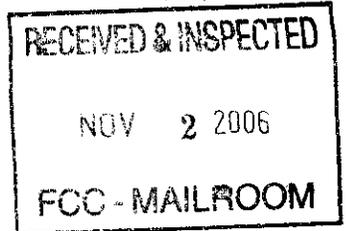




EX PARTE OR LATE FILED



THE SENIORS COALITION

Working for a Responsible America

DOCKET FILE COPY ORIGINAL

ORIGINAL

October 23, 2006

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445-12th Street SW
Washington, DC 20054

ORIGINAL

Re: EX PARTE PRESENTATION
Federal-State Joint Board on Universal Service Fund: CC Docket No. 96-45

Dear Ms. Dortch:

On October 5, 2006, the following members of The Senior Coalition met with Commissioner McDowell, John W. Hunter Chief of Staff & Senior Legal Advisor for Commissioner McDowell, and Ms. Angela E. Giancarlo Legal Advisor for Commissioner McDowell; Mac Haddow Chairman the Senior Coalition Advisory Council, and Phillip Theodosiou Director of Government Affairs. The subject discussed was the Universal Service Fund, the "Federal Phone Taxes and America's Seniors" and Dr. Thomas W. Hazlett "What Does \$7 Billion Buy?" Enclosed herein, please find true copies of the aforementioned documents.

The purpose of said meeting was to discuss a pending proposal to modify the current universal service contribution mechanism by using working telephone numbers rather than interstate telecommunications service revenue as the basis for assessing Universal Service contribution obligations. We discussed the grave concerns and its impact on the millions (16,000,000 consumers) of seniors who do not make long distance calls in any given month (information provided by the Florida Public Service Commission). It is also important to note that these seniors have a cell phone for emergencies and not for everyday use. Additionally we pointed out that it is appropriate to consider the concerns of the consumer on this issue because it is consumers who pay the universal service fund fee, not the industry, which has been largely isolated in its support for "numbers."

In strongly advising that any discussion on the USF contributions include actual consumer input, we explained that, among those who will be most negatively impacted by the shift to numbers, are seniors, the disabled, minorities, low income and rural

2+1

Americans. Millions of the most financially vulnerable Americans would see their phone tax go up under the plan. Voicing our concerns, we are not alone on this issue. Among the others who have expressed concern about the impact of the shift to a numbers-based contribution approach are the AARP and numerous large and small colleges and universities across the country. Our recommendation is to utilize the "Reverse Option" to reduce outlays and the regulatory fees/taxes that would impact seniors, low-volume users and minorities most profoundly.

We thank Commissioner McDowell and his staff for their time and assistance in providing us time to be heard on this most important issue. The discussion was candid and informative as to our position and recommendations.

Pursuant to section 1.1206(b) (2) of the Commission's rules, this letter is being filed manually in the record of the above-referenced proceeding. Please do not hesitate to contact me at (703)-631-4211, ext. 4476 or my mobile phone @ (571)-212-9480.

With kind regard, I am

Respectfully,



Phillip Theodosiou
Director of Government Affairs

Enclosure

cc: Tom Moore, C.O.O.

“UNIVERSAL SERVICE” TELEPHONE SUBSIDIES: WHAT DOES \$7 BILLION BUY?

Thomas W. Hazlett*

June 2006

The “universal service” regime ostensibly extends local phone service to consumers who could not otherwise afford it. To achieve this goal, some \$7 billion annually is raised – up from less than \$4 billion in 1998 – by taxing telecommunications users. Yet, benefits are largely distributed to shareholders of rural telephone companies, not consumers, and fail – on net – to extend network access. Rather, the incentives created by these subsidies encourage widespread inefficiency and block adoption of advanced technologies – such as wireless, satellite, and Internet-based services – that could provide superior voice and data links at a fraction of the cost of traditional fixed-line networks. Ironically, subsidy payments are rising even as fixed-line phone subscribership falls, and as the emergence of competitive wireless and broadband networks make traditional universal service concepts obsolete. Unless policies are reformed to reflect current market realities, tax increases will continue to undermine the very goals “universal service” is said to advance.

* Professor of Law & Economics and Director, Information Economy Project, George Mason University; and Senior Advisor to the Analysis Group. This study has been undertaken on behalf of the Seniors Coalition. Coleman Bazelon of the Analysis Group provided excellent research support. The views expressed herein are solely those of the author, who retains liability for conclusions, errors or omissions.

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EXECUTIVE SUMMARY

Universal Service Fund (USF) expenditures – now nearly \$7 billion annually, up from less than \$4 billion in 1998 – are driving telecommunications taxes ever higher. Growth in the USF stems primarily from rising payments to rural phone carriers labeled “High-Cost support,” where annual payments mushroomed from \$1.7 billion in 1998 to \$3.7 billion in 2005. These rising expenditures, in turn, are driven by increasingly expensive (per-line) payments to high cost rural phone carriers and by new payments to wireless phone carriers now qualifying as recipients of such funds.

High-Cost Fund (HCF) payments are distributed in a manner that encourages rural phone carriers (RLECs) to be inefficiently small. RLECs tend, as a result, to be extremely expensive to operate, even as they are highly profitable. HCF subsidies are as much as *\$13,000 per year per line*, a remarkable outcome given that retail satellite phone service is available nationwide for about \$800 annually. Corporate overhead is vastly inflated under this system, where taxpayers fund cost overruns. Scores of RLECs incur over *\$500 per line in annual administrative expense* (costs unrelated to the higher capital expenditures often required in sparsely populated areas), more than what a typical U.S. mobile phone customer pays in *total annual charges*.

