CALIFORNIA PUBLIC UTILITIES COMMISSION

Communications Division

Fourth Annual Report to the Governor and the Legislature

Fourth Annual DIVCA Report

For the Year Ending December 31, 2010

The Digital Infrastructure and Video Competition Act of 2006

"To promote competition, the state should establish a state-issued franchise authorization process that allows market participants to use their networks and systems to provide video, voice, and broad-band services to all residents of the state..." DIVCA 5810

Published May 4, 2012

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Executive Summary

This year's DIVCA report continues to offer good news in most areas. The available metrics show increasing investment in video and broadband infrastructure. They also show that more households have more choices and faster broadband speeds, offered by more competing video and broadband service providers.

This is the fourth annual report under the Digital Infrastructure and Video Competition Act of 2006 (DIVCA).[1] Section 5920 4(b) of the DIVCA statute directs the CPUC to create an annual report for the Legislature and the Governor, which aggregates the data provided by holders of State Video Franchises. These data quantify broadband and video deployment, availability and subscribership throughout the state. The statute also directs the CPUC to make the information available to the public on the CPUC Internet Website.

Video Deployment and Choice Continues to Grow

The number of households offered video by all state-issued video franchise holders and their local affiliates increased 2.9% (540,916) to 19.1 million during 2010, up from 18.5 million during 2009.[2] AT&T and Verizon, combined, more than quintupled the number of households to which they offer video between 2007 and 2010 and now cover almost 5.4 million households. Accordingly, both AT&T and Verizon have exceeded their statutory 3 year build out obligations, as defined in DIVCA.

Video penetration of households served by state-issued video franchisees and their local affiliates is 50.0% (6,284,239 households).

Over 72% of California households (9.1 million) are now located in census tracts in which two or more state video franchise holders offer video services. As a result of this new video competition, 894,505 more households (7.1% of the state) gained a choice of a second state franchised video provider in 2010 and 188,317 gained a third video provider during 2010.

Broadband Availability, Penetration and Speed are all Increasing

Based on data provided by all broadband providers in the state, in December 2010 there were 9.1 million residential subscribers to wireline and fixed wireless broadband in the state of California. That results in a statewide broadband penetration rate of 72.1%, up from 68.9% in December 2009 and up from 65.7% in December 2008. Since 2003, broadband subscriptions have almost tripled.

Based on data provided by State-issued video franchisees and their local affiliates, the number of broadband subscribers (both business and residential) has almost tripled to 9.5 million between 2003 and 2010 in California. Between 2007 and 2010, the number of residential broadband subscribers served by state-issued video franchisees and their local affiliates increased by 30% to 8.9 million households in California, resulting in a wireline State Video

[1] A.B. 2987, 2005-2006 Session, (Ca. 2006); Cal. Pub. Util. Code, Division 2.5, The Digital Infrastructure and Video Competition Act of 2006. ("DIVCA"). DIVCA was signed into law on 9/29/2006. California Public Utility Code §440-444 and §5800-5970.

[2] Due to multiple franchisees offering video to the same households, more households are offered video than the total number of households in the state (12,577,498). For details, see Appendix D, Section B titled: "Census Tract Data Limitations."

Franchisee broadband penetration rate of 70.8%, up from 66% in 2009, up from 62% in 2008 and up from 55% in 2007.

During 2010, 2.2 million more households subscribed to wireline broadband (from state-issued video franchisees and their local affiliates) with bandwidth that is advertised as having maximum download speeds of 10 – 25 mbps. This is a 128% increase over last year. Compared with 2008, the increase was 3.5 million more households or a 796% increase.

Correspondingly, 323,671 fewer households have broadband advertised at download speeds in the 768 kbps – 1.5 mbps speed tier in 2010 compared with 2009. That is a decrease of 22%.

Fifty three percent (53%) of the residential broadband connections (4.7 million) provided by state-issued video franchise holders and their local affiliates had maximum advertised download bandwidth speeds of greater then 6 mbps in December 2010. This is up from 45% (3.8 million) in December 2009.

Broadband faster than 6 Mbps download was offered to 89.4% (11,238,354) of the total households in the state in December 2010.

In February 2012, the Commission adopted decision D.12-02-015, which changed the Commission's definition of areas that are underserved by broadband. The new definition states that underserved areas are offered broadband slower than 6 Mbps download and 1.5 Mbps upload. The previous definition was underserved areas were offered broadband slower than 3 Mbps download and 1 Mbps upload.

As a result of these definitional changes, in December 2010 1.1 million households (8.6%) in California were defined as underserved by broadband, because they are offered broadband slower than 6 Mbps download or 1.5 Mbps upload. Under the previous definition, only 2.8% or 355,711 households in the state were defined as underserved by broadband.

Only 1.97% (247,326) households are unserved by broadband. This metric did not change as a result of the change in the definition of underserved, described above.

I. Video Findings

Section I summarizes data describing video services that are provided by state-issued video franchise holders and their local affiliates, in response to the statutory requirements of DIVCA. These data were aggregated and show the success of DIVCA in enabling telephone companies to rapidly deploy infrastructure and offer video services to households throughout California.

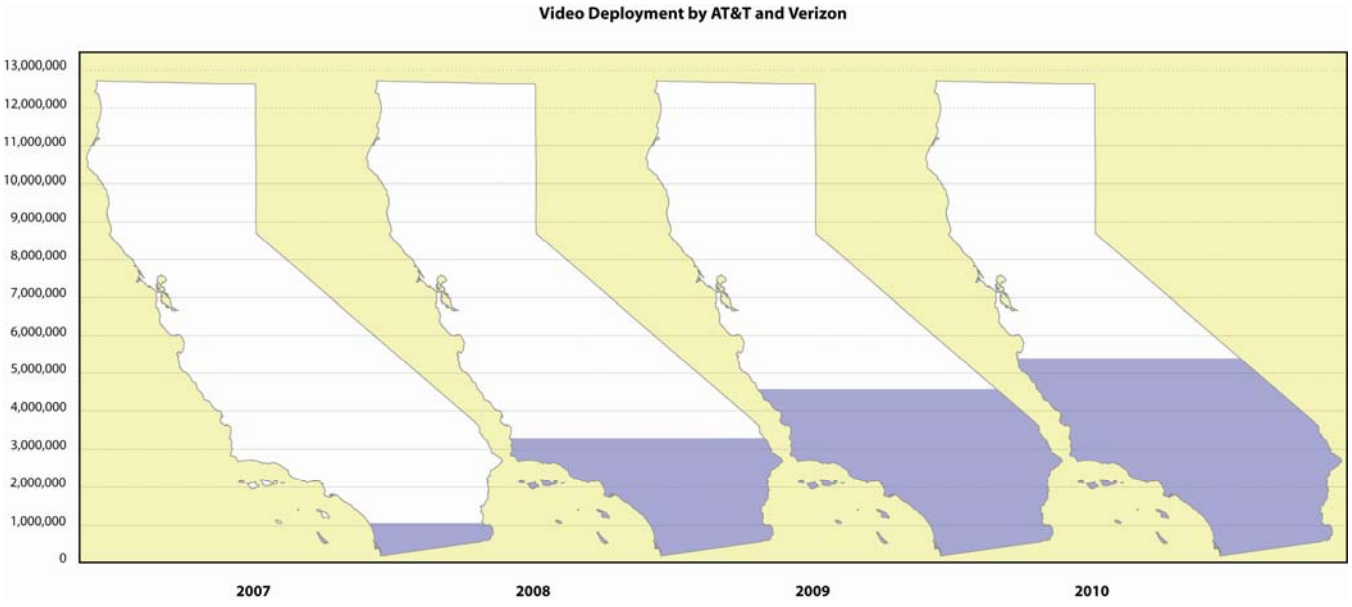
A. Video Deployment Continues to Grow

The number of households **offered video** by all state-issued video franchise holders and their local affiliates increased 2.9% (540,916) to 19.1 million during 2010, compared with 18.5 million during 2009, and up from 16.4 million households in 2008.

AT&T and Verizon, combined, more than quintupled (increased by 5 times) the number of households to which they **offer video** between 2007 and 2010 to almost 5.4 million households. This is an increase of 18.7% over 2009.

Both AT&T and Verizon have exceeded their 2 & 3 year build out obligations, as defined in DIVCA.

Both AT&T and Verizon have satisfied their obligation in DIVCA to provide free video services to community centers based on the number of subscribers that purchase video services from them.



B. Video Deployment Increased, Driving Faster Broadband Speeds

As shown in the graph on the previous page, AT&T and Verizon, combined, more than quintupled the number of households to which they offer video between 2007 and 2010 and now cover almost 5.4 million households. Accordingly, both AT&T and Verizon have exceeded their statutory build out obligations, as defined in DIVCA.

Because video requires significantly more bandwidth than telephony, DIVCA was a catalyst for increased investment in both video and faster broadband infrastructure. This investment has enabled AT&T and Verizon to significantly increase the amount of bandwidth that they offer to their broadband customers.

DIVCA requires that AT&T must build out video and as a result, associated faster broadband infrastructure to serve 50% of its telephone service territory within five years after it began providing video service (Spring, 2012).[3]

Verizon is required by DIVCA to build out video infrastructure to 40% of its telephone service territory within five years after it began providing video service (Spring, 2012).[4]

Verizon exceeded its two year build out obligation / milestone by offering video services to more than 25% of the households in its telephone service area.[5] By 2012 (five years after it began providing video service), Verizon is obligated to offer video service to at least 40% of the customer households in its telephone service area.[6]

AT&T exceeded its three year build out obligation / milestone by offering video services to more than 35% of the households in its telephone service area.[7] By 2012 (five years after it began providing video service), AT&T is obligated to offer video service to at least 50% of the customer households in its telephone service area.[8]

We have no reason to believe that Verizon and AT&T will not honor the build out requirements of DIVCA. However, they may choose to delay additional infrastructure investment until the end of their five year build out obligations.

Next year's report will contain an analysis of AT&T and Verizon's five year build out and how they compare with the requirements stated in DIVCA.

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[3] Section 5890 (e, 3) states: "A holder shall not be required to meet the 40% requirement or the 50% requirement until two years after at least 30 percent of the households with access to the holder's video service subscribe to it for six consecutive months."

[4] Ibid

[5] **Verizon's** obligation is to offer video service to **at least 25%** of customer households in its telephone service area **within two years** of when it began providing video service. California Public Utility Code, Division 2.5, The Digital Infrastructure and Video Competition Act of 2006. ("DIVCA"), Section 5890.

[6] Section 5890 (e, 3) states: "A holder shall not be required to meet the 40% requirement or the 50% requirement until two years after at least 30 percent of the households with access to the holder's video service subscribe to it for six consecutive months."

[7] **AT&T's** obligation is to offer video service to **at least 35%** of customer households in its telephone service area **within three years** of when it began providing video service. P.U. Code §5890.

[8] Ibid

C. State Video Franchising Growth Continues

One hundred twenty one (121) state video franchises and franchise amendments were issued by the CPUC's video franchising group through 2010, as shown in the chart below. This is a 56% increase from 69 state franchises and amendments that were issued by the CPUC through 2008 and a 414% increase from the 21 state franchises that were issued by the CPUC through 2007.

