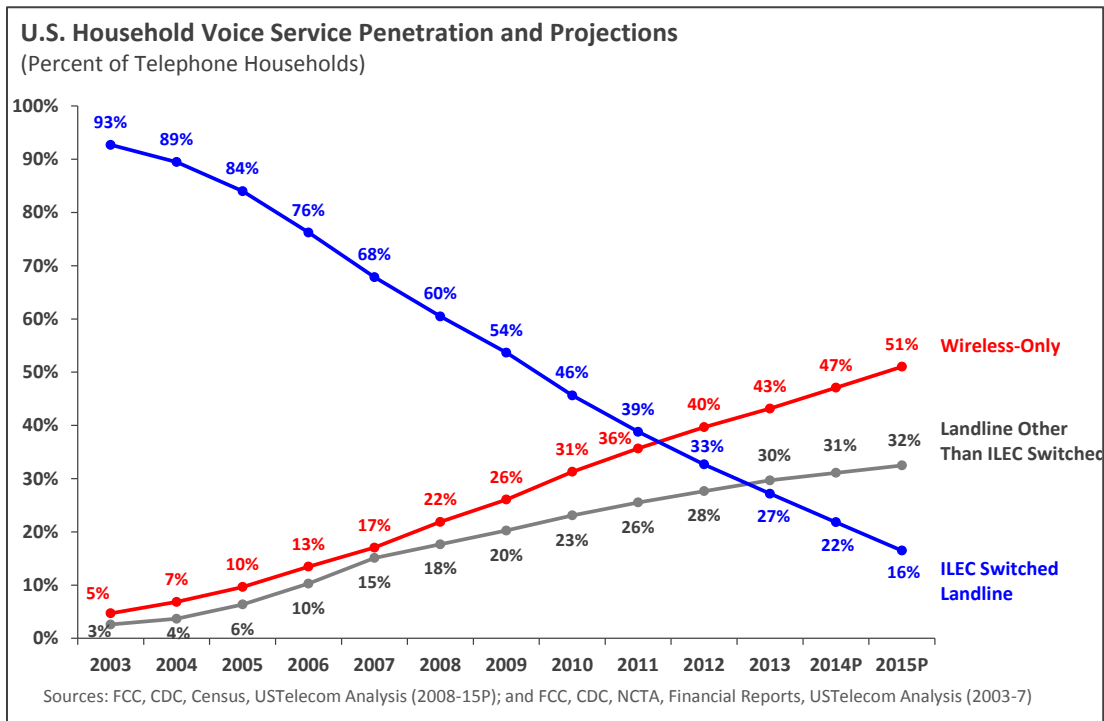


VOICE COMPETITION DATA SUPPORT REGULATORY MODERNIZATION

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. By the end of 2013, 43 percent of households were wireless only while 30 percent were using non-switched services and less than 27 percent were using traditional landlines (see Chart 1). Based on trends, by the end of 2014, 47 percent of telephone households will be wireless-only and that figure will exceed 50 percent by the end of 2015. Traditional landlines are now approaching 20 percent of households and this figure will drop toward 15 percent over the next couple of years. Based on trends, from 2000 to 2015 ILECs will have lost a projected 72 percent of switched access lines and 82 percent of switched retail residential access lines (see Chart 2) due to facilities-based competition from wireless and cable. By the end of 2015, ILEC switched connections will represent 11 percent of U.S. voice connections, 14 percent if ILEC VoIP is included (see Chart 3). Moreover, if trends continue, by 2015 or 2016 there will be more non-ILEC lines than ILEC switched plus VoIP lines.

Chart 1: ILEC Switched vs. Wireless-Only and Interconnected VoIP Households¹



¹ In this chart, the Landline Other Than ILEC Switched category includes ILEC VoIP and the ILEC switched category includes all non-cable, non-ILEC switched services, assuming that they are resold ILEC switched services.

These projections showing continuing declines in ILEC telephony provide support for USTelecom's October 2014 petition for regulatory modernization, which asks the Federal Communications Commission (FCC) to forbear from applying outdated rules that act as barriers to competition and investment in broadband. The data also provide ongoing support for quick resolution of IP transition issues and for USTelecom's December 2012 [petition](#) seeking an FCC declaratory ruling 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 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](#), a November 2013 [research brief](#), and an April 2014 [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 2013), CDC (year-end 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 percent. The vast majority is ILEC retail service; with less than 1 percent being resold ILEC switched wholesale service. Of the remaining telephone households at year-end 2013, an estimated 43 percent had "cut the cord," relying entirely on wireless telephone service. Approximately 21 percent were using cable telephony, mostly interconnected voice over Internet Protocol (VoIP); nearly 3 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. By 2015, the share of telephone households using traditional switched landlines is projected to fall to 16.5 percent, while wireless-only households are projected to grow to 51 percent and landlines other than ILEC switched are projected to reach 32.5 percent. The latter category consists of 24 percent cable and non-ILEC VoIP and 8.5 percent ILEC VoIP. In addition, CDC data indicate that about 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 as we approach the end of 2014, only about 20 percent of telephone households use ILEC landlines for all or most of their calls and by 2015 this figure will fall to approximately 17 percent. When considering only traditional switched lines, today only 15 percent of telephone households use ILEC landlines for all or most of their calls and this figure will drop to 11 percent by the end of 2015.

