No. 21
July 2008

MERCATUS ON POLICY

TEXAS-SIZED SAVINGS FROM HIGH COST UNIVERSAL SERVICE REFORM

By Jerry Ellig

MERCATUS CENTER
GEORGE MASON UNIVERSITY

Ten years ago, the Texas Public Utility Commission (PUC) reduced subsidies for rural phone service that were hidden in long-distance charges, substituting explicit subsidies funded by a surcharge on Texas telephone bills. In 2005, the Texas legislature enacted sweeping telecommunications legislation that directed the PUC to evaluate universal service programs and consider further reforms.

The largest subsidy programs in the Texas Universal Service Fund are the "high cost" programs. They are meant to pay money to phone companies serving rural areas where costs are higher than in suburban and urban areas. A study by the PUC found that subsidies for rural phone service accounted for 92 percent of the fund's $580 million disbursements in 2005. Most of the money ($432 million) went to the state's largest four carriers—AT&T, Verizon, Embarq, and Windstream—which serve the largest number of rural lines.[1] The money comes from surcharges on the intrastate portion of wireline and wireless phone bills.

In September 2007, the PUC started a proceeding to reexamine the large-company high-cost fund. In April 2008, the parties in this proceeding negotiated a settlement estimated to reduce the subsidies to the four largest carriers by $144.35 million (36.5 percent) when fully implemented in 2012.[2]

EFFECTS OF THE LARGE COMPANY HIGH-COST SUBSIDIES

To help inform the universal service debate in Texas, in 2007 Joseph Rotondi and I undertook an analysis of alterna-

tive reforms the PUC might consider.[3] We found that the PUC had a variety of options that could significantly reduce the cost of the subsidy program with minimal impact on rural telephone subscribership. Key findings include:

The PUC did the right thing in 1999. Ten years ago, the Texas PUC reasoned that subsidizing rural phone service by overcharging consumers for long-distance service was not sustainable. PUC correctly forsaw that with long-distance prices falling and many calls shifting to wireless phones, the revenue base was inevitably going to continue shrinking.

We found that the PUC had a variety of options that could significantly reduce the cost of the subsidy program with minimal impact on rural telephone subscribership.

Today, given actual trends in long-distance prices, long-distance usage, and consumer price sensitivity, it would be mathematically impossible to impose a surcharge on long-distance service high enough to raise the $500-600 million collected annually by the Texas universal service fund.[4]

The hidden cost to society of raising the revenues could be reduced substantially. Current universal service charges act like a percentage tax on telecommunications services. They discourage use of services like long-distance and wireless, where numerous economic studies have demonstrated that consumer usage is sensitive to price. (Any parent who's gotten hit with a big long-distance or wireless bill when their child spent too much time on the phone understands this!)

The value lost by consumers, operating profit lost by companies, and tax revenue lost by governments due to reduced use of these services is an *additional* cost to society of raising the revenues. Economists call this social cost the "deadweight loss." Deadweight loss means society as a whole is less prosperous because resources are not employed in the uses consumers value most highly. One way to reduce the deadweight loss is to reduce the assessment rate. For instance, we estimate after the assessment rate was reduced to 4.4 percent in 2007, the deadweight loss of the subsidies felt to approximately $138 million, a significant decrease over our 2005 estimate of $176 million.[5]

The subsidies have caused relatively few additional phone subscriptions. Subsidies have made phone service cheaper for many rural residents. But because local wireline phone service is not very price-sensitive (that is, it takes a fairly high price to drive most people away from purchasing the service), most subsidy recipients would have subscribed anyway. We estimate that the high cost subsidies to the four largest companies increased Texas telephone subscribership by between three-tenths and three-quarter of one percent, or between 41,000 and 102,000 subscribers. Dividing total subsidies by the number of successful outcomes (new subscribers) produced by the program, it costs an average of $4,000 –$10,500 annually to cause one additional subscriber to join the phone network.[6]

Subsidies may have made phone rates unreasonably low. Rural phone rates in Texas have not changed since 1999 or earlier. Because of rate regulation, most Texas rural rates are actually below urban rates, even though costs are higher in rural areas.[7] Reducing subsidies and allowing large company rural rates to match the highest large-company urban rates—$16 per month for residences and $41 per month for businesses—would save $97 million annually in universal service subsidies to the large carriers.[8]