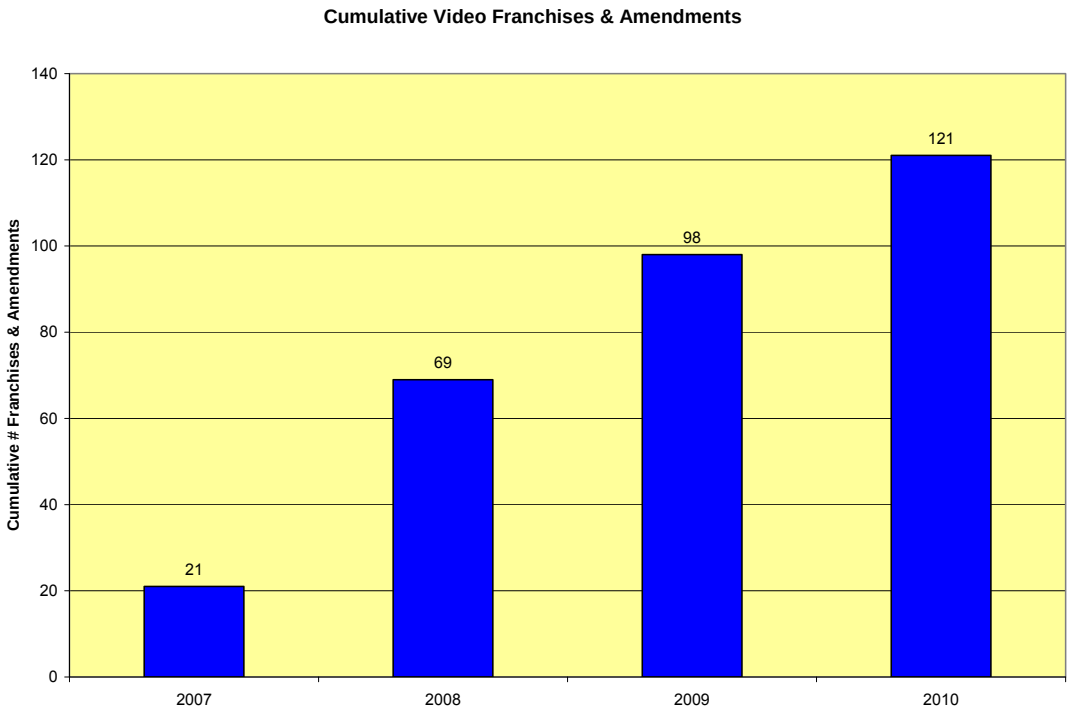
The state began issuing video franchises in 2007. Since that time, as of December 2010, the CPUC cumulatively issued initial state video franchises to 39 different companies:

During 2007, when the state began issuing video franchises, 20 were issued.

During 2008, 10 additional companies were issued state franchises.

In 2009, 5 more operators of video systems were issued state video franchises.

During 2010, four new video franchises were issued to companies previously without state franchises. And 19 amendments were issued to existing Franchises during 2010.



A state video franchise grants the right to offer video services in an area. State video franchises are not exclusive. Multiple firms can receive video franchises for the same geographic area.

An amendment to a franchise is a change of some type to the original franchise agreement, generally involving expansions or contractions in the geography of the franchise area. Applications for initial franchises and for subsequent amendments involve the same process for staff to determine whether each type of application is "complete."

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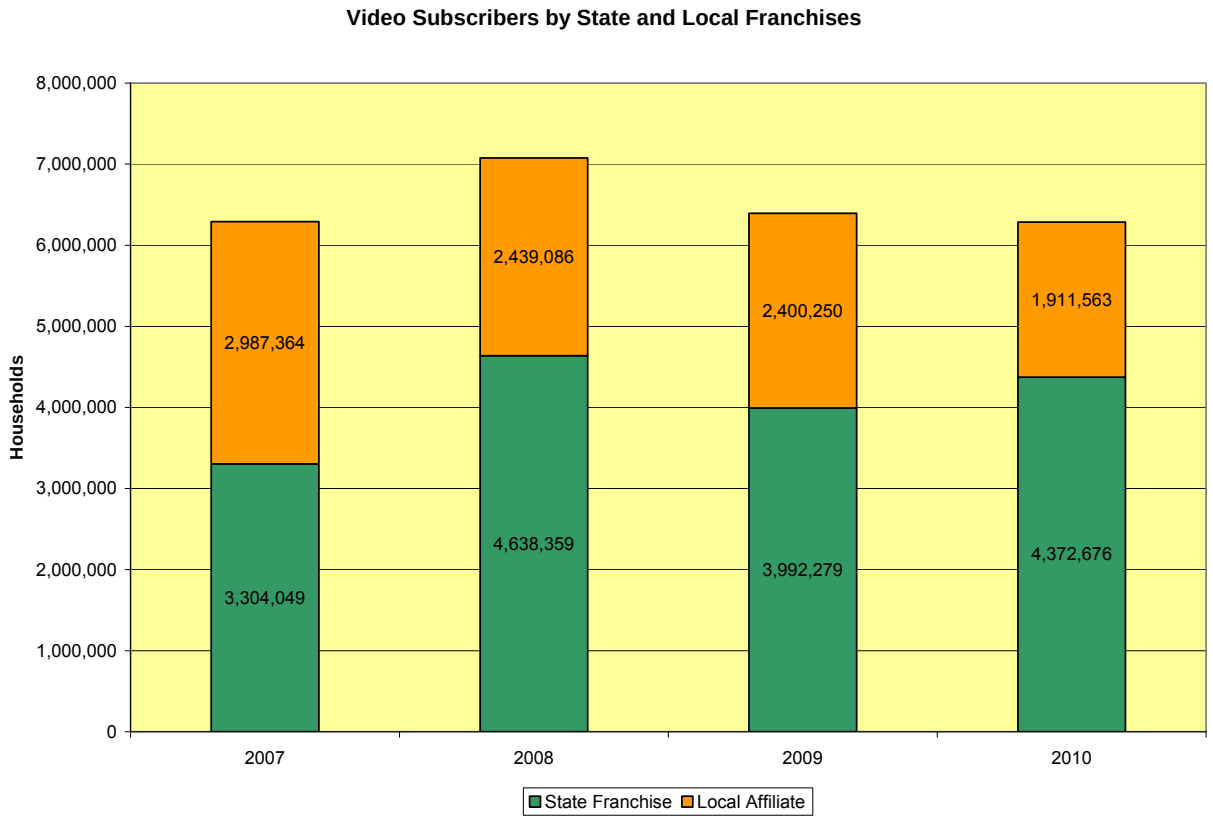
D. Video Penetration and Subscribers Segmented by State and Local Franchises

Video penetration of households served by state issued video franchisees and their local affiliates rose to 50.0% (6,284,239) at the end of 2010, up from 49.9% (6,394,538 households) in 2009.[9],[10]

In 2007, AT&T and Verizon were issued video franchises and they began deploying their video systems in various parts of the state. Since then, many incumbent cable operators have chosen to shift their video franchises from local entities - primarily municipalities and counties - to state-issued video franchises, as DIVCA allows. This process began in 2007 and continues today.

The bar chart below illustrates this shift from local video franchises to state video franchises in terms of the number of video subscribers served. One manifestation of this shift is that the number of households subscribing to video in areas served by state-issued franchises, increased by 32% (1.1 million) between 2007 and 2010 to 4.37 million households, as shown in the chart below. (The green bars in the chart below represent the households served by state franchisees.)



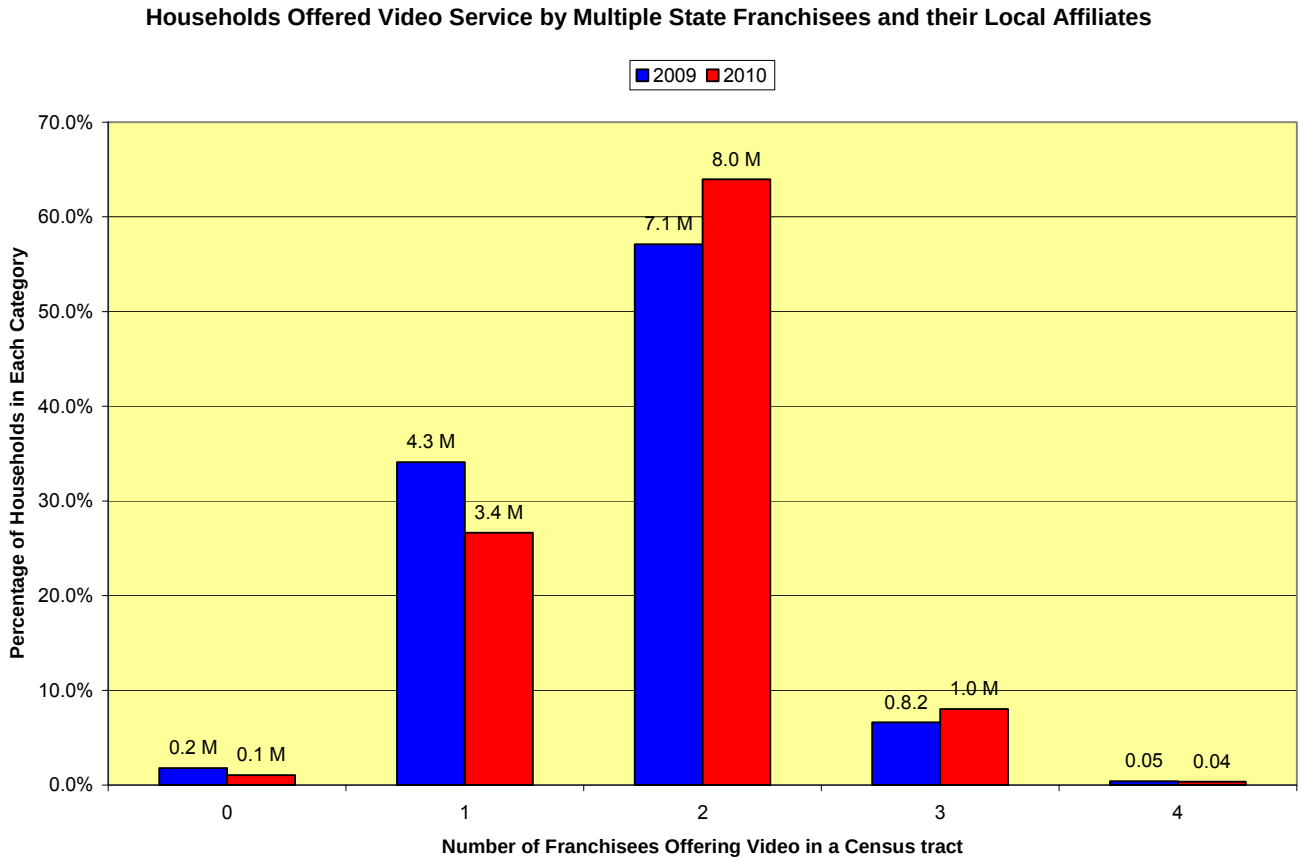
[9] The total number of households in California is 12,577,498, according to the U.S. Census Department. http://2010.census.gov/2010census/popmap/ipmtext.php?fl=06

[10] The penetration rate rose slightly this year, while the number of video subscribers fell by 110,299, because the number of households in the denominator fell from a projected number of 12,790,143 households last year, which was based on the 2000 census, to this year's number of 12,577,498 HHs, which was provided by the US Census Department's enumeration in 2010.

E. More Households Have More Video Choices: 72% of HHs Offered Video Services by Multiple State Franchisees

The chart below illustrates that over 72% of California households (9.1 million) are now located in census tracts in which two or more state video franchise holders offer video services.

As a result of this new video competition, 894,505 more households (7.1% of the state) gained a choice of a second state franchised video provider in 2010 and 188,317 gained a third video provider during 2010.



