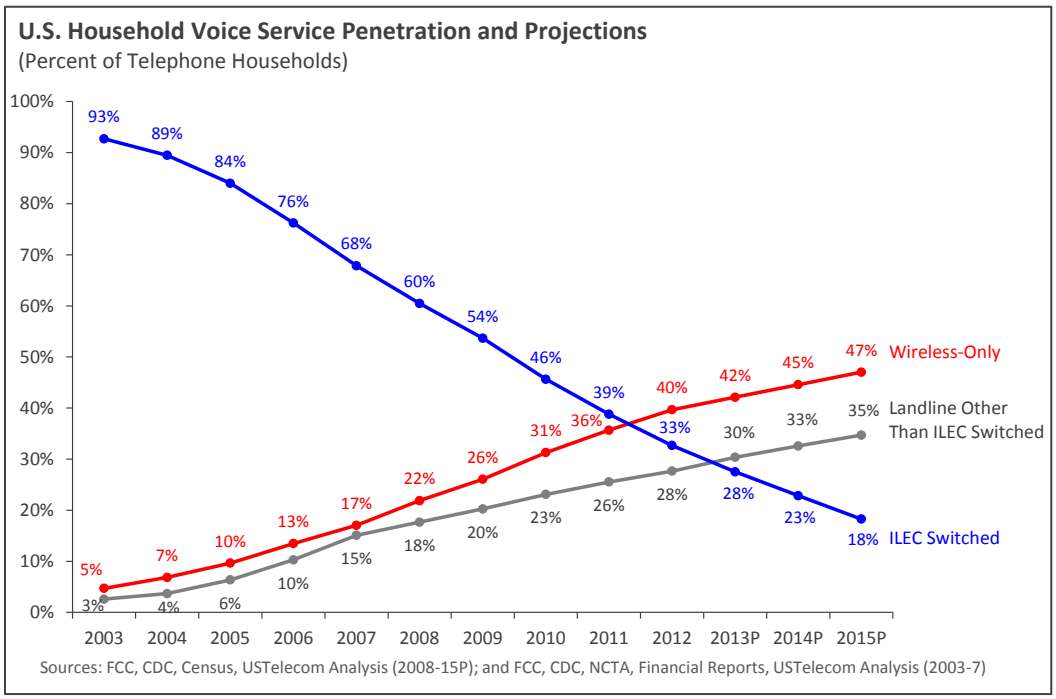
VOICE COMPETITION HAS ENDED ILEC DOMINANCE

By Patrick Brogan, Vice President of Industry Analysis

An updated USTelecom analysis of residential voice competition data reaffirms previous research showing that an overwhelming majority of consumers are dropping traditional switched telephone landlines from incumbent local exchange carriers (ILECs) in favor of modern mobile and Internet Protocol (IP) options. This analysis provides historical estimates and straight line projections through 2015 for both household-level voice service and total voice connections. By the end of 2012, U.S. households using wireless-only phone service had surpassed households using traditional ILEC switched landlines. By the end of 2013, an estimated 42 percent of households were wireless only while 30 percent were using non-switched services and less than 28 percent were using traditional landlines (see Chart 1). Based on current trends, wireless only households will be approaching 50 percent over the next couple of years and traditional landlines will fall below 20 percent of households. Based on trends, from 2000 to 2015 ILECs will have lost a projected 70 percent of switched access lines and 79 percent of switched retail residential access lines (see Chart 2) due to facilities-based competition from wireless and cable.

Chart 1: ILEC Switched vs. Wireless-Only and Interconnected VoIP Households[1]



[1] In this chart, the ILEC switched category includes all non-cable, non-ILEC switched services, on the assumption that they are resold ILEC switched services. ILEC VoIP lines are included in the Landline Other Than ILEC Switched category.

These projections provide ongoing support for USTelecom's December 2012 petition seeking a declaratory ruling from the Federal Communications Commission (FCC) that ILECs should no longer be subject to dominant carrier regulation. In particular, as detailed in USTelecom's December 2012 petition to the FCC, the mounting evidence of non-dominance undermines the core rationale for much legacy regulation of ILEC switched residential voice services.

The estimates and projections below for households and connections are based on an analysis of the most current landline data from the FCC, wireless substitution data from the Centers for Disease Control (CDC), and household data from Census. This updates and revises previous analyses published in a January 2012 research brief, a November 2012 research paper, an April 2013 research brief, and a November 2013 research brief based on earlier data releases.

