouri	522	115	4.5	2,173	4.2	910	418.7
Montana	443	56	7.9	863	1.9	152	175.8
Nebraska	249	93	2.7	898	3.6	269	299.1
Nevada	17	17	1.0	477	28.1	357	748.0
New Hampshire	162	10	16.2	470	2.9	203	432.1
New Jersey	550	21	26.2	2,222	4.0	1,306	587.8
New Mexico	89	33	2.7	720	8.1	320	444.8
New York	343	62	5.5	3,344	9.7	2,488	743.9
North Carolina	117	100	1.2	2,037	17.4	1,296	636.3
North Dakota	214	53	4.0	514	2.4	105	203.7
Ohio	241	88	2.7	2,133	8.9	1,135	532.3
Oklahoma	542	77	7.0	1,818	3.4	622	341.9
Oregon	195	36	5.4	1,186	6.1	542	456.7
Pennsylvania	500	67	7.5	3,063	6.1	1,767	576.7
Rhode Island	36	5	7.2	309	8.6	157	506.9
South Carolina	84	46	1.8	1,072	12.8	673	627.7
South Dakota	173	66	2.6	716	4.1	127	177.6
Tennessee	137	95	1.4	1,579	11.5	898	568.5
Texas	1,039	254	4.1	6,610	6.4	4,110	621.8
Utah	40	29	1.4	719	18.0	481	668.3
Vermont	235	14	16.8	298	1.3	93	311.3
Virginia	132	135	1.0	1,819	13.8	1,162	638.8
Washington	296	39	7.6	1,884	6.4	1,009	535.7
West Virginia	55	55	1.0	751	13.7	282	375.7
Wisconsin	426	72	5.9	2,035	4.8	875	430.1
Wyoming	48	23	2.1	363	7.6	88	242.1

*In Hawaii and District of Columbia, there is one school district.

Data sources: U.S. Census Bureau, *Census 2000 (STP2)* and National Center for Education Statistics *Common Core Data*

TABLE 2: Definition #3

Counties With Population Density Above and Below of 100 Persons Per Square Land Mile; Estimated Number of School Districts, School Buildings, and Enrollment, 2000-01 by State

	POPULATION DENSITY LESS THAN 100 PERSONS PER SQUARE LAND MILE			POPULATION DENSITY 100 PERSONS OR GREATER PER SQUARE LAND MILE		
	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01
United States	7,272	26,971	10,105	5,471	53,786	35,450
Alabama	77	545	257	51	800	470
Alaska	52	389	82	1	83	50
Arizona	153	678	323	54	606	518
Arkansas	259	772	271	51	350	178
California	403	1,549	956	557	5,925	4,987
Colorado	140	693	233	34	841	507
Connecticut	0	0	0	166	968	544
Delaware	0	0	0	16	161	106
District of Columbia	1	150	68	0	0	0
Florida	33	328	164	34	2,731	2,336
Georgia	118	533	341	62	1,407	1,130
Hawaii	0	0	0	1	275	185
Idaho	101	464	164	11	131	82
Illinois	415	1,133	327	474	2,786	1,718
Indiana	131	519	230	154	1,291	757
Iowa	318	1,053	285	53	421	201
Kansas	267	943	227	37	488	243
Kentucky	126	682	305	50	582	349
Louisiana	48	628	268	18	754	457
Maine	80	295	72	56	267	107
Maryland	6	65	28	18	1,179	833
Massachusetts	0	0	0	189	1,476	791
Michigan	205	626	222	349	2,716	1,440
Minnesota	272	843	329	66	677	500
Mississippi	122	559	291	27	319	200
Missouri	401	1,046	320	121	1,127	590
Montana	444	864	152	0	0	0
Nebraska	233	640	135	17	260	133
Nevada	15	223	102	2	254	254
New Hampshire	58	134	33	104	336	170
New Jersey	0	0	0	550	2,222	1,306
New Mexico	87	586	229	2	134	91
New York	52	229	109	291	3,115	2,378
North Carolina	56	490	240	61	1,547	1,056
North Dakota	0	0	0	214	514	105
Ohio	39	191	82	202	1,942	1,053
Oklahoma	479	1,234	320	63	584	301
Oregon	151	665	246	44	521	296
Pennsylvania	107	449	191	393	2,614	1,576
Rhode Island	0	0	0	36	309	157
South Carolina	38	281	146	46	791	527
South Dakota	166	666	101	7	50	26
Tennessee	85	506	232	52	1,073	666
Texas	718	2,236	872	321	4,374	3,238
Utah	30	272	119	10	447	361
Vermont	216	258	72	19	40	21
Virginia	74	560	257	58	1,259	905
Washington	209	729	291	87	1,155	718
West Virginia	40	386	128	15	365	154
Wisconsin	247	879	283	179	1,156	592
Wyoming	0	0	0	48	363	88