F. State Video Franchise Territories

The map below shows the franchise territories of state-issued video franchisees in California.

G. Low Income Households Offered Video

Section 5890(a) of DIVCA[11] states the requirements not to discriminate based on income as follows: "A cable operator or video service provider that has been granted a state franchise under this division may not discriminate against or deny access to service to any group of potential residential subscribers because of the income of residents in the local area in which the group resides."

"Holders or their affiliates with more than 1 million telephone customers in California satisfy (this requirement) if the following conditions are met:

(1) Within three years after it begins providing video service under this division at least 25 percent of households with access to the holder's video service are low-income households.
(2) Within five years after it begins providing video service under this division and continuing thereafter, at least 30 percent of the households with access to the holder's video service are low income households."

DIVCA requires state video franchise holders to provide information describing the number of low-income households in their video service areas, as well as the number of low-income households to which they offer video service. These data have been aggregated, and are shown in the table below.

The aggregated data below shows that while there are 3.6 million low income households, state-issued video franchises and their local affiliates offered video to 5.2 million low income households at the end of 2010.

The reason that the number of low income households offered video by state-issued video franchisees and their local affiliates exceeds the number of low income households in the state is due to the fact that one household may be offered video by multiple video providers.

Low Income Households Offered Video

	2008 # Households	2009 # Households	2010 # Households
Low Income Households in the state of California		3,585,838[12]	
Low Income Households Offered Video by both State-issued video franchisees and their local affiliates.	5,024,002	5,170,247	5,984,156

[11] California Public Utility Code §440-444 and §5800-5970 (P.U. Code).
[12] U.S. Census

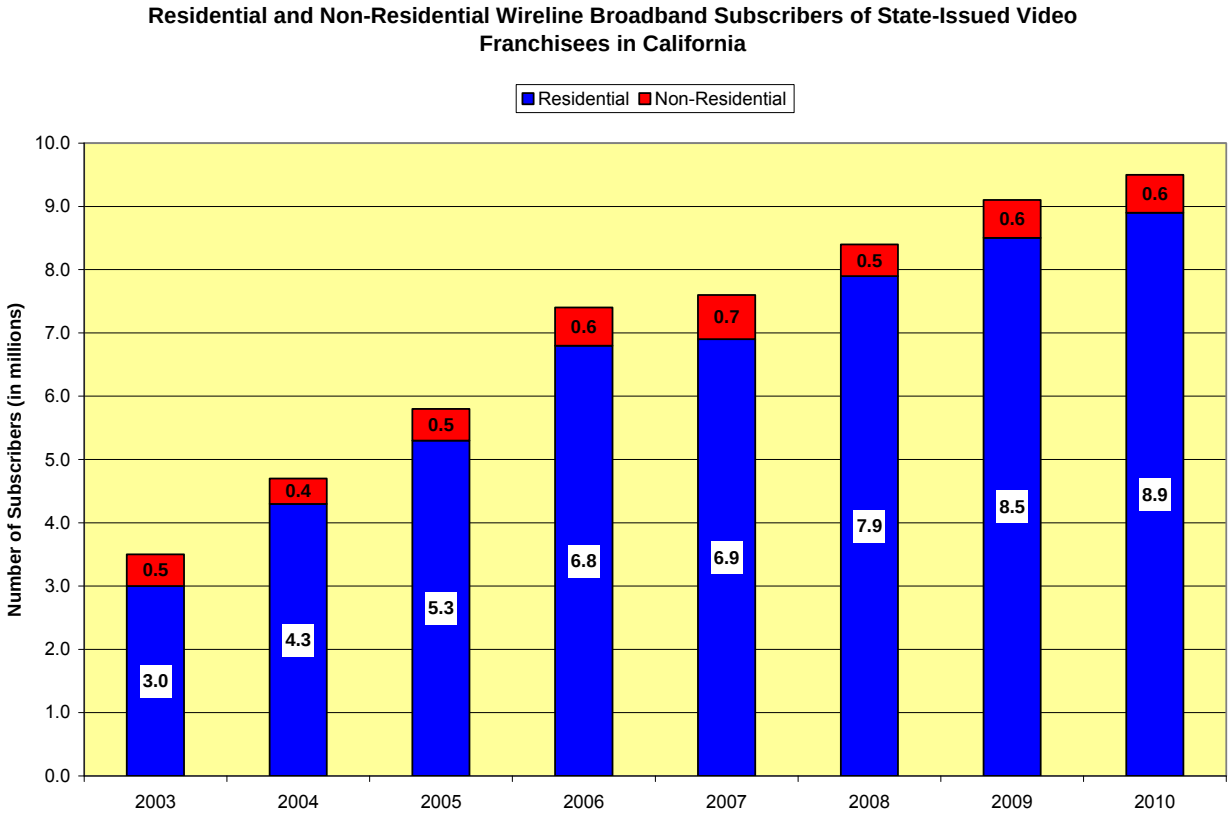
II. Broadband Findings

This Broadband section summarizes data describing broadband services provided by both state-issued video franchise holders and their local affiliates as well as unaffiliated broadband service providers. The data from state-issued video franchisees and their local affiliates were provided in response to the statutory requirements of DIVCA. They were aggregated and provide metrics illustrating changes in broadband penetration over the past four years. These data also show the number of wireline and wireless broadband connections provided by state-issued video franchisees, download and upload speed tier information, and the predominant technologies used to deploy broadband.

Most of the broadband section of this report analyzes data provided by state-issued franchisees and their local affiliates and does not include data from providers unaffiliated with state-issued franchisees. Non affiliated unregulated broadband providers serving residential customers, such as wireless broadband and satellite are included in sections II B, C, D, and E of this report.

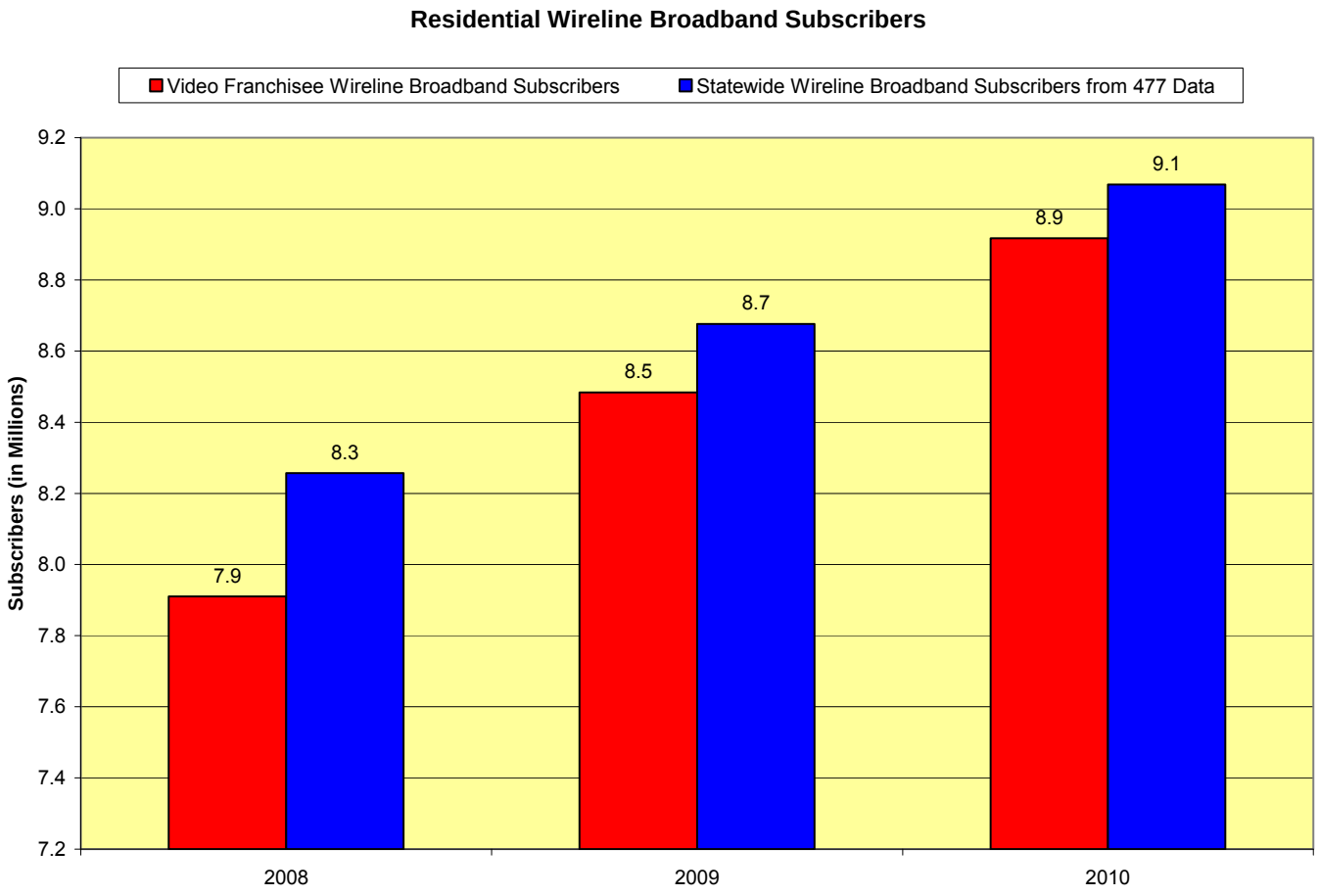
A. Broadband Subscriptions Almost Tripled Since 2003

The chart below shows that the number of broadband subscribers to State-issued video franchisees and their local affiliates in the state of California has almost tripled to 9.5 million connections over the seven years since 2003.



B. State-issued Video Franchisees and their local affiliates Serve 98.3% of the Residential Wireline Broadband Subscribers in California

The graph below shows that in December 2010, 98.3% (8.9 million) of the broadband subscribers in the state of California were served by state-issued video franchisees or their local affiliates. Consequently, there were 151,162 broadband subscriptions that were provided in the state by broadband service providers that are not state-issued video franchisees or one of their local affiliates.



C. Broadband Penetration Increased by 30% Between 2007 and 2010

In December 2010, there were 9.1 million residential subscribers to wireline and fixed wireless broadband in the state of California, based on data provided by all broadband providers in the state. That results in a statewide broadband penetration rate of 72.1%, up from 68.9% in December 2009 and up from 65.7% in December 2008.

The 2010 residential wireline broadband penetration rate for households served by state-issued video franchisees or their local affiliates increased 7.4% to 70.9% (8.9 million) during 2010, up from 66% in 2009 (8.5 million connections), and 62% in 2008.

Between 2007 and 2010, the broadband penetration rate for households served by state-issued video franchisees or their local affiliates increased by 30% to 70.9% (8.9 million connections) from 55% in 2007.

The 2010 mobile broadband wireless service plan penetration rate for households served by state-issued video franchisees or their local affiliates increased 38.2% to 23.2% (6.5 million) during 2010, up from 17% (4.7million) in 2009, and from 8.6% in 2008 .

Between 2007 and 2009, the wireless service plan penetration rate increased by 729%, to 23.2% from 2.8% in 2007.

Broadband (Wireline and Wireless) Penetration Rates and Growth for HHs Served by State-issued Video Franchisees or their Local Affiliates[13] [14]

	2007	2008	2009	2010
Statewide Residential Wireline & Fixed Wireless Broadband Penetration (% total HHs in CA)	N/A	66%	69%	72.1%
Residential Wireline Broadband Penetration State Video Franchisees / Affiliates (% total HHs in CA)	55%	62%	66%	70.8%
Mobile Broadband Wireless Service Plan Penetration (% of total population in CA)	2.8%	8.6%	17.0%	23.2%[15]

Mobile broadband wireless service plan subscribers are those customers subscribing to

[13] Total statewide households (12,577,498) provided by the U.S. Census. Projected population in CA for 2007, 2008, 2009, based on projections from the U.S. Census, provided by California Department of Finance.