Households Analysis

This household-level voice share analysis includes historical data from 2003 and revised estimates for 2013, plus projections through 2015. The analysis is based on the latest available data from FCC (year-end 2012), CDC (mid-year 2013), and Census (2013). As of year-end 2013, the estimated share of U.S. telephone households for traditional ILEC-provided voice service (ILEC switched) was approximately 27.5 percent. The vast majority is ILEC retail service; with the remainder being resold ILEC switched wholesale service. Of the remaining telephone households at year-end 2012, an estimated 42 percent had "cut the cord," relying entirely on wireless telephone service. Almost 22 percent were using cable telephony, mostly interconnected voice over Internet Protocol (VoIP); 2.5 percent were using independent VoIP providers; and 6 percent were using an ILEC VoIP service.

The declining trends in switched voice service and the rapid migration to mobile and IP networks continue apace. By 2015, the share of telephone households using traditional switched landlines is projected to fall to 18 percent, while wireless-only households are projected to grow to 47 percent and landlines other than ILEC switched are projected to reach 35 percent. The latter category consists of 26 percent cable and non-ILEC VoIP and 9 percent ILEC VoIP. In addition, CDC data indicate between 15 percent and 16 percent of households are "wireless-mostly," meaning they subscribe to landline telephone service but receive all or most calls on wireless telephones. Allocating this group in proportion to landline shares, today only about 20 percent of telephone households use switched ILEC landlines for all or most of their calls and by 2015 this figure will fall to approximately 13 percent. As discussed below, all of these estimates of ILEC line losses are based on conservative assumptions.

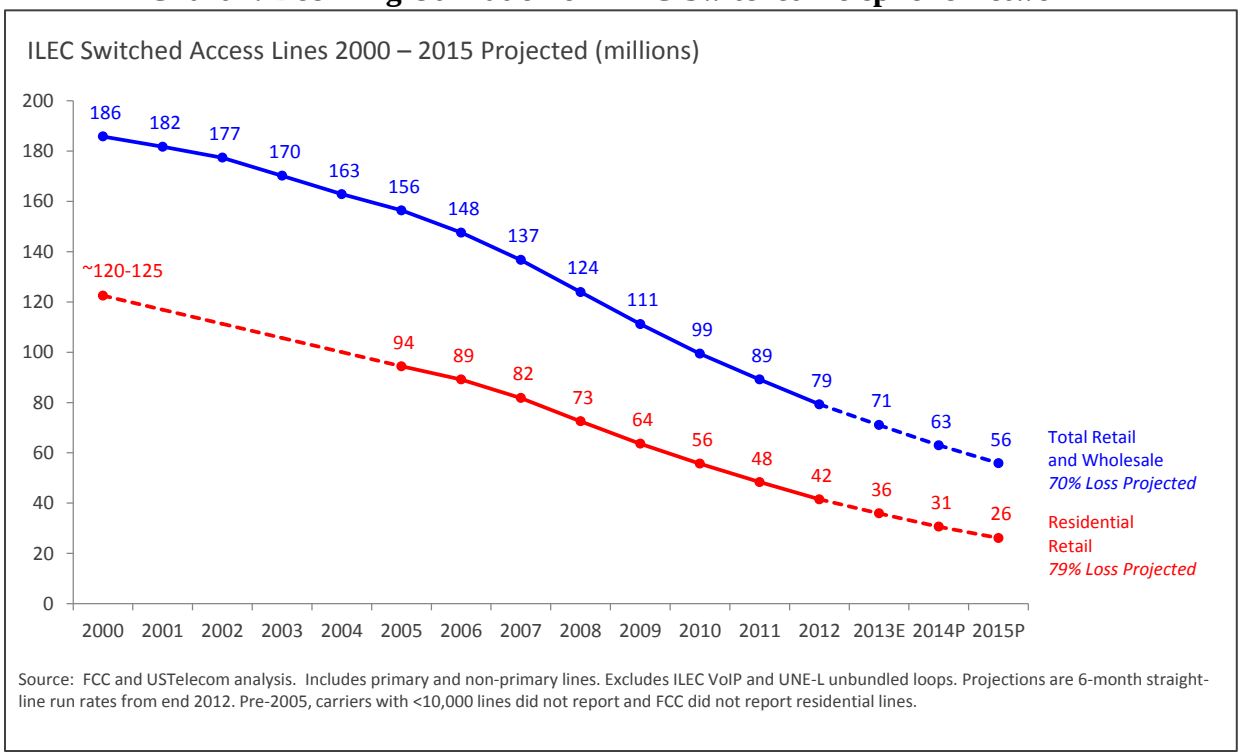
Some methodological revisions were necessary in this iteration of USTelecom's household voice share analysis for two reasons. First, there was a slight deceleration in cord cutting in the most recent CDC data for the first half of 2013. While it is too early to tell if this slowdown is temporary, the conservative approach is to continue to make straight-line estimates for cord cutters. For consistency, however, it was necessary to slow the rate of projected landline losses. Also to be conservative, the slower rate of landline losses was applied only to traditional switched landlines. As a result, wireless-only household estimates for 2013 are slightly lower than previously projected and ILEC switched lines are slightly higher. This could change if cord-

