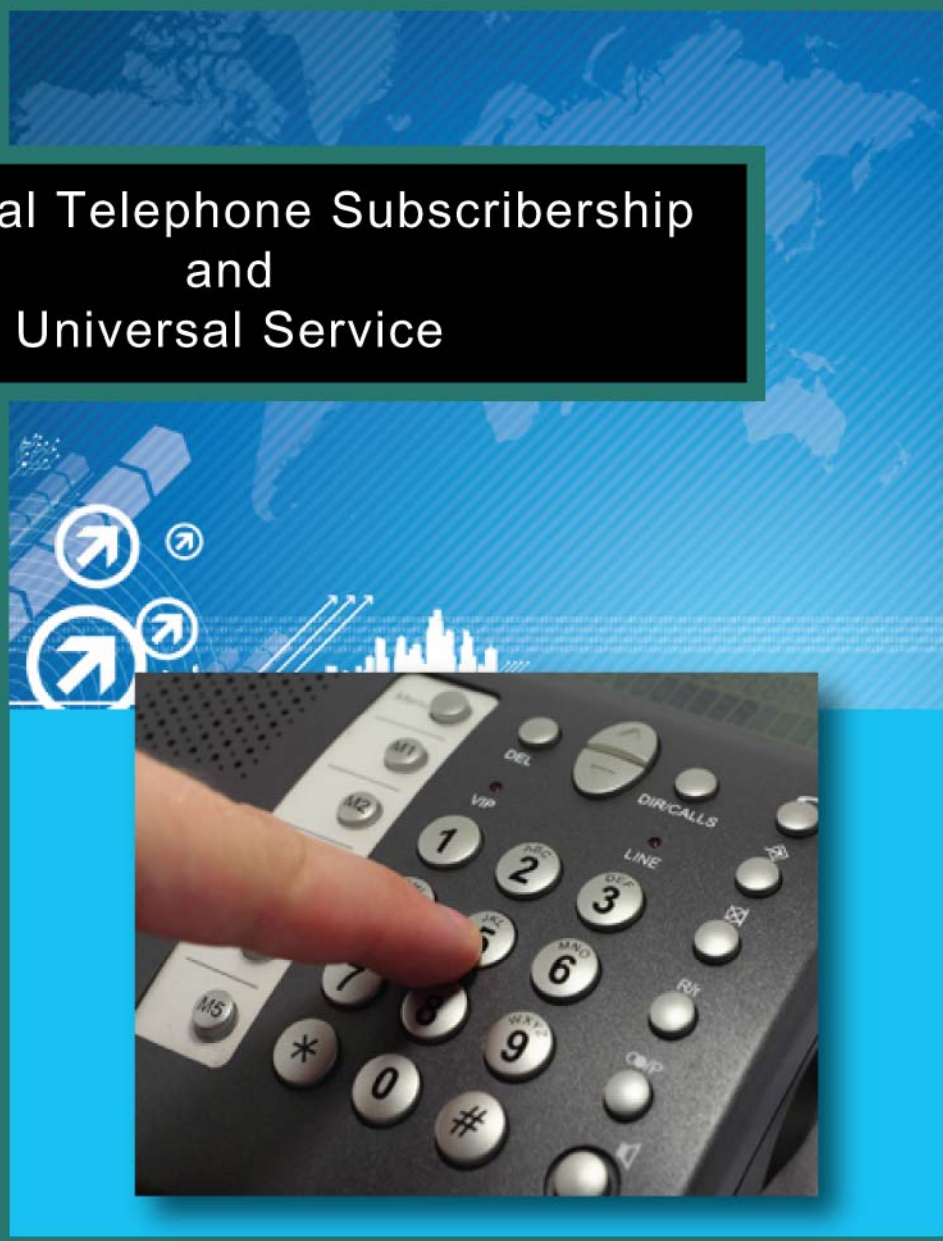


December 2010

# Residential Telephone Subscribership and Universal Service



## Report to the California Legislature

In Accordance with California Public Utilities Code Section 873

California Public Utilities Commission





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## EXECUTIVE SUMMARY

The purpose of this report is to comply with the Moore Universal Telephone Service Act (Moore Act)<sup>1</sup> by reporting the status of access to communications services among California residents. The Moore Act is meant to ensure that high quality, basic residential telephone service is available to the public at affordable rates. This report is issued in compliance with Section 873(a)(4) of the Moore Act, which requires the California Public Utilities Commission (Commission) to annually assess and report to the Legislature the degree of achievement of universal service, including voice communications subscribership rates by income, ethnicity, and geography.

This report finds that California continues to meet and exceed the 95% telephone penetration goal adopted by the Commission in 1994. As of March 2010, 97.0% of all households in California had some form of voice service, an increase from the 96.6% penetration rate of July 2009. The general trend since 1983 has been an increasing penetration rate, albeit leveling off from 2004 through 2010. California has also maintained a higher penetration rate than the nation's by an average of 1.3 percentage points every year since 1984.

The data in this report reflect the varied choices in voice services offered to consumers today. Today's consumers can choose among traditional circuit-switched wireline telephone services, wireless services and Voice over Internet Protocol (VoIP) services available from a multitude of providers. Following are subscribership figures for California as of June 30 2009<sup>2</sup>:

- 17.7 million circuit-switched wireline subscribers
- 32.2 million mobile wireless subscribers
- 2.5 million VoIP subscribers

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<sup>1</sup> AB 1348, Ch.1143, Stats. 1983, as amended [Calif. Pub. Util. Code §871 *et seq.*]

<sup>2</sup> California FCC Form 477 Filings, June 30 2009 cycle

As of June 2009<sup>3</sup>, the latest national data available, California is the state with the most wireless subscribers.<sup>4</sup> However, after ranking first among states in 2007 with an adjusted wireless penetration rate<sup>5</sup> of 111%, California has fallen to 7<sup>th</sup> among states in its 2008 with an adjusted wireless penetration rate of 110%. California is one of just a few states where the adjusted wireless penetration rate decreased from 2007 to 2008. Additionally, the total number of mobile wireless subscribers in California decreased in absolute terms from 32.25 million in December 2007 to 31.95 million in June 2008, and rebounding in June 2009 to 32.22 million subscribers.

Voice communication services are migrating away from circuit-switched wireline service to mobile wireless and fixed VoIP services. Fixed VoIP is functionally identical to wireline voice service, such that these two technologies compete directly for the same home telephone customers. Many consumers are also ‘cutting the cord’, opting to rely on their mobile wireless service for all voice communications. Since peaking in 2001, the total number of wireline end-user access lines has steadily decreased in California from 24.77 million in 2001 to 17.7 million in 2009, mirroring national trends.

Regardless of the technology used, voice service penetration rates are driven by a number of factors, most notably household income, but also demographic factors such as ethnicity and geographic factors such as location within an urban area. This report does not provide any new information from the 2009 Penetration Report on rates by geography and ethnicity because the underlying data are from the 2000 Census – the last time this information was collected in any relevant detail. We therefore refer the legislature to last year’s report on these issues and will provide updated information when the 2010 census data become available next year.

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<sup>3</sup> The FCC distributes the most current Form 477 data to states. However, each state receives only its own data until the FCC releases one of several industry status reports, which are generally derived from earlier data sets.

<sup>4</sup> The District of Columbia has more wireless subscribers but this number is likely inflated by the presence of many federal agencies and private entities that issue work-related wireless telephones to employees who reside outside the District.

<sup>5</sup> For the purposes of this study, the ‘adjusted wireless penetration rate’ is defined as the number of subscribers per 100 residents over the age of fifteen. This definition is a more realistic representation of the customer base than simple per capita figures as small children are not considered to be participants in the consumer communications market. For more description, see Section Two.

Penetration rates by household income, however, are measurable between censuses because household income is included in the U.S. Census Bureau's abbreviated monthly Census Population Survey (CPS), which is the FCC's source of data for voice service access and subscribership. This data shows that California's penetration rate for households with annual income of less than \$20,600 stood at 93.8% as of March 2009.<sup>6</sup>

As for the residents in California without voice service, CPUC's public policy programs are designed to fill this gap toward universal service. In areas where communications services are available, but some residents cannot afford service, the California LifeLine Telephone program make services accessible to these disadvantaged residents. In areas that are remote, sparsely populated, or topographically difficult, service may be limited if the cost of installing facilities is higher than the potential income to be made. In these high cost areas, California High Cost Area A and B universal service programs assist service providers deploying facilities to increase access to services. The universal service programs are the California LifeLine Telephone Program (LifeLine), the California High Cost Fund A (CHCF-A) and High Cost Fund B (CHCF-B) Programs, the Deaf and Disabled Telecommunications Program (DDTP), the California Teleconnect Fund Program (CTF), the California Advanced Services Fund Program (CASF), and the Rural Telecom Infrastructure (RTI) Program. All of these will be discussed in more detail in Section Four.

In the following pages, we report on voice service subscribership levels from various perspectives. Section One contains an overview of California's overall telephone penetration rate (subscribership rate) in relation to other states and the nation. Section Two looks at the different technologies being used today to provide voice service. Section Three discusses penetration levels by geography, ethnicity and income. Section Four of the report discusses California's universal service programs designed to help keep basic residential service affordable. Finally, Section Five discusses rate deregulation ordered by the Commission and subsequent affordability studies.

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<sup>6</sup> The 2009 Federal Poverty Guideline for a family of four was \$22,050. Federal Register: January 23, 2009 (Volume 74, Number 14); [Pages 4199-4201].

## SECTION ONE

### Overview of Voice Service Penetration Rates in California as of July 2010

In 1994, CPUC set a benchmark level for universal service of 95%, meaning that at least 95% of California residents should have access to voice service. This rate is also called the ‘penetration rate’, denoting that a technology has been adopted by (i.e., “penetrated”) a certain percent of the population. According to the federal survey of residential households released August 31, 2010, California continues to exceed the 95% telephone penetration rate goal adopted in 1994.<sup>7</sup>

As of March 2010, California’s penetration rate was 97.0% for all technologies, meaning that 97.0% of all households in California had some form of telephone voice service. This is an increase of 0.4% over the 96.6% penetration rate in July 2009, representing an additional 48,860 households with telephone service<sup>8</sup>. As noted, this survey is technologically neutral, such that all voice services are applicable. In California, voice services are provided in California over circuit-switched copper wireline, mobile wireless or VoIP provided over fiber-optic or coaxial cable.<sup>9</sup>

California compares favorably with the rest of the United States, but less so than in previous years. Although California’s penetration rate of 97.0% exceeds the nation’s 96.0% in March 2010, California has fallen in comparison with other states. In 2003 California ranked 8<sup>th</sup>, 11<sup>th</sup> in 2007, and now has fallen to 24<sup>th</sup> as of March 2010. Table 1 below shows historical, as well as the most current penetration rate data available from the FCC.