[14] Total statewide population 18 & over (27,958,916) provided by the U.S. Census Department

[15] Mobile Broadband Wireless Service Plan Penetration determined by dividing the number of broadband service plan subscribers (>200kbps in 1 direction) by the number of adults over 18 year of age (27.96 million).

monthly mobile broadband wireless service plans. The most popular devices that are used to access mobile broadband wireless services are smart phones such as iPhones, Android based smart phones and Blackberrys. Additionally, iPads, "data cards" and a host of emerging devices access the Internet via terrestrial mobile wireless broadband.

Number of Broadband (Wireline and Wireless) Subscribers Served by State-issued Video Franchisees or their Local Affiliates

Number Subscribers	2007	2008	2009	2010	2009 - 2010 Growth Rate	2007 - 2010 Growth Rate
State-Wide Providers of Residential Wireline & Fixed Wireless Broadband	N/A	8,257,281	8,676,193	9,069,599	4.5%	2008-2010 9.8%
State Video Franchisees & Affiliates Residential Wireline Broadband	6,851,743	7,910,166	8,484,435	8,917,437	5.1%	30.1%
Mobile Broadband Wireless Service Plan Subscribers	776,903	2,399,600	4,758,204	6,497,820	36.6%	736%

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D. Definition of Underserved by Broadband Changed to 6 Mbps from 3 Mbps

In February 2012, the Commission adopted decision D.12-02-015, which changed the Commission's definition of areas that are underserved by broadband. The current definition states that underserved areas are offered broadband slower than 6 Mbps download and 1.5 Mbps upload. The previous definition was underserved areas were offered broadband slower than 3 Mbps download and 1 Mbps upload

As a result of these definitional changes, the metrics describing the number of underserved households in California has increased compared to previous years. These metrics include both State-issued video franchisees as well as unaffiliated broadband providers.

Broadband faster than 6 Mbps download is offered to 89.4% (11,238,354) of the total households in the state.

The number of households in the State that are now defined as **underserved** by broadband (slower than 6 Mbps) has increased to 1.1 million (8.6% of HHs in the state) from 355, 711 (2.8% of the HHs in the state) under the previous definition.

Correspondingly, the **area of the state (in square miles)** that is now defined as underserved has increased to 22,407 square miles (14.4% of the state) from 6,018 square miles (3.9% of the state) under the previous definition.

The following page contains the two tables that contain these and other metrics based on the two different definitions of underserved.

To graphically illustrate the impact of this change, we created two different maps based on the two different definitions of underserved. Both maps show underserved areas in red. The first map contains 3.7 times as much red, signifying 22,407 square miles underserved by broadband (slower than 6 Mbps), while the second map, shows only 6,018 square miles underserved by broadband (slower than 3 Mbps).

E. Broadband Availability: Unaffiliated Broadband Providers as well as State-Issued Video Franchisees

The tables and maps on the following pages show that:

> 95.2% of all households in the state of California are **offered broadband faster than 3 Mbps** (11,974,461 households).
>
> 89.4% of the households in the state are **offered broadband faster than 6 Mbps** (11,238,354 households).
>
> Only 1.97% (255,309) households are **unserved** by broadband.

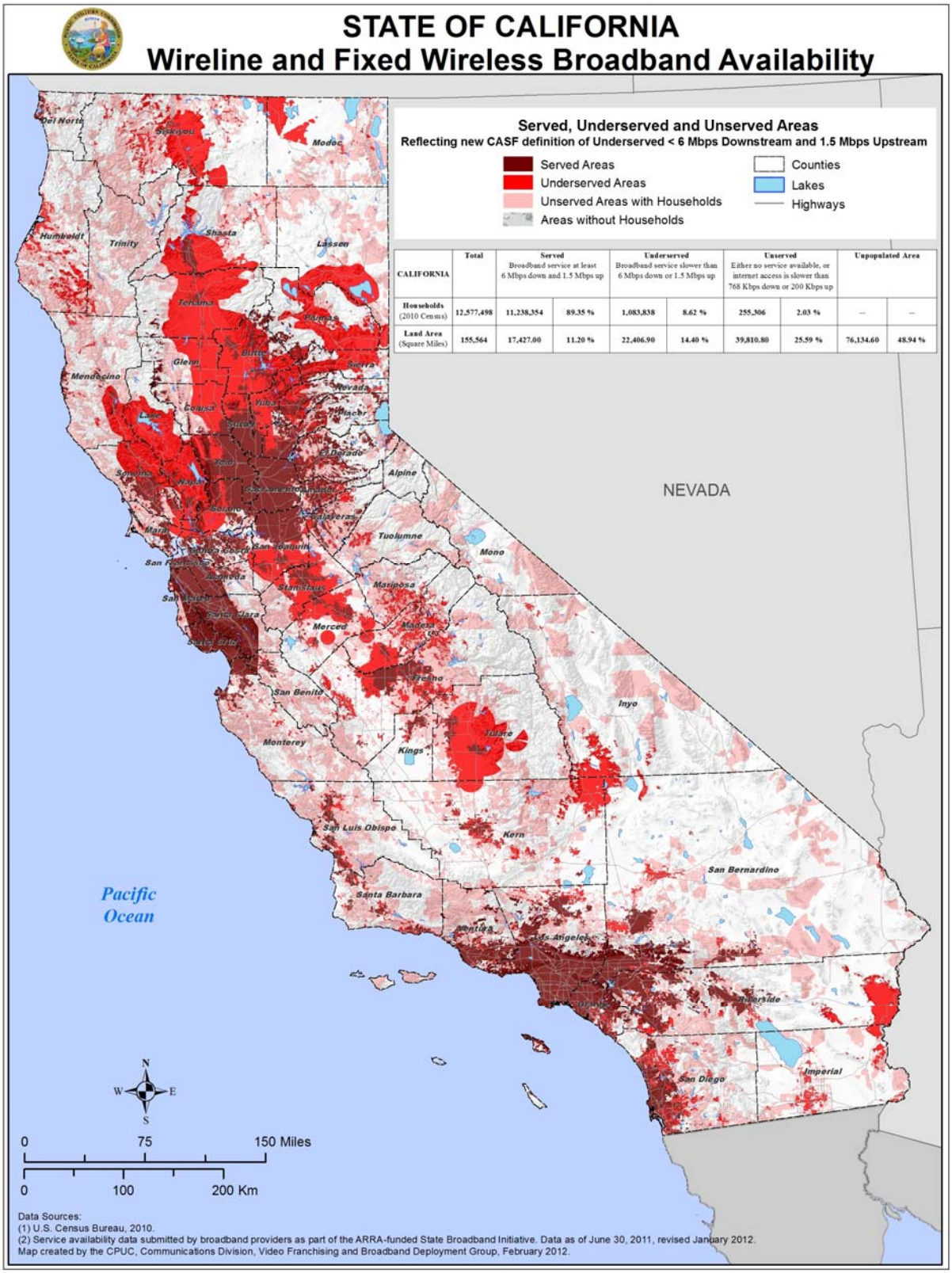
Number of Households Served, Underserved and Unserved by Broadband
Based on the new definition of underserved as being Less than 6 Mbps download and 1.5 Mbps upload

California	**Number of Households** in California (2010 Census)	**Served** Broadband Service is available at speeds of **at least 6mbps down** & 1.5 Mbps up		**Underserved** Broadband Service available, but **slower than 6 Mbps down** OR 1.5 Mbps up		**Unserved Households** Either **no Broadband Service at all**, or Internet access is slower than 768 Kbps down R 200 Kbps up		Households Subscribing to **Satellite** Broadband Service	**Unpopulated area**	
	Number	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Number**	**Percent**
Households	12,577,498	11,238,354	89.4 %[1]	1,083,838	8.6 %	255,309	2.0 %	62,412	N/A	
Land Area (Square Miles)	155,564	17,427	11.2%	22,407	14.4%	39,811	25.6%	N/A	76,135	48.9%

Number of Households Served, Underserved and Unserved by Broadband
Based on the previous definition of underserved being less than 3 Mbps download and 1.0 Mbps upload

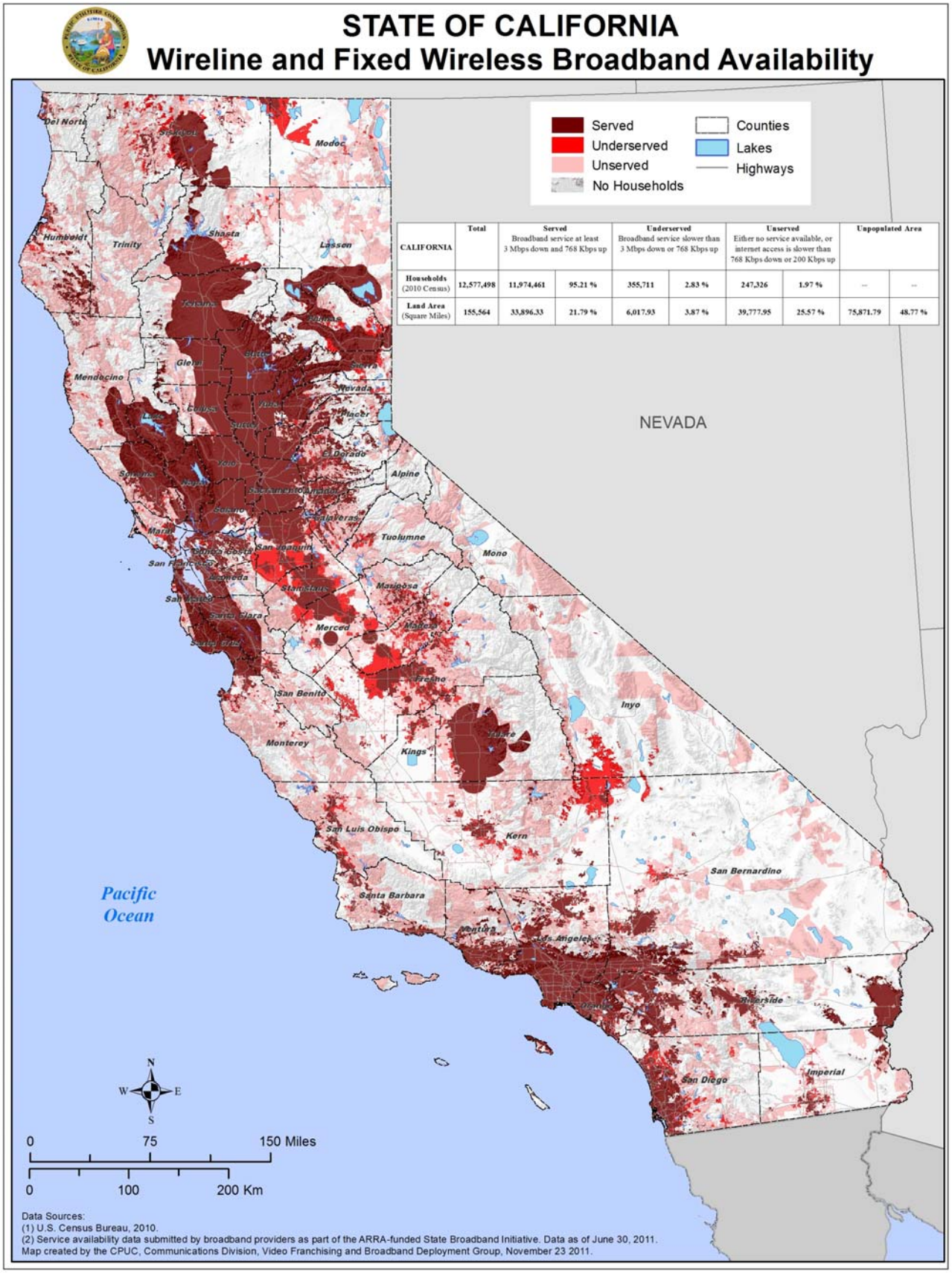
California	**Number of Households** in California (2010 Census)	**Served** (Broadband Service is available at speeds of **at least 3 mbps down** & 768 Kbps up)		**Underserved** (Broadband Service available, but **slower than 3 Mbps down** OR 768 Kbps up)		**Unserved Households** (either **no Broadband Service at all**, or Internet access is slower than 768 Kbps down R 200 Kbps up)		Households Subscribing to **Satellite** Broadband Service	**Unpopu-lated area**	
	Number	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Number**	**Percent**
Households	12,577,498	11,974,461	95.2%	355,711	2.8%	247,326	2.0%	62,412	N/A	N/A
Land Area (Square Miles)	155,564	33,896	21.8%	6,018	3.9%	39,778	25.6%	N/A	76,135	48.9%

