

CBO TESTIMONY

**Statement of
Donald B. Marron
Acting Director**

Potential Future Spending from the Universal Service Fund

**before the
Subcommittee on Telecommunications and the Internet
Committee on Energy and Commerce
U.S. House of Representatives**

June 21, 2006

This document is embargoed until it is delivered at 2:00 p.m. (EDT) on Wednesday, June 21, 2006. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.



**CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515**

Mr. Chairman and Members of the Subcommittee, I am pleased to be here today to discuss the Universal Service Fund (USF) and its High-Cost Program. Spending by the High-Cost Program doubled from \$1.9 billion to \$3.8 billion between fiscal years 2000 and 2005; that increase accounted for more than 80 percent of the total growth in spending by the USF over that period. My testimony today addresses factors that may increase the budgetary pressures facing the High-Cost Program in the future.

My testimony makes the following major points:

- Further growth in the number of wireless telephone carriers that become eligible to receive USF support for providing service in rural areas could increase annual spending for the High-Cost Program by between \$0.6 billion and \$1.2 billion.
- Using the Universal Service Fund to compensate rural telephone companies for income lost from the reduction of certain regulated telephone rates could raise annual USF spending by another \$0.8 billion to \$2.9 billion.
- Including broadband (high-speed) Internet access in the services explicitly supported by the High-Cost Program would also increase spending; the magnitude of that rise would depend on the specific policy changes made.
- Although the USF's programs do not increase the federal budget deficit, they impose costs on the economy. The benefits provided by the Universal Service Fund come at the cost of rising charges to telephone companies, which are often reflected in charges to consumers. Such costs will continue to increase if new demands are put on the USF.

The Universal Service Fund's Structure and Financing

The USF subsidizes certain producers and consumers of telecommunications services. Under its High-Cost Program, a majority of the USF's spending goes to companies that provide voice telephone connections in areas where the cost of offering such service is higher than the nationwide average. That program aims to ensure that the prices charged to telephone customers in such high-cost areas—mainly rural and insular (island) locations—are comparable to prices charged to urban customers. Smaller USF programs subsidize telephone service for qualified low-income people (urban or rural) as well as Internet and other advanced telecommunications services for schools, public libraries, and rural nonprofit health care providers.

The Universal Service Fund operates by collecting mandatory payments from all providers of interstate and international telecommunications services in order to subsidize local services and providers. Those payments are based on a percentage

of the revenue that telecommunications companies derive from providing interstate and international services (subject to certain adjustments).¹ Companies may recover all or part of their payments to the USF by passing the cost on to their customers.

Because the payments that the USF transfers between telecommunications providers and parties receiving support are required by law, monies coming into and out of the USF are counted as revenues and outlays in the federal budget. However, USF fees are adjusted regularly to match expected spending, so the fund is basically budget-neutral. (In practice, the USF runs a small surplus because of the lag between making commitments to projects and paying for them.)

The benefits provided by the USF's programs come at a cost to the economy, regardless of how those programs are treated in the budget. Both consumers' purchasing decisions and providers' investment decisions are distorted by the way the USF collects its receipts and spends its resources. As is the case with any tax or fee, the effects of USF fees vary with their size and structure.

Current Spending and Future Pressures on the Universal Service Fund

The outlays and receipts flowing through the USF have grown substantially in recent years. Between fiscal years 2000 and 2005, annual outlays from the fund rose from \$4.0 billion to \$6.3 billion, while receipts grew from \$4.5 billion to \$7.0 billion (see Table 1). Outlays may not be the best measure of the yearly claims that universal service programs make on the telecommunications sector. The revenues from USF fees are a better measure because they take into account commitments that have been made but not yet paid for.

In the past six years, growth in spending for the High-Cost Program has accounted for 83 percent of the rise in USF outlays, or roughly \$1.9 billion of the total \$2.3 billion increase. Growth in the Low-Income Program has accounted for another \$300 million, whereas spending for the other support programs has not changed significantly.

