



COMPETITIVE ENTERPRISE INSTITUTE

Tech Briefing 2001

*A Free-Market Guide to Navigating Tech Issues
in the 107th Congress*

Universal Service for Telecommunications

by
Solveig Singleton

“Universal service” is an example of old-style telephone regulation that doesn’t fit well into the modern telecommunications world. This section explains its origin and flaws, with particular focus on explicit federal support for high-cost (usually rural) areas, except where otherwise noted.

What is universal service? Theodore Vail, the founder of the Bell System, first used the term universal service to mean there should be one interconnected telephone system, enabling any telephone customer to call any other customer.¹ Today, universal service has come to mean the idea that everyone is entitled to have phone service—and perhaps broadband connections and Internet access, too.

It is a myth that subsidies to promote universal service were embodied in the Telecommunications Act of 1934.² In truth, FCC first formalized a universal-service policy in the 1950s, eventually becoming the “Ozark Plan,” under which revenues from artificially high prices on long-distance phone service subsidized artificially low prices for local phone service, with especially large subsidies for local service in rural areas.

Today, universal service refers to various FCC or state programs which subsidize telephone companies in rural or other “high-cost” areas. This amounts to \$2.6 billion annually in explicit federal subsidies. But as discussed below, most of the subsidies to high-cost areas come in the form of hidden, or “implicit,” charges built into federal and state rate regulations. (Estimates of total federal and state support, including implicit support, vary.) Federal subsidies for advanced services for schools and libraries are now at \$1.5 billion per year, rural health facilities at \$2.8 million, and programs targeted to low-income telephone subscribers at \$600 million.³

Policy background: the Telecommunications Act of 1996. The breakup of AT&T in 1984 and the competition that followed threatened FCC’s universal-service program. When competition arrived in the long-distance business and FCC began to reduce

“access charges,” prices came down, so there was less money for subsidies available from long-distance phone companies. But business users were charged more than residential customers for local service, and states could still require intrastate long-distance customers to pay more, so local residential service continued to be subsidized.

Then, in the early 1990s, competition grew between providers of local business service. The monies that had been siphoned from traditional local phone companies’ (mostly the former Bell Operating Companies) business users to their residential users began to dry up.

The partial solution in the Telecommunications Act of 1996 was to make all telecommunications service providers, even the new competitors, pay something toward the universal-service subsidy. The act also extended subsidies to cover “advanced services,” to be defined at FCC’s discretion, and created the fund for schools and libraries.

The money for the subsidies comes from a tax on telecommunications services. The 1996 act directed that federal funding for universal service be made explicit, so consumers can see how much they are paying. FCC has partly implemented this policy, but some federal universal service cross-subsidies remain hidden in the “access charges” paid by long-distance phone companies to local phone companies.⁴ Explicit federal-funding mechanisms appear in the form of fees on customers’ phone bills. Most of the hidden charges for universal service, however, are imposed by state, not federal, regulators.

A special tax on communications. Taxes imposed on only one sector of the economy—such as telecommunications service providers—distort the decisions of businesses and consumers engaged in the taxed activities.⁵ The tax on communications that funds universal service can discourage consumers from adopting new technologies. For this reason, many experts support the idea that universal service should be funded out of general tax revenues. This would reduce the distortion, but would still be part of Americans’ tax burden, and as such would face political resistance. This resistance should be seen as a positive thing, however, for it would encourage policymakers to eliminate waste from the program. This is because keeping general taxes at a minimum is the best policy.

Expanding explicit high-cost coverage to new services. Currently, the universal-service fund for high-cost areas subsidizes eligible carriers’

costs of providing basic dial-tone, touch-tone, and 911 services.⁶ The Telecommunications Act of 1996 delegated to FCC the power to expand universal-service coverage to newer services.⁷ For example, FCC might order that the high-cost fund subsidize services like voicemail, the building of ISPs in localities that lack toll-free Internet access, or broadband service.