Uneconomic operations are a predictable outcome of taxpayer financing on a “cost-plus” basis. In fact, *only 27% of RLEC revenues come directly from customers paying for local access*, less than that contributed by USF monies. Using standard mobile and satellite phone subscriptions to provide service to residents in outlying areas could be achieved far less expensively than what is currently purchased wholesale with taxpayers’ money. Annual savings of at least \$1 billion are easily achievable.

Current annual payments of nearly four billion HCF dollars to rural telephone companies increase RLEC shareholder wealth, but do not help consumers, low income or otherwise. To the extent that local telephone service in high-cost areas is offered to customers at reduced retail prices, other costs – most notably, residential rents – rise by an offsetting amount. Property owners may gain, but consumers are excluded.

That telephone networks are improved via subsidies for traditional fixed-line coverage is an idea eclipsed by history. Competitive alternatives, including wireless and broadband, are today available to more than 95% of U.S. households – the threshold level of coverage achieved by decades of universal service subsidies. Targeting universal service subsidies to those few households lacking access to communications networks would produce substantial social savings, as would be expected from a system that spends more than *an estimated \$5,000 per year for each incremental phone connection*.

The E-Rate program generously funds computers and computer network connections in educational institutions, using about \$2.2 billion of the USF annually. Much of this spending would likely take place without the program, especially in higher income areas, and lax oversight results in gold-plated systems and fraud. More generally, research on student achievement suggests that E-Rate program benefits are illusory.

High Cost Fund payments flow, in the main, to shareholders of telephone companies serving relatively few customers in rural areas. These carriers, heavy recipients of taxpayer dollars, maintain a keen interest in supporting current policies. Moreover, subsidies are concentrated in a few sparsely populated states that exercise disproportionate political influence. The result is that universal service policies diverge, more and more, from the interests of the general public.

To pay for the Universal Service Fund, the tax rate applied to long distance revenues has skyrocketed from 3.2% in 1998 to its recent level of 10.9%. This has prompted widespread interest in restructuring the USF tax, expanding the base to cover additional sources of telecommunications spending. But there are no free lunches. Moving to a monthly fee on telephone numbers, for instance, would dramatically raise the tax burden on persons or institutions currently using little or no interstate long distance services such as prepaid wireless customers and colleges and universities. This would limit access to telephone service – a perverse outcome for “universal service” policy.

Reforms that accommodate further spending increases in the USF are recipes for disaster. Raising telecommunications taxes is precisely the reverse of what policy makers should be doing, as this dynamic sector supplies crucial infrastructure enabling productivity growth economy-wide.

Rather than extracting ever-greater taxes to fund failed regulatory models, a pro-consumer approach would cap and then reduce USF subsidy payments. Owing to the stark ineffectiveness of current payment schemes, this option could be smartly executed without any loss in universal service outcomes. New technologies and emerging networks allow customers in what were once high-cost areas to be served by modern telecommunications systems at a fraction of the cost of the current regime. An encouraging sign is that FCC Chairman Kevin Martin has floated the idea of competitive bidding for universal service obligations. Through such market mechanisms, inefficiencies could be slashed – a superior alternative to tax increases for telecommunications users.

I. INTRODUCTION

Alaska is a beautiful state, and its salmon fishing unsurpassed. But many Americans would be surprised to learn that they pay taxes on their telephone service to fund phone networks in the 49th state. These subsidies total over \$175 per Alaskan per year.¹ Curiosity might be further piqued when informed that those same Alaskan citizens receive annual checks for over \$1,000 per man, woman, and child, pay-outs from the State's crude oil royalties.²

Rural phone carriers are subsidized across the country, but U.S. payments average about \$12 per person,³ or 1/15 the level in Alaska. Notwithstanding the fairness of oil-rich Alaska extracting \$100 million annually from U.S. taxpayers to fund phone service while distributing some \$663 million in petrol windfalls,⁴ the scheme might not generate much controversy were the funds well spent.

The "universal service" program ostensibly extends telephone networks to additional users, particularly in high-cost rural areas. Yet, Universal Service Fund (USF) subsidies expand phone usage *less* than the taxes they require *reduce* it. This is because virtually all phone users are heavily taxed through long distance and wireless phone charges to pay for the program, discouraging many, especially low-income, families from

¹ See TABLE 9.

² "In 2003, each of the nearly 600,000 Alaska US citizens (residents of Alaska for at least one year) received a check for \$1,107 from the APF [Alaska Permanent Fund]. The total amount dispersed was \$663.2 million. The \$25 billion investment fund's core experienced stock market losses which led to the dividend's decline this past year compared to the several previous years. The amount was \$433 less, a 28 percent drop from the 2002 pay out of \$1,540, and a 44 percent decrease from the all-time high of \$1,964 in year 2000." Alanna Hartzok, *Citizen Dividends And Oil Resource Rents, A Focus on Alaska, Norway and Nigeria*, Paper delivered at the Eastern Economic Association meetings (Feb. 2004) ["Hartzok 2004"]; <http://www.earthrights.net/docs/oilrent.html>.

³ See TABLE 9.

⁴ Hartzok 2004.

using phone service and driving still others to disconnect entirely. These taxes, \$3.9 billion in 1998, are now about \$6.8 billion and (obviously) rising rapidly.⁵

Federally subsidized phone service costs taxpayers a large multiple of what the most efficient network solutions would. That is because “high-cost” subsidies are delivered not to low-income customers, but to rural phone companies, typically on a “cost-plus” basis. The more service costs, the more money the phone carrier receives – a clear incentive to *avoid* cost savings. This not only bloats administrative expenses, it undercuts market forces that would naturally lead consumers to abandon traditional fixed lines in favor of newer, cheaper, and functionally superior technologies.