Data Source: National Center for Education Statistics, Common Core Data

TABLE 3: Definition #4

Bureau of Economic Analysis (BEA) Non-Nodal and Nodal Counties; Estimated Number of School Districts, School Buildings, and Enrollment, 2000-01 by State

	BEA NON-NODAL COUNTIES			BEA NODAL COUNTIES		
	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01
United States	6,728	23,991	8,390	6,015	56,766	37,165
Alabama	75	524	243	53	821	483
Alaska	49	342	60	4	130	72
Arizona	72	211	80	135	1,073	760
Arkansas	243	680	230	67	442	219
California	214	545	202	746	6,929	5,741
Colorado	120	449	115	54	1,085	625
Connecticut	38	100	46	128	868	498
Delaware	6	34	20	10	127	86
District of Columbia	0	0	0	1	150	68
Florida	33	338	177	34	2,721	2,323
Georgia	126	657	429	54	1,283	1,041
Hawaii	0	0	0	1	275	185
Idaho	88	373	120	24	222	126
Illinois	362	996	279	527	2,923	1,766
Indiana	139	611	275	146	1,199	712
Iowa	310	1,022	269	61	452	217
Kansas	250	870	203	54	561	267
Kentucky	130	732	336	46	532	318
Louisiana	41	465	193	25	917	532
Maine	88	327	94	48	235	86
Maryland	8	96	48	16	1,148	813
Massachusetts	3	13	4	186	1,463	787
Michigan	229	721	262	325	2,621	1,401
Minnesota	219	634	234	119	886	595
Mississippi	116	525	272	33	353	219
Missouri	376	984	300	146	1,189	610
Montana	393	710	97	51	154	54
Nebraska	200	509	95	50	391	174
Nevada	14	128	47	3	349	309
New Hampshire	55	161	51	107	309	152
New Jersey	0	0	0	550	2,222	1,306
New Mexico	65	338	97	24	382	224
New York	47	230	110	296	3,114	2,378
North Carolina	72	763	410	45	1,274	887
North Dakota	171	354	51	43	160	54
Ohio	63	362	154	178	1,771	981
Oklahoma	394	1,002	247	148	816	374
Oregon	103	388	120	92	798	422
Pennsylvania	133	607	281	367	2,456	1,485
Rhode Island	6	29	12	30	280	145
South Carolina	41	359	192	43	713	481
South Dakota	143	550	68	30	166	59
Tennessee	91	562	266	46	1,017	632
Texas	605	1,701	591	434	4,909	3,519
Utah	30	272	119	10	447	361
Vermont	196	236	63	39	62	29
Virginia	69	458	200	63	1,361	962
Washington	170	488	164	126	1,396	845
West Virginia	39	384	128	16	367	154
Wisconsin	248	864	274	178	1,171	601
Wyoming	45	287	62	3	76	26

Data Source: National Center for Education Statistics, Common Core Data

TABLE 4: Definition #5

Rural Service Areas and Metropolitan Service Areas; Estimated Number of School Districts, School Buildings, and Enrollment, 2000-01 by State

	RURAL SERVICE AREA			METROPOLITAN SERVICE AREA		
	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01
United States	7,400	28,033	10,548	5,343	52,724	35,007
Alabama	75	535	252	53	810	474
Alaska	52	389	82	1	83	50
Arizona	138	457	195	69	827	646
Arkansas	249	706	242	61	416	207
California	268	770	343	692	6,704	5,600
Colorado	120	481	131	54	1,053	608
Connecticut	38	100	46	128	868	498
Delaware	11	74	43	5	87	62
District of Columbia	0	0	0	1	150	68
Florida	35	450	273	32	2,609	2,227
Georgia	135	787	530	45	1,153	941
Hawaii	0	0	0	1	275	185
Idaho	109	510	191	3	85	55
Illinois	390	1,110	325	499	2,809	1,720
Indiana	145	648	294	140	1,162	693
Iowa	304	998	264	67	476	222
Kansas	256	916	225	48	515	245
Kentucky	140	812	381	36	452	274
Louisiana	46	570	239	20	812	486
Maine	81	282	71	55	280	108
Maryland	12	205	124	12	1,039	737
Massachusetts	12	53	26	177	1,423	764
Michigan	242	792	295	312	2,550	1,368
Minnesota	234	686	257	104	834	572
Mississippi	129	629	331	20	249	160
Missouri	395	1,048	325	127	1,125	585
Montana	412	765	116	32	99	35
Nebraska	231	629	132	19	271	137
Nevada	15	145	53	2	332	304
New Hampshire	94	246	75	68	224	128
New Jersey	79	184	125	471	2,038	1,181
New Mexico	81	512	181	8	208	140
New York	64	322	155	279	3,022	2,333
North Carolina	87	1,066	611	30	971	685
North Dakota	182	389	60	32	125	45
Ohio	75	440	188	166	1,693	947
Oklahoma	379	974	240	163	844	381
Oregon	133	542	187	62	644	354
Pennsylvania	151	720	329	349	2,343	1,437
Rhode Island	6	29	12	30	280	145
South Carolina	53	515	296	31	557	377
South Dakota	159	609	81	14	107	46
Tennessee	99	681	329	38	898	569
Texas	633	1,824	655	406	4,786	3,455
Utah	29	256	110	11	463	371
Vermont	211	253	71	24	45	22
Virginia	82	642	317	50	1,177	845
Washington	180	534	186	116	1,350	823
West Virginia	44	515	186	11	236	96
Wisconsin	258	908	291	168	1,127	584
Wyoming	47	325	76	1	38	12