Map Showing Areas Underserved by Wireline Broadband (<u>Slower than 6 Mbps</u>)



CALIFORNIA	Total	Served: Broadband service at least 6 Mbps down and 1.5 Mbps up		Underserved: Broadband service slower than 6 Mbps down or 1.5 Mbps up		Unserved: Either no service available, or internet access is slower than 768 Kbps down or 200 Kbps up		Unpopulated Area	
Households (2010 Census)	12,577,498	11,238,354	89.35 %	1,083,838	8.62 %	255,306	2.03 %	--	--
Land Area (Square Miles)	155,564	17,427.00	11.20 %	22,406.90	14.40 %	39,810.80	25.59 %	76,134.60	48.94 %

Map Showing Areas Underserved by Wireline Broadband (<u>Slower than 3 Mbps</u>)



CALIFORNIA	Total	Served: Broadband service at least 3 Mbps down and 768 Kbps up		Underserved: Broadband service slower than 3 Mbps down or 768 Kbps up		Unserved: Either no service available, or internet access is slower than 768 Kbps down or 200 Kbps up		Unpopulated Area	
Households (2010 Census)	12,577,498	11,974,461	95.21 %	355,711	2.83 %	247,326	1.97 %	--	--
Land Area (Square Miles)	155,564	33,896.33	21.79 %	6,017.93	3.87 %	39,777.95	25.57 %	75,871.79	48.77 %

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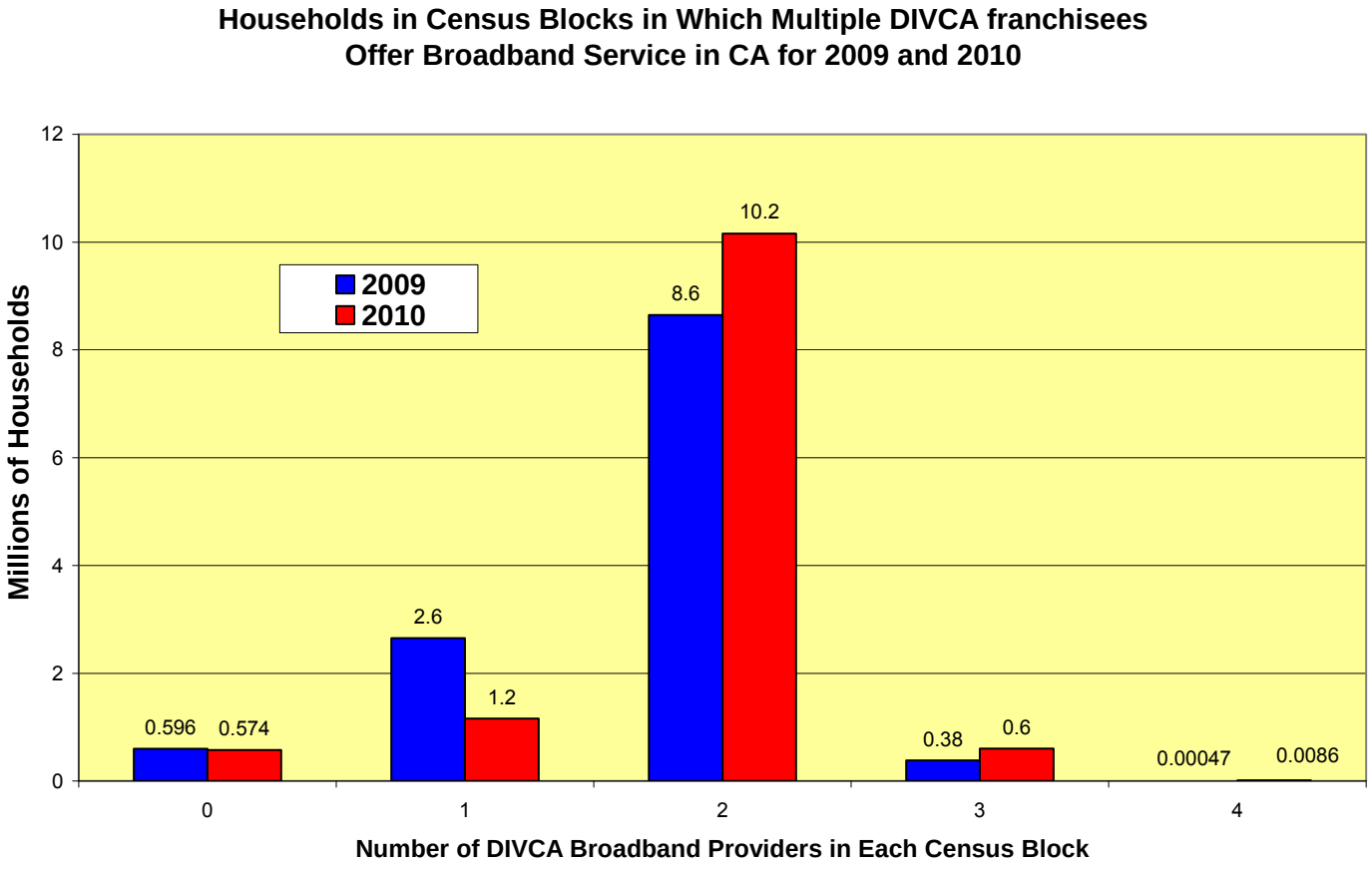
F. 86% of Households are Offered Broadband Service by Multiple State Franchise Holders

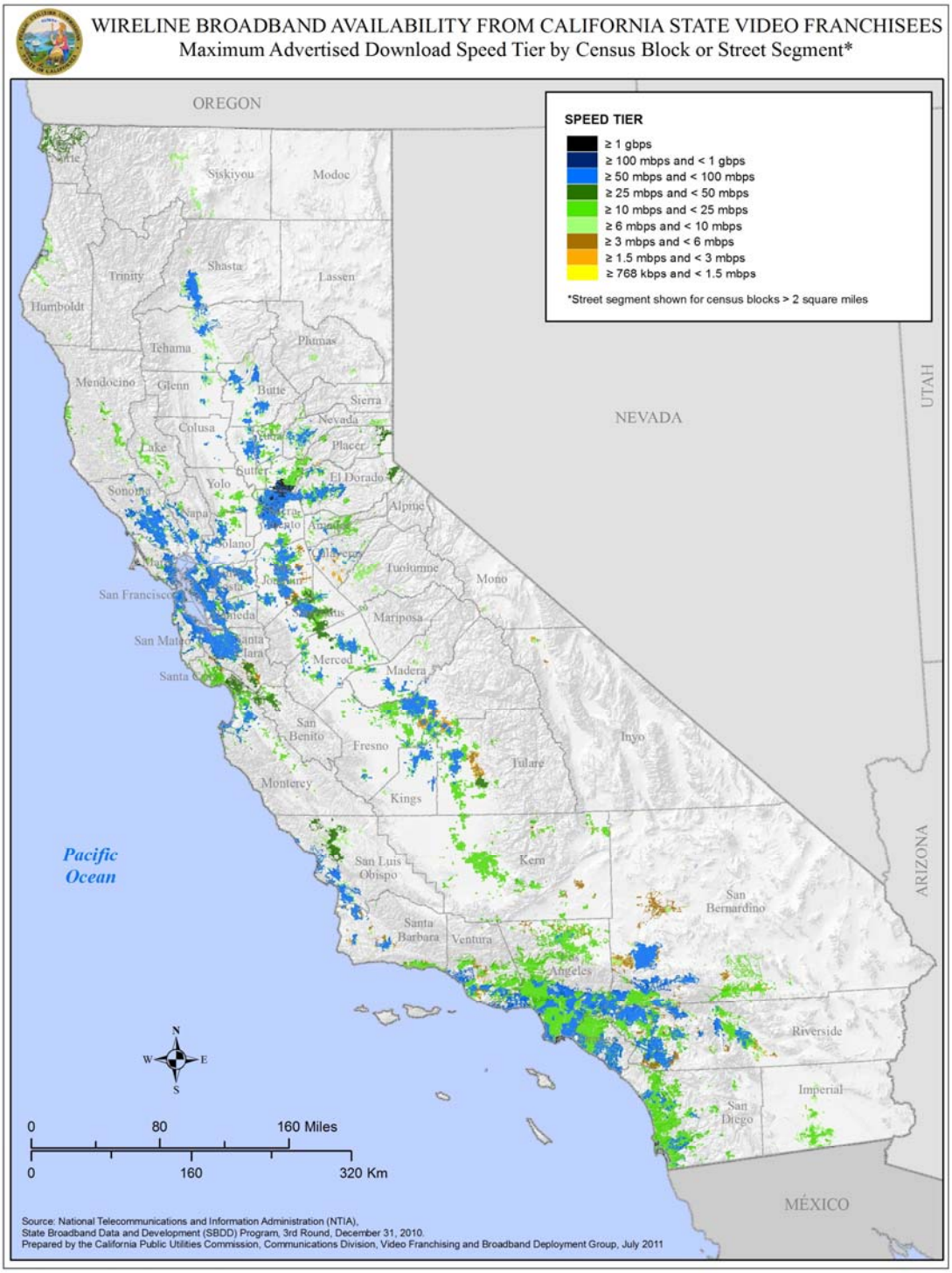
The chart below illustrates that 86% (10.8 million) of the households in the state are located in census blocks in which they were offered broadband by two or more state-issued video franchisees or their local affiliates in December 2010. This is up from 73% (9.3 million) in December 2009.

As a result of this new broadband competition, 1,511,830 more households gained a choice of a second broadband provider (that is a state-issued video franchisee) in 2010 and 219,931 households gained a third broadband provider during 2010.



G. Broadband Availability Map of Maximum Advertised Broadband Download Speed Tiers by Census Block

The map below uses the download speed tier information that is summarized in the bar and pie charts on page 27 to display which one speed tier is the maximum advertised broadband download speed tier for each census block in the state of California.