Today, satellite telephone networks are available in Alaska, with retail subscriptions costing \$120 per month that include 500 minutes of airtime.⁶ That is quite expensive compared to nationwide cellular calling plans, or even lower-cost satellite subscriptions, but it is a bargain compared to what is often spent in federal “universal service” programs. Traditional fixed-line service is provided to outlying areas, courtesy of federal taxpayers, with monthly per-line *subsidies* often exceeding \$120 a month⁷ – customer charges additional. We could provide residents in such areas *free* phone service while reducing government expenditures, simply by buying satellite phones for households.

While Alaska features the highest level of per-capita federal subsidies, other states – such as Wyoming, North Dakota, South Dakota, Montana and Mississippi – also collect

⁵ See APPENDIX 1. These numbers represent the commitments of the fund for a given year. Actual taxes collected year-to-year tend to vary from the level of commitments, but ultimately all commitments are funded from USF taxes.

⁶ See TABLE 5.

⁷ See TABLE 4.

subsidies several times the national average.⁸ And phone carriers in wealthy enclaves such as Jackson Hole, Wyoming, where the boast that “the billionaires are pushing out the millionaires” applies, garner extremely high – and highly inefficient – payments. With both income and net worth above the national averages, telephone carriers in Jackson Hole received over \$282 per subscriber in subsidies from the High-Cost Fund in 2005.⁹

Perhaps the most sensational example lies in the 50th state, where the Sandwich Isles Telephone Company collects some \$13,345 a year per telephone line¹⁰ – almost *ten times* the high-cost satellite solution.

As a rule, poor people do not benefit from these lavish expenditures. To the extent that landline telephone rates are reduced below other alternatives, the price of land (as reflected in home prices and apartment rents) will rise by an offsetting amount, eliminating the gain to consumers. Money that would be spent on phone service is instead spent on rent.

But given the evolution of new competition, subsidies are less and less able to affect even this cost-shifting outcome. In rural markets, over 5% of households have already given up fixed lines to go all-wireless, just about the same proportion as in non-rural markets.¹¹ This trend is unmistakable, as the fixed-to-wireless transition is well under way. Already, there are more wireless phone subscriptions in the U.S. than fixed

⁸ See TABLE 9.

⁹ See APPENDIX 10. Jackson, WY median household income was \$47,757 in the 2000 census, with the national average \$41,994. U.S. Census Bureau; <http://quickfacts.census.gov/qfd/>.

¹⁰ See TABLE 4.

¹¹ Wireline Competition Bureau, *Trends in Telephone Service*, FEDERAL COMMUNICATIONS COMMISSION (Apr. 2005) [*“Trends in Telephone Service 2005”*], Table 16.5.

lines (at least 38 million more¹²), and most minutes of phone use are – in the average household – via wireless.¹³ In other countries, the transition is even more advanced. In Finland, a country with much rugged, rural terrain, only 64% of households maintained POTS (plain old telephone service) connections in 2004, down from about 93% in the early 1990s.¹⁴

And fixed line competitors are also on the march. Some analysts estimate that cable TV systems offer broadband service to as many as 98% of U.S. homes.¹⁵ This option yields the great majority of customers, including those in rural areas, a competitive alternative to POTS via voice-over-Internet (VoIP) service. Many phone users are actually abandoning the subsidized system of “universal service,” taking advantage of superior alternatives. Residents in Westhope, North Dakota, a town of 533 just six miles from the Canadian border witnessed this first hand.¹⁶ “[S]even months ago, Cassidy Sivertson, a 27-year-old who runs a computer business out of his home here, bailed out of the subsidized plan, which was costing him about \$165 a month. Instead, he signed up

¹² As of April 23, 2006, there were 212,842,289 U.S. wireless phone subscribers; <http://www.ctia.org/> (visited April 23, 2006). The FCC reported 174.7 million local exchange carrier loops in 2005. Federal-State Joint Board on Universal Service, *Universal Service Monitoring Report*, CC Docket No. 98-202 (2005) [“2005 Monitoring Report”] Table 3.22 and 3.29, backup file “05t3-22to30.xls”; <http://www.fcc.gov/wcb/iatd/monitor.html>. The fixed line total is declining, while the wireless subscriber base is growing rapidly.

¹³ “[T]he Yankee Group ... ‘reports that by the end of 2002, average cell phone minutes used had surpassed the average per-person household wireline minutes of use.’” Randolph J. May, *Paring FCC Sharing Rules*, THE WASHINGTON TIMES (Dec. 14, 2004), p. A14.

¹⁴ Thomas W. Hazlett, *Rivalrous Telecommunications Networks With and Without Mandatory Sharing*, AEI-BROOKINGS JOINT CENTER FOR REGULATORY STUDIES, Working Paper No. 05-07 (Mar. 2005), Table 1.

¹⁵ Research Notes 1Q 2006, LEICHTMAN RESEARCH GROUP, INC. [“Leichtman 2006”], p. 7; http://www.leichtmanresearch.com/research/notes03_2006.pdf. Others sources estimate lower levels of cable modem availability. See, for example, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of June 30, 2005*, Federal Communications Commission (Apr. 2006), Table 14; National Cable & Telecommunications Association, *In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Comments of NCTA*, MB Docket No. 05-255 (Sept. 19, 2005), p. 33.