Data Source: National Center for Education Statistics, Common Core Data

TABLE 5: Definition #6

USDA Rural Utility Service (RUS) Broadband Program Eligibility; Estimated Number of School Districts, School Buildings, and Enrollment, 2000-01 by State

	ELIGIBLE FOR RUS PROGRAM			INELIGIBLE FOR RUS PROGRAM		
	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01
United States	6,184	21,375	7,192	6,559	59,382	38,363
Alabama	67	455	209	61	890	518
Alaska	49	342	60	4	130	72
Arizona	46	143	53	161	1,141	787
Arkansas	218	592	193	92	530	256
California	141	363	112	819	7,111	5,831
Colorado	120	449	115	54	1,085	625
Connecticut	0	0	0	166	968	544
Delaware	6	34	20	10	127	86
District of Columbia	0	0	0	1	150	68
Florida	31	294	152	36	2,765	2,348
Georgia	119	549	357	61	1,391	1,114
Hawaii	0	0	0	1	275	185
Idaho	77	312	92	35	283	154
Illinois	334	887	244	555	3,032	1,801
Indiana	129	534	235	156	1,276	752
Iowa	276	864	210	95	610	276
Kansas	230	750	158	74	681	312
Kentucky	125	695	313	51	569	341
Louisiana	39	416	172	27	966	553
Maine	80	274	72	56	288	107
Maryland	8	96	48	16	1,148	813
Massachusetts	1	3	1	188	1,473	790
Michigan	241	786	289	313	2,556	1,373
Minnesota	211	593	211	127	927	618
Mississippi	109	472	245	40	406	246
Missouri	361	922	273	161	1,251	637
Montana	364	642	78	80	222	74
Nebraska	190	458	83	60	442	186
Nevada	13	119	39	4	358	318
New Hampshire	66	159	43	96	311	160
New Jersey	0	0	0	550	2,222	1,306
New Mexico	51	235	57	38	485	263
New York	42	190	86	301	3,154	2,402
North Carolina	67	653	340	50	1,384	956
North Dakota	171	354	51	43	160	54
Ohio	49	258	111	192	1,875	1,024
Oklahoma	347	833	189	195	985	433
Oregon	90	295	87	105	891	455
Pennsylvania	131	605	280	369	2,458	1,487
Rhode Island	0	0	0	36	309	157
South Carolina	40	335	175	44	737	498
South Dakota	148	572	71	25	144	56
Tennessee	89	536	249	48	1,043	649
Texas	562	1,524	506	477	5,086	3,604
Utah	24	180	63	16	539	417
Vermont	196	236	63	39	62	29
Virginia	68	479	212	64	1,340	950
Washington	137	366	113	159	1,518	896
West Virginia	42	455	157	13	296	125
Wisconsin	235	797	246	191	1,238	629
Wyoming	44	269	58	4	94	30

Data Source: National Center for Education Statistics, Common Core Data

TABLE 6: Definition #8

Non-Urbanized; Estimated Number of School Districts, School Buildings, and Enrollment, 2000-01 by State