H. Broadband Speed Tier and Technology Type Data Reported by Broadband Service Providers

The definition of broadband fundamentally changed in June 2008 when the FCC changed how it defines and gathers data about broadband services.[17] Between 1996 and June, 2008 the FCC considered services to be "broadband" if they involved transmission speeds in excess of 200 kbps in one direction. All that changed on June 12, 2008 when the FCC passed new Form 477 reporting requirements for broadband and Internet service providers.

As a result of the FCC's action, on July 10 2008, the CPUC amended G.O. 169 to match the FCC's broadband reporting requirements. Until 2008, broadband connections were only reported as a statewide total. Now each broadband provider, including each state-issued video franchise holder, is required to report broadband connections by subscription speeds and technology types. Video franchisees satisfy this obligation by submitting their Form 477 data for California directly to the CPUC, identical to the way they report to the FCC.

The FCC's June 2008 order required service providers to report their services and subscribers by different technologies, bandwidth and offered eight speed tiers[18] in each census block:

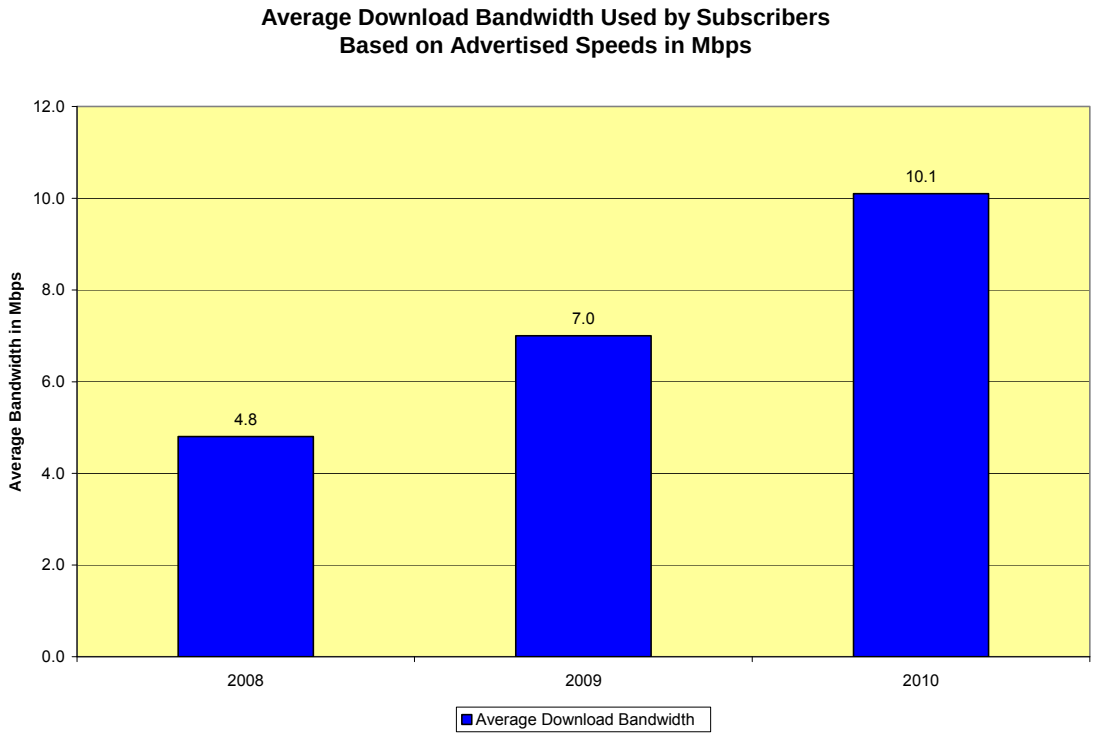
- 768 kbps to < 1.5 mbps
- 1.5 mbps to < 3 mbps
- 3 mbps to < 6 mbps
- 6 mbps to < 10 mbps
- 10 mbps to < 25 mbps
- 25 mbps to <50 mbps
- 50 mpbs < 100
- 100 mbps < 1 Gbps
- >= 1 Gbps

[17] Form 477, available at http://www.fcc.gov/form477.

[18] The data in this section is based on 477 data, which are advertised speeds. Advertised speeds do not necessarily equal the speeds users receive.

I. Broadband Speed is Getting Faster: Broadband Download Speeds Are Increasing

The chart below shows that average broadband bandwidth (speed) used by subscribers of state-issued video franchisees and their local affiliates has increased from 4.8 Mbps in 2008 to 7.0 mbps in 2009 to 10.1 Mbps in 2010. This is an increase of 110% over three years.



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Broadband Download Speeds Are Increasing

The bar chart on the following page shows the number of subscribers served by state-issued video franchise holders and their local affiliates in each wireline broadband maximum advertised download speed tier category for 2008, 2009 and 2010. The pie chart describes the aggregated data for 2010. Analyzing these data yields the following facts at the end of 2010:

Four (4.0) million households subscribed to broadband connections between 10 and 25 Mbps on Dec 31, 2010, up 135% from 1.7 million in 2009.

In 2010, 2.3 million more households subscribed to wireline broadband bandwidth with maximum advertised download speeds of 10 – 25 mbps, compared with 2009. This is a 135% increase from 2009 and an 790% increase from 2008

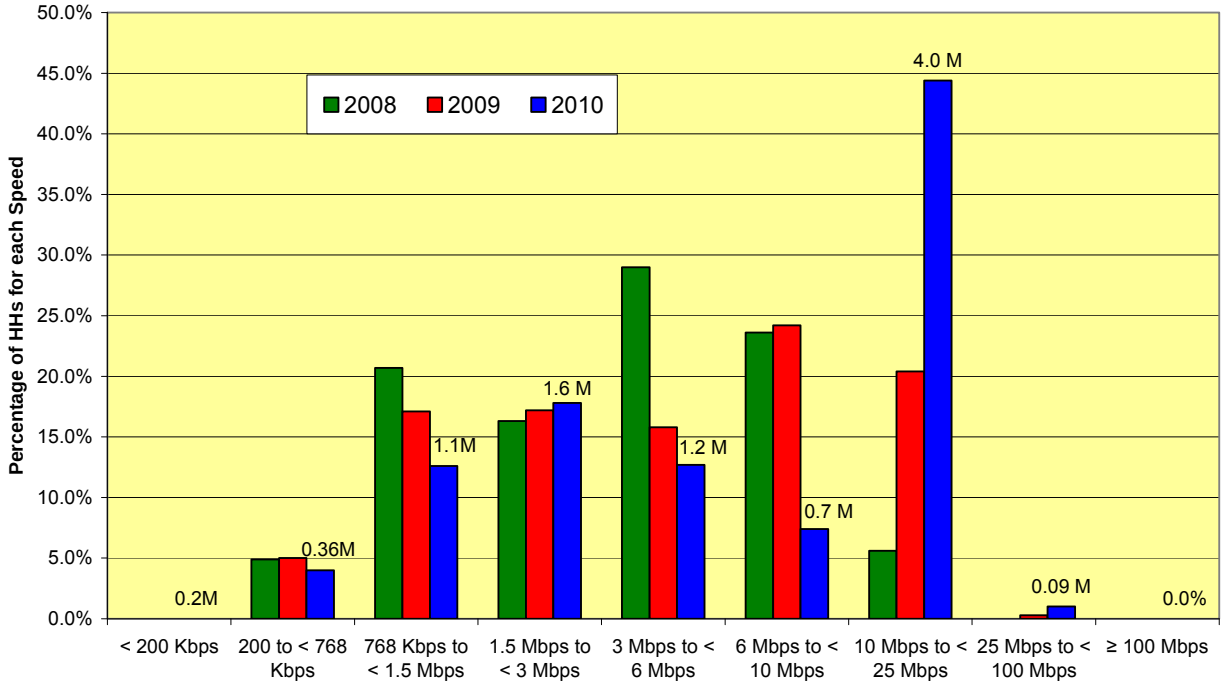
Correspondingly, compared with 2009, 525,811 **fewer** households had wireline broadband bandwidth in the two download speed categories of 768 kbps – 1.5 mbps and 3 – 6 mbps in December 2010. That is likely because these households now purchase faster broadband.

Sixty five percent (65%) of residential broadband download subscribers (5.8 million) served by state-issued video franchise holders and their local affiliates in California subscribed to wireline bandwidth with maximum advertised download speeds **greater than 3 mbps** in December 2010. This is a 4.5 percentage point increase from 2009.

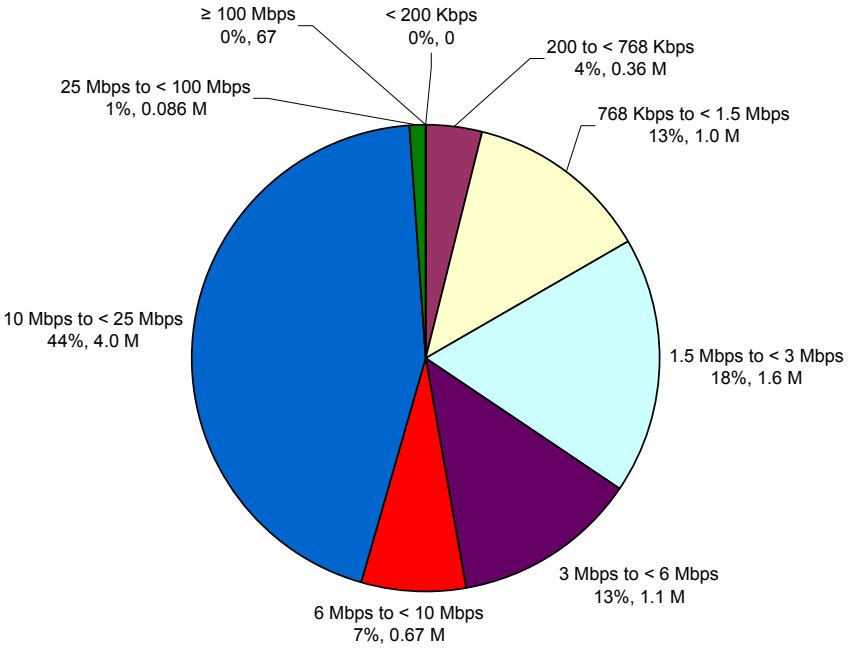
Fifty three percent (53%) of the residential broadband subscribers (4.7 million) served by state-issued video franchise holders and their local affiliates subscribed to wireline bandwidth with maximum advertised download speeds **greater then 6 mbps** in December 2010. This is 8 percentage points higher than in 2009.

Forty four percent (44%) of the residential broadband subscribers (4.0 million) served by state-issued video franchise holders & their local affiliates subscribed to wireline bandwidth with maximum advertised download speeds of **10 mbps- 25 mbps** compared with 20% in 2009 and 6% in 2008.