Two main factors have caused the growth in spending for the High-Cost Program. Increases since 2003 represent additional resources being devoted to rural telecommunications, mainly to support cell phone companies that are new competitive entrants to rural markets. Earlier increases in spending were essentially accounting changes mandated by the Telecommunications Act of 1996. That law

1. For more information, see Congressional Budget Office, *Financing Universal Telephone Service* (March 2005).

Table 1.

Receipts and Outlays for Universal Service Fund Programs, 2000 to 2005

(By fiscal year, in billions of dollars)

	2000	2001	2002	2003	2004	2005
Receipts	4.5	5.2	5.4	5.7	6.4	7.0
Outlays						
High-Cost Program	1.9	2.6	2.8	3.3	3.4	3.8
Low-Income Program	0.5	0.6	0.7	0.7	0.8	0.8
Schools and Libraries Program	1.6	1.7	1.6	1.6	1.5	1.7
Rural Health Care Program	*	*	*	*	*	*
Total	4.0	4.9	5.1	5.6	5.7	6.3

Source: Congressional Budget Office based on data from the Federal Communications Commission.

Notes: * = less than \$50 million.

The numbers shown here are for receipts and outlays of the Universal Service Administrative Company, which administers Universal Service Fund (USF) programs. Actual USF program commitments differ from these figures.

required telephone regulators to convert subsidies that had been included in the prices of long-distance and other services (called implicit subsidies) into payments from the USF (explicit subsidies).

Possible Sources of Future Spending Growth

Disbursements for the High-Cost Program have doubled since 2000, from \$1.9 billion to \$3.8 billion. The Congressional Budget Office (CBO) estimates that such spending could continue to increase rapidly depending on legislative and regulatory decisions about three potential sources of budgetary pressure on the program:

- Further increases in the number of telephone carriers—predominantly wireless telephone companies—eligible to receive universal service subsidies for high-cost areas;
- Possible changes in the structure of the rates that telephone companies charge one another for connecting and transferring calls (known as inter-carrier compensation); and
- Possible inclusion of broadband Internet connections in an expanded definition of universal service.

The first two factors could add between \$1.4 billion and \$4.0 billion to the annual outlays of the High-Cost Program by 2011, CBO estimates (see Table 2). The lower end of that range represents an increase of about one-third from current spending; the higher end implies that spending would double. If, instead, outlays for the High-Cost Program continued to grow at the average annual rate of the 2000-2005 period, they would be roughly \$2.2 billion higher by 2011—or in the middle of that range.

CBO's 10-year baseline budget projections for the Universal Service Fund account for some of the budgetary pressures described above, but not others.² The baseline assumes moderate growth in funding for wireless companies entering the market in high-cost areas, on the basis of trends from previous years and anticipated increases. However, because CBO's baseline is predicated on current law and policies, it does not account for new legislative or regulatory actions, such as a restructuring of intercarrier compensation rates and payment flows or new initiatives in rural broadband.

Continued Increases in the Number of Eligible Telephone Companies. Following the 1996 Telecommunications Act, the Federal Communications Commission (FCC) made more telephone companies eligible for support under the High-Cost Program, and a growing number of companies began to apply to be designated as eligible to receive USF funds. The result is that the amount of funding going to new “competitive eligible telecommunications carriers” has risen dramatically. Funding for those carriers accounts for about 94 percent of the increase in spending by the High-Cost Program since 2003.

Both the number of carriers receiving payments under the High-Cost Program and the amount of funding given to competitive entrants have grown over the past several years. In 2000, just two competitive telecommunications carriers were eligible for high-cost support. By 2005, that number had risen to 263 (some carriers are counted more than once in that figure because of the way the data are tallied). Similarly, funding for competitive entrants has grown from \$130 million in 2003 to an estimated \$640 million in 2005. Typically, about 95 percent of that funding in any given year goes to wireless companies. By contrast, funding for the first carrier in each market (the “incumbent” service provider) has been nearly constant in the past three years at between \$3.1 billion and \$3.2 billion, probably because of the cap currently imposed on one type of high-cost support for incumbents. Early projections for 2006 suggest a substantial rise in spending for new entrants and continued stability in spending for incumbents.