	NON-URBANIZED			URBANIZED		
	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01	Estimated # School Districts, 2000-01	Estimated # School Buildings, 2000-01	Estimated Enrollment, (1,000), 2000-01
United States	8,636	30,131	10,831	4,103	50,632	34,724
Alabama	82	557	267	46	788	460
Alaska	51	369	68	2	114	65
Arizona	150	417	154	57	867	687
Arkansas	276	780	267	34	342	182
California	478	1,252	533	480	6,220	5,410
Colorado	143	521	135	31	1,013	604
Connecticut	38	83	36	128	885	508
Delaware	6	37	23	10	124	83
District of Columbia	0	0	0	1	150	68
Florida	31	317	162	36	2,742	2,338
Georgia	128	625	406	52	1,315	1,065
Hawaii	0	0	0	1	275	185
Idaho	98	377	113	14	218	133
Illinois	485	1,321	383	404	2,598	1,662
Indiana	183	762	344	102	1,048	643
Iowa	336	1,098	289	35	376	197
Kansas	280	1,008	251	24	423	219
Kentucky	141	804	371	35	460	284
Louisiana	42	482	198	24	900	527
Maine	112	415	118	24	147	61
Maryland	11	150	82	13	1,094	779
Massachusetts	9	27	10	180	1,449	781
Michigan	336	1,149	442	218	2,193	1,221
Minnesota	281	841	331	57	679	498
Mississippi	127	609	320	22	269	171
Missouri	450	1,205	381	72	968	529
Montana	427	779	111	16	84	41
Nebraska	237	644	137	12	254	131
Nevada	12	109	30	5	368	327
New Hampshire	118	298	94	44	172	109
New Jersey	70	111	46	480	2,111	1,260
New Mexico	79	454	148	10	266	172
New York	92	431	210	251	2,913	2,278
North Carolina	77	820	442	40	1,217	854
North Dakota	209	433	66	5	81	39
Ohio	95	541	233	146	1,592	903
Oklahoma	499	1,300	343	43	518	279
Oregon	155	574	185	40	612	357
Pennsylvania	205	896	418	295	2,167	1,348
Rhode Island	5	16	8	31	293	148
South Carolina	49	357	192	35	715	481
South Dakota	165	626	83	8	90	44
Tennessee	103	647	311	34	932	587
Texas	822	2,488	930	217	4,122	3,180
Utah	26	192	71	14	527	410
Vermont	222	264	74	13	34	19
Virginia	79	520	233	53	1,299	929
Washington	205	586	201	91	1,298	809
West Virginia	43	454	162	12	297	121
Wisconsin	322	1,091	359	104	944	516
Wyoming	46	294	63	2	69	25

Data Source: National Center for Education Statistics, Common Core Data

TABLE 7: Definition Summary

	<u>Definition #1:</u> RUCAs	<u>Definition #2:</u> USDA, ERS Rural Areas Based on Census Tracts	<u>Definition #3:</u> County Population Density Below 100 Persons Per Square Mile	<u>Definition #4:</u> BEA Non-Nodal Counties
Does the Definition Meet the Simplicity Criteria?	No	No	Yes	No
Does the Definition Meeting the Accuracy Criteria?	Yes	Yes	No	No
Can Definition Identify Rural School Districts?	No	No	No	No
Estimated Total # School Districts, 2000-01	Cannot Be Determined	Cannot Be Determined	7,272	6,728
Estimated Total # School Buildings, 2000-01	Cannot Be Determined	Cannot Be Determined	26,971	23,991
Avg. # Buildings per District	Cannot Be Determined	Cannot Be Determined	3.7	3.6
Estimated Total Student Enrollment (1,000), 2000-01	Cannot Be Determined	Cannot Be Determined	10,105	8,390
Avg. Enrollment per Building	Cannot Be Determined	Cannot Be Determined	375	350
Is the Definition Recommended?	No	No	No	No

	<u>Definition #5:</u> Rural Service Areas	<u>Definition #6:</u> USDA, RUS Broadband Program Eligibility	<u>Definition #7:</u> Census Tracts Outside 10 Miles of a Place with More than 2,500 Residents	<u>Definition #8:</u> Non-Urbanized School Districts
Does the Definition Meet the Simplicity Criteria?	No	No	No	Yes
Does the Definition Meeting the Accuracy Criteria?	No	Yes	Yes	Yes
Can Definition Identify Rural School Districts?	No	No	No	Yes
Estimated Total # School Districts, 2000-01	7,400	6,184	Cannot Be Determined	8,636
Estimated Total # School Buildings, 2000-01	28,033	21,375	Cannot Be Determined	30,131
Avg. # Buildings per District	3.8	3.5	Cannot Be Determined	3.5
Estimated Total Student Enrollment (1,000), 2000-01	10,548	7,192	Cannot Be Determined	10,831
Avg. Enrollment per Building	376	336	Cannot Be Determined	359
Is the Definition Recommended?	No	No	No	Yes

Should current rural areas be “grandfathered” as rural if the adopted system moves them to urban?

No, the definition of rural that we propose could not allow for the grandfathering of currently rural counties. The current definition is based on 1990 census data and using data that is 14 years old would not provide realistic picture of how rural or urban an area currently is. Furthermore, we don't believe the current definition ever gave a true picture for rural and urban districts in the country, and therefore there is not reason to extend the life of an inaccurate definition.

What effect would any suggested change specifically have on schools and libraries, with numbers and descriptions?