This iteration of USTelecom's household voice share analysis reverses several methodological revisions adopted in the previous April 2014 analysis. First, there was a slight deceleration in cord cutting in the CDC data for the first half of 2013. The deceleration moderated somewhat in the second half of 2013, but did not return to recent historical levels. While it is too early to tell if this slowdown is temporary, the best approach is to continue to make straight-line estimates for cord cutters. Second, in the April 2014 analysis, since some smaller categories were either beginning to trend negative or exhibiting volatility, projections were smoothed. Based on trends in the most recent data, the volatility has moderated and straight-line trends are not yielding any negative results. Therefore, this analysis relies on unadjusted straight-line trends for all categories. If volatility returns in the future, adjustments may be needed.

Regardless, the impact of volatility in projections is a marginal side-show when considering the larger trend of significant shifts away from ILEC lines to wireless and non-ILEC alternatives. 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. In order to address the prospect of a deceleration in cord-cutting and ILEC line losses, Appendix A includes alternative projections based on a scenario in which cord cutting and ILEC switched line losses fall to 90 percent of the previous 6-month run rate over each of the next two years. Even under this decelerated scenario, Wireless-Only shares and the corresponding ILEC Switched shares only shift by a couple of percentage points. Thus, even if line loss trends decelerate, the conclusion is unchanged: Appendix B below contains a detailed discussion of the methodology.

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 70 million, and are projected to fall to 52 million by end of 2015, or a decline of 72 percent from the year 2000. For retail residential service, lines are projected to fall an estimated 82 percent over the same period. See Chart 2.

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 11 percent of U.S. voice connections, 14 percent if ILEC VoIP connections are included (see Chart 3). Moreover, if trends continue, by 2015 or 2016 there will be more non-ILEC lines than ILEC lines — even when including both ILEC switched and VoIP lines.