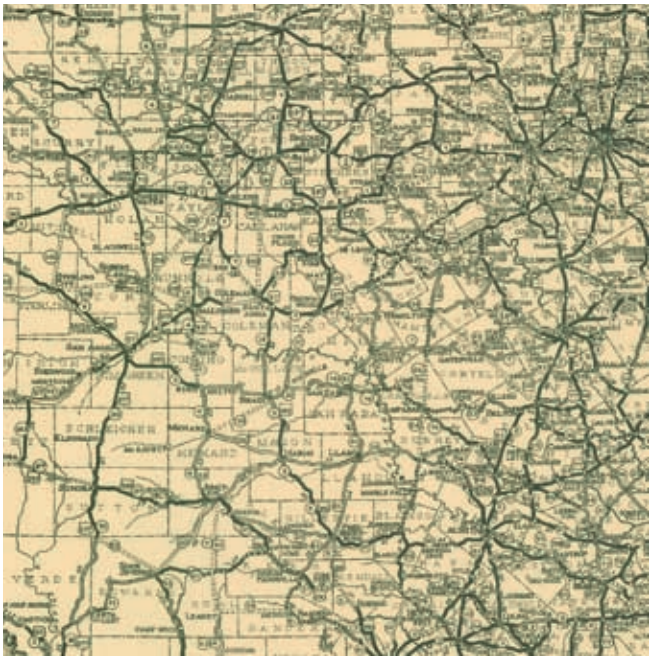
Progressive reforms would cost little. Continuing the current subsidy levels and low rates for low-income households who participate in the joint federal-state Lifeline program would cost little, because Lifeline households make up less than 5 percent of all Texas telephone subscribers.[9]

EFFECTS OF REFORMS APPROVED BY THE PUC

The parties to the settlement the PUC-approved estimate agreed that the changes will save a total of $144.35 million annually when fully implemented in 2012.[10] There are five sources of savings:

Eliminate subsidies in deregulated exchanges. Phone rates are deregulated in exchanges where the incumbent phone company faces competition. Subsidies in these exchanges will be discontinued in 2009.
(Savings: $18.55 million)

Reduce subsidies for business lines: "Single-line" business customers are eligible for up to five subsidized lines in high-cost areas. The settlement reduces these subsidies by gradually reducing the number of lines eligible for subsidy (to one for Verizon, three for Embarq, one for Windstream, and zero for AT&T). Verizon, Embarq, and Windstream agreed that if they raise business rates above $41 per line, their subsidies will be further reduced by a concomitant amount.
(Savings: $17.1 million)



Rebalance residential rates. The four large phone companies agreed to substantial subsidy reductions on residential lines in exchange for the opportunity to charge higher rates on those lines. Residential rates on subsidized lines cannot exceed $17 for Embarq and Verizon, $15.50 for Windstream, and $16.25 for AT&T. By comparison, the highest residential rate now charged by a large company is $16.00, and the highest residential rate charged by any incumbent company in a rural area is $19.00. The subsidy reductions and rate increases will phase in between 2009 and 2012. The companies are not required to increase rates and must obtain approval from the PUC in a separate proceeding in order to do so. The subsidy reductions occur even if the companies do not ask for permission to raise rates.
(Savings: $93 million)

Eliminate subsidies on wholesale lines: Some competing phone companies purchase phone service from the incumbents at wholesale rates and then re-sell the service to consumers and businesses at retail. The settlement removes universal service subsidies for these lines provided by AT&T, Embarq, and Verizon, effective in 2009.
(Savings: $10 million)

Windstream subsidy reduction: The settlement agreement calculates the savings from Windstream's subsidy reduction separately, which accounts for an additional $5.6 million.
(Savings: $5.6 million)

THE HIDDEN CONSUMER WELFARE BENEFIT

As a result of these reforms, the typical Texas consumer will pay less to subsidize phone service in rural areas. In addition, the deadweight loss associated with the funding assessments will fall.

The 2007 Mercatus study calculated that each dollar of Texas universal service assessment generated a deadweight loss of 29 cents.[11] Reducing the subsidies by approximately $150 million, therefore, should reduce the deadweight loss by about $43.5 million annually. This is the amount of additional value Texas consumers, phone companies, and taxing authorities will receive when the reduction in the universal service assessment encourages greater use of communications services.