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<sup>7</sup> California Public Utilities Commission Decision (D.) 94-09-065.

<sup>8</sup> Based on the Census Bureau’s 2009 American Community Survey estimate of 12.21M households for California, this is a slight increase from the 2008 survey result of 12.17M households.

<sup>9</sup> This subscribership level, or penetration rate, is calculated by the Federal Communications Commission (FCC) and is based upon data supplied by the Census Bureau’s monthly Current Population Survey, or CPS, a monthly survey of about 50,000 households nationwide - about 10% of them in California.

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**Table 1 – Telephone Penetration Rates by State  
(Percentage of Households with Telephone Service)**

State	Nov. 1983 (Moore Act)	July 2008	July. 2009	March 2010	% Change (1983 ~ 2010)	March 2010 Rank
<i>Colorado</i>	94.4	98.0	97.0	98.8	4.4	1
<i>Connecticut</i>	95.5	96.9	98.5	98.6	3.1	2
<i>New Hampshire</i>	95.0	98.2	98.0	98.5	3.6	3
<i>Maine</i>	90.7	97.6	97.1	98.5	7.8	4
<i>Vermont</i>	92.7	96.4	98.2	98.5	5.8	5
<i>Iowa</i>	95.4	98.1	98.3	98.5	3.1	6
<i>Wisconsin</i>	94.8	97.7	97.0	98.5	3.7	7
<i>Pennsylvania</i>	95.1	97.6	97.9	98.5	3.4	8
<i>South Dakota</i>	92.7	97.8	97.6	98.4	5.7	9
<i>North Dakota</i>	95.1	98.8	98.3	98.3	3.2	10
<i>Minnesota</i>	96.4	98.3	98.1	98.3	1.9	11
<i>Massachusetts</i>	94.3	96.7	98.2	98.3	3.9	12
<i>Kansas</i>	94.9	96.7	97.1	98.1	3.2	13
<i>Washington</i>	93.1	97.9	97.6	97.9	5.4	14
<i>Oregon</i>	91.2	97.5	97.3	97.9	6.7	15
<i>Wyoming</i>	89.7	95.4	96.3	97.8	8.0	16
<i>Delaware</i>	95.0	92.3	96.5	97.7	2.6	17
<i>Idaho</i>	89.5	95.2	96.3	97.6	8.1	18
<i>Maryland</i>	94.3	93.3	95.0	97.5	1.2	19
<i>Ohio</i>	92.2	97.0	96.6	97.4	5.2	20
<i>Rhode Island</i>	93.3	97.3	97.4	97.3	4.0	21
<i>Alaska</i>	83.8	96.1	95.9	97.1	13.3	22
<i>Michigan</i>	93.8	96.0	97.1	97.0	3.2	23
<b><i>California</i></b>	<b>91.7</b>	<b>96.4</b>	<b>96.6</b>	<b>97.0</b>	<b>5.2</b>	<b>24</b>
<i>Hawaii</i>	94.6	97.1	98.7	96.9	2.3	25
<b>Nationwide</b>	<b>91.4</b>	<b>95.4</b>	<b>95.7</b>	<b>96.0</b>	<b>4.6</b>	

Source: FCC: *Telephone Subscribership in the United States*, August 2010<sup>10</sup>

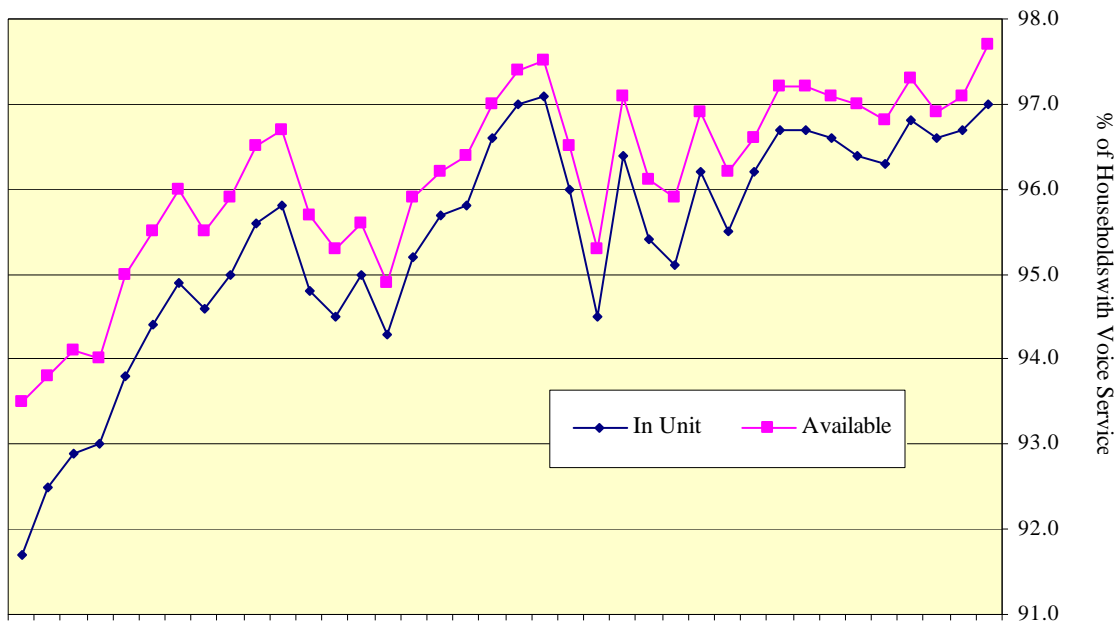
<sup>10</sup> Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Telephone Subscribership in the United States* (August 31, 2010).



Since 1983, California has seen an increasing telephone penetration rate. A longer term view of the penetration rate in California is shown in Chart 1 below, which tracks the annualized average telephone penetration rates from 1983 through 2010.

There are two values shown for each time period measured representing two positive responses to the survey questions. The specific questions asked in the CPS are: "Does this house, apartment, or mobile home have telephone service from which you can both make and receive calls? Please include cell phones, regular phones, and any other type of telephone." And, if the answer to the first question is "no," this is followed up with, "Is there a telephone elsewhere on which people in this household can be called?" If the answer to the first question is "yes," the household is counted as having a telephone "in unit." If the answer to either the first or second question is "yes," the household is counted as having a telephone "available."

*Chart 1. California Residential Telephone Penetration Rates*

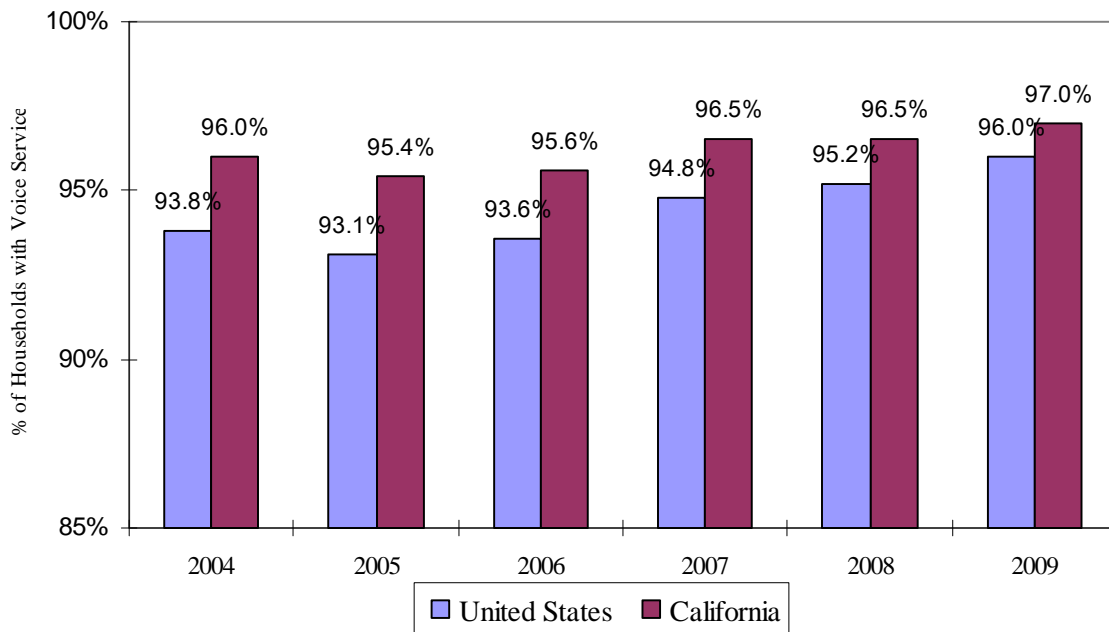


Source: FCC: *Telephone Subscription in the United States*, August 2010<sup>11</sup>

<sup>11</sup> Id.

Chart 2 below shows California's annualized average telephone penetration rate compared with the national rate from 2004 through 2009. Over this period, California's rate has been relatively stable and consistently higher than the national average.

**Chart 2. Annual Average Household Telephone Penetration Rates – U.S. vs. California**



Source: FCC: *Telephone Subscribership in the United States*, August 2010<sup>12</sup>

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<sup>12</sup> Id.