2. Those projections were published in Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2007 to 2016* (January 2006), Tables 3-3 and 4-9.

Table 2.

Additional Spending for the High-Cost Program in 2011 from Various Sources

(Billions of dollars)

	Estimated Range of Additional Spending	
	Low End of Range	High End of Range
Further Growth in the Number of Wireless Companies Entering High-Cost Markets	0.6	1.2
Restructuring of Inter-carrier Compensation Rates ^a	<u>0.8</u>	<u>2.9</u>
Total (Excluding broadband)^b	1.4	4.0

Source: Congressional Budget Office.

- a. The numbers shown here are CBO's extrapolations of estimates by the National Exchange Carrier Association.
- b. Increased spending for broadband (high-speed) Internet access in rural areas is likely to be determined through legislative activity, which CBO has no basis for predicting.
-

In the absence of policy changes, that pattern appears likely to continue. Less than one-third of cellular telephone connections in rural areas currently receive USF subsidies. If the companies serving the unsubsidized connections apply for funding, subsidies for those competitive entrants may increase substantially. The main source of uncertainty about the extent and timing of that increase is how rapidly all of the potentially eligible carriers will apply for and be granted eligibility.

On the basis of data from the Bureau of Labor Statistics, CBO projects that rural cell phone subscribers will number about 22 million in 2011. Competitive entrants received subsidies on some 4.6 million rural cellular connections last year. The most likely scenarios are that the current level of subsidized connections could double or triple by 2011. If subsidy costs moved in tandem with subscription counts, USF spending to support competitive entrants would also double or triple, rising by between \$600 million and \$1.2 billion (see Table 2).

Changes in the Structure of Inter-carrier Compensation Rates. Regulators have often set some of the per-minute rates that telephone companies charge one another to interconnect and transfer long-distance and other calls above the cost of those activities in order to provide an implicit subsidy to local telephone companies and their customers. Such payments flow primarily from long-distance companies to local telephone companies.

The level of intercarrier compensation has declined in recent years. One reason is that consumers are increasingly substituting e-mail and wireless long distance (which often bypasses the landline system) for traditional long-distance calling. Another reason is that regulators have reduced some of the rates charged for inter-carrier compensation.

At the same time, technological improvements in telecommunications equipment have decreased the costs that carriers incur in routing and connecting telephone calls. Because the prices that customers pay—which include intercarrier compensation payments—have not fallen as rapidly, those prices do not reflect the underlying economic costs of providing different types of service and thus distort consumers' choices. For example, consumers may choose to make long-distance calls on a cell phone despite its inferior coverage or voice quality because their plan offers such calls at no extra cost, whereas their landline service costs them 5 cents or 10 cents per minute. However, the difference in actual costs to the telephone network between completing a long-distance call from a landline and completing one from a wireless telephone is not as great as the difference in prices charged to customers. That disparity has prompted a number of proposals to restructure intercarrier compensation rates.

Most of the restructuring proposals that are being discussed would reduce revenues to the smaller companies that often serve high-cost and insular areas. One way to offset those companies' revenue losses would be to provide supplemental payments through the Universal Service Fund. In the past, when cuts in long-distance access rates reduced the income flowing to rural telephone companies, the USF increased its payments correspondingly. As in earlier instances, such a change in intercarrier compensation would convert regulated payments among carriers into regulated payments into and out of the Universal Service Fund and could alter the distribution of costs and subsidies among consumers.