As a result of these reforms, the typical Texas consumer will pay less to subsidize phone service in rural areas. In addition, the deadweight loss associated with the funding assessments will fall.

The subsidy reductions mean large companies' rates for basic local phone service in rural areas could increase for the first time since 1999 or earlier. Even with the rate increases, residential and business rates on subsidized lines will be no higher than the rates that customers in some rural areas already pay. Residential rates will still be far below the cost of a basic unsubsidized wireless plan ($29.99) or a basic satellite-phone service plan ($49.99).[12]

LOOKING FORWARD

The settlement calls for the PUC to take two additional actions that could benefit consumers substantially:

Progressive targeting of subsidies: Subsidies in rural areas can be better targeted to low-income households by expanding the Lifeline discount to shield these households from some of the rate increases. The settlement calls for the PUC to open a proceeding intended to give Lifeline households a discount equal to 25 percent of any rate increases that occur as a result of the subsidy reductions.

Lower-cost technologies: The cost of subsidies in some rural areas could be reduced by allowing phone companies to

employ less-expensive technologies, such as wireless, to meet their "provider of last resort" obligations, instead of requiring them to maintain aging copper wires. The settlement calls for the PUC to revive a proceeding addressing quality of service issues for "nontraditional" technologies. Hopefully, this proceeding will remove barriers to the use of less-expensive technologies to serve rural areas.

Two other reforms that were outside the scope of the PUC's proceeding could deliver additional large consumer benefits:

Numbers-based universal service assessments: The current funding mechanism generates a large deadweight loss because it acts like a usage-based tax. The Mercatus study estimated that charging a flat universal service assessment per phone number would encourage use of communications services and cut the deadweight loss in half.[13]

Small-company subsidies: The recent reform proceeding did not address subsidies to the fifty-seven small companies that serve high-cost areas. The Mercatus study estimated that the PUC could save $33 million annually simply by allowing all small-company rates to rise to the national average rate of $14.52 and reducing subsidies accordingly.[14] This rate is still below the residential-rate ceilings the large companies agreed to in the settlement approved by the PUC.

ENDNOTES

1. Public Utility Commission of Texas, *Report to the 80th Texas Legislature: Review and Evaluation of the Texas Universal Service Fund Pursuant to PURA* (January 2007), §56.029, Figures 4 and 8, http://www.puc.state.tx.us/telecomm/reports/TUSF/TUSF_Report_80thLeg.pdf.
2. Public Utility Commission of Texas, "Motion for Approval of the Unanimous Settlement Agreement," Docket No. 34723 (April 8, 2008), accessible through http://interchange.puc.state.tx.us.
3. Jerry Ellig and Joseph Rotondi, "Outcomes and Alternatives for Universal Telecommunications Service: A Case Study of Texas," *Texas Review of Law & Politics* 12, no. 1 (Fall 2007), 1-91, http://www.mercatus.org/Publications/pubID.4245,cfilter.0/pub_detail.asp.
4. Ellig & Rotondi, "Outcomes and Alternatives," 48.
5. Ibid., 43-45.
6. Ibid., Figures 3 and 4.
7. Robert W. Crandall and Jerry Ellig, "Texas Telecommunications: Everything's Dynamic Except the Pricing," *Texas Public Policy Foundation Research Report* (January 5, 2005) 25. http://www.texaspolicy.com/pdf/2005-01-telecom.pdf.
8. Ellig & Rotondi, "Outcomes and Alternatives," Figure 13.
9. Ibid., 69.
10. All figures are from Texas PUC, "Motion for Approval of the Unanimous Settlement Agreement."
11. Ellig & Rotondi, "Outcomes and Alternatives," Figure 7.
12. Ibid., 61.
13. Ibid., 50.
14. Ibid., 61.

Jerry Ellig is a senior research fellow at the Mercatus Center at George Mason University. Between August 2001 and August 2003, Dr. Ellig served as deputy director and acting director of the Office of Policy Planning at the Federal Trade Commission. He has also worked as a senior economist for the Joint Economic Committee of the U.S. Congress and as an assistant professor of economics at George Mason University.