## SECTION TWO

### Penetration by Technologies

#### Wireline Circuit-Switched Service

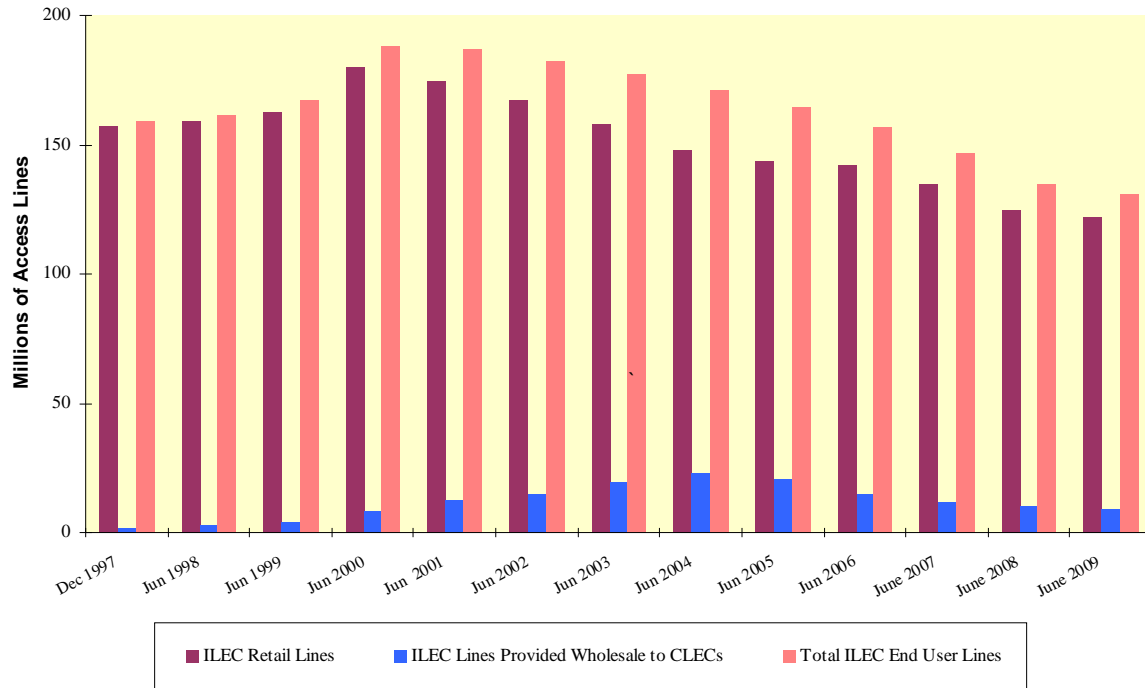
What we have come to know as “plain old telephone service” (or POTS) is the traditional home phone service over copper wire directly into the subscriber’s residence. These are also called access lines, or circuit-switched access lines. The number of circuit-switched access lines in California and across the nation is declining. This is largely due to the new technologies, especially mobile wireless but also VoIP, which are competing directly with wireline voice service. Additionally, some traditional telephone corporations are transitioning from copper-based circuit-switched service offerings to VoIP service via fiber-optic cable, known often as fiber-to-the-home (ftth). Although the introduction of local exchange competition did spur a small increase in wireline subscribers in the mid-1990s, this temporary gain quickly gave way to an accelerating loss of wireline subscribers.

Chart 3 below shows the number of residential and business circuit-switched wirelines in service nationwide provided by incumbent local exchange carriers (ILECs) from December 1999 through June 2009. This chart includes both the number of retail wirelines and those provided wholesale to competitive local exchange carriers (CLECs). From a peak of 188 million wirelines in service in 2000, end user access lines in the U.S. have decreased in each successive year. Nationally, the number of wirelines in service stands at just below 70% of the lines in service in 2000, and has decreased by 2.8% since one year ago to a total of 120.9 million subscriber lines.<sup>13</sup>

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<sup>13</sup> Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

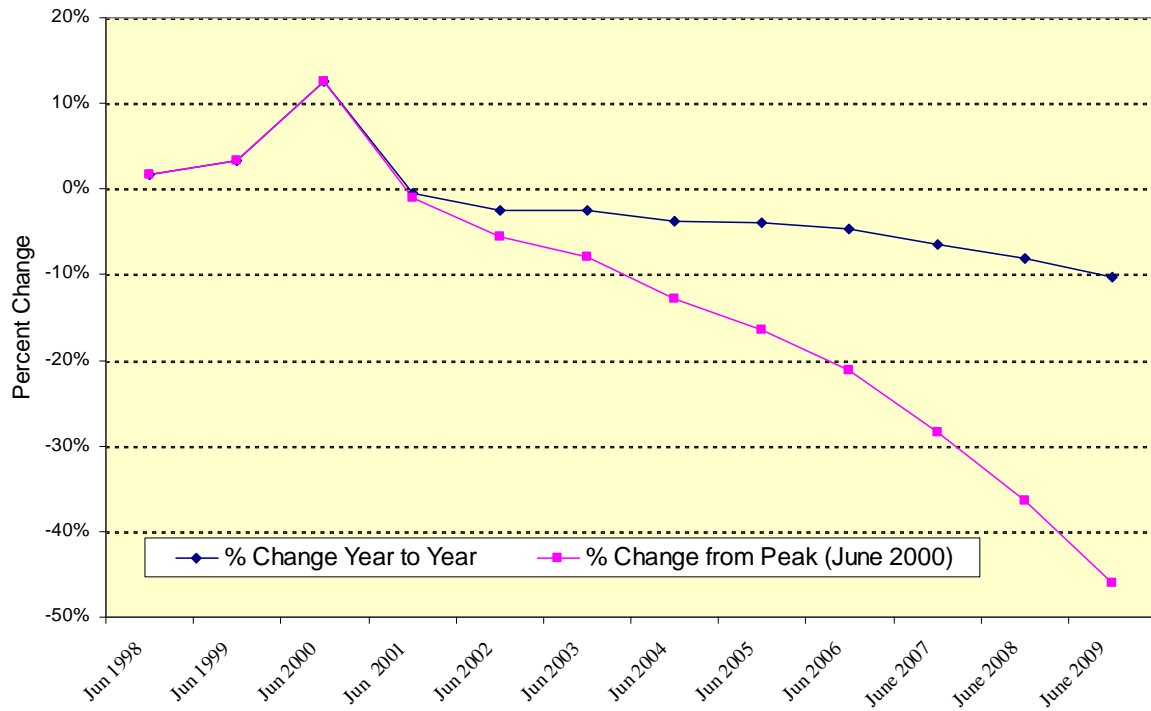
*Chart 3. Nationwide End User ILEC Wirelines*



Source: FCC: *Telephone Subscribership in the United States*, August 2010<sup>14</sup>

<sup>14</sup> Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Telephone Subscribership in the United States* (August 31, 2010).

**Chart 4. Nationwide Percentage Change in End User ILEC Wireline  
Subscribers**

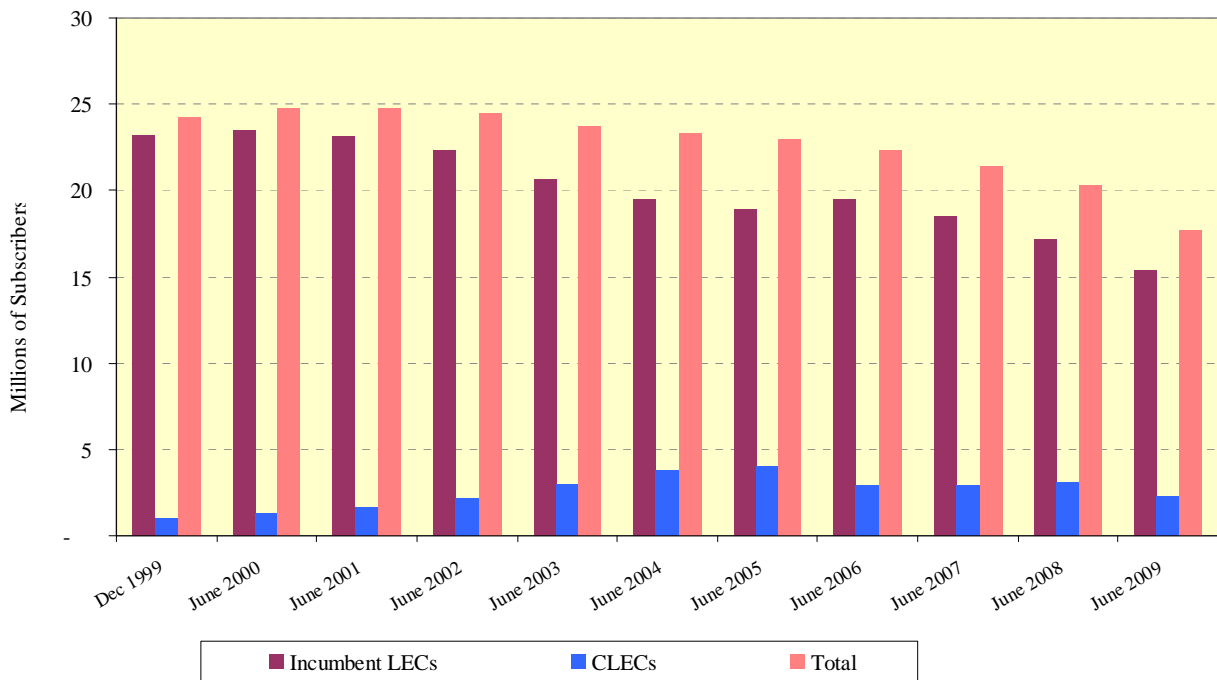


Source: FCC: *Telephone Subscribership in the United States*, August 2010<sup>15</sup>

<sup>15</sup> Id.

California has likewise seen decreasing circuit-switched wireline subscribership since 2000. Chart 5, below, includes ILEC retail and wholesale wirelines, plus CLEC-owned wirelines, in California from December 1999 through June 2009. Since peaking in 2001, the total number of wireline subscribers has steadily decreased in California, despite the millions of wirelines added by CLECs. The total number of wirelines for California has dropped from 24.77 million in 2001 to 20.23 million in 2009 - a decrease of 18.3%. CLEC-owned wirelines reached a peak in 2005 with 4.03 million wirelines, but then dropped off 2.31 million in 2009. The decline in ILEC wirelines therefore cannot be accounted for by growth of CLECs.