¹⁶ Anne Marie Squeo, *Universal Battle: In Tiny Towns, New Call Options Shake Up an Old Phone System — Rivals, Technology Threaten Program Bringing Service to Remote Parts of U.S — Mr. Smith’s \$10 Lifelines*, THE WALL STREET JOURNAL (Feb. 22, 2005) [“Squeo 2005”], p. A1.

for a new Internet-based service from Vonage... [A] high-speed Internet connection and an additional toll-free line cost just \$60 a month. 'It surprises me we can have this type of service out here,' says Mr. Sivertson, who says several of his friends have made a similar change thanks to him."¹⁷

Yet owners of rural telephone companies continue to reap the financial rewards of taxpayers' largesse. They are guaranteed profits via federal payments, even if they waste money on overhead and squander opportunities to save. Several rural co-ops have paid their members annual dividends in excess of what they pay in local phone charges.¹⁸ Hence, courtesy of the Universal Service system, the owners of these rural telephone companies enjoyed free phone service, and a tip.

The obsolescence of traditional phone service is becoming apparent in rural areas, where wireless technologies – including terrestrial and satellite, fixed and mobile – are displacing wireline systems. With lower costs in low density markets, greater utility for users who prefer untethered phones, and national calling plans that price long distance minutes cheaply, this is a consumer pleasing, economy enhancing transition. However, the current Universal Service system resists this tide of efficiency, levying taxes on productive networks to reward those threatened with obsolescence.

This paper examines the trends in USF expenditures and the means by which such funds are extracted from taxpayers. Despite the fact that fixed telephone penetration is now declining, subsidies are rising – reaching nearly \$7 billion in 2005. The analysis demonstrates that:

¹⁷ Squeo 2005.

¹⁸ Paul Davidson, *Fees Paid By All Phone Customers Help Rural Phone Firms Prosper*, USA TODAY (Nov. 17, 2004) ["Davidson 2004"]; http://www.usatoday.com/money/industries/telecom/2004-11-15-phone-fees_x.htm.

- “High-cost” support is largely distributed to rural telephone companies serving a relatively small number of customers.
- Of these companies, a small number receive a high proportion of the funds; these firms, in turn, are concentrated in a small number of largely rural states.
- Many subsidized companies incur annual *corporate overhead costs* greater than \$500 per line,¹⁹ exceeding the *total subscriber cost* of a mobile phone subscription with unlimited off-peak nationwide calling offered by a *rural* wireless carrier.²⁰
- Subsidized phone service results in extremely high costs, with lines costing taxpayers at much as \$13,000 per year – an order of magnitude higher than giving away premium satellite phone subscriptions, free of charge.
- While “universal service” has failed to expand phone network access, it now taxes new competitive alternatives, threatening the very options for consumers it ostensibly aims to produce.
- The tax that funds “universal service” has mushroomed from 3.2% of long distance revenues in 1998 to 10.9% in 2006.²¹
- Alternative telecommunications taxes, such as monthly fees on phone numbers, would continue to punish a key sector driving economic growth and damage the interests of various phone users, including institutions of higher learning and low-income pre-paid wireless consumers.

¹⁹ See TABLE 3.

²⁰ For instance, Cellular One plan prices for Bear Lake, MN (zip code 55723) are as low as \$35 per month; <https://www.celloneusa.com/ECCellPortal/ECCell.portal>. Unicef plan prices for Alango, MN (zip code 55703) are as low as \$32.95 per month; <http://www.rccwireless.com/shop/plans/>.

²¹ Data for 1998-2005 Q1 are from *Trends in Telephone Service* 2005, Table 19.6; data for Q2-Q3 2005 are from the 2005 Monitoring Report, Table 1.10, and data for 2005 Q4 – 2006 Q2 are from http://www.fcc.gov/wcb/universal_service/quarter.html.

- Policies constraining the mushrooming growth of USF spending offer a pro-consumer alternative to tax increases.
- Spending restraint can be achieved without sacrificing the objectives of Universal Service, with policy makers capping and then reducing subsidies – an outcome achievable through the use of competitive bidding for universal service obligations, an idea used elsewhere and recently floated in the U.S. by FCC Chairman Kevin Martin.

This paper offers an overview in Section II and then, in Section III, examines the trend in spending patterns of the Universal Service Fund, fleshing out the factors driving recent spending increases. In Section IV the distribution of funds is explained, showing how dollars flow largely to rural telephone networks serving small clusters of customers in a highly inefficient manner. The generous payments do not generally lower costs for consumers, but protect obsolete technologies. Further, they waste taxpayers' dollars and distort economic activity by reducing consumer purchases in telecommunications markets, reducing network formation.

Section V considers opportunities for technological substitution, making use of wireless, satellite, and Internet-based communications to supply telecommunications service in rural areas. Given that multiple networks, including cable TV and mobile wireless, cover more than 95% of U.S. households – the level of “universal service” actually achieved under the existing system – shifting to reliance on alternative technologies could easily save most payments made to carriers in the \$3.7 billion per year High-Cost Fund (the lion's share of the Universal Service Fund). This reveals the magnitude of inefficiency embedded in the cost-plus subsidies now in place. Section VI

reviews the waste and corruption endemic in the E-Rate program, a \$2 billion per year program²² to subsidize information technology in schools and libraries.

Section VII offers an explanation of why the distribution of benefits under the USF – primarily, high returns for owners of rural telephone companies – offers political support for the current system. Not only are benefits highly concentrated on shareholders in rural phone carriers (RLECs) while costs are diffused across consumer and business phone users, but subsidy payments are skewed in favor of small states with relatively large clout in the U.S. Senate. Section VIII evaluates the means by which subsidy fund dollars are extracted from telephone users. Not only has the current system proven highly inefficient, but alternative tax schemes currently under consideration would also distort markets. In particular, a flat monthly fee per telephone number would impose sharply asymmetric burdens. Finally, Section IX offers a summary and conclusion.