Residential Broadband Wireline Subscribers in Each Advertised Download Speed Tier



Residential Broadband Wireline Subscribers in each Advertised Download Speed Tier - 2010
Data Provided by DIVCA Franchisees as of 12/10

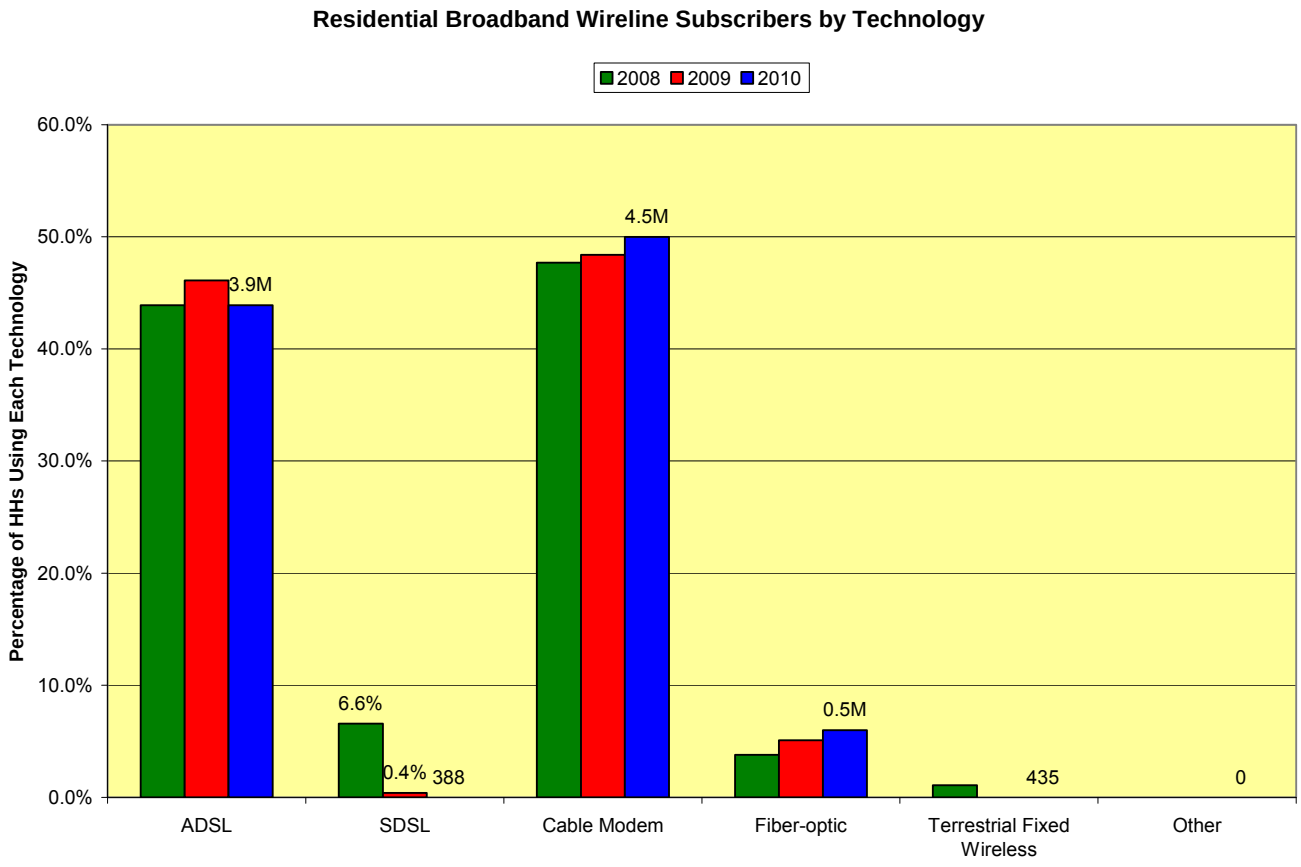


J. Broadband Technologies: Cable Modems Overtake DSL Modems

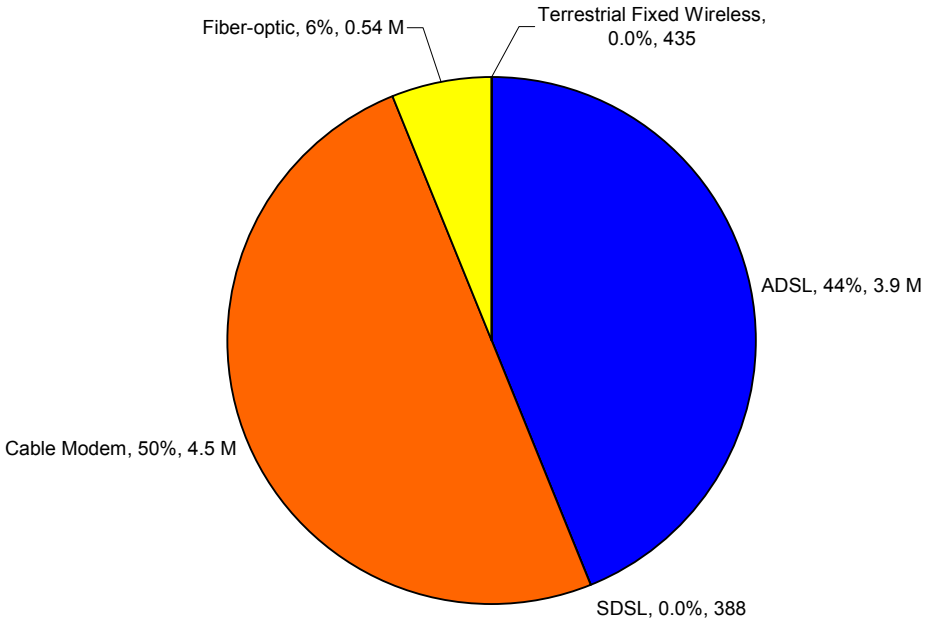
The distribution of broadband technology deployed is a metric made possible by the changes in the FCC Form 477 reporting rules mandated by the FCC in 2008. The bar chart below and the pie chart on the opposite page show the technologies that state-issued video franchisees and their local affiliates used to deploy broadband as of December 31, 2010. The pie and bar charts show:

- **Cable modems** were used by state-issued video franchise holders to serve 50% of the residential households (4.5 million) in their franchise territories that subscribe to broadband. This is a three percentage point increase from 47% in 2009.

- **DSL** (both Asymmetric and Symmetric) is used by state-issued video franchise holders to serve 44% of the residential households in their franchise territories that subscribe to broadband. This is a 6 percentage point decrease from 49% two years ago. (49% = 43% asymmetric DSL + 6.6% symmetric DSL)



Residential Broadband Wireline Subscribers by Technoolgy - 2010
Data Provided by DIVCA Franxhisees as of 12/10



K. Subsidy Programs for Broadband Deployment

There are a number of efforts underway to provide incentives to service providers to increase their deployment of broadband services in unserved and underserved areas.

Though market forces in conjunction with lower-cost technology will always influence broadband availability, a variety of programs are underway to encourage more competition and investment in video and broadband infrastructure. DIVCA is but one example. Below are brief descriptions of several programs that are intended to create incentives for deployment of additional infrastructure in unserved and underserved areas throughout California:

The California Advanced Services Fund (CASF) provides matching funds for the deployment of broadband infrastructure in unserved and underserved areas in California. Senate Bill 1193 (Padilla, Chapter 393, 2008) requires the CPUC to provide for transfer payments to encourage service providers to deploy high quality advanced communications services to all Californians. The goal is to promote economic growth, job creation and other social benefits of advanced information and communications technologies.

The California Emerging Technology Fund makes investments in programs and projects to minimize the digital divide by accelerating the deployment and adoption of broadband and other advanced communication services to unserved and underserved communities, and to increase subscribership to these services.

The California Telehealth Network is a three year pilot program funded by a $22 million grant from the FCC. The Telehealth network uses advanced telecommunications and information services to connect more than 300 rural healthcare sites with a network of specialized healthcare providers at academic medical centers and other healthcare providers throughout the state of California.

The California Rural Telecommunications Infrastructure Grant Program aids in the establishment of telecommunications service in areas not currently served by existing local exchange carriers. In 2008, the Governor signed SB 1149 which extended the program to January 2012. The CPUC can now grant $40 million over a four year period and can issue individual grants of $5 million.

The Federal American Recovery and Reinvestment Act of 2009 (ARRA) was passed by Congress and appropriated:

$2.5 billion to the Dept. of Agriculture's Rural Utilities Service to fund broadband loans, loan guarantees and grants to support distance learning, telemedicine and broadband.

$4.7 billion dollars to be used by the National Telecommunications and Information Administraton (NTIA) to fund the Broadband Technology Opportunities Program . The Recovery Act requires NTIA initiate the Broadband Technology Opportunities Program (BTOP) to accelerate broadband deployment to unserved and underserved areas and ensure that institutions strategically placed to create jobs and provide other public benefits have broadband access.

BTOP has five overarching purposes:

1) Extend broadband access to unserved areas;

2) Provide improved access in underserved areas;

3) Improve use of broadband by public safety agencies; and

4) Stimulate broadband demand as an engine for economic growth.

5) Provide education, training, equipment and support to strategic institutions such as at libraries, community organizations and job-creating facilities;

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Appendix A:
Overview of
The Digital Infrastructure and Video Competition Act

A. Overview of DIVCA

On September 29, 2006, the Governor signed into law Assembly Bill 2987, the Digital Infrastructure and Video Competition Act of 2006 (DIVCA).[19] DIVCA's overriding goals are to promote rapid, widespread competition in the broadband and video markets and accelerate the deployment of additional infrastructure in California.

DIVCA, which the CPUC implements, addresses not only video franchising, but also the deployment of additional broadband infrastructure within California, particularly to unserved and underserved areas. DIVCA fundamentally changed video franchising within California by transferring the authority for issuing franchises for the provision of video services from local entities to the State of California. The State Legislature designated the CPUC as the sole franchising authority for issuing state video franchises as of January 1, 2007.

California was the eighth state to fundamentally reform video franchising to facilitate competitive video entry.[20] Approximately 17 states have transferred video franchising authority to the state. These states include California, Florida, Georgia, Iowa, Illinois, Indiana, Kansas, Michigan, Missouri, New Jersey, North Carolina, Nevada, Ohio, South Carolina, Texas, Virginia and Louisiana.[21]

Prior to DIVCA, cable television franchises were issued by local entities, primarily cities, counties and special districts. This required cable operators to negotiate separate franchise agreements with each locality where they wished to provide video service. California is made up of 58 counties encompassing over 6,000 cities and towns.[22] These local franchise agreements required that service providers comply with specified customer service and performance standards and other requirements that often varied by locality.

For new entrants seeking to provide video and broadband services on a widespread basis, the process of negotiating franchise agreements with each individual local entity would inevitably have been a long process, delaying the widespread market entry of additional competitive service providers for many years. To speed the entry of new video and broadband providers into the marketplace, the Legislature sought to replace the local franchising system with one in which video franchises would be issued by the state. The CPUC was designated as the agency charged with issuing state video franchises.

In order to carry out its statutory goals, the CPUC developed and adopted rules to implement DIVCA through a series of three formal decisions and several resolutions. See pages 43 – 45 in Appendix C for descriptions of these decisions.

Following the adoption of these new rules, the CPUC began issuing ten-year state video franchises. The state video franchise application process is ministerial. A state video franchise will be issued, so long as an applicant is eligible for a state franchise, the application is

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[19] A.B. 2987, 2005-2006 Session, (Ca. 2006); Cal. Pub. Util. Code, Division 2.5, The Digital Infrastructure and Video Competition Act of 2006. ("DIVCA").

[20] Passage of Cal. Video Bill Expands Franchise Reform to 1/3 of U.S. Population, Communications Daily, September 5, 2006.

[21] Miller & Van Eaton, PLLC., State Cable Franchise Laws at a Glance, available at http://www.millervan eaton.com/00130020.pdf. (Last visited June 16, 2008).

[22] California Gazetteer: City Profiles, Physical and Cultural Features, http://california.hometownlocator. com/cities/ (Last visited June 16, 2008); California State Association of Counties, http://www.csac. counties.org/ (Last visited June 16, 2008).

complete, and the applicant swears that it will adhere to all state and federal laws, rules, and regulations.