*Chart 5. California LEC Wirelines Loss*



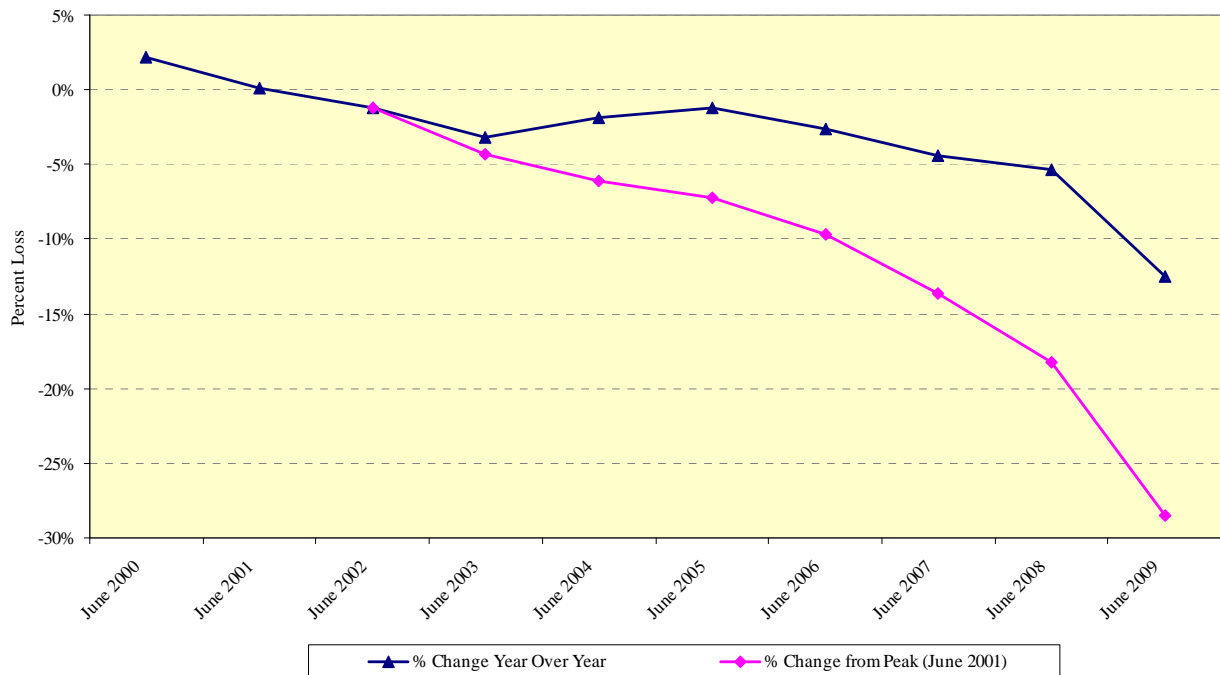
Source: FCC: *Telephone Subscribership in the United States*, August 2010<sup>16</sup>

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<sup>16</sup> Id.

California has also seen acceleration in the rate of circuit switched wireline abandonment. Chart 6 below illustrates the trend in percent change in wireline subscribers from 2000 to 2009.

*Chart 6. California Percentage Change in End User LEC Wireline Subscribers*



Source: FCC: *Telephone Subscribership in the United States*, August 2010<sup>17</sup>

There are a myriad of reasons for the switched-circuit wireline losses in California. Some loss is due to the introduction of broadband in the late 1990's. First, Digital Subscriber Line (DSL) service and cable Internet access service eliminated the need for a second telephone line to connect to the Internet. Second, wirelines dedicated to Internet and facsimile applications were disconnected in favor of new broadband technologies. Third, another likely reason for the decline is the substitution of wireless or VoIP service for switched circuit wireline service.

<sup>17</sup> Id.

## Mobile Wireless Voice Service

Based on the FCC's most current reporting of wireless subscribership, in June 2009 there were over 265 million mobile wireless telephone subscribers in the United States, an increase of 3.9% increase over 2008, and representing approximately 86% of the population, as well as 144 million more subscribers than wireline.<sup>18</sup>

A Center for Disease Control and Prevention (CDC) survey, released in December of 2009<sup>19</sup> indicates that 22.7% of households in the U.S. are wireless only. In 2005, the same survey indicated the percentage was only 8.5%. Additionally, the survey showed that one out of seven American homes received all, or almost all, calls on mobile wireless telephones, despite having a wireline telephone in the home.<sup>20</sup>

Today there are far more wireless subscribers than circuit-switched access line subscribers in California. In December of 1999, the FCC reported 8.54 million wireless subscribers in California. By June 2009, that number had grown to 32.25 million. This is a 10-year increase of 277%, faster than the national rate of mobile wireless adoption during the same period (233%)<sup>21</sup>.

For this report, a modified wireless penetration rate is used. Because of the differing ways wireless and wireline services are used, a different benchmark is needed to provide a more accurate measurement of penetration rate. Wireline service is household oriented and generally shared by all members of the household. This enables calculating accurate penetration rates based on the number of households. Mobile wireless service, on the other hand, is individualized, portable and much more personal. Therefore a metric is needed that would account for total population rather than just households, but would exclude children, who are unlikely to have their own mobile wireless subscriptions.

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<sup>18</sup> Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Local Telephone Competition Status as of June 30, 2009* (August 31, 2010)

<sup>19</sup> The survey was conducted by the National Center for Health Statistics of the CDC. Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, January-June 2009. National Center for Health Statistics. December 2009. <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless200912.htm>

<sup>20</sup> *Id.*

<sup>21</sup> FCC Form 477 data for California as of June 30, 2009



With these considerations in mind, Commission staff established a metric for measuring the mobile wireless penetration rate more accurately, creating an ‘effective’ wireless penetration rate<sup>22</sup>. The effective wireless penetration rate is defined here as the number of mobile wireless subscribers per state resident over 15 years of age.<sup>23</sup>

Table 2 below shows the top 25 states for 2009 in effective wireless penetration rates, along with historical data from 2000 and 2008. While California was ranked as high as second to the District of Columbia in 2007, in 2009 California ranked 13 among states and DC.

Interestingly, D.C.’s wireless penetration rate is likely inflated by the presence of many federal agencies and private entities that issue work-related wireless telephones to employees who reside outside the District. Additionally, this report found in 2008 that urban areas are likely to have higher wireless penetration rates.<sup>24</sup>

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<sup>22</sup> This cutoff was chosen because it is also the legal driving and employment age in most states. Naturally, there are some mobile wireless subscriptions purchased by parents for children younger than the cutoff age. Whether or not this is a challengeable metric, its value as a consistent measure of penetration rate is valuable as a tool for comparative analysis.

<sup>23</sup> [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en) (U.S. Census Bureau Website).

<sup>24</sup> Residential Telephone Subscribership and Universal Service, Report of the California Public Utilities Commission to the California Legislature in Accordance with the California Pub. Util. Code § 873, June 2008.

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**Table 2. Wireless Subscriptions and Effective Wireless Penetration Rates**

State	June 2009 Wireless Subscribers <small>(in Thousands)</small>	Effective Wireless Penetration Rate <sup>25</sup> (June 2009)	Effective Wireless Penetration Rate (Dec 2000)	Effective Wireless Penetration Rate (June 2008)	% Change in Effective Wireless Penetration Rate Change (2000 to 2009)	2009 Rank By Penetration Rate
District of Columbia	1,116	224	76	210	196	1
Maryland	5,260	117	56	113	107	2
New Jersey	8,036	116	55	112	113	3
New York	18,194	116	40	109	191	4
Louisiana	4,053	116	38	111	201	5
Texas	21,460	115	48	109	139	6
Hawaii	1,196	115	55	106	109	7
Nevada	2,325	114	45	110	157	8
Tennessee	5,676	114	45	116	156	9
Arkansas	2,576	114	36	108	218	10
Georgia	8,562	114	44	108	158	11
Massachusetts	6,027	113	53	106	114	12
<b>California</b>	<b>32,215</b>	<b>113</b>	<b>50</b>	<b>110</b>	<b>127</b>	<b>13</b>
North Carolina	8,193	111	49	101	126	14
Delaware	779	111	61	110	83	15
Kansas	2,430	111	39	105	185	16
Colorado	4,348	111	56	103	98	17
Florida	16,425	110	50	105	120	18
Illinois	11,070	110	44	104	103	19
Connecticut	3,047	108	48	104	125	20
North Dakota	562	108	*	103	*	21
Nebraska	1,508	108	50	103	116	22
Alabama	4,003	108	40	104	169	23
Washington	5,671	107	50	103	114	24
Virginia	6,596	106	49	100	116	25
<b>Nationwide</b>	<b>265,332</b>	<b>110</b>	<b>47</b>	<b>104</b>	<b>137</b>	

*Source: Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services – Thirteen Report; May 20, 2010. FCC Form 477 Data, June 2009; FCC, Local Telephone Competition Status as of June 30, 2009*

<sup>25</sup> Wireless subscribers per 100 residents over the age of fifteen. Rate developed by CPUC staff.

## **Voice over Internet Protocol (VoIP)**

VoIP service is digitally transmitted via packets transmitted using the same protocol as internet traffic. These packets can utilize the same networks as the public internet or internet protocol private networks. VoIP service can be provisioned over copper Digital Subscriber Lines (DSL), coaxial cable, high-speed wireless facilities, optical fiber lines, or hybrids of copper and fiber.

VoIP service is either "fixed" or "nomadic." Fixed VoIP is delivered via a stationary ("fixed") broadband connection located in a residence or business. VoIP service simply uses the existing broadband connection at the customer's premise, whether that is coaxial cable used by video providers such as Comcast, DSL over copper used by traditional LEC phone companies, digital broadband over fiber-to-the-home, or other broadband technology. The vast majority of VoIP subscribership in the United States is "fixed". "Nomadic" VoIP service provided via the Internet allows the subscriber can make calls from anywhere the subscriber can access the internet using an application launched from their laptop or smart device in "hot spots" locations such as airports and cafes.

VoIP service is also either "interconnected" or "non-interconnected." Some Computer-to-Computer or, "Peer-to-Peer" VoIP services do not connect with the Public Switched Telephone Network (PSTN). Non-interconnected VoIP is not considered a communications access service because it does not allow the user to connect with any regular telephone number, as it would if it were interconnected to the PSTN.

Some telephone service providers offer VoIP service over a closed network that does not rely on the public Internet. Examples of this type of service are cable TV companies offering VoIP service over their cable facilities. In 2008, both Comcast Cable Communications, Inc., subsidiary of Comcast Corporation, and Time Warner Cable LLC, subsidiary of Time Warner, Inc., received approval from the Commission to migrate all voice service customers from circuit-switched services to a VoIP service platform. Some telephone corporations have engineered fiber-to-the-home or fiber-to-the-node facilities, such as AT&T U-Verse voice service provided by AT&T

California, and are able to deploy VoIP service over these IP-enabled networks.

As of June 30, 2009, there were over 2.5 million interconnected VoIP subscribers in California, served by 100 providers. Many of these customers subscribe to VoIP as part of a bundle of services that may include broadband connectivity, digital video (cable), and/or mobile wireless voice. VoIP subscribers to “digital voice” from cable TV providers accounts for more than 65% of the VoIP subscriptions reported in California in June 2009. Traditional ILECs such as AT&T and Verizon account for another 7.3% of the VoIP market, indicating that the bulk of California’s VoIP customers are directly substituting functionally identical fixed VoIP for traditional wireline voice.<sup>26</sup> VoIP subscribers in California are equal to at least half of the circuit-switched lines lost from 2001 to 2008, some 4.03 million subscribers.<sup>27</sup> However no direct correlation can be drawn from the available information. We can only make the assumption that many VoIP subscribers, like many wireless subscribers, have dropped their circuit-switched wireline in favor of new technology.