II. OVERVIEW OF UNIVERSAL SERVICE IN TELECOMS

Americans now send nearly \$7 billion annually to the Universal Service Fund, which ostensibly distributes these monies to extend phone service to all Americans. While few people quibble with the goal, virtually none of the promised benefits materialize. As a standard telecommunications policy textbook puts it: “[T]he term ‘universal service’ is commonly used to denote various subsidy programs that have very little to do, even as a conceptual matter, with keeping people on the network.”²³

²² 2005 Monitoring Report, p. 4-1.

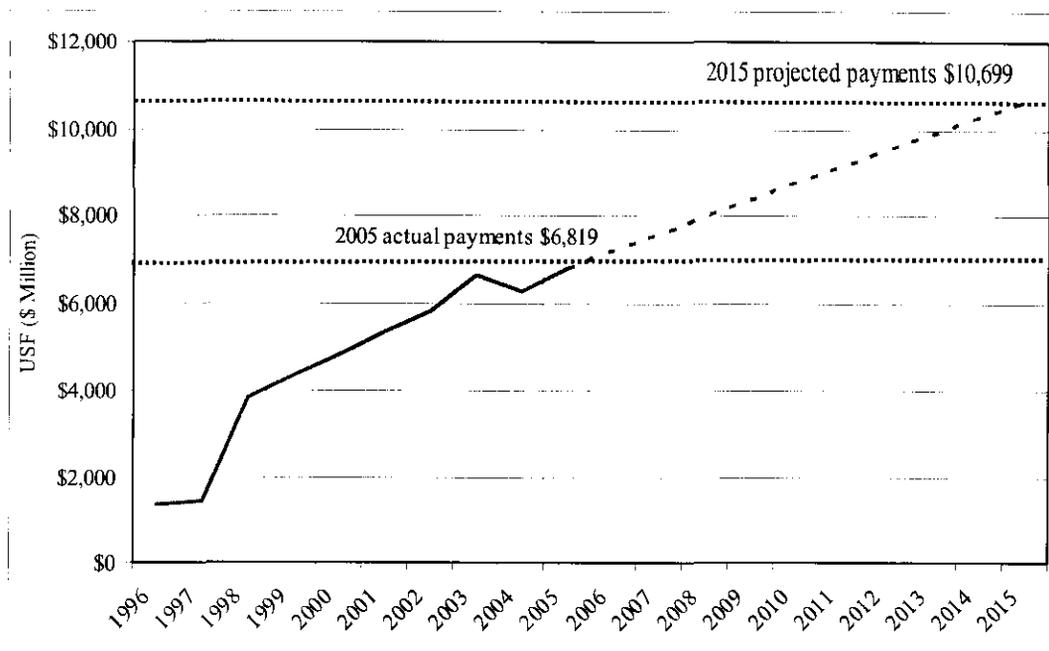
²³ Jonathan E. Nuechterlein and Philip J. Weiser, DIGITAL CROSSROADS: AMERICAN TELECOMMUNICATIONS POLICY IN THE INTERNET AGE (MIT Press 2005) [“Nuechterlein and Weiser 2005”], p. 333.

In fact, the complex system of taxes and subsidies undermines the goal it is designed to achieve. The “universal service” system connects few, if any, additional people to telephone networks. Indeed, just the reverse obtains: because USF dollars are raised by taxing various telephone services, many low-income consumers are discouraged from making calls, *priced off* the phone network by the very charges instituted to bring them on board.²⁴

This perverse outcome is due to the way the USF system works. Taxes are imposed on phone usage, including wireless, and are increasing rapidly. Set at \$3.9 billion in 1998, the USF is now over \$6.8 billion, and will rise still further unless the system is reformed. These taxes discourage Americans from subscribing or using telephones – undermining universal service.

²⁴ Robert W. Crandall and Leonard Waverman, WHO PAYS FOR UNIVERSAL SERVICE? WHEN TELEPHONE SUBSIDIES BECOME TRANSPARENT (Brookings Institution Press 2000) [“Crandall and Waverman 2000”], pp. 114-121; and Joseph S. Kraemer, Richard O. Levine, and Randolph J. May, THE MYTHS AND REALITIES OF UNIVERSAL SERVICE: REVISITING THE JUSTIFICATION FOR THE CURRENT SUBSIDY STRUCTURE (The Progress and Freedom Foundation 2005) [“Kraemer et al 2005”], p. 29.

**FIGURE 1
TOTAL USF SPENDING**



Sources: 1998-2005 yearly USF expenditures are taken from APPENDIX I. 2006-2015 expenditures are linearly extrapolated using the average yearly change in HC and LI expenditures (1998-2005) to predict growth (which assumes the Schools and Libraries and Rural Health Care funds are constant at 2005 levels).

The tax is rising because USF spending is exploding, which is curious given that the percentage of U.S. households subscribing to standard telephone service is *declining*. With an overall (fixed and mobile) penetration rate for the nation of about 94% through the 1990s²⁵ and recorded at 94.9% in 2004,²⁶ fixed-line penetration is now decreasing primarily due to wireless substitution. In February 2004, only 88.9% of households had wireline service. At least six percent of U.S. households reported that they subscribed to at least one wireless phone service, but had no fixed line connection.²⁷

If increased tax dollars do not result in an extension of phone service, where does the money go? It goes to phone companies serving very few customers. For example, of

²⁵ *Trends in Telephone Service 2005*, Table 16.1.