cutting returns to its previous trend. Second, some smaller categories were either beginning to trend negative or exhibiting volatility, so projections were smoothed. Detailed results and projections for all categories are shown in the table in Appendix A below, with the yellow highlighted row corresponding to the ILEC switched share in Chart 1. Appendix B below contains a detailed discussion of the methodological revisions.

Access Lines and Connections Analysis

Switched access line data emphasize the degree to which utilization of ILEC switched networks has declined since line growth peaked around the year 2000. Unlike the households-level analysis above, the access line data below include both residential and business lines and they do not adjust for multiple lines per household or business establishment. By the end of 2013, total access lines using the ILEC switched network had fallen from 186 million to 71 million, and are projected to fall to 56 million by end of 2015, or a decline of 70 percent from the year 2000. For retail residential service, lines are projected to fall an estimated 79 percent over the same period. See Chart 2.

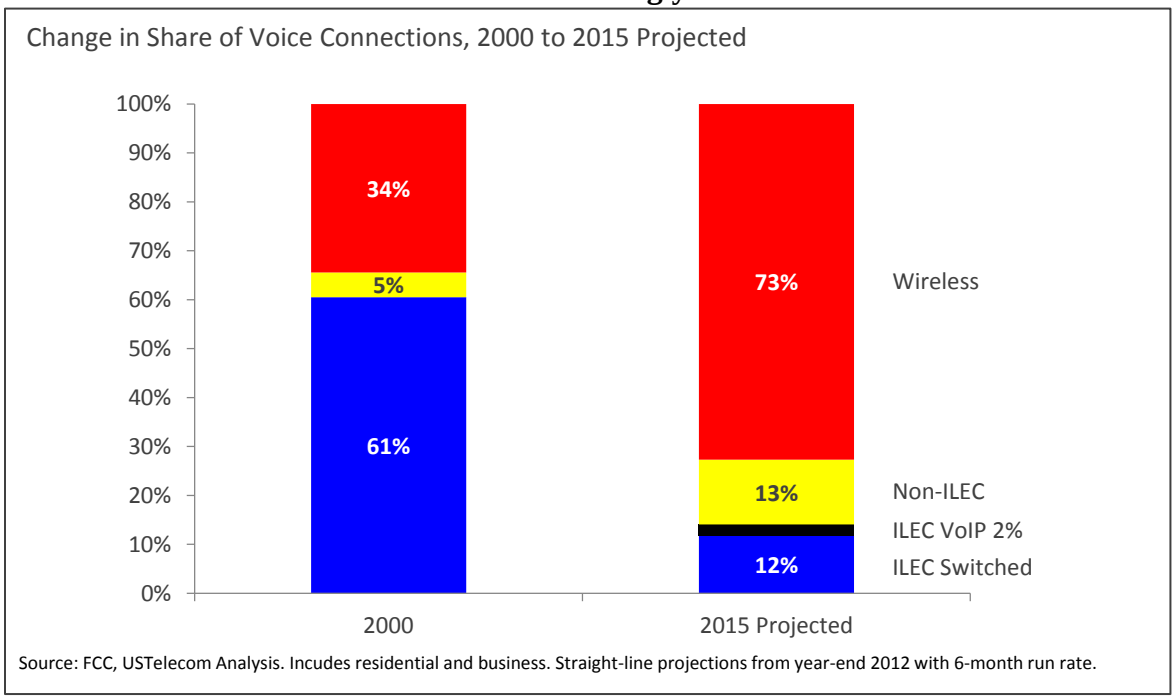
Chart 2: Declining Utilization of ILEC Switched Telephone Network



Source: FCC and USTelecom analysis. Includes primary and non-primary lines. Excludes ILEC VoIP and UNE-L unbundled loops. Projections are 6-month straight-line run rates from end 2012. Pre-2005, carriers with <10,000 lines did not report and FCC did not report residential lines.

An analysis of all U.S. voice connections, including wireless connections unadjusted for multiple subscriptions per household, underscores that ILECs are no longer dominant providers of voice service. By the end of 2015, switched ILEC connections—including business and residential, retail and wholesale switched lines—will represent approximately 12 percent of U.S. voice connections, 14 percent if ILEC VoIP connections are included (see Chart 3). Moreover, if trends continue, in two to three years there will be more non-ILEC lines than ILEC lines—even when including both ILEC switched and VoIP lines.