While we do not yet know the nationwide impact of this proposed definition compared to the current definition, we can provide impact data for a few states. In Pennsylvania, 140 districts are located in so-called "rural" counties under the current definition, while 205 districts would be considered "non-urbanized" or rural under the proposed definition. We do not believe other states would see as drastic a change as Pennsylvania due to the fact that the current definition so grossly misclassifies nine of Pennsylvania's 67 counties. Other states, where the current MSA definition more accurately reflected their ruralness, would not have as many districts switching from the urban category to the rural category. For example, West Virginia would have the same number of rural and urban districts, and Virginia actually would have five districts move from rural to urban.

We realize that any state that has a net loss of rural districts will likely not favor this proposed definition. But we urge the Commission to look at the accuracy of this or any other proposed definition, as opposed to the resulting impact on individual states. We believe it makes no sense to continue to use a definition that does not reflect the true rural makeup of district simply to appease individual parties.

F. Eligibility of Bundled Content

Would expanding the definition to allow access to bundled content simplify and streamline program administration? If this is done, how will it affect the amount of funding for Priority 1 services and thus impact the amount remaining for Priority 2?

We recommend that content remain an ineligible service and that the Commission require such costs to be broken out on bills. This is no different than any ineligible service being bundled with an eligible service. If the Commission permits such combinations, applicants and particularly providers will try to bundle hundreds of ineligible items with eligible items under the condition of, "it is impossible for us to unbundled them." We urge the Commission to not start down this slippery slope.

G. Wide Area Networks

Should an upfront non-recurring charge for a capital investment of over \$500,000 be prorated over 5 years instead of 3?

It has been our experience that in cases where infrastructure charges modestly exceed \$500,000, the service providers have graciously extended the three-year amortization schedule to the non-discounted charges as well. We do not believe they will be as generous if the amortization schedule is dragged to five years. We propose a compromise between the current and proposed rules. If the infrastructure costs range from \$500,000 - \$1 million, the costs must be amortized over three years. If the infrastructure costs exceed \$1 million, the costs must be amortized over at least 5 years.

We would like to bring to the Commission's attention that many in the E-rate program use the terms 'one-time costs or non-recurring costs' and 'infrastructure costs' interchangeably, when, in fact, they could mean two entirely different things. In many cases, service providers will propose a funding structure that greatly reduces the monthly costs but charging a large, one-time cost at the beginning of the contract. In some cases, this fee is needed to support infrastructure build-out, and in other cases it is simply a lump sum payment.

H. Recovery of Funds

Should rules be adopted to recover funds disbursed in violation of statutory and/or programmatic regulations?

We understand the need to recover funding from applicants and/or service providers when funding has been committed in error, but we caution the Commission to not judge all funding errors alike. In cases where blatant and deliberate abuse of program funds has occurred after funding was committed, or where requests for discounts were deliberately misrepresented in order to dupe the PIA reviewers, we believe applicants and/or service providers should be responsible for repaying the fund.

In terms of how such program abusers should be treated on an on-going basis, we believe this should be handled on a case-by-case basis. The easy answer is that program abusers should be put on either a suspended list or have their applications put in E-rate purgatory known as Selective Review for years to come. But it has been our experience that in cases where applicants have abused or committed fraud on the program, all bad actors participating in the fraud were immediately dismissed and a new team was brought in to help the applicant recover from the actions, and ensure that future applications are above reproach.

When SLD is Responsible

Keep in mind that it is not uncommon for the SLD to be the culprit by improperly funds applications, through no fault of the applicant. In most cases, services have begun and/or equipment has been delivered, and use of the intended service/equipment has begun by the time the mistake is realized. Where the SLD, through their own research or through an audit, realizes they have committed funding in error, we do not believe it is fair to make the applicant repay the fund when services have begun and/or equipment has been installed. There must be a line in the sand by which applicants can be assured that a funding commitment letter is just that – a commitment. Applicants currently have little or no confidence in the E-rate application/funding process. This feeling is further exacerbated by knowing that their SLD “commitment” can be revoked at any time, even years later. With ever changing eligibility lists and rules, it is inconceivable that an applicant should be required to repay the fund when the FRN was mistakenly approved by the SLD.

In cases where a mistake is made and is approved an FRN pertaining to a multi-year contract, we would expect the SLD to contact the applicant to explain the error, tell them that their current year’s funding will be held harmless, but that the service and/or contract and/or application as it was submitted will not be approved in future years unless modifications are made. This will provide the applicant with enough time to renegotiate their contract or made positive changes to their future E-rate applications in order to ensure that the application is approved prospectively.

I. Consultants and Outside Experts.

Should applicants be required to identify any consultant that aids in the preparation of the technology plan or in procurement? Should consultants be required to register with USAC and disclose any conflicts of interest? Should all entities that act as service providers be barred from bidding on any eligible services for any applicant to whom they provide technical assistance of any type?