²⁶ *Trends in Telephone Service 2005*, Table 16.5.

²⁷ *Trends in Telephone Service 2005*, Table 16.5.

the funds distributed to incumbent local exchange carriers (ILECs) to alleviate the burdens of serving high cost areas, phone operators supplying just 5% of lines receive over 60% of funds; companies providing just 10% of lines receive nearly 80% of subsidies.²⁸ This study evaluates the path of universal service subsidies, charting expenditures and examining alternative mechanisms to provide equal or superior service to telephone users while saving billions of tax dollars. The results are striking:

- A high proportion of universal service subsidies go to a relatively small group of rural telephone carriers;
- These telephone systems often collect over \$900 per line per year²⁹ – or about what it would cost to provide free service to each customer via satellite phone networks accessed at retail prices;³⁰
- A small fraction of monies dispensed benefit low-income consumers;
- The large fraction of monies dispensed to rural phone carriers do not increase affordability for low-income consumers, as benefits of lower priced phone service are capitalized in land values and reflected in housing rents;
- The actual beneficiaries of the universal service system are relatively wealthy landowners and shareholders in rural telephone companies, which realize as much as 95% of total revenues from federal subsidies.³¹

²⁸ Analysis Group calculations based on data from 2005 Monitoring Report from file 05t3-22to30.xls; <http://www.fcc.gov/wcb/iatd/monitor.html>. Universal Service payments from Spreadsheet “Total” and Loops (lines) from spreadsheets “HCLS” and “LSS.” When the number of loops (lines) indicated in “HCLS” and “LSS” differed, the larger number was used.

²⁹ See APPENDIX 10.

³⁰ See TABLE 5.

³¹ Davidson 2004.

III. UNIVERSAL SERVICE FUND GROWTH

Summary: Increasing USF expenditures are driving telecommunications taxes ever higher. The primary cause of USF increases stem from rising payments to rural phone carriers, labeled "High-Cost support," where annual payments mushroomed from \$1.7 billion in 1998 to \$3.7 billion in 2005. These rising expenditures are, in turn, driven by increasingly expensive (per-line) payments to high cost rural phone carriers and by new payments to wireless phone carriers now qualifying as recipients of such funds.

1. Competition Forces Subsidies to be Made Explicit

The federal Universal Service Fund is a creation of the 1996 Telecommunications Act (96TA), which sought to permit competition in local phone markets. Instead of having just one telecommunications provider serve each area on a monopoly basis, the 96TA set down rules allowing rival networks to offer traditional fixed-line voice services. While the established systems, the ILECs, were obligated to provide "universal service," extending networks to all customers in their service territories, the new entrants did not have such requirements. If they had, competition would have been stifled from the start, as the obligation to serve every business or household is an expensive requirement, particularly for competitive entrants.

A conflict was evident. The existing system of universal service obligations was premised on monopoly market structure. Franchised phone operators were mandated to provide a given level of service, at regulated retail rates, to all customers in their service territories regardless of the cost of serving them. Telephone users living in remote, sparsely populated areas where the average cost of service was \$100 per line per month paid exactly the same rates as subscribers living in urban areas where costs were \$15. Since there were many more in the latter category than in the former, the company's overall average cost might be \$20 per line per month; by charging everyone this rate, the

company covered its costs (including the cost of capital). Universal service was effectively provided by a system of hidden cross-subsidies. Relative to the cost of their service, urban customers paid their phone carrier a premium to fund the discount extended to rural dwellers. Internal transfers within the phone monopoly achieved the goals of the regulatory system without any explicit accounting.

When Congress enacted the 96TA, however, the idea was that monopolies would be swept aside. The natural effect of competition is to drive prices towards costs, threatening to eliminate the mark-ups on some services that make possible below-cost pricing for others. In addition to the premia obtained from urban residential users, business lines and long distance services were priced (according to rate regulation schedules) well above costs. All these sources of profit were to potentially disappear with competitive entry. While good for the majority of consumers, who would enjoy lower prices, the prospect was that ILECs would no longer be able to internally subsidize users in high cost areas.

Hence, reforms in the 96TA moved away from internal ILEC transfers towards explicit subsidies. The USF expenditures were to finance telecommunications connections to extend network usage as competition drove prices toward costs.

Low Income support dollars, predating the 96TA, were folded into the USF, along with portions of the High-Cost funds. Funding for Schools and Libraries (E-Rate), and for Rural Health Care support, was initiated by the TA96, which also designated a Joint Federal-State Universal Service Board to determine the structure of the universal service

system with the task of making subsidies explicit.³² The system is managed by the Universal Service Administration Company (USAC), an independent non-profit.³³

2. Deconstructing USF Increases

As FIGURE 2 indicates, the USF more than doubled when 96TA changes took effect in 1998, and has been on a steady upward trend since. E-Rate spending, while substantial, does not contribute to this rise.³⁴ (Schools and Libraries spending is capped by federal statute at \$2.25 billion annually,³⁵ and spending in 1999 had already hit \$2.15 billion.) Rural Health Care fund expenditures, on the other hand, grew rapidly from 1998, but constitute a trivial fraction of the USF (\$41 million of a 2005 total of about \$6.8 billion, or 0.6%).