Voice communications are quickly migrating away from circuit-switched wireline service to wireless and VoIP services. As the Commission noted in its interim opinion implementing the California Advanced Services Fund (CASF):<sup>28</sup> “Telecommunication services are starting to migrate to broadband because of the greater flexibility, efficiency and redundancy that can be achieved.” “In other words, in a broadband environment, voice service is simply one of many data streams flowing over the broadband connection.”<sup>29</sup>

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<sup>26</sup> FCC Form 477 Data reported as of 6/30/2009

<sup>27</sup> VoIP service did not exist in 2001.

<sup>28</sup> D. 07-12-054. CASF provides grants to companies to help fund deployment of broadband services in unserved and underserved areas of California pursuant to Pub. Util. Code § 281.

<sup>29</sup> *Id* at p.5.

## SECTION THREE

### Penetration Rates by Geography, Ethnicity and Income

#### Penetration Rates by Geography and Ethnicity

Penetration rates by geographic area and customer ethnicity have not been analyzed for this year's report, due to the fact that the underlying data are from the 2000 Census – the last time this information was collected in sufficient detail. For analysis on penetration rates by ethnicity and geography, see the Commission's 2008 penetration report<sup>30</sup>. Because the data have not changed since our 2008 report, we refer the Legislature to that report for information on penetration rates by geography and ethnicity.<sup>31</sup> That report found that the penetration rates for all racial and ethnic classifications exceeded the 95% objective at the statewide level.

#### Penetration Rates by Income

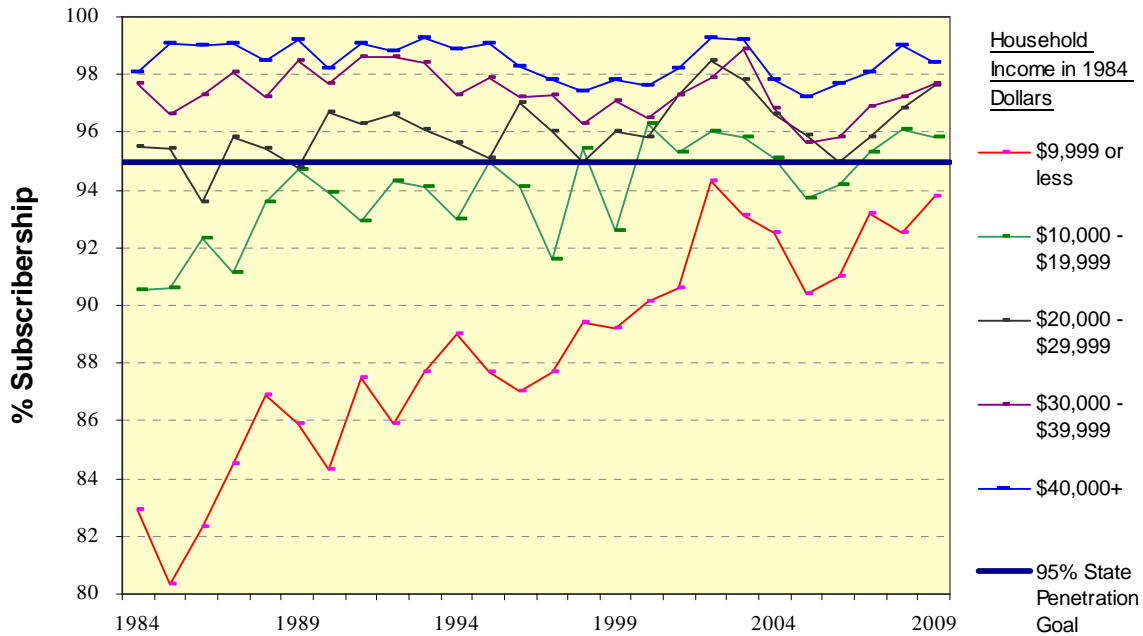
Chart 7 traces the history of the telephone penetration rate in California from 1984 through March 2009 by annual household income valued in constant 1984 dollars. Penetration rates at the higher income levels have remained fairly flat over this period. Penetration rates at the two lowest income levels have increased markedly, particularly the rate for those in the lowest income category, which rose from 89.9% in 1984 to 93.8% in 2009. However, rates for low income households have consistently failed to meet the Commission's 95% threshold throughout the period.

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<sup>30</sup> Residential Telephone Subscribership and Universal Service, Report of the California Public Utilities Commission to the California Legislature in Accordance with the California Pub. Util. Code § 873, June 2008.

<sup>31</sup> *Id* at <http://ftp.cpuc.ca.gov/puc/telco/Penetration%20Report%206%204%20for%20web.pdf>

**Chart 7. California Telephone Penetration by Annual Income**  
(In constant 1984 dollars)

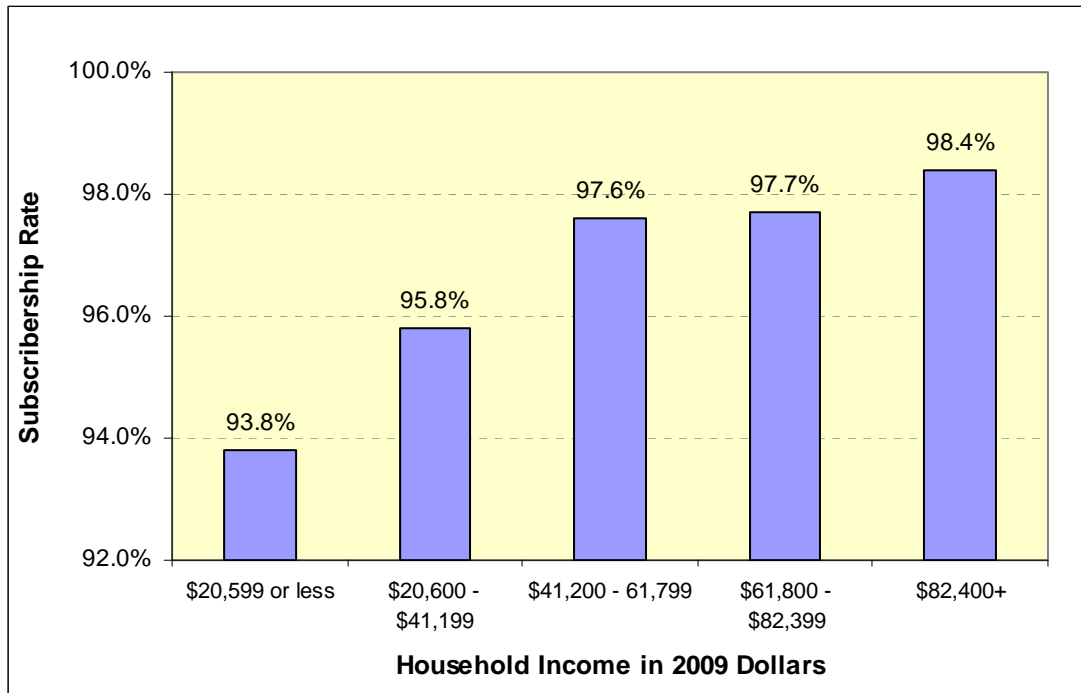


Source: FCC: *Telephone Penetration by Income by State*, May 2010

Chart 8 below compares 2009 income levels and subscribership data from the Census Bureau’s CPS. Consistent with the historical view above, the penetration rate for households with an annual income below \$20,600 (in 2009 dollars) did not meet the 95% penetration rate goal as of March 2009. Chart 8 below shows a snapshot of 2009 penetration rates in California by household income.<sup>32</sup>

<sup>32</sup> These income categories are not based on current poverty or median income, but rather the 2009 dollar equivalent of the income categories established in 1984 and displayed in Chart 7.

**Chart 8. March 2009 California Telephone Penetration by Annual Household Income (2009 Dollars)**



Source: FCC: *Telephone Penetration by Income by State*, May 2010

As of March 2009, there were approximately 13 million households in California and a 97.0% telephone penetration rate.<sup>33</sup> This rate equates to roughly 389,258 households in California without telephone service as of March 2009.

Households in California with an annual income less than \$20,600 numbered 2.4 million, or 18.8% of the state's households. At a 93.8% penetration rate, that is 151,157 households in this lowest income category with no telephone service at all. Although in 2009 this income category represented 18.8% of California's households, it accounted for 38.8% of the state's unsubscribed households.

<sup>33</sup> *Id.*

## SECTION FOUR

### Universal Service Programs

As demonstrated in the preceding pages, a key factor affecting the telephone penetration rate in California is household income. In line with the intent of the Moore Universal Telephone Service Act (Moore Act)<sup>34</sup>, the Commission has instituted several programs to promote the goal of affordable, universal telephone service.

Four specific universal service programs, often referred to as CPUC Public Purpose Programs, function to advance the rate of residential telephone penetration in California. These four programs are the California LifeLine Telephone Program (LifeLine), the California High Cost Fund A (CHCF-A) and High Cost Fund B (CHCF-B) Programs, and the Deaf and Disabled Telecommunications Program (DDTP).

These programs are aimed at increasing telephone subscribership, particularly among the lower income populations. The California LifeLine Telephone Program and the DDTP are targeted directly at end-users, while the other two programs take an indirect approach by subsidizing carriers' costs of serving high-cost, generally rural areas. Below are brief descriptions of the four programs.

Two additional programs administered by the Commission promote universal service by providing discounts for communications services to anchors institutions in a community, and grants for deployment of facilities to unserved rural communities. These two programs are, respectively, the California Teleconnect Fund Program (CTF) and the Rural Telecommunications Infrastructure Grant Program (RTI). Brief descriptions of these programs are also provided below.

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<sup>34</sup> Pub. Util. Code § 871 *et seq.*



## California LifeLine Telephone Program

The LifeLine Program (previously Universal Lifeline Telephone Service) was established in 1984 pursuant to the Moore Act to address telephone subscribership for low income households. It provides reduced rates and discounts for local flat-rate and measured monthly service as well as eliminating certain other monthly fees for LifeLine subscribers, funded by surcharges on billed intrastate services of all non-LifeLine telephone customers. Expenditures for Fiscal Year (FY) 2009-2010 were approximately \$216 million dollars. Since 2005, LifeLine subscribership in California has experienced erosion congruent with the overall decline in wireline use. As of September 2010 subscribership stands at 1.8 million participants (households).