Chart 3: ILEC Switched Lines Are an Exceedingly Small Portion of Voice Connections



Summary

The declining share telephony provided over ILEC switched networks is evidence that ILECs are no longer dominant voice providers. At the national level, even when including ILEC VoIP and wholesale, ILEC share of household voice service was no more than 34 percent at the end of 2013. ILEC switched service was less than 28 percent at the end of 2013, conservatively falling to 18 percent in 2015. When taking into account "wireless mostly" households that still had landlines, but predominantly used their wireless phones, ILECs were the provider of first choice for voice service for 25 percent of U.S. households by the end of 2013, (20 percent for switched service) declining to an estimated 19 percent in 2015 (13 percent for switched service). However one slices the data, the portion of households getting voice telephone service over ILEC-owned end-user facilities, switched or VoIP, is significantly lower than the roughly 60 percent market share threshold at which AT&T long distance service was found to be non-dominant in the mid-1990s. Of course, voice telephony is only one of the many options available to consumers for personal communications. Internet voice and video calling, email, wireless text messaging, instant messaging, and social networking offer non-traditional alternatives to voice and these services are growing in popularity. Given these factors, along with low and declining utilization of the public switched telephone network, it is unfathomable ILECs continue to be classified as dominant voice providers. This was true at the end of 2012 when USTelecom filed its non-dominance petition, and remains the case today as competitive and technological trends persist. Moreover, the economic inefficiency of maintaining an underutilized PSTN underscores the urgency to quickly resolve IP transition issues and develop a regulatory framework that acknowledges there are no dominant voice providers in the broadband and mobile IP world.

Appendix A – U.S. Household Voice Telephony Choices 2008 to 2015 Projected

	HHs 2008	Share of Phone HHs	HHs 2009	Share of Phone HHs	HHs 2010	Share of Phone HHs	HHs 2011	Share of Phone HHs	*HHs 2012*	*Share of Phone HHs*	*HHs 2013 Projected*	*Share of Phone HHs*	*HHs 2014 Projected*	*Share of Phone HHs*	*HHs 2015 Projected*	*Share of Phone HHs*
Total Households (HHs)	117.1	n/a	117.4	n/a	119.3	n/a	120.8	n/a	122.0	n/a	*123.4*	*n/a*	*124.6*	*n/a*	*125.9*	*n/a*
Total Phone Households	114.9	100.0%	115.1	100.0%	116.9	100.0%	118.2	100.0%	119.3	100.0%	*120.5*	*100.0%*	*121.7*	*100.0%*	*123.0*	*100.0%*
Total Wired	89.7	78.1%	85.1	73.9%	80.4	68.7%	76.0	64.3%	72.0	60.3%	*69.8*	*57.9%*	*67.5*	*55.4%*	*65.1*	*53.0%*
ILEC Wired	69.7	60.7%	62.7	54.5%	55.7	47.6%	49.7	42.1%	44.6	37.4%	*40.5*	*33.6%*	*36.9*	*30.3%*	*33.3*	*27.1%*
ILEC Switched (retail and wholesale)	69.5	**60.5%**	61.8	**53.7%**	53.4	**45.6%**	45.9	**38.8%**	39.0	**32.7%**	*33.2*	***27.5%***	*27.8*	***22.8%***	*22.5*	***18.3%***
ILEC Retail	66.7	58.1%	59.4	51.6%	51.3	43.9%	44.2	37.4%	37.7	31.6%	*32.6*	*27.0%*	*27.3*	*22.4%*	*22.0*	*17.9%*
Non-ILEC, Non-Cable Switched (ILEC resale)	2.7	2.4%	2.4	2.1%	2.1	1.8%	1.7	1.4%	1.3	1.1%	*0.6*	*0.5%*	*0.5*	*0.4%*	*0.5*	*0.4%*
ILEC VoIP	0.2	0.2%	0.9	0.8%	2.3	2.0%	3.9	3.3%	5.6	4.7%	*7.3*	*6.1%*	*9.1*	*7.5%*	*10.8*	*8.8%*
ILEC Est. "Wireline Mostly"	56.9	49.6%	49.9	43.3%	42.9	36.7%	37.5	31.8%	33.0	27.7%	*29.5*	*24.5%*	*26.4*	*21.7%*	*23.4*	*19.1%*
ILEC Est. "Wireless Mostly"	12.8	11.1%	12.8	11.1%	12.8	10.9%	12.2	10.3%	11.6	9.7%	*11.0*	*9.1%*	*10.4*	*8.6%*	*9.9*	*8.0%*
Non-ILEC Wired	20.0	17.5%	22.4	19.4%	24.7	21.1%	26.3	22.3%	27.4	22.9%	*29.2*	*24.3%*	*30.6*	*25.1%*	*31.8*	*25.9%*
Non-ILEC Switched (excludes ILEC wholesale)	2.5	2.2%	2.3	2.0%	1.9	1.6%	1.7	1.5%	1.5	1.3%	*1.9*	*1.6%*	*1.7*	*1.4%*	*1.4*	*1.2%*
Non-ILEC VoIP	17.6	15.3%	20.1	17.5%	22.8	19.5%	24.6	20.8%	25.8	21.6%	*27.3*	*22.7%*	*28.8*	*23.7%*	*30.4*	*24.7%*
Cable Operator	17.0	14.8%	19.8	17.2%	21.6	18.5%	22.9	19.4%	24.2	20.3%	*26.1*	*21.7%*	*27.4*	*22.5%*	*28.6*	*23.3%*
Other than Cable Operator	3.0	2.6%	2.6	2.3%	3.0	2.6%	3.4	2.9%	3.1	2.6%	*3.1*	*2.6%*	*3.2*	*2.6%*	*3.2*	*2.6%*
Cord Cutters	25.1	21.9%	30.0	26.1%	36.6	31.3%	42.2	35.7%	47.3	39.7%	*50.8*	*42.1%*	*54.3*	*44.6%*	*57.8*	*47.0%*
No-Phone Households	2.2	n/a	2.3	n/a	2.4	n/a	2.6	n/a	2.7	n/a	*2.8*	*n/a*	*2.9*	*n/a*	*2.9*	*n/a*