However, FCC's authority is not unlimited.⁸ Because of the expense, many regulators are skeptical of expanding universal service. The universal-service fund (and the fees that appear on customers' phone bills to support the fund) could grow by billions over the years. One study tagged the cost of adding broadband at \$10.9 billion.⁹

Beyond the expense, expanding universal service means that monopoly-era price and cost distortions, hitherto confined to traditional telephone service, would begin to spread into new services like Internet access. It is not merely preserving the regulatory *status quo*, but spreading regulation to new industries. These consequences include:

- ☞ subsidizing higher-cost infrastructure discourages the adoption of low-cost technology, like wireless;
- ☞ giving subsidies to services (such as voicemail), but not to competing equipment (answering machines), sets up unfair competition;
- ☞ subsidizing early-state technology like broadband could induce wasteful early adoption of technology that quickly becomes obsolete.

One key premise of the Telecommunications Act is that communications services can be competitive. Thus communications markets, especially for new services born in a competitive environment, should need no subsidies to keep costs low. Universal-service subsidies should not be expanded. A better policy would be to create a "firewall" between traditional telephone service and new services, to keep obsolete regulations from spreading into new areas.¹⁰

Unfairness and waste in the explicit and implicit subsidy to high-cost areas. The following discussion pertains to implicit universal-service subsidies, state and federal, as well as explicit federal subsidies. The most expensive part of the universal-service plan is also the most wasteful. This is the subsidy to companies operating in high-cost areas. These companies are often affiliated with profitable businesses and are far from poor. Many customers, including but not limited to those at wealthy resorts that receive this subsidy, could afford to pay the real costs of phone service

to their areas. Your telephone charges help subsidize such needy folk as the residents of Palm Springs, California, and Hilton Head, South Carolina. Even if one takes the view that such subsidies do not generally go to rich areas, the picture does not improve. Economists Robert Crandall and Leonard Waverman note that the burden of implicit universal-service charges falls particularly on heavy users of long-distance service, most of whom are low-income and rural.¹¹

There is also an issue of fairness in asking urban residents (even of low-income areas) to subsidize rural users. People live in rural areas by choice. Some things cost more in urban areas (housing) and some cost more in rural areas (transportation); but costs of living in rural areas are generally lower.¹² People should bear the natural consequences of their decisions to live where they do.

By targeting support to individuals rather than phone companies, Congress and the states could continue to provide support for the most needy telephone customers, while greatly reducing the overall size of the universal-service program.

Universal service versus competition. As described above, universal-service subsidies were born in the age of regulated telephone monopoly and began to fall apart when competition forced prices down. Even after the 1996 act, universal service is not compatible with freely competitive markets.

☞ Universal service discourages competition in residential and rural areas. Competitors are first attracted to markets where the incumbent players' prices are too high, not too low. That is why competition came first to business services and long distance. Competitors are unlikely to be attracted to residential and rural markets where prices are held below market rates. For example, satellites and other wireless technology offer a cheaper way to provide service in some high-cost areas. But holding prices below market rates means reduced investment in those innovations.

☞ Fledgling competitors often need to start small and serve more profitable areas first, until they have capital to expand. History shows this pattern in long-distance service (MCI got started providing private lines), and in business services (Competitive Access Providers at first served only a few densely populated buildings). But universal-service subsidies only are available to companies that can afford to agree to serve an entire

state or region from the very start—to provide “universal service.” That means the subsidies give incumbents an advantage over all but the largest competing firms.

☞ In the case of universal service, the additional fees levied on a second phone line or wireless phone service penalize consumers for buying those services. This can “chill” the growth of cutting-edge communications services. For example, new services like paging pay the tax intended to subsidize “high-cost” areas, but are not usually eligible for subsidies (the subsidy monies go to old-fashioned Plain Old Telephone Service).