Restructuring intercarrier compensation has substantial budgetary implications for USF spending. Depending on the proposal selected, changing the intercarrier compensation system could add between \$800 million and \$2.9 billion to annual outlays for the High-Cost Program by 2011 (see Table 2). Much of that increase could occur under current law. The FCC has the legal authority to alter the interstate portion of intercarrier compensation. However, there is disagreement about whether it could adjust intercarrier compensation rates within a state without additional legislation.³

3. See National Association of State Utility Consumer Advocates, *Initial Comments of the National Association of State Utility Consumer Advocates Before the Federal Communications Commission in the Matter of Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92 (May 23, 2005), pp. 40-43, available at www.nasuca.org/Intercarrier%20Compensation%20Comments.pdf.

In a filing to the FCC, the National Exchange Carrier Association (NECA) compared various proposals for restructuring intercarrier compensation to determine how they would split the burden among the different revenue sources—intercarrier compensation itself, telephone subscribers, and the Universal Service Fund. NECA's analysis looked at the records of a sample of its member companies and calculated how much of the \$8.0 billion in income they received in 2003 came from subscribers' fees, intercarrier compensation, and universal service subsidies. (Those NECA members, which are incumbent telephone companies, received about three-quarters of the subsidies paid by the High-Cost Program that year.) The association then modeled the various proposed rate changes to determine the extent to which they would lower revenues relative to a baseline estimate of the calls and minutes handled by NECA members.

In the three proposals that NECA modeled, the majority of the revenues lost from restructuring intercarrier compensation would be made up through increases in spending by the Universal Service Fund. For example, under the first proposal, intercarrier compensation payments were estimated to fall from \$2.3 billion to \$1.4 billion. To compensate, the proposal would raise subscribers' rates to collect an additional \$0.3 billion in revenue and would increase USF payments by \$0.6 billion, a 25 percent rise. The increase in USF support would be much higher under the other two proposals that NECA examined: more than 60 percent. (The analysis was static and did not account for changes from the 2003 baseline in the number of calls and minutes of use.)

To estimate the total impact on USF spending from restructuring intercarrier compensation, CBO adjusted NECA's estimates to account for carriers that were not in the sample. That extrapolation suggests that the three proposals analyzed by NECA would increase spending for the High-Cost Program in 2011 by \$0.8 billion to \$2.9 billion. (The latter figure includes \$0.8 billion in additional USF spending from removing the cap on certain high-cost support payments to incumbent providers, which was part of one of the proposals.)

Inclusion of High-Speed Internet Access in Universal Service. The 1996 Telecommunications Act requires that the basket of services included in the definition of universal service—and thus eligible for USF support—be reviewed and updated periodically. The law assigns that task to the Federal-State Joint Board on Universal Service (composed of regulators from the FCC and the states), which makes recommendations to the FCC. Many analysts and interested parties have argued that broadband Internet access should be one of the residential services paid for by the High-Cost Program. (It is already subsidized by the much smaller Schools and Libraries and Rural Health Care Programs.)

Broadband is penetrating into rural areas at a rapid pace, albeit more slowly than in urban and suburban areas. Currently, some 920 rural telephone carriers offer broadband service under terms set forth by NECA. Only one-quarter of the carriers participating in the association do not yet offer broadband service. Furthermore, according to one recent survey, rural areas are only about two years behind urban areas in their broadband subscription rates.⁴

Some of that rural expansion is already being supported by the High-Cost Program. Investments in telephone networks subsidized by the program often allow for both conventional telephone service and broadband, because most modern telephone equipment is capable of providing voice and data services. In addition, the Department of Agriculture's Rural Utilities Service has begun making low-interest loans to companies that invest in broadband. (The Agriculture Department's credit program for conventional telephone service has long made low-interest loans to carriers that invest in telephone networks capable of providing broadband as well as voice telephone service. Many of those loans were made for equipment that subsequently formed part of the cost basis for USF support.)