Chart 2: Declining Utilization of ILEC Switched Telephone Network

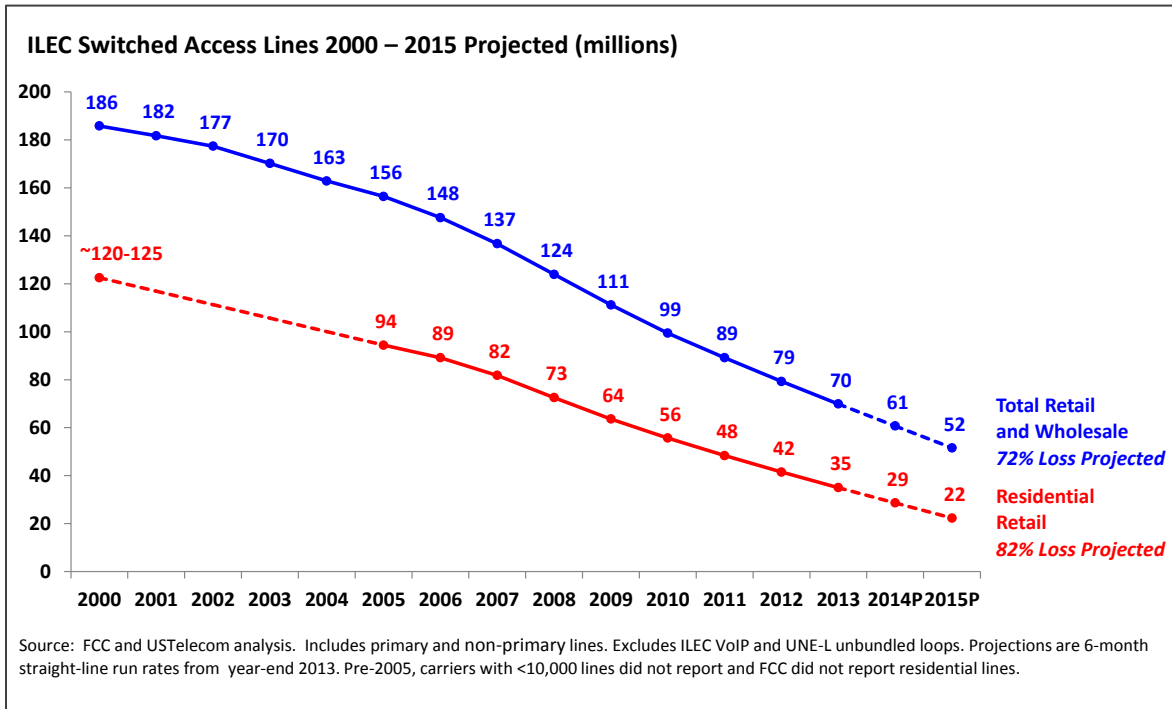
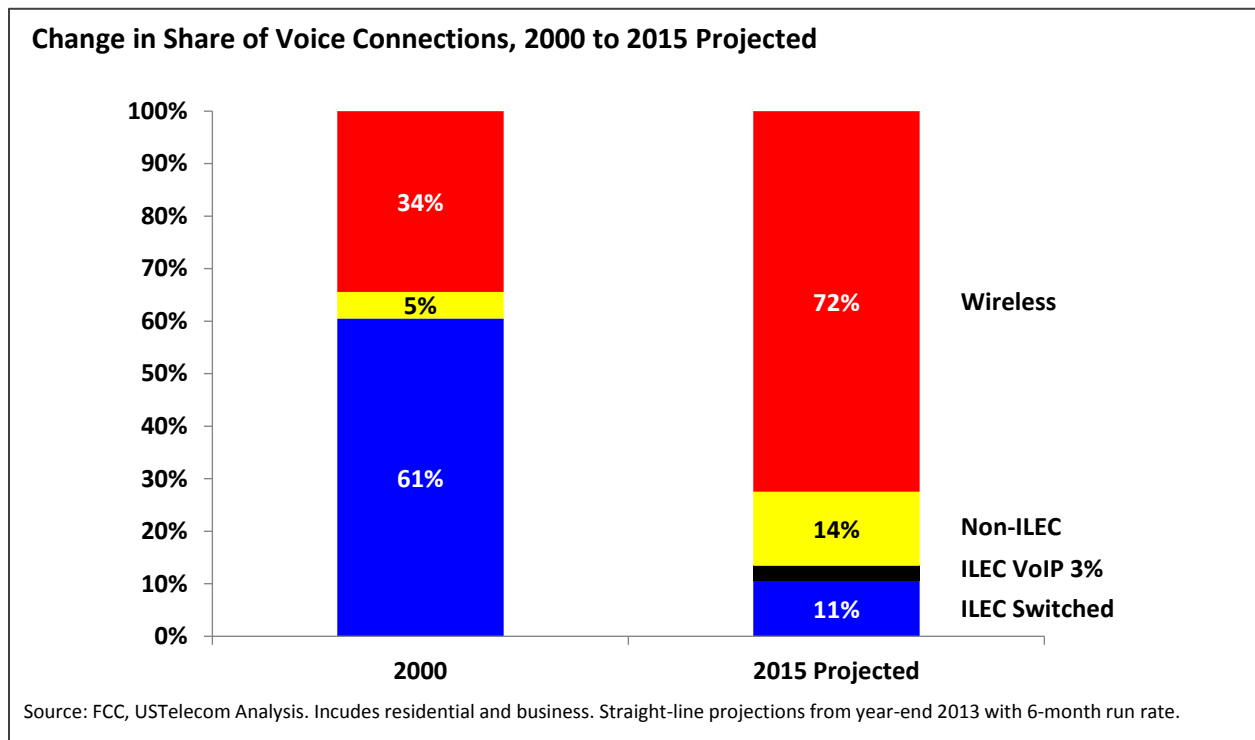


Chart 3: ILEC Switched Lines Are an Exceedingly Small Portion of Voice Connections



Summary

The declining share of telephony provided over ILEC switched networks is evidence that ILECs are no longer dominant voice providers. Archaic regulations which are rooted in ILEC dominance in voice services, and which divert resources from investment and competition in broadband, can no longer be justified. Even when including ILEC VoIP and wholesale, ILEC share of household voice service was no more than 33 percent at the end of 2013. Based on trends, these ILEC shares are approaching 29 percent today and projected to decline to 25 percent in 2015. Moreover, among ILEC landline customers, many also have wireless phones and some are “wireless mostly,” meaning they predominantly use their wireless phones. When taking these households into account, ILECs today are the provider of first choice for voice service for 20 percent of U.S. households, declining to an estimated 17 percent in 2015. When narrowing the field down to traditional switched lines only, the numbers are even starker. At the end of 2013, only 27 percent of households subscribed to ILEC switched service. Today, only about 21 percent of households use ILEC switched lines and that will fall to 16.5 percent in 2015. When taking into account wireless-mostly households, ILEC switched service is the first choice for voice service for 15 percent of households today, falling to 11 percent in 2015.