☞ Ultimately, competition forces all service providers to move prices toward costs. No business will be able to charge extra. Businesses with the least healthy balance sheets will be hit the hardest by requests to fill the universal-service-fund coffers.

~ SOLVEIG SINGLETON

For further reading:

Crandall, Robert W., and Leonard Waverman. *Who Pays for Universal Service: When Telephone Subsidies Become Transparent*. Washington, DC: Brookings Institution Press, 2000.

Gasman, Lawrence. “Universal Service: The New Telecommunications Entitlements and Taxes.” *Cato Institute Policy Analysis*, no. 310 (1998).

¹ Milton Mueller, *Universal Service: Competition, Interconnection, and Monopoly in the Making of the American Telephone System* (Cambridge, Massachusetts: MIT Press, 1997), pp. 92-95.

² 47 U.S.C. § 151; Mueller, *Universal Service*, p. 158.

³ Estimates are based on quarterly figures from the Federal Communications Commission, “Proposed Fourth Quarter 2000 Universal Service Contribution Factor,” public notice, 8 September 2000; available at www.fcc.gov/ccb/universal_service/quarter.html. For another recent analysis of federal universal-service spending, see Robert W. Crandall and Leonard Waverman, *Who Pays for Universal Service: When Telephone Subsidies Become Transparent* (Washington, DC: Brookings Institution Press, 2000), p. 10.

⁴ Crandall and Waverman, *Who Pays for Universal Service*, p. 11.

⁵ James Alleman, Paul N. Rappaport, and Dennis Weller, “Universal Service: The Poverty of Policy,” 71 *Colorado Law Review* 849, 869 (2000) (“distorting the prices of telecommunications services is a particularly costly method for financing universal service subsidies. The services with elevated prices are generally those for which demand is more elastic than for local service...Because the burden of this funding

is concentrated on certain telecommunications services, rather than drawn from general revenues, the base of the 'tax' is relatively narrow, and the markups on the prices of the services generating the subsidy are quite high"). See also John W. Berresford, "The Future of the FCC: Promote Competition, Then Relax," 50 *Admin. Law Review* 731, 763 (1998); Jerry Hausman and Howard Shelanski, "Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies," 16 *Yale Journal on Regulation* 19, 30 (1999); Thomas G. Krattenmaker, "The Telecommunications Act of 1996," 29 *Connecticut Law Review* 123, 164-166 (1996); William J. Baumol and Thomas W. Merrill, "Does the Constitution Require That We Kill the Competitive Goose? Pricing Local Phone Services to Rivals," 73 *New York University Law Review* 1122 (1998); William J. Baumol, *et al.*, "Parity Pricing and Its Critics: A Necessary Condition for Efficiency in the Provision of Bottleneck Services to Competitors," 14 *Yale Journal on Regulation* 145 (1997); Jerry Hausman, "Taxation by Telecommunications Regulation," *National Bureau of Economic Research*, Working Paper No. W6260 (November 1997).

⁶ Federal State Joint Board on Universal Service, Report to Congress, 13 F.C.C. Rcd. 11501, par. 104 (1998).

⁷ 47 U.S.C. § 254(c).

⁸ *Ibid.*, (A-D). To expand universal service to cover new services, FCC must show the service in question: (1) is essential to education, public health, or public safety; (2) has, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers; (3) is being deployed in public networks by telecommunications carriers; and (4) is consistent with the public interest, convenience, and necessity.

⁹ Paul Coe Clark III, "NECA Takes Aim At Rural Broadband," *Broadband Networking News*, 4 July 2000.

¹⁰ Lawrence Gasman and Solveig Bernstein, "A Firewall to Protect Telecom," *The Wall Street Journal*, 27 March 1997.

¹¹ Crandall and Waverman, *Who Pays for Universal Service*, pp. 48, 52.

¹² For a good idea of how much cheaper it is to live in rural areas than urban ones, type some figures into the cost-of-living calculator at www.monstermoving.com/Relosmart.