In August 2006, the Commission determined that voice markets in the service territories of ILECs AT&T, Verizon, Frontier, and SureWest<sup>35</sup> were competitive and thus eliminated retail rate regulations for most voice services except for basic residential service, LifeLine service, and certain other services. As of January 1, 2011, these four ILECs will have full pricing flexibility for basic residential service. The Commission will track market prices to determine continuation of affordable rates.

As ordered by the Commission, the Communications Division (CD) has recently conducted an affordability study to evaluate the LifeLine program with the goal of determining if the program is sufficient to ensure meeting the goal of a 95% statewide penetration rate in today's competitive, deregulated telecommunications markets. This study found that the average California household telephone bill, adjusted for inflation, has not changed significantly since the prior 2004 survey, as well as confirming that LifeLine has helped low-income customers afford telephone service<sup>36</sup>.

The information in this report indicates a need to continue the California LifeLine and other universal service programs that will help

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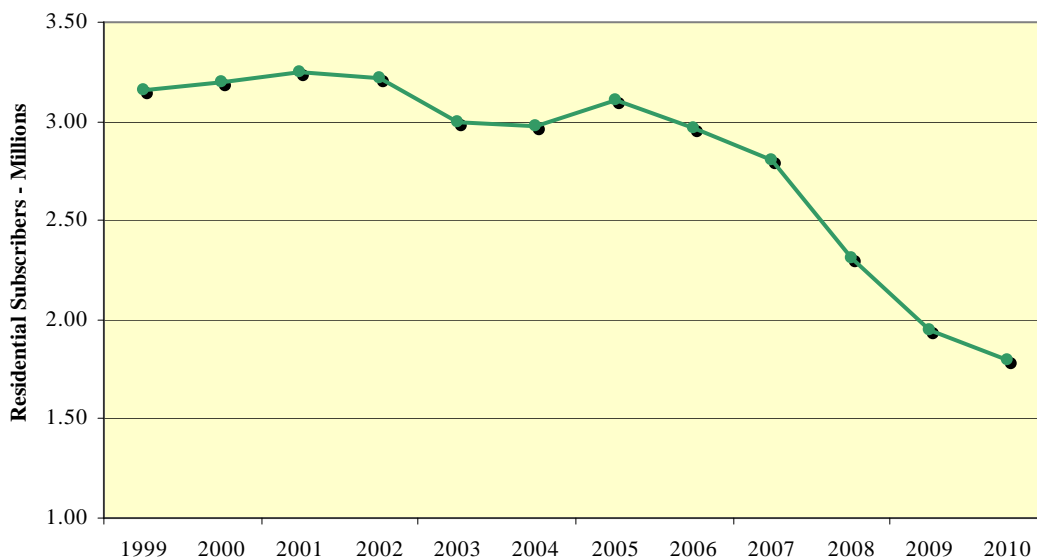
<sup>35</sup> The certified, formal names of these companies are Pacific Bell; Verizon California, Inc.; Citizens Telecommunications Company of California, Inc.; and SureWest Telephone, respectively.

<sup>36</sup> "Affordability of Basic Telephone Service." CPUC Staff Report to the California Legislature. September 30, 2010

keep basic voice service rates affordable. The LifeLine program may also need to be reformed to adjust to the growing embrace by customers of voice service provided via alternative technologies and the national question of whether to consider broadband a necessary communications service that should be included in LifeLine programs. Towards this end, the Commission has recently voted to enable LifeLine subscribers more flexibility in choosing the best voice technology for their needs.

Chart 9 tracks the yearly average number of LifeLine customers from 1999 through 2010. The yearly average number of LifeLine subscriptions in California declined over the 2009-2010 period, from 1.94 million in 2009 to 1.80 million in September 2010, a decline of 7.4%.

*Chart 9. California LifeLine Residential Telephone Subscribers*



Source: Solix LifeLine Customer Counts, California Public Utilities Commission

As discussed in the 2009 edition of this report<sup>37</sup>, the most significant causal factor of the decline in the number of LifeLine subscribers from 2006 through 2010 is the Commission's implementation of a new certification process for verifying LifeLine eligibility. Prospective LifeLine customers are no longer allowed to self-certify. Instead, they are required to submit documentation to the California LifeLine Administrator to prove their eligibility and must renew their participation annually to remain in the program. This new verification

<sup>37</sup> Residential Telephone Subscribership and Universal Service, Report of the California Public Utilities Commission to the California Legislature in Accordance with the California Pub. Util. Code § 873, June 2008, p. 31.

process for new applicants and current participants was initiated in mid-2006.<sup>38</sup>

In July 2009, the Commission implemented another major process change for the LifeLine program -- a pre-qualification system. Under pre-qualification, a customer can not begin receiving a California LifeLine discount until the customer is actually approved for the program. This change prevents back-billing of subscribers for inappropriately received discounts. This process change, coupled with a slight increase in the LifeLine rate in 2009 (see Section Five), may also account for some of the decline in the number of LifeLine subscribers in 2009 and 2010.

In Decision 10-11-033 issued on November 19, 2010, the Commission adopted California LifeLine program policies that when implemented by staff will provide available discounts to certain competitive services, such as wireless and VoIP.<sup>39</sup>

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<sup>38</sup> Due to some implementation issues, on November 2006, the Commission temporarily halted the verification process for six months for current participants.

<sup>39</sup> LifeLine Decision 10-11-033 November 19, 2010.

## California High Cost Fund-B Program

The California High Cost Fund-B (CHCF-B) Program, implemented in accordance with Public Utilities Code § 739.3(c), provides subsidies to the largest California non-rural ILECs -- AT&T, Verizon, SureWest, and Frontier -- to ensure that basic local residential telephone service remains affordable in the high cost areas within the service territories of these Carriers of Last Resort (COLRs).<sup>40</sup> The CHCF-B Program supports primary lines only. It is funded by an end-user surcharge billed and collected by telecommunications carriers.<sup>41</sup> Expenditures for FY 2009-2010 were approximately \$40 million dollars. The program currently sunsets on January 1, 2013, unless extended by the Legislature.

In 2007, in response to broad-based demographic trends in spending for local exchange services, the Commission modified the formula for computing the applicable level of B-Fund support.<sup>42</sup> The Commission determined that \$36.00 per month per telephone line represents the nationwide average household expenditure on basic telephone service.<sup>43</sup> The Commission thus revised the adopted threshold high-cost benchmark for the CHCF-B Program from \$20.30 to \$36.00 per line as of July 1, 2009. This revision has substantially reduced the draw from the CHCF-B Fund.

In light of this Commission change to the CHCF-B Program and the Commission's authorization of rate deregulation for the four largest ILECs, the legislature enacted SB 780<sup>44</sup> in 2008, requiring the Commission to prepare and submit to the legislature a report on the affordability of basic telephone service in areas funded by the California High-Cost Fund – B Program. This study was submitted September 30, 2010. Affordability of service is discussed more thoroughly in Section Five.

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<sup>40</sup> Cox California Telcom II, LLC. , d/b/a Cox Communications, also receives a small amount of CHCF-B funding due to its status as a Carrier of Last Resort.

<sup>41</sup> Surcharges for the various universal service programs do not apply to LifeLine customers.

<sup>42</sup> See D. 07-09-020.

<sup>43</sup> *Id.* at p. 46.

<sup>44</sup> SB 780 (Wiggins) Ch. 342, Stats. 2008.

## California High Cost Fund-A Program

The California High Cost Fund-A (CHCF-A) Program, implemented pursuant to Public Utilities Code § 275.6, makes a source of supplemental revenues available to 14 small rural incumbent local exchange carriers (ILECs)<sup>45</sup> for the purpose of minimizing any rate disparity in basic telephone service between rural and metropolitan areas.<sup>46</sup> Carriers collecting support from the fund must limit their rates for basic residential service to 150% of the urban rates charged by AT&T. The CHCF-A Fund Program subsidizes the difference between the carrier's costs and the revenues it realizes at those rates, plus a 10% rate of return.

As discussed in Section Five, the Commission authorized the four largest ILECs in California to increase their basic residential service rates by a certain amount in 2009 and 2010, followed by market-based pricing in 2011. It is expected that basic service rates for these large ILECs will be increasing. As currently required by rule, in order to receive CHCF-A funding, the small ILECs in the CHCF-A Program that apply for General Rate Case (GRC) reviews are required to raise their basic rate to match 150% of the higher urban rates charged by AT&T.

Like the CHCF-B, the CHCF-A is funded through a surcharge on intrastate revenues billed to end-users by their respective carriers. Expenditures for FY 2009-2010 were approximately \$40 million dollars. In 2008, the Legislature extended the sunset on the CHCF-A Fund Program to January 1, 2013.<sup>47</sup>

The Commission intends to open a proceeding in 2011 to review the CHCF-A program, particularly in light of the removal of price caps for URF ILECs basic service rates, in January 1, 2011.

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<sup>45</sup> These 14 small ILECs include Ducor Telephone, Foresthill Telephone, Pinnacles Telephone, Ponderosa Telephone, Sierra Telephone, Siskiyou Telephone, Volcano Telephone, Calaveras Telephone, California-Oregon Telephone, Evans Telephone, Happy Valley Telephone, Hornitos Telephone; Kerman Telephone, and Winterhaven Telephone.

<sup>46</sup> Not all of the small ILECs draw from the fund. Certain requirements must be met including the filing and approval of a rate case showing how revenues at 150% of urban rates fall short of the ILEC's costs.

<sup>47</sup> SB 780 (Wiggins) Ch. 342, Stats. 2008.

## **Deaf and Disabled Telecommunications Program**

The Deaf and Disabled Telecommunications Program (DDTP) is mandated by the State Legislature and administered by the Commission.<sup>48</sup> The DDTP provides deaf and disabled Californians with specialized telephone equipment and relay services through the California Telephone Access Program (CTAP) and California Relay Service (CRS), respectively.

California is currently providing captioned telephone (CapTel) service to eligible persons who are CTAP-certified. CapTel provides hard of hearing persons and other persons who can benefit from the service word-for-word captions of everything said by the other party in a telephone conversation. The CPUC/DDTP continued to expand pilot efforts involving wireless in 2009/2010 with Jitterbug cell phone. Pilot participants are required to be California LifeLine eligible and CTAP-certified. The wireless pilot program is now closed to new participants. However, given the success of the pilot program, Commission Decision 10-11-033 directed that wireless equipment become a permanent part of the Deaf and Disabled Telecommunications Program/ California Telephone Access Program (CTAP).