Sources: FCC, CDC, Census, USTelecom. Numbers may not add due to rounding. Projections in gray shaded areas are straight-line estimates based on most recent six-month trends in available data, with the following adjustments: ILEC retail rate of decline assumed to slow to correspond with recent observed slowdown in cord-cutting and Non-ILEC Wired Other than Cable Operator and ILEC resale assumed to flatten.

Appendix B: Discussion of Methodology and Revisions

Methodology and Assumptions

USTelecom incorporates by reference the discussion of methodology published in Appendix B of its November 2013 Research Brief, "Growing Voice Competition Spotlights Urgency of IP Transition."

Key Methodology Changes Compared to the November 2013 Analysis

There are two methodology changes in this analysis compared to the previous version.

First, there was a slight deceleration in cord cutting in the most recent CDC data for the first half of 2013. The 6-month run rate fell from 1.9 percentage points in the second half of 2012 to 1.2 percentage points in the first half of 2013. It is too early to tell if this is a permanent deceleration or a temporary blip. In the past, there have been slowdowns that were then followed by an uptick or reversion to historical trends. Nonetheless, the conservative approach is to continue to make straight-line estimates for cord cutters, so the model assumes a 1.2 percentage point six-month run rate. As a result, the wireless-only household estimate for 2013 is slightly lower (42.1 percent) than the previous November 2013 projection (44.7 percent). Regardless, for consistency, it was necessary to slow the rate of projected landline losses. The run rate in our projections for 2013 was reduced approximately 20 percent from about 2.8 percentage points to 2.3 percentage points. In order to be conservative, the slower rate of landline losses applied only to ILEC switched landlines. As a result, the estimated household share for ILEC switched retail lines is higher (27.5 percent) than the previous November 2013 projection (26.1 percent). This could all change if cord-cutting reverts even partially to the previous trend.

Second, some smaller categories were either beginning to trend negative or exhibiting volatility, so projections needed to be smoothed. Non-Cable, Non-ILEC Retail Switched lines, which are assumed to be resold ILEC wholesale lines are trending down, but recent estimates are trending toward a negative number in the next two years. Therefore, the analysis assumes the trend levels out at approximately a half a million households. At the same time, estimated household shares for independent VoIP (Other than Cable Operator Non-ILEC VoIP) has been volatile in recent periods, fluctuating between approximately 2.5 percent and 3.0 percent. The data give no indication of a trend one way or the other, so the analysis assumes a flat share equal to the most recent share of 2.6 percent.

Finally, Census released new household data since the November 2013 analysis, which brought the household trend higher by several hundred thousand households as of year-end 2013 compared to previous projections.

While it is important to note these changes in methodology and assumptions, and their impact on the results, the margins of error are small, perhaps a couple of percentage points. The big picture is unaffected: a very large portion of U.S. households have chosen and continue to choose alternatives to traditional telephone service from ILECs as they migrate to modern IP and mobile networks.