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. Furthermore, consumers have multiple choices other than voice telephony for personal communications: Internet voice and video calling, email, wireless text messaging, instant messaging and social networking are competitive alternatives that are growing in popularity. Given these factors, along with low and declining utilization of the public switched telephone network, it remains unfathomable that ILECs continue to be classified as dominant voice providers. Moreover, complying with outdated regulations and maintaining an inefficient, underutilized PSTN underscores the urgency to resolve IP transition issues and develop a regulatory framework that allows ILECs to shift resources to more effectively compete 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	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	122.1	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%	118.2	100.0%	119.4	100.0%	120.3	100.0%	121.5	100.0%	122.7	100.0%
Total Wired	89.7	78.1%	85.1	73.9%	80.4	69%	76.0	64.3%	72.0	60.3%	68.4	56.8%	64.3	52.9%	60.1	49.0%
ILEC Wired	69.7	60.7%	62.7	54.5%	55.7	48%	49.7	42.1%	44.7	37.4%	40.0	33.3%	35.4	29.1%	30.6	24.9%
ILEC Switched (retail and wholesale)	69.5	60.5%	61.8	53.7%	53.4	46%	45.9	38.8%	39.0	32.7%	32.7	27.2%	26.5	21.8%	20.2	16.5%
ILEC Retail	66.7	58.1%	59.4	51.6%	51.3	44%	44.2	37.4%	37.7	31.6%	31.6	26.3%	25.6	21.1%	19.5	15.9%
Non-ILEC, Non-Cable Switched (ILEC resale)	2.7	2.4%	2.4	2.1%	2.1	2%	1.7	1.4%	1.3	1.1%	1.1	0.9%	0.9	0.7%	0.8	0.6%
ILEC VoIP	0.2	0.2%	0.9	0.8%	2.3	2%	3.9	3.3%	5.6	4.7%	7.3	6.1%	8.8	7.3%	10.4	8.5%
ILEC Est. "Wireline Mostly"	56.9	49.6%	49.9	43.3%	42.9	37%	37.5	31.8%	33.0	27.7%	28.8	23.9%	24.7	20.3%	20.6	16.8%
ILEC Est. "Wireless Mostly"	12.8	11.1%	12.8	11.1%	12.8	11%	12.2	10.3%	11.6	9.7%	11.2	9.3%	10.7	8.8%	10.0	8.1%
Non-ILEC Wired	20.0	17.5%	22.4	19.4%	24.7	21%	26.3	22.3%	27.4	22.9%	28.4	23.6%	28.9	23.8%	29.5	24.0%
Non-ILEC Switched (excludes ILEC wholesale)	2.5	2.2%	2.3	2.0%	1.9	2%	1.7	1.5%	1.6	1.3%	1.3	1.1%	1.1	0.9%	0.8	0.7%
Non-ILEC VoIP	17.6	15.3%	20.1	17.5%	22.8	19%	24.6	20.8%	25.8	21.6%	27.1	22.5%	27.9	22.9%	28.7	23.3%
Cable Operator	17.0	14.8%	19.8	17.2%	21.6	18%	22.9	19.4%	24.3	20.3%	25.0	20.8%	25.8	21.2%	26.6	21.7%
Other than Cable Operator	3.0	2.6%	2.6	2.3%	3.0	3%	3.4	2.9%	3.1	2.6%	3.3	2.8%	3.1	2.6%	2.9	2.4%
Cord Cutters	25.1	21.9%	30.0	26.1%	36.6	31%	42.2	35.7%	47.4	39.7%	51.9	43.2%	57.2	47.1%	62.6	51.0%
No-Phone Households	2.2	n/a	2.3	n/a	2.4	n/a	2.6	n/a	2.7	n/a	3.1	n/a	3.1	n/a	3.1	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.