In Pennsylvania, we see few, if any, such conflicts of interest between consultants/service providers and technology planning and competitive bidding. Where service providers are involved with technology planning, it is likely due to the fact that districts often have little technological expertise in-house and rely on service providers to educate them on the most current technology available, or what various technology solutions exist. We don’t believe this is anti-competitive or results in the raising of pre-discount prices.

While we are inclined to generally agree that outside consultants that assist applicants with technology planning and RFP development should not be permitted to submit bids for those same applicant’s

services, we know there must be exceptions to this rule. In Pennsylvania, there are regional service agencies, called Intermediate Units, which provide various services, including E-rate assistance and technology planning, to districts. In a few cases, they also are Internet Service Providers and have E-rate SPINs in order for them to bid on their districts' Form 470s. In those cases, there is a perceived conflict of interest, but in reality, Intermediate Units exist to provide a wide range of value-added services to districts, including E-rate assistance and providing cost-effective services such as Internet Access. In the end, the E-rate program is benefiting from the services these IUs provide because costs are kept low and applicants aren't receiving tainted technology planning advice.

And finally, we believe that having consultants include their name and contact information on the district's applications is a sound, ethical practice which may provide the SLD with a system to track unscrupulous consultants. We doubt, however, that it will result in the change of any consultants' current unworthy business practices.

J. Use of Surveys to Determine School Lunch Eligibility.

Should the 50% reply rate required for projecting discount levels from a survey be codified? Should the response rate be lowered? Should the response rate depend upon the size of the population being surveyed? How can program administration of this process be streamlined?

We have found that when surveys are sent to families in a particular school, achieving a 50% response rate is difficult. In fact, it has been our experience that in every situation where a survey is conducted, the school or district needed to conduct additional outreach to achieve the 50% response, either through the use of volunteer or temp employees to make calls to random houses, or through a follow-up survey. We urge the Commission to not raise the 50% response rate requirement. We further urge the Commission to codify that survey results may be used for two E-rate program years. This has been the practice, and has been presented as practice at the annual Train the Trainers workshops, but it is not listed on the SLD's website and thus has created some concern where we believe there should be none.

Although we have not witnessed this problem, we believe there is room for abuse of the survey discount mechanism when applicants issue the survey in connection with another needs-based, that requires only the poorest families to return the survey. In those cases, the applicant would be sending surveys to all families and asking that they all be returned, but in essence knowing that only the poorest families will return the survey. The SLD should revise the survey guidance to make it explicit that such "double surveying" is not permitted unless all surveys are required to be returned by all families, as opposed to just the poorest ones.

K. Reversal of SLD's 30% Unsubstantiated Rule

The SLD's current implementation of the 30% ineligible rule that denies applicants who include a dollar amount on their application that is more than their Item 21 attachments show, is unfair and contrary to all 30% ineligible policies for Funding Years 1 - 5. In previously filed NPRM Comments, the State E-rate Coordinators' Alliance (SECA) clearly spells out the issue at hand:

The Alliance submits that this implementation of the "30 Percent Policy" - one which punishes miscalculations and legitimate errors in estimating future costs - is contrary to the program's goals and does little to support its efforts to address waste, fraud and abuse. The program has several other internal checks and balances to assure that only legitimate costs are funded, including checks at the 486, BEAR, SPIF and other reviews that substantiate and re-affirm actual expenses. Also, service providers and applicants are fully aware that they are subject to post-BEAR audit reviews to substantiate any dispersed funds.

In its continuing efforts to address waste, fraud, and abuse, the FCC should continue to allow the Administrator some limited latitude to deny entire funding requests where they believe blatant price inflation has occurred. However, to intentionally deny applicants in the "30% unsubstantiated" group their rightful funding - due to simple mistakes for which applicants are quickly willing to correct - is contrary to the goals of the Telecommunications Act. The Administrator's past practice was much more appropriate - reviewers lowered the request to the substantiated amount of eligible services - miscalculations and mathematical errors were adjusted and remedied in the review process.

We urge the Commission to reverse this policy and revert back to prior years' policy that was to deny an FRN if 30% or more of the FRN was for *ineligible* services.

L. Timely Issuance of Appeals Decisions and Invoice Payments

Appeal Decisions

While we appreciate the SLD's and FCC's recent attempts to reduce the backlog of appeals from previous years, we still are extremely concerned at the length of time it takes for any appeal to be considered and, if meritorious, ultimately funded. Receiving a funding commitment letter before the

funding year begins is as imperative during the appeal process as it is during the regular wave cycles. The current reality is that it takes a year or more for an appeal, from either the FCC or SLD, to be decided.