Including broadband in the definition of universal service would represent a new commitment of economic resources, as well as an increase in the amount of funds transferred among different groups of consumers. Those new resources could come directly from the USF (as was the case in the Schools and Libraries Program) or indirectly, through the expansion of other initiatives, such as the Rural Utilities Service's program of loans and loan guarantees for rural broadband. Even the expansion of such indirect programs, however, could ultimately increase USF spending if those programs were used to expand the broadband-capable telephone networks of carriers that receive USF support.

Members of Congress have introduced various proposals to increase the availability of broadband in rural areas. One approach would be to spend a limited amount each year on supporting the deployment of broadband and distribute that funding among unserved areas through a competitive selection process, as is done in the Schools and Libraries Program. A bill before the Congress, S. 2686, would direct the FCC to collect and spend up to \$500 million a year in that way to encourage the spread of broadband service.

Paying for Spending Increases

The possibility of future increases in USF spending raises the question of how such expenditures would be paid for. At present, the USF is financed through a

4. John Horrigan, "Rural Broadband Internet Use" (data memo, Pew Internet and American Life Project, Washington, D.C., February 2006), available at http://207.21.232.103/pdfs/PIP_Rural_Broadband.pdf.

percentage fee on the value of interstate telecommunications services, including long-distance revenues, a portion of cell phone revenues, and part of the basic subscriber charges that customers pay to local telephone companies. That fee is calculated quarterly and is generally set to keep the USF budget-neutral.

Telecommunications spending is rising in the economy as a whole, but the revenues that are subject to universal service fees have declined since 2000. Because USF spending has been growing while the telecommunications base from which its receipts are drawn has been shrinking, the percentage used in calculating the fee on eligible telecommunications revenues has risen. In 2000, the quarterly fee rate never exceeded 6 percent; in 2005, it never fell below 10 percent.

Further increases in spending by the USF would drive up the fee percentage even higher, unless either a different revenue mechanism was devised or the base of telecommunications services subject to the fees was broadened. Higher fee levels might cause consumers to shift more of their spending to telecommunications services that are not subject to USF fees—such as e-mail and instant messaging—thus reducing receipts for the fund.

Options for Curtailing the Growth of USF Spending

To illustrate how lawmakers or regulators might alleviate some sources of budgetary pressure on the Universal Service Fund, CBO examined several policy options, each geared toward one of the aforementioned sources of spending growth:

- Under the structure of the High-Cost Program, more wireless carriers are likely to be designated as eligible to receive support payments for providing service in high-cost areas. Spending for that program could be curbed by limiting high-cost support to one connection per household, by basing support on each carrier's own costs rather than on a cost standard set by the incumbent carrier, or both.
- In other instances, regulatory processes can put pressure on the USF, as is the case with intercarrier compensation. Reducing the subsidies that are implicit in current intercarrier compensation rates would create pressure for higher explicit USF support. However, that support could be structured in such a way as to reduce the flow of resources from the USF.
- The legislative process can also create budgetary pressures on the USF, as would be the case if pending legislation was enacted to accelerate the deployment of broadband into high-cost areas. The growth of USF spending could be slowed by not adding special programs, such as one for

broadband, to the Universal Service Fund but rather by keeping any such programs part of discretionary spending.

**Limit Support to One Connection per Household or
Base Support on Carriers' Own Costs**

Two of the most commonly discussed options for curbing growth in the funding for wireless entrants are restricting support to only one telecommunications connection per household or basing support on the actual costs incurred by the eligible carrier, regardless of whether it is the incumbent telephone company or a competitive entrant.

In response to prospective growth in spending for the High-Cost Program, the Federal-State Joint Board on Universal Service recommended in 2004 that the FCC limit support to one telecommunications connection for each household. Before the FCC could act, however, the Congress restricted the commission from carrying out the board's recommendation, thus allowing the USF to fund multiple connections to a single household.

In addition, under current policy, a company that is entering the market to provide service in a high-cost area receives an amount of subsidy per connection equal to that received by the existing telephone company. Because the competitive entrants are almost all wireless companies—whose cost of providing service is likely to be lower than that of the incumbent landline provider—the subsidy paid to new entrants is likely to be higher than the amount needed to attract new providers who will offer services in rural areas at rates comparable to those charged in urban areas.