Appendix A - Continued

U.S. Household Voice Telephony Choices 2008 to 2015 Projected – Decelerated Line Loss Scenario

	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	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	122.1	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%	119.4	100.0%	120.3	100.0%	121.5	100.0%	122.7	100.0%
Total Wired	89.7	78.1%	85.1	73.9%	80.4	68.7%	76.0	64.3%	72.0	60.3%	68.4	56.8%	65.0	53.5%	62.3	50.8%
ILEC Wired	69.7	60.7%	62.7	54.5%	55.7	47.6%	49.7	42.1%	44.7	37.4%	40.0	33.3%	36.3	29.9%	33.5	27.3%
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%	32.7	27.2%	27.4	22.6%	23.1	18.8%
ILEC Retail	66.7	58.1%	59.4	51.6%	51.3	43.9%	44.2	37.4%	37.7	31.6%	31.6	26.3%	26.5	21.8%	22.4	18.2%
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%	1.1	0.9%	0.9	0.7%	0.8	0.6%
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%	8.8	7.3%	10.4	8.5%
ILEC Est. "Wireline Mostly"	56.9	49.6%	49.9	43.3%	42.9	36.7%	37.5	31.8%	33.0	27.7%	28.8	23.9%	25.4	20.9%	22.9	18.7%
ILEC Est. "Wireless Mostly"	12.8	11.1%	12.8	11.1%	12.8	10.9%	12.2	10.3%	11.6	9.7%	11.2	9.3%	10.9	8.9%	10.6	8.6%
Non-ILEC Wired	20.0	17.5%	22.4	19.4%	24.7	21.1%	26.3	22.3%	27.4	22.9%	28.4	23.6%	28.7	23.6%	28.8	23.5%
Non-ILEC Switched (excludes ILEC wholesale)	2.5	2.2%	2.3	2.0%	1.9	1.6%	1.7	1.5%	1.6	1.3%	1.3	1.1%	0.9	0.7%	0.1	0.1%
Non-ILEC VoIP	17.6	15.3%	20.1	17.5%	22.8	19.5%	24.6	20.8%	25.8	21.6%	27.1	22.5%	27.9	22.9%	28.7	23.3%
Cable Operator	17.0	14.8%	19.8	17.2%	21.6	18.5%	22.9	19.4%	24.3	20.3%	25.0	20.8%	25.6	21.1%	25.9	21.1%
Other than Cable Operator	3.0	2.6%	2.6	2.3%	3.0	2.6%	3.4	2.9%	3.1	2.6%	3.3	2.8%	3.1	2.6%	2.9	2.4%
Cord Cutters	25.1	21.9%	30.0	26.1%	36.6	31.3%	42.2	35.7%	47.4	39.7%	51.9	43.2%	56.5	46.5%	60.4	49.2%
No-Phone Households	2.2	n/a	2.3	n/a	2.4	n/a	2.6	n/a	2.7	n/a	3.1	n/a	3.1	n/a	3.1	n/a

Sources: FCC, CDC, Census, USTelecom. Numbers may not add due to rounding. Projections in gray shaded areas are based on decelerated cord-cutting and ILEC line losses. In this decelerated scenario, each six-month run rate is reduced to 90 percent of the run rate for each previous six-month period.

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 were two notable methodology changes in the April 2014 analysis, compared to the November 2013 analysis. First, there was a deceleration in cord cutting in the CDC data for the first half of 2013. That deceleration moderated somewhat in the second half of 2013 but did not return to recent historical levels seen prior to 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, and then rose to 1.6 percentage points in the second half of 2013. It is too early to tell if the deceleration is durable or temporary. In the past, slowdowns were followed by an uptick or reversion to historical trends. Nonetheless, the model assumes a 1.6 percentage point six-month run rate. As a result, the wireless-only household estimate for 2013 is slightly lower (43.2 percent) than the previous November 2013 projection (44.7 percent). **Note:** in the April 2014 analysis, for consistency with the drop in the 6-month cord-cutting run rate to 1.2 percentage points, it was necessary to slow the rate of projected landline losses. With the bounce back to a six-month run of 1.6 percentage points, this adjustment is not necessary for the updated projections. Regardless, as a result of the overall deceleration in cord-cutting compared to 2012, the current estimate of household share for ILEC switched lines as of year-end 2013 remains higher (27.2 percent) than the November 2013 projection (26.1 percent).

Second, in the April 2014 analysis some smaller categories of households 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, were trending toward a negative number by 2015. Therefore, the analysis assumed the trend leveled out at approximately a half-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 assumed a flat share equal to the most recent share of 2.8 percent. With the most recent FCC data for year-end 2013, the volatility has moderated and trends are no longer yielding negative results. Therefore, in this analysis, the best approach was to reverse the previous methodology changes used to smooth those trends and simply rely on straight-line trends.

As in the past, future projections are subject to change based on observed trends in the rates of cord-cutting and migration to landline alternatives. While it is important to note the impact of these changes in methodology and assumptions, 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.