Like the other three universal service programs discussed above, DDTP is funded by an end-user surcharge billed and collected by telecommunications carriers.<sup>49</sup> Expenditures for FY 2009-2010 were approximately \$60 million dollars.

## **California Teleconnect Fund Program**

The California Teleconnect Fund Program (CTF) provides discounts to anchor institutions for broadband services. It was established by Commission Decision 96-10-066 and codified at Public Utilities Code § 280.

The CTF Program promotes universal service by providing discounts to public anchor institutions for monthly communications services. The program provides a 50% discount on select telecommunications and

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<sup>48</sup>Pub. Util. Code §§ 2881-2881.4.

<sup>49</sup> For more information on the DDTP, see DDTP 2005-2008 Consolidated Annual Report at <http://www.ddtp.org/pdfs/DDTP-AnnualReport08-1G.pdf>.

Internet access services to qualifying K-12 schools, California Community Colleges, libraries, public health care organizations, and non-profit community-based organizations. It will also provide discounted service to participants in the California Telehealth Network once this network is in operation.

The CTF program is funded through a surcharge assessed on intrastate telecommunications service charges incurred by end-users. Expenditures for FY 2009-2010 were approximately \$70 million dollars.

### **California Advanced Services Fund**

The California Advanced Services Fund (CASF) was authorized by the Commission on December 20, 2007, in D.07-12-054, in accordance with Public Utilities Code § 701, to encourage the deployment of broadband services in unserved and underserved areas. CASF provides funding for infrastructure projects that will a) provide broadband services to areas currently without broadband access except through dial-up or satellite and b) build out facilities in underserved areas with speeds below 3 megabits per second download and 1 megabit per second upload, if funds are still available.

The total allocation for the CASF was originally \$100 million funded by a surcharge rate of 0.25% assessed on all-end-user surcharge billed and collected by telecommunications carriers from January 1, 2008 through December 31, 2010.

In D 09-07-020, the Commission expanded CASF funding (40% of the project cost) from certificated carriers or wireless carriers registered with the Commission to non-certificated entities (10% of the project cost) provided CASF funding was sought in to leverage an American Recovery and Reinvestment Act funding request.

Senate Bill 1040 (Padilla, Chapter 317, Stats 2010), increased funding for the program by \$125 M (for a total of \$225M) and established two new accounts (in addition to the Broadband Infrastructure Grant Program): the Rural and Urban Regional Consortia Grant Account and the Broadband Infrastructure Revolving Loan Account. The \$125 million is allocated to: Broadband Infrastructure Grant Account - \$100 M, Rural and Urban Regional Consortia Grant Account- \$10 M and Broadband

Infrastructure Revolving Loan Account - \$15 M. SB 1040 extends CASF indefinitely, prohibits the Commission from collecting surcharges beyond 2015, and limits the yearly surcharge collection to \$25 million.

The Commission is in the process of opening an OIR to establish rules for loan and the grant programs eligibility, terms, conditions, requirements, goals and security

## **Surcharge History of Residential Universal Service Programs**

As part of the Commission's responsibilities in administering the five Universal Service Programs discussed above, it sets and collects all-end-user surcharges for each program.<sup>50</sup> The surcharge rates vary from program to program and they are adjusted periodically based on the forecasted demand of the programs.<sup>51</sup> The all-end-user surcharges are collected by the telecommunications carriers. They, in turn, remit the surcharges as directed by the Commission.

Although the Commission always tries to set a program's surcharge rate to maintain an adequate reserve -- meeting both forecasted and unexpected changes in demand -- it is not an exact science. When a program's reserve gets too big or too small, the Commission adjusts the surcharge rate for the program bringing the reserves to an acceptable level. An adjustment to a program's surcharge rate is also made if the Commission expects to see a shift in demand for that particular program.

Table 3 provides a highlight of the historical surcharge rates for these six universal service programs from 2000 through 2010.

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<sup>50</sup> The surcharges do not apply to LifeLine customers.

<sup>51</sup> The surcharge rates are determined through CPUC resolutions and do not have predetermined timeframes.



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*Table 3. Historic Residential Universal Service Program Surcharge Rates*

	LifeLine	DDTP	CHCF-A	CHCF-B	CTF	CASF
1/1/2000	0.500%	0.192%	0.0%	2.600%	0.050%	--
1/1/2001	0.800%	0.0%	0.0%	2.600%	0.185%	--
1/1/2002	1.450%	0.480%	0.300%	1.470%	0.300%	--
1/1/2003	0.0%	0.300%	0.360%	1.420%	0.0%	--
1/1/2004	1.100%	0.047%	0.170%	2.200%	0.0%	--
1/1/2005	1.100%	0.300%	0.170%	2.430%	0.160%	--
1/1/2006	1.290%	0.270%	0.210%	2.000%	0.130%	--
4/1/2007	1.150%	0.370%	0.210%	1.300%	0.130%	--
6/1/2008	1.150%	0.200%	0.130%	0.250%	0.079%	0.25%
12/1/2009	1.150%	0.200%	0.130%	0.450%	0.079%	0.25%
6/30/2010	1.150%	0.200%	0.11%	0.450%	0.079%	0.00%

## Rural Telecommunications Infrastructure Grant Program

In 2001, the State Legislature created the Rural Telecommunications Infrastructure (RTI) Grant Program to aid in the establishment of telecommunications service in areas not currently served by existing local exchange carriers.<sup>52</sup> The RTI Program is funded with monies collected under the California High Cost Fund -A Program.

In 2008, the Legislature amended the program to authorize RTI grants for construction of facilities to provide access to emergency 911 services.<sup>53</sup> The bill also extended the life of the program to January 1, 2013, and authorized the Commission to provide \$40 Million in grants over the four year period ending December 31, 2012 and increased the grant award ceiling for individual projects from \$2.5 million to \$5 million. There are four projects completed and five projects are in progress.

*Table 4. Rural Telecommunications Infrastructure Grant Program  
in Progress Projects*

Project	Status	Grant Amount	Description
Indian Springs School District	In CEQA Review	\$1,844,721	3 cell towers serving residences and traffic along highway 299
Siskiyou Eddy Gulch Project	Phase 2 Approval	No Grant Yet	Voice service to 8 residences in remote area
Channel Islands Telephone Company	In CEQA Review	No Grant Yet	Voice, emergency phone service to Channel Islands
Siskiyou Godfrey Ranch Project	In CEQA Review	No Grant Yet	Voice service to 6 residences in remote area
Pine Mountain Learning Center	Phase 1 Approval	No Grant Yet	Voice service to school, senior citizens

<sup>52</sup> See AB 140 (Strom-Martin) Ch. 903, Stats. 2001, Pub. Util. Code § 276.5.

<sup>53</sup> See SB 1149 (Wiggins) Ch. 388, Stats. 2008.

## SECTION FIVE

### Basic Rate Deregulation in 2011

In August 2006, in the Uniform Regulatory Framework (URF) decision, the Commission determined that the voice markets in the service territories of the four largest ILECs in California -- AT&T, Verizon, Frontier, and SureWest -- were competitive.<sup>54</sup> As a result, the URF decision eliminated all retail price regulations for most business and residential services provided by these URF ILECs – except for rates for basic residential service, LifeLine service, and certain other services.

In a subsequent decision,<sup>55</sup> the Commission adopted a two-year phase-in period for transitioning to full pricing flexibility for basic residential service for these four large ILECs. Limited price increases were also permitted for LifeLine service in 2009 and 2010. The Commission authorized AT&T to phase in an increase in its monthly basic rates by \$3.25 per line effective January 1, 2009, and by an additional \$3.25 per line effective January 1, 2010, equivalent to the cumulative increase in nominal dollars required to adjust for inflation as measured by the consumer price index from 1996 through 2010. For the other three URF ILECs, the Commission authorized annual increases in their monthly rate caps equivalent to the AT&T amount of \$3.25, effective January 1, 2009 and 2010, respectively. The decision approved a cap as high as \$25.40 for basic service and none of the current or proposed rates have come close to that amount. Overall, basic rates are still within the bounds contemplated by the Commission in 2008.

Chart 9 below shows the basic residential service and LifeLine rates in current dollars for AT&T California and Verizon California (formerly General Telephone) from 1984 to 2011. This Chart indicates that in inflation-adjusted dollars the rate increases approved for 2009 and 2010 result in rates that are less than or equal to prior rates. As the Commission noted in Decision (D.) 08-09-042, prior to the increases in basic rates authorized by the Decision, “ILEC basic rates have remained fixed since the mid-1990s (except for one minor inflation adjustment in

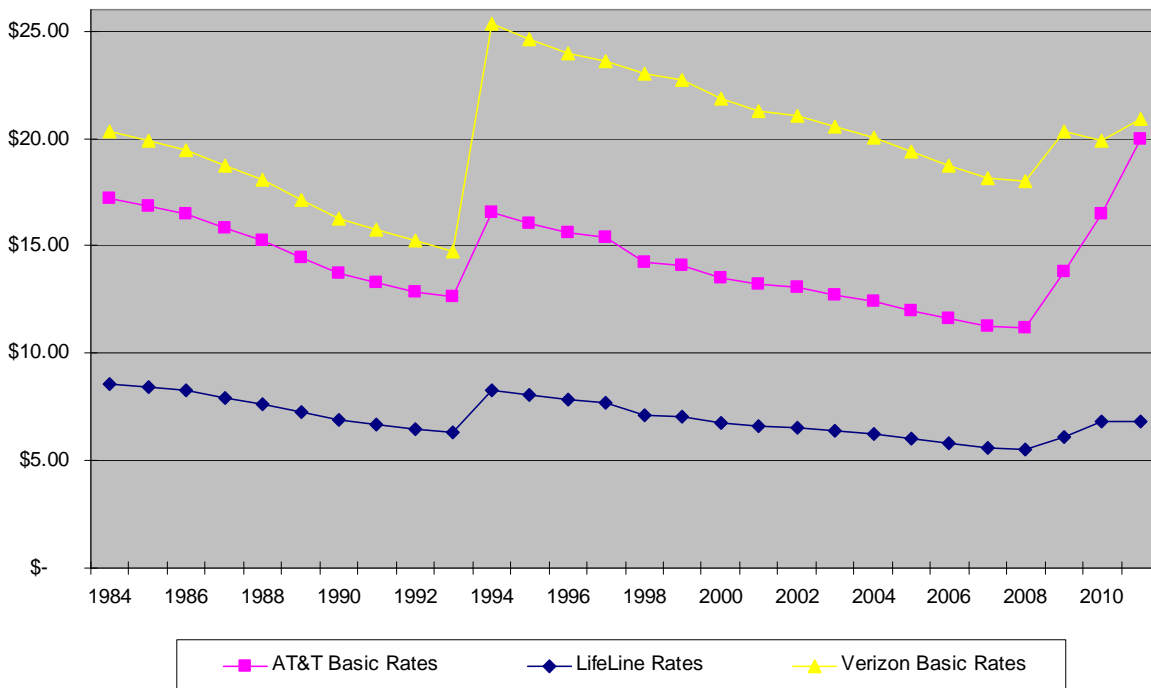
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<sup>54</sup> D. 06-08-030.