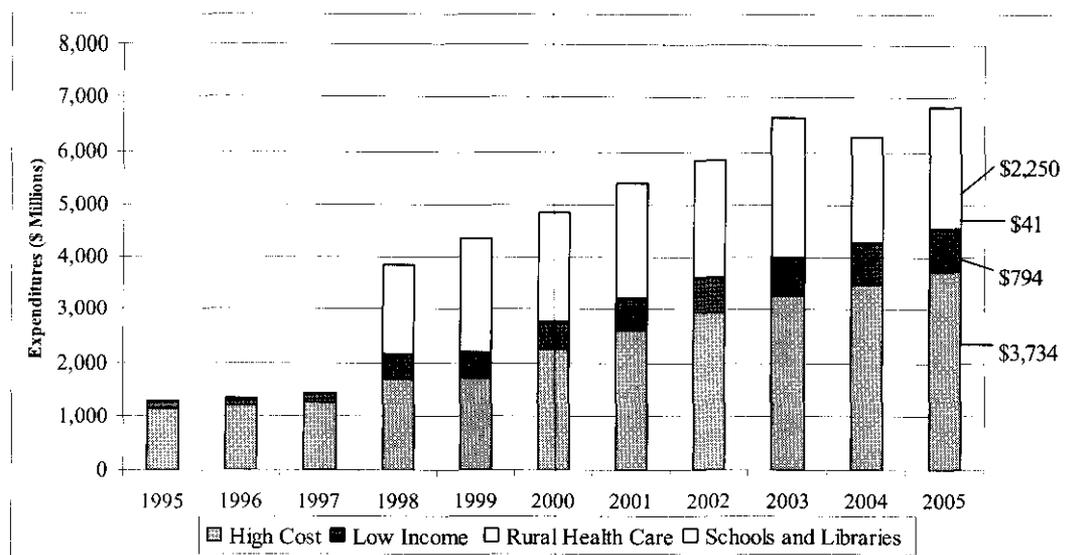
³² Federal Communications Commission, *Federal-State Joint Board on Universal Service*; http://www.fcc.gov/wcb/universal_service/JointBoard/welcome.html.

³³ Universal Service Administrative Company, *About USAC*; <http://www.universalservice.org/about/>.

³⁴ There is a lag between when funds are committed and when they are actually spent. All commitments and spending are credited to the year in which they were authorized. The School and Libraries payments and additional commitments decreased by 11% from 1999 to 2005, adjusted for inflation. Payments data from APPENDIX 1 and inflation data from all-items annual CPI, Bureau of Labor Statistics; <http://data.bls.gov/cgi-bin/surveymost?cu>.

³⁵ 2005 Monitoring Report, p. 4-1.

FIGURE 2
TOTAL UNIVERSAL SERVICE EXPENDITURES



Source: See APPENDIX I.

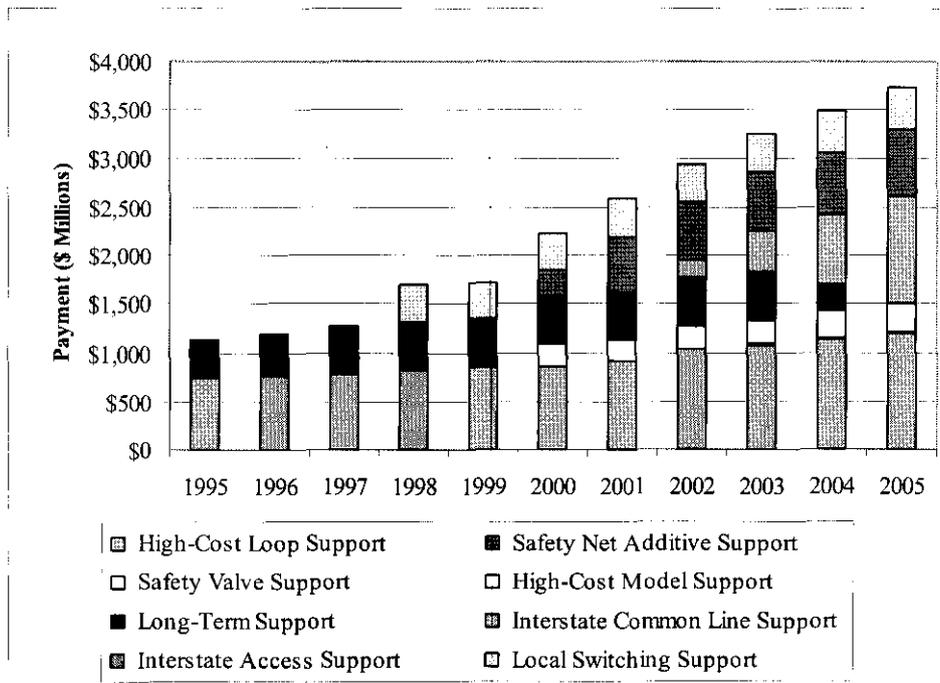
The growth in USF flows are accounted for by High-Cost Fund spending, which rose from \$1.7 billion in 1998 to \$3.7 billion in 2005, a nominal gain of 118%; and Low Income payments, which increased from \$464 million in 1998 to \$804 million in 2005, a nominal increase of 73%. Given their higher magnitude, High-Cost fund increases dominate the growth, accounting for about 85% of total USF expenditures increases, 1999-2005. Hence, when asking about the trend in USF flows, the answer must focus on the size and composition of High-Cost Support Payments.

3. Deconstructing High-Cost Fund Increases

The High-Cost Fund (HCF) grew from about \$1.7 billion in 1998 to \$3.7 billion in 2005. This collection of subsidies is extremely complex, composed of many disparate funding mechanisms, each with its own rules for calculating payments. The basic thrust

is that phone carriers, largely privately-held rural telephone companies, are annually given billions of tax dollars. The theory is that such payments compensate for the high cost of doing business in rural telephone markets, but the true (efficient) costs of service provision may have no bearing on subsidy levels, while the payments themselves encourage operators to increase operating and capital costs by avoiding potential efficiencies.

