



The History of Universal Service*

*(Twenty-Minute Version)

Origins

- As initially used (circa 1907), universal service was about interconnection of competing networks, not about prices and separations.
 - Lack of interconnection among Bell and independent companies
 - Many two-company towns; price wars
 - Low penetration rates, but less of a public policy driver
- AT&T acted upon opportunity to consolidate many elements into a system under its management.

Source: Crandall & Waverman, Who Pays for Universal Service?

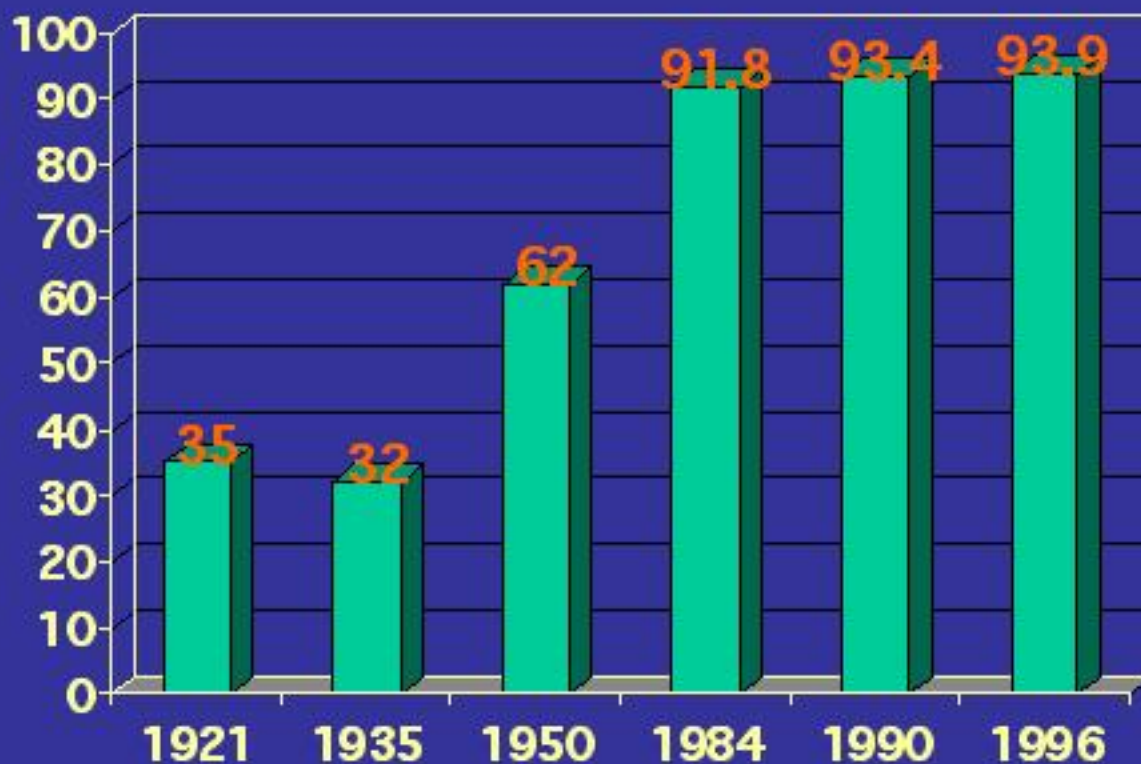


Evolution

- Concept of separations implemented in 1947 by a state-federal Joint Board
 - Initial efforts to discern whether some of the costs of the network should be apportioned to (and recovered from) interstate calling
 - Initial factor: 3 percent of costs shifted to interstate jurisdiction.
 - By the 1970s: 20 percent to interstate jurisdiction
- Concurrent developments in local rate regulation
 - Business rates v. residential rates
 - Urban rates v. rural rates



Snapshots of U.S. Telephone Penetration Rates



Source: FCC Data; Crandall & Waverman

Challenge

- As long as all of the rate shifts were in a self-contained system and AT&T was a de facto national telco, this worked
- As competition made inroads on AT&T's long distance business, made it harder to maintain
- Led to the access charge regime: long distance carrier pays local network facilities owner for the privilege of using the local network to originate and terminate calls.
 - At first, negotiated between AT&T and its principal competitor, MCI
 - Later, adopted as regulatory regime
 - Net effect: long distance dollars shared with local telcos.



Tension

- Two economic principles put pressure on local rates:
 - The local loop is not traffic sensitive. It is dedicated to one user's use and costs the same to have in place no matter how much it's used.
 - Local loops in rural areas are more expensive to provision and maintain because of distances from central office, and other factors such as terrain and weather.



Solution

- Subscriber Line Charge
- High Cost Assistance
 - Allowed companies whose loop costs were in excess of certain benchmarks above the national average for loop costs to shift some or all of those costs to the interstate jurisdiction.

Less than 115	115 to 160	160 to 200	200 to 250	Over 250
25%	75%	85%	95%	100%

How much higher are costs compared to national average?

More Programs

- Company-level programs
 - Long-Term Support
 - DEM Weighting (Dial Equipment Minute)
- People-level programs
 - Lifeline – discounts on service for low-income subscribers
 - Link-up – discounts for installation for eligible low-income subscribers



More Problems

- Statutory Authority for Universal Service?
 - Words appeared nowhere in the 1934 Act, as amended, up until 1996.
 - Authority premised on the preamble language of the pre-1996 Communications Act.
- Pressure to introduce competition leads to more tensions
 - Are the real costs of doing business clear enough to potential entrants?
 - How do new entrants get access to available support mechanisms?



Section 254

- Specific statutory authority assigned to Joint Board and FCC with deadlines for initial actions
- Principles of universal service – Seven of them, for example
 - Just reasonable and affordable rates
 - Access to advanced services everywhere
 - Specific, predictable and sufficient support mechanisms
 - Schools, libraries, health care access
- Definition of what is to be supported
- Who pays, and how
- Who's eligible to receive support



Background Reading

- Section 254
- www.tcdesk.com



More Background Reading

- Telecommunications Policy for the Information Age, G. Brock
- The Essential Guide to Telecommunications, A.Z. Dodd