<sup>55</sup> D. 08-09-042.

2008 allowed by the Commission and the state Legislature through the Digital Infrastructure and Video Competitive Act (DIVCA).”<sup>56</sup>

**Chart 10. AT&T and Verizon California Basic Service and LifeLine Rates, 1984 ~ 2011 (In 2010 Dollars <sup>57</sup>)**



Beginning January 1, 2011, the four URF ILECs will acquire full pricing flexibility for basic residential rates in regions not subsidized by the CHCF- B Fund. At that time, the URF ILECs may change their rates for basic service by filing a Tier 1 advice letter.

In regions that continue to be subsidized by the CHCF-B Fund, the carrier of last resort (COLR) (the ILEC and/or any successor assuming the role of COLR) must certify that its basic rates do not exceed 150% of the highest basic rate that it charges in non-high-cost areas in California. Thus, in those regions where high-cost support payments will continue to apply, basic service rates will continue to be restricted to a level no higher than (a) 150% of the highest rate charged by the

<sup>56</sup> *Id* at p. 2. See D. 07-09-020 authorizing limited inflation-related adjustments for 2008 for AT&T and Verizon as permitted by DIVCA [AB 2987 (Nunez), Ch.700, Stats. 2006, at Pub. Util. Code §5950].

<sup>57</sup> 2010 Dollars are calculated using the CPI calculator at Bureau of Labor statistics website (<http://data.bls.gov/cgi-bin/cpicalc.pl>)

ILEC (or successor COLR) in its California service area outside of any subsidized high-cost areas or (b) the \$36.00 high-cost benchmark minus the EUCL,<sup>58</sup> whichever is lower. The CHCF-B proceeding R.06-06-028 has been superseded by the new proceeding, R.-09-06-019. The proceeding will update the costs for the CHCF-B areas and/or institute a reverse auction process for determining high cost support. The proceeding will also look at ways to streamline the claims process to achieve operating efficiencies.

## **Affordability Studies**

In D.08-09-042, the CPUC determined that there was merit in conducting a statewide affordability study to evaluate the California Lifeline Telephone Program in order to ensure that Commission policies continue to meet the goal of a 95% penetration rate.<sup>59</sup> The staff received an appropriation from the Legislature to conduct the study as part of its ongoing evaluation of the Lifeline Program in R.06-06-028.

Senate Bill 780 (SB 780, Ch. 342, Stats 2008; amending Public Utilities Code § 739.3 and adding § 275.6), introduced by Senator Wiggins and coauthored by Senators Cox and Kehoe, required the Commission to prepare and submit to the Legislature a report addressing the affordability of basic telephone service in areas funded by the California High-Cost Fund – B (CHCF-B).

In compliance with D.08-09-042, and legislative mandate in SB 780, the Commission's Communications Division worked with San Francisco State University's Public Research Institute to conduct three separate surveys (CHCF-B customer, CHCF-B noncustomer, and statewide) and on September 30, 2010, submitted the report based on data gathered in the surveys, and titled Affordability of Basic Telephone Service, to the legislature.

The staff report provided information on average and median bill for basic telephone service, and penetration and utilization rates of basic telephone service by income, ethnicity, age, and other demographic

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<sup>58</sup> The End User Common Line (EUCL) charge is set by the FCC. See 47 C.F.R. 69.152.

<sup>59</sup> D.08-09-042, at p. 32 and footnote 34 at p. 32.

characteristics. The surveys also evaluated other factors affecting affordability of basic telephone service for customers and noncustomers. The report describes the characteristics of noncustomers and their reasons for not having telephone service. The report also identified those persons most at risk of losing basic telephone service.

The surveys concluded that the median California household telephone bill as reported in the 2010 affordability surveys, adjusted for inflation, has not changed significantly from the prior 2004 survey. On average customers report being able to afford a 63% increase in basic phone service. The surveys find that the California High Cost Fund-B and the LifeLine programs have helped to fulfill the Commission's goal of 95% universal service telephone subscribership established in Decision 96-10-066, by maintaining affordable voice service rates. Seventy-one percent (71%) of the respondents in the statewide survey, and 80% of the respondents in the CHCF-B surveys, found their monthly landline bill affordable. LifeLine subscription benefits those who qualify for this service as reflected by the mean and median amounts of those respondents in lower income strata. The statewide survey indicated that 54% of customers have heard of LifeLine. Tolerance for basic service increases among LifeLine subscribers is lower than for non-LifeLine subscribers.

Statewide, landline subscriptions are diminishing with fewer customers subscribing to Lifeline service, while 82% of all households now subscribe to or use wireless service. A majority (58%) of noncustomer respondents have heard of the LifeLine program.

In CHCF-B areas, over one-third of LifeLine eligible households (35 percent) choose not to subscribe. CHCF-B survey indicates that for LifeLine subscribers, 25% have landline service only, while 75% subscribe to both landline and wireless. Thirty-two percent of those who choose not to subscribe to LifeLine do not have wireless access. Monthly phone bill costs for CHCF-B customers do not vary much by race/ethnicity. The surveys asked statewide and CHCF-B respondents about their tolerance to a percentage change in their basic phone service rate and the threshold at which an increase would cause respondents to discontinue landline service. Responses varied by income group. Broadband service is important to CHCF-B customers;

for those who subscribe to broadband, this ranks last among services customers would discontinue given a bundled-service rate increase. A large majority (95%) of noncustomer respondents has access or subscribes to other than traditional landline telephone service such as wireless or VoIP, and 86% of noncustomers who are eligible for LifeLine service have access to wireless phones. In CHCH-B areas, customers are more tolerant of rate increases, have a smaller percentage of population at risk, and have increasing reliance on alternatives. LifeLine customers are more sensitive to price increases, with 4.4% at risk of having to discontinue service if rates increase beyond the affordability threshold. Many program recipients subscribe to alternative services.

## CONCLUSION

California's March 2010 statewide telephone penetration rate of 97.0% exceeds both the 95% goal set by the Commission, and the nationwide penetration rate of 96.0%. However, penetration among California subscribers with annual incomes below \$20,600 still lags at 93.8%.<sup>60</sup> This below-goal penetration rate for low-income households demonstrates the need for continuation of LifeLine and other universal service programs necessary to keep basic residential rates affordable. The LifeLine program may also need to be reformed to adjust to the growing embrace by customers of voice service provided via alternative technologies.

The evolution of the telecommunications industry from the rate-regulated world of monopoly providers of circuit-switched wireline voice service via the PSTN to a competitive market dominated by wireless and Internet Protocol-enabled voice services provided over broadband facilities continues at a rapid pace. Subscribers are increasingly procuring voice service from wireless and VoIP service providers, often forgoing LEC circuit-switched wireline service entirely. In order to ensure widespread penetration of these new technologies, the Commission, working with the Legislature and the Executive Branch, is taking steps to ensure statewide deployment of broadband facilities through such programs as the California Teleconnect Program and California Advanced Services Fund Program.<sup>61</sup>

Senate Bill 1462, introduced by Senator Alex Padilla created the California Broadband Council for the purpose of promoting broadband deployment and adoption throughout the state for the benefit of all customers. The CPUC president will chair the first Broadband Council meeting with participating state agencies in the first quarter of 2011.

The introduction of intermodal competition has clearly benefited customers, providing new choices and services to fit their needs. However, these changes in the communications market are also driving changes in the regulatory arena. The Federal Communications Commission has initiated proceedings to implement the National

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<sup>60</sup> As of March 2010, the latest date for which information on penetration by income is available.

<sup>61</sup> See D. 07-12-054 and Pub. Util. Code § 270.



Broadband Plan, and is very close to establishing federal universal support for broadband services.<sup>62</sup> The Commission is fully engaged in this debate at the federal level, and has voiced support for a limited federal pilot program to provide low-income customers with computers and discounts on monthly access to the Internet. Such a pilot program would help determine the costs of providing universal service support to low-income customers for adoption of broadband Internet service.

The transition to wireless and VoIP services also has called into question the current federal-state paradigm as regards jurisdiction over voice services. Already one can see the beginnings of the shift from state jurisdiction over intrastate voice services to federal preemption over these services. In 1993, Congress preempted state jurisdiction over the rates and entry of wireless services.<sup>63</sup> Although Congress did not preempt state jurisdiction over the “terms and conditions” of wireless service, efforts to attain full preemption have been underway for several years in Washington, D.C. The argument that nationwide companies are hindered by a “patchwork quilt” of regulations of 50 states is a strong argument that resonates with many policymakers.

The transition by the industry to VoIP also raises serious questions about the traditional state role over the provision of intrastate voice services. The federal government has preempted state regulation of the Internet, Internet access services, information services and certain nomadic VoIP services.<sup>64</sup> Neither Congress nor the FCC has yet declared whether VoIP is a “telecommunications service” or an “information service.” The federal government may also decide not to define VoIP as either an information or a telecommunications service. Rather Congress and the FCC may regulate VoIP only as it deems necessary, which is the status today. As a result of the undefined status, currently VoIP service providers are not required to contribute to California universal service programs.

The outcome of this debate will obviously impact the provision of voice communications in California and California telephone customers in the

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<sup>62</sup> See Federal Communications Commission, *Connecting America: The National Broadband Plan*, (rel. Mar. 16, 2010).

<sup>63</sup> 47 U.S.C. 332(c)(3).

<sup>64</sup> *In the Matter of Vonage Holdings Corporation's Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission* (WC Docket No. 03-211) (2004) 19 FCC Recd 22404 (Vonage Order).

years to come as communications services migrate to technologies not yet imagined. The Commission urges the legislature to fully engage in this debate to ensure that the State can continue to adopt, fund and implement policies and programs that promote universal deployment and adoption of quality voice services at reasonable rates throughout California.