For any applicant with priority 1 services that are contingent upon E-rate funding, this delay means that the FRN is effectually denied, regardless of the administrator or Commission's ultimate decision, because the funding year for which the services were going to be used will have ended. Long delays also routinely result in the need for subsequent requests for service substitutions and SPIN changes, thus adding an additional 3-4 months to the original appeal process.

We believe that in a program where applicants are given very narrow windows to file forms and appeals, there should be similar rules on appeal decisions and funding, such as 60 days for a decision. It is not a bragging point to say that only a few hundred appeals are over 90 days old. Incredible emphasis is being placed on technology plans, but apparently with little or no regard with how difficult it is to implement a curriculum based on a three-year technology plan when one or more of the services included in an appeal is on hold for more than a year. This is in addition to the difficulties that are created in submitting next year's applications when the applicant has not heard about the current year's appeal.

Invoice Payments

When vendors originally agreed to participate in the program, most did so with the understanding that the normal 30-day payment period for a typical invoice would not be met. Similarly, applicants that chose to or were required to pay their service provider invoices in full and seek reimbursement from the fund understood they would have to float those funds until reimbursement was made, which was typically expressed to applicants as 6-8 weeks. In fact, in the first four years of the program, service provider invoice payments and BEAR payments typically were made within 45-60 days of submission to USAC.

Within the past six months, we have noticed an extremely long delay in remittance payments from USAC to both service providers and applicants. Many applicants that submitted BEAR forms in early October 2003 still have not received BEAR Approval Letters as of March 2004. While we understand the increased focus on invoice review to ensure program integrity, we are extremely concerned with the consequences that such delayed payments are imposing. It has come to our attention that certain service providers have threatened to significantly increase future service costs due to the extended floating of such significant amounts due to E-rate delays. In addition, invoice payment delays are placing a hardship on applicants, particularly poorer schools and libraries, that are relying on the reimbursement checks to restore their cash balances or purchase additional technology services or equipment.

To rectify both the delays in appeal decisions and delays in invoice processing, we ask that the Commission direct the SLD to expend a small portion of their cash reserves to hire additional staff – in addition to the staff hired in fall 2003 – to process appeals and invoices with the goal of having both executed within 60 calendar days. To have funding commitment decision letters issued in a timely manner is a laudable goal. The SLD must be afforded the opportunity through additional staff to also process appeals and invoices in an equally as expeditious manner.

M. Sharing of Unused Bandwidth

In the Commission's previous NPRM, they requested comments on the issue of sharing unused bandwidth. We applaud the Commission for broaching this difficult issue, as it is one that many schools have raised since the inception of the E-rate program, and we again offer our support for a pilot program to test such a policy. The question we receive from districts is, in essence, what would be the harm of sharing unused bandwidth with community centers, for example, if no additional costs were imposed on to the fund? In addition to the issue of wasted bandwidth, many networks and educational institutions are trying to provide an education environment where students can access files and work after the school doors close.

For example, one large urban district in Pennsylvania is trying to provide a seamless educational environment in order for students to leave school at regular time and go to the local community center to gain access to the computer files stored on the District's network. Under the current rules, the District will have to cost-allocate a portion of their E-rate request for the ineligible locations. The question that is asked by the District and other applicants on a regular basis is, "why should we have to reduce our funding request when this bandwidth is just sitting idle after the school day ends anyway?"

With the proper safeguards in place, we support the concept of being able to share E-rate discounted bandwidth with certain non-eligible entities during off-school hours as long as the bandwidth is used for educational purposes. Those safeguards, however, will be the key to ensuring that demand to the fund is not increased due to this provision, and that the entity does not initially request more than it needs for educational purposes.

We agree that these safeguards, as the Commission suggests, should include:

- That the school or library request only as much discounts for services as are reasonably necessary for educational purposes;
- The additional use would not impose any additional costs on the schools and libraries program;

- The services to be used by the community would be sold on the basis of a price that is not usage sensitive; and
- The use should be limited to times when the school is not using the services.

Further, we suggest the Commission consider that the entities receiving this excess bandwidth be non-profit entities with a robust educational program, and be considered on a case-by-case basis by the SLD. Of course, equipment needed to connect these entities to the network would not be E-rate eligible in any way.

As far as how to ensure that the fund is not adversely affected, we suggest a condition that applicants filing to share excess bandwidth show payment records from previous years as proof that their current request was not increased because of their intention to share their bandwidth.

As the Commission is searching for a way to control waste of program funds, we hope they also will consider there is a waste of the services that the program is funding, that is, bandwidth that is not being used between the hours of 3 p.m. and 8 a.m. We urge the Commission to consider a limited pilot project for sharing excess bandwidth, with extremely tight oversight and rules.