FIGURE 3
HIGH-COST SUPPORT FUND PAYMENTS



Source: See APPENDIX 2.

As FIGURE 3 indicates, much of the HCF growth has come from the introduction and growth of Interstate Access Support (IAS) and Interstate Common Line Support (ICLS). The IAS was created on May 31, 2000 and replaced previous subsidies that were

recovered through access charges,³⁶ fees long distance carriers pay ILECs to complete calls to their (ILEC) customers. Access charges have historically been set well above the incremental cost of locally delivering long distance calls (i.e., the actual costs to ILECs), but have been lowered in recent years as part of the transition to competition. From an average of 2.85¢ per minute in 2000, access charges in 2005 averaged just 1.53¢.³⁷ In 2005, IAS support was \$675 million and accounted for 18% of the HCF.³⁸

Since July 1, 2002, ICLS payments have gone to ILECs that are determined to recover insufficient funds from Subscriber Line Charges (SLCs), monthly fees that local phone subscribers pay.³⁹ (SLCs have also been increased as access charges have been reduced; set at \$3.50 per residential line from 1993 to 2000, the SLC rose to an average of \$5.92 per residential line in 2005.⁴⁰) As of July 1, 2004, ICLS payments replaced what was previously Long-Term Support (LTS) funding.⁴¹ Together, LTS and ICLS payments rose from \$473 million in 1998 to \$1,107 million in 2005.⁴²

The final high-growth HCF component is High-Cost Loop Support (HCLS), a spending category which rose from \$827 million in 1998 to \$1,196 million in 2005.⁴³ In 1993, HCLS payments to rural ILECs were capped and since then total payments are indexed to the national total rural ILEC phone lines times GDP growth.⁴⁴ HCLS

³⁶ 2005 Monitoring Report p. 3-7.

³⁷ *Trends in Telephone Service 2005*, Table 1.2.

³⁸ See APPENDIX 2.

³⁹ 2005 Monitoring Report, p. 3-7.

⁴⁰ *Trends in Telephone Service 2005*, Table 1.1.

⁴¹ 2005 Monitoring Report, p. 3-7.

⁴² See APPENDIX 2.

⁴³ See APPENDIX 2.

⁴⁴ 2005 Monitoring Report, p. 3-4.

payments are targeted to rural carriers with higher costs, typically above 115% of the national average.⁴⁵

Subsidies are also collected by Competitive Eligible Telecommunications Carriers (CETCs) in addition to incumbent ETCs (aka, ILECs). See TABLE 1. This means that some households subscribe to two services (fixed and wireless) provided by different networks, *both of which receive universal service subsidies*. Because the FCC is forbidden by Congress from limiting the amount of support triggered by a household or subscriber that subscribes to more than one carrier, HCLS payments to CETCs do not fall under the cap for rural ILECs.⁴⁶ Furthermore, the support per subscriber made to CETCs – generally mobile phone carriers – is set by the rates paid to the incumbent ETC, even if that rate is completely unrelated to the competitive provider’s actual costs. As FIGURES 4 and 5 indicate, CETCs account for more than all the growth in HCLS subsidies, and for almost all the growth in the overall HCF, since 2003.

**TABLE 1
HIGH COST LOOP SUPPORT**

	1998	1999	2000	2001	2002	2003	2004	2005
Total Payments (millions)	\$827	\$864	\$874	\$927	\$1,045	\$1,085	\$1,137	\$1,196
Total Lines	NA	31,163,746	23,472,881	23,728,799	14,780,582	12,184,654	12,727,136	12,634,524
ILEC Reported Lines	NA	31,163,746	23,472,881	23,677,570	14,265,127	11,152,521	10,567,956	9,805,463
CETC Reported Lines	NA	0	0	51,229	515,455	1,032,133	2,159,180	2,829,061
Total Dollars per Line	NA	\$27.73	\$37.24	\$39.07	\$70.69	\$89.01	\$89.31	\$94.69

Source: Total payments from 2005 Monitoring Report, Table 3.1. Total Lines, ILEC Reported Lines, and CETC Reported Lines from USAC FCC filings, available at <http://www.universalservice.org/about/governance/fcc-filings/>. 1999 data from 1999 fourth quarter appendix file, “append1.xls”; 2000 data from fourth quarter appendix file “appendixhc1.xls”; 2001 data from 2001 fourth quarter appendix file “Appendix HC01.xls”; 2002 data from 2002 fourth quarter appendix file “HC04 - High Cost Loop Support by State by Study Area.xls”; 2003 data from 2003 fourth quarter appendix file “HC05 - High Cost Loop Support Projected by State by Study Area - 4Q2003.xls”; 2004 data from 2004 fourth quarter appendix file “HC05 - High Cost Loop Support Projected by State by Study Area - 4Q2004.xls”; 2005 data from 2005 fourth quarter appendix file “HC05 - High Cost Loop Support Projected by State by Study Area - 4Q2005.xls.” Only the lines from carriers that are specified as either an ILEC or a CETC and received HCLS in a given year are reported.

⁴⁵ 2005 Monitoring Report, pp. 3-2 – 3-3.

⁴⁶ Federal Communications Commission, *In the Matter of Federal-State Joint Board on Universal Service, Report and Order*, CC Docket No. 96-45 (Rel. Mar. 17, 2005), ¶15 [“Joint Board 2005”].