Proposals that would peg subsidies to a provider's own cost of offering service would thus probably lower payments to new entrants. The FCC could make that change without any legislative action being required. However, basing support on a company's own costs might lessen the incentive that current policy gives wireless entrants to expand their telephone networks and to produce services at the lowest possible cost.

**Restructure Intercarrier Compensation and USF Payments to
Reduce Cross-Subsidies**

The more that intercarrier compensation rates are reduced by eliminating the subsidy element they contain, the more pressure there is to increase USF payments to telephone companies serving rural areas. As noted above, CBO estimates that under the proposals being considered, restructuring intercarrier compensation rates could increase annual costs for the USF by \$800 million to \$2.9 billion. Those proposals have been put forth by groups of large and small telephone com-

panies and other concerned parties, such as regulators. So far, those groups have not reached a consensus on the best way to restructure rates.

Lowering intercarrier compensation rates would improve economic efficiency in that prices for long-distance service would more closely match the actual cost of providing that service. In general, resources are allocated better when people base their decisions about how much to consume on the cost of the service provided. But the increase in USF fees that would be imposed to pay for USF support would introduce distortions of its own on consumers' choices, offsetting much of the gain in economic efficiency.⁵

Restructuring intercarrier compensation rates would also alter which groups make payments to rural telephone companies. Under the current structure, only people or companies that originate or terminate calls on the networks of rural telephone companies make intercarrier compensation payments to those companies. If intercarrier compensation payments were converted to USF support, long-distance customers as a whole would pay for it.

In addition, converting intercarrier compensation payments into USF support could fix the transfer of funds to rural telephone companies at current levels, even though competition from other telecommunications providers and technologies is gradually reducing such payments. Thus, restructuring intercarrier compensation could protect rural telephone companies from the competition that is occurring in other telecommunications markets and thereby deny consumers the benefits of that competition.

If USF payments increased because of reductions in intercarrier compensation, however, the payments could be structured in such a way as to avoid committing any new resources to cross-subsidies or even to reduce cross-subsidy amounts. Currently, competitive entrants are eligible for the same per-line payments from the USF as the incumbent serving the same area. That equivalence means that wireless entrants receive payments from the USF that were originally designed to compensate incumbents for reducing their long-distance access rates during a period before most new entrants had entered the market. Careful design of USF payments to partly replace lost intercarrier compensation could result in a reduced flow of resources to competitive entrants, on net. That change would require at least partly decoupling the support given to incumbents from the support given to competitive entrants.

5. One option under consideration at the FCC and in the Congress is to convert USF fees from the current revenue-based charge into an access-based charge, such as one based on telephone numbers or connection capacity. That shift would reduce such price distortions. For more details, see Congressional Budget Office, *Financing Universal Telephone Service*.

Limit Broadband Subsidies

The discussion now taking place about how best to promote rural broadband spans a wider range of policy options than the USF budget. Under current law, for a new telecommunications service to qualify for USF support, a substantial majority of residential consumers nationwide must subscribe to it—a condition not yet achieved by broadband. Consequently, new legislation would be necessary to expand USF subsidies for rural broadband beyond those currently provided to schools, libraries, and rural nonprofit health care providers. Such legislation has been proposed.

One option for controlling USF spending would be to keep special programs such as broadband separate from the Universal Service Fund. USF programs are not subject to the annual scrutiny of the Congressional appropriation process, as discretionary spending programs are. As a result, the size of USF programs can grow or remain stable while discretionary programs' funding is altered as national priorities change.

Even if lawmakers do not explicitly authorize the expansion of rural broadband service, the USF will continue to provide financing for the development of broadband in rural areas. Such funding goes to pay for infrastructure investments by carriers that let them provide both conventional telephone service and advanced digital services, including broadband.