SUMMARY OF RECOMMENDATIONS

Changes to the Discount Matrix

- We urge the Commission to adjust the discount matrix so the maximum discount permitted for priority two services is 70%.
- We propose a new tertiary priority of funding be instituted for non-essential equipment purchases, installation and maintenance, such as video and voice equipment, and the replacement of any equipment, until all eligible applicants are wired to the classroom level.
- The 2/5 rule should not be implemented alone; rather, it must be implemented with a significant change in the discount matrix.

Competitive Bidding/Form 470 Reforms

- The competitive bidding requirement pendulum needs to shift from the blanket 470 process that is required of all applicants for all services, regardless of their size, to a Form 470 requirement for all priority 1 services over a certain dollar threshold and a Form 470/bid solicitation requirement for all internal connections services and equipment.

Record Keeping Requirements

- We believe that additional record keeping requirements would discourage vendors from submitting proposals to districts because it would be seen as one additional burden to the current requirements, forms, timelines and delays in payments. Also, local vendors responding to an RFP would have no idea that they are submitting a bid for an E-rate proposal when they see it in the local paper and therefore would have no idea they were falling under a new federal requirement in terms of record-keeping.

Technology Planning Requirements

We, as most states, are concerned that the SLD's technology plan requirements were changed without notice, are not consistent with plans required by the US Department of Education, and are out of step with the solid technology planning efforts that many states, including Pennsylvania, have taken in recent years. Therefore:

- We urge the Commission to clarify that states should be provided maximum flexibility for technology plan development and that applicants are encouraged, but not required, to have their technology plans completed by the time the 470 is posted.
- We urge the Commission to recognize that certain services, such as Centrex and voice mail, are not services that districts normally included in their technology plans, and to drop this level of requirement. Without such recognition, applicants are subject to a negative audit finding or denial of their applications.
- We encourage the Commission and SLD to work with the states in developing realistic technology planning requirements and not attempt to impose penalties on states that have approved technology plans that are not deemed "acceptable" by the SLD.

Definition of Rural Areas

- We believe the Commission should adopt a definition of rural and urban at the school district level, rather than at the county, or school building level. Furthermore, any definition adopted by the Commission should be easy to understand and reflect the spatial character of the school district. The definition which best meets these criteria is the U.S. Census Bureau's 2000 Urbanized Area definition.

Eligibility of Bundled Content

- We recommend that content remain an ineligible service and that the Commission require such costs to be broken out on bills.

Recovery of Infrastructure Investments

- We propose a compromise between the current and proposed rules. If the infrastructure costs range from \$500,000 - \$1 million, the costs must be amortized over three years. If the infrastructure costs exceed \$1 million, the costs must be amortized over at least 5 years.

Recovery of Funds

- In cases where blatant and deliberate abuse of program funds has occurred after funding was committed, or where requests for discounts were deliberately misrepresented in order to dupe the PIA reviewers, we believe applicants and/or service providers should be responsible for repaying the fund.
- Where the SLD, however, through their own research or through an audit, realizes they have committed funding in error, we do not believe it is fair to make the applicant repay the fund when services have begun and/or equipment has been installed. There must be a line in the sand by which applicants can be assured that a funding commitment letter is just that – a commitment.

Consultants and Conflicts of Interest

- Where service providers are involved with technology planning, it is likely due to the fact that districts often have little technological expertise in-house and rely on service providers to educate them on the most current technology available, or what various technology solutions exist. We don't believe this is anti-competitive or results in the raising of pre-discount prices.

National School Lunch Program Eligibility Survey

- It has been our experience that in every situation where a survey is conducted, the school or district needed to conduct additional outreach to achieve the 50% response, either through the use of volunteer or temp employment callers to random houses, or through a follow-up survey. We therefore urge the Commission to not raise the 50% response rate requirement.
- We further urge the Commission to codify that survey results may be used for two E-rate program years.

30% Unsubstantiated Rule

- We urge the Commission to reverse the 30% unsubstantiated policy and revert back to the prior years' policy that was to deny an FRN if 30% or more of the FRN was for *ineligible* services.

Timely Issuance of Appeals Decisions and Invoice Payments

- We believe that in a program where applicants are given very narrow windows to file forms and appeals, there should be similar rules on appeal decisions and funding, such as 60 days for an appeal decision or invoice submission. We ask that the Commission direct the SLD to expend a small portion of their cash reserves to hire additional staff – in addition to the staff hired in fall 2003 – to process appeals and invoices in an expeditious manner.

Sharing of Unused Bandwidth for Educational Purposes

- We support the concept of being able to share E-rate discounted bandwidth with certain non-eligible entities during off-school hours as long as the bandwidth is used for educational purposes. We urge the Commission to consider a limited pilot project, on a case-by-case basis, with extremely tight oversight and rules.

We look forward to continued dialogue with the Commission on the suggestions made in these comments and stand ready to answer any questions you may have.

Respectfully submitted,

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