Holders of state video franchises are required to submit certain data annually on April 1 relating to their provision of video and broadband services, and information pertaining to their service to low-income households within the holders' video service areas as of December 31 of the previous year. DIVCA directs the CPUC to aggregate the data described above and to report the aggregated totals to the Governor and the Legislature annually.

While DIVCA provides that the CPUC is the sole franchising authority for issuing state video franchises,[23] the statute also provides that video service providers are not public utilities and prohibits the Commission from imposing any requirements on state franchise holders that are not expressly provided by DIVCA.[24]

DIVCA defined the jurisdiction of the Commission quite narrowly. The Commission is charged with the following tasks:[25]

- Issuing and renewing 10-year video franchises.
- Gathering data from franchise holders on their deployment of video and broadband services on an annual basis.
- Aggregating data submitted by holders for use in an Annual Report from the CPUC to the Governor and Legislature.
- Monitoring Franchise holders' deployment of infrastructure and services to protect against discrimination and enforce build-out requirements contained within the statute.
- Protecting against telco-video cross subsidization.
- Collecting fees from state franchise holders to equal the cost of carrying out the CPUC's duties under DIVCA.

DIVCA guided the CPUC in its job of implementing the act by setting forth the following goals:[26]

- Create a fair and level playing field for all market competitors that does not disadvantage or advantage one service provider or technology over another.
- Promote widespread access to the most technologically advanced cable and video services to all California communities in a nondiscriminatory manner regardless of socioeconomic status.
- Protect local government revenues and their control of public rights-of-way.
- Require market participants to comply with all applicable consumer protection laws.
- Complement efforts to increase investment in broadband infrastructure and close the digital divide.
- Continue access to and maintenance of the public, education, and government (PEG) channels.

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[23] P.U. Code § 5890.
[24] Id. at §5840 (a).
[25] On March 1, 2007, the CPUC issued decision 07-03-014, adopting a General Order and Procedures to Implement the Digital Infrastructure and Video Competition Act of 2006, (Phase I Decision), at p. 7.
[26] P.U. Code §5840 (a).

- Maintain all existing authority of the California Public Utilities Commission as established in state and federal statutes.

B. Enforcement of Video Build-out Requirements: Protecting Against Discrimination and Closing the Digital Divide

DIVCA requires the CPUC to monitor holders' deployment of infrastructure and services to protect against discrimination and enforce build-out requirements contained in the statute.[27] Also, as discussed above, DIVCA mandates that the CPUC should promote efforts to increase investment in broadband infrastructure and close the digital divide.

In order to carry out these goals, the Commission applies a number of nondiscrimination and build-out tests to protect against discrimination and enforce DIVCA's build-out requirements. For example, the build-out requirements for holders with over one million telephone customers are set out in the table below:

	Holders with More than ONE million telephone customers in CA	
	Predominantly fiber optic to premises (Verizon)	**Not predominantly fiber optic to premises (AT&T)**
Within 2 years	25% of customer households in telephone service area must have access to video service	
Within 3 years		35% of households in telephone service area must have access to video service

The two telephone corporations with more than one million telephone customers are AT&T and Verizon. Verizon provides video using predominantly fiber optic cable to the premises. AT&T provides video using predominantly DSL over copper (not fiber optic cable) to the premises.

DIVCA requires that AT&T must build out video and as a result, associated faster broadband infrastructure to serve 50% of its telephone service territory within five years after it began providing video service (Spring, 2012).[28]

Verizon is required to build out video infrastructure to 40% of its telephone service territory within five years after it began providing video service (Spring, 2012).[29]

[27] Phase I Decision, at 7; *See* P.U. Code §5890.

[28] Section 5890 (e, 3) P.U. Code states: "A holder shall not be required to meet the 40% requirement or the 50% requirement until two years after at least 30 percent of the households with access to the holder's video service subscribe to it for six consecutive months."

[29] Ibid

So far Verizon met its two year mandate to build out to 25% of the households in its service area. AT&T met its three year mandate to build out to 35% of the households in its service area.

As can be seen in the table on the previous page, the trigger points for this build-out requirement do not occur until the end of the second year of operation (in the case of holders predominantly deploying fiber optic to the premises) or the end of the third year (in the case of holders not predominantly deploying fiber optic to the premises.)[30] Similarly, the other benchmarks that holders must reach with regard to building out facilities and doing so in a nondiscriminatory manner are only to be applied in future years. The benchmarks are:

> Verizon has exceeded their two year build out obligation / milestone by offering video services to more than 25% of the households in their telephone service area. The obligation is to offer video service to at least 25% of customer households in their telephone service area within two years.
>
> AT&T has exceeded their three year build out obligation / milestone by offering video services to more than 35% of the households in their telephone service area. The obligation is to offer video service to at least 35% of customer households in their telephone service area within three years.

[30] *Id*. at (e)(1) and (2).

C. Protecting Against Telco-Video Cross Subsidization

DIVCA directs the CPUC to assure that state franchise holders that provide stand-alone, residential, primary line basic telephone service shall not increase their rate for such service to finance the cost of deploying a network to provide video service.[31]

Both DIVCA[32] and the CPUC's Uniform Regulatory Framework (URF) decision[33] prohibited AT&T and Verizon from raising these rates at all, prior to January 1, 2009, except to reflect increases in inflation. The CPUC's decision D 08-09-042 OP 12 extended this freeze on basic rate increases (other than inflation) to December 30, 2010.

To date, these safeguards have served to protect against cross-subsidization.

[31] P.U. Code § 5940

[32] *Id*. at § 5950

[33] Order Instituting Rulemaking on the Commission's Own Motion to Assess and Revise the Regulation of Telecommunications Utilities, Decision 06-08-030, Opinion (Cal. P.U.C. August 24, 2006).

Appendix B: Methodology

Data & Method

Sources of Annual Video and Broadband Data

DIVCA requires state franchise holders to submit annual data describing their territories, availability of service, and subscribership. The data used in this third annual report, were as of December 31, 2009. These data were used throughout this report and provided a base from which to compare and evaluate providers' year-to-year performance under DIVCA.

The analyses of broadband subscribership and broadband penetration rates in this report were conducted using data collected from franchisees under the FCC's Form 477 requirements, as required by DIVCA. Analyses of broadband availability were conducted using data collected from the franchisees under the State Broadband Data and Development Grant Program (SBDDGP). The NTIA has authorized the CPUC as the sole authority in California for collecting, compiling, analyzing, and presenting broadband data. Details are described in section three on the next page.

To aggregate the data reported by census tract and map and analyze it, we used an Oracle database and a Geographic Information System (GIS). We also used Excel spreadsheets to aggregate, analyze and create graphs of the annual data. The findings are illustrated in maps, graphs, and charts throughout the report.

All state video franchise holders who had state franchises and/or amendments issued before December 31, 2009, submitted annual data pursuant to Sec. 5960. Each parent company of a state video franchise holder filed one annual report which included broadband and video service data for all of their state franchised operations as well as their local affiliates that operate in California and provide video or broadband service in the state.

The companies that filed annual reports include:

AT&T California, Astound Broadband, Baldwin County Internet, Cable USA, Cableview Communications, Calaveras Cablevision, Capps TV, Champion Broadband, Charter Communications, Comcast Cable, Cox Communications, Greenfield Communications, Mediacom, Northland Cable Television, Redwood IPTV, Sebsatian, Suddenlink Communications, SureWest Broadband, Time Warner Cable, Verizon California, Volcano Vision, and Wave Broadband.

The analyses of video and broadband service are based on these self-reported data from parent companies of the state video franchise holders listed above and exclude companies that are not yet state franchise holders. State video franchise holders reported the following data by census tract as of December 31, 2009:[34]

1. Broadband service
    a. The number of households that subscribe to broadband to which the holder makes available
    b. Whether the broadband provided by the holder utilizes wireline-based facilities or another technology

[34] Some of the small video franchisees did not report SBDDGP data.

c. Number of subscribers to each download and upload broadband speed tier
d. Types of technology used to deploy broadband services

2. Video service
   a. If the holder is a telephone corporation:
      i. The number of households in the holder's telephone service area
      ii. The number of households in the holder's telephone service area that are offered video service by the holder
   b. If the holder is not a telephone corporation:
      i. The number of households in the holder's video service area
      ii. The number of households in the holder's video service area that are offered video service by the holder
   c. The number of low-income households in the holder's video service area
   d. The number of low-income households in the holder's video service area to which video service in made available by the holder

3. Broadband Availability Data Sources

Broadband availability data used in this analysis was collected by the CPUC's Broadband Mapping Program, under the auspices of the National Telecommunication and Information Administration's (NTIA) State Broadband Data and Development Grant Program (SBDDGP).

Broadband availability data collected by the CPUC's Broadband Mapping Program from current state video franchisees has been used in this report in lieu of data mandated under the 2006 Digital Infrastructure and Video Competition Act (DIVCA). We used this data because the SBDDGP data is aggregated to the census block and street segment level, and therefore can be up to 8,991 times more granular than data collected at the census tract level under DIVCA.[35]

According to SBDDGP rules, a broadband provider may elect to provide data on the availability of their service by either 1) address, or 2) census blocks and street segment. If an entity provides service in a census block that is less than 2 square miles in size, they may assert that they provide service everywhere in that block. If an entity provides service in a block that is 2 square miles or larger in size, they must specify to which segment they provide service. All collected data is rolled up to census blocks and street segments, preserving the 2 square mile break. More details are available on the Video Franchising web page of the CPUC at (http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/BB+Mapping.htm).

[35] There can be up to 999 census blocks (CBs) in a single census block group (CBG), and up to 9 CBGs in a single census tract.

Method for calculating the number of broadband providers by census block

Broadband availability data for each provider, aggregated by census block, was incorporated into a single census block shapefile through a process of attribute joining and field calculation. Data fields containing the names of each broadband provider were concatenated together into a single field using the "&" operator in the Field Calculator. The resulting concatenation sequences were then sorted alphabetically, common blocks of sequences selected, and the appropriate provider count for each census block recorded in a new field using the Field Calculator. The same method was used for the street segment data.

Method for Estimating the Aggregate Number of Households in Census Blocks with a Common Number of Broadband Providers

While we used the best data available from the California Department of Finance to estimate the number of households and growth in each county, we found that there are a number of inherent problems with estimating aggregate household totals associated with any specific broadband metric.

First and foremost is the projection of household totals from 2000 to 2009. Rather than use a single average household growth rate for the entire state, as we did in the 2008 report, we applied separate county growth rates to all census blocks in each county. While this accounts for regional variation in growth rates, it doesn't address the urban/rural growth dichotomy present in every county.[36] A single growth rate for an entire county will result in an underestimate of households in the faster growing (i.e. urban or suburban) census blocks, and an overestimate of households in the slower growing, or shrinking, (i.e. rural) census blocks. When this fact is combined with the fact that urban and suburban areas generally have a greater number of entities providing broadband service, it means that the aggregate household totals for census blocks with more broadband providers are overestimated, and the aggregate household totals for census blocks with fewer broadband providers are underestimated. In the end, this paints a rosier picture of broadband competition in California than may actually be the case.

Another problem we encountered was how to aggregate households from street segment data. Street segment data amounted to nearly half of all broadband availability data collected; yet linear (polyline) data has no associated census household data. A simple overlay selection with the existing census block layer containing provider and household data wouldn't work; since street segments, by their very nature, overlap or straddle multiple census blocks, which would result in double counting of households in many census blocks. Instead, we did a census block overlay selection for each group of street segments with a common number of providers; then removed any selected blocks that may already have had a non-zero provider count (i.e. blocks 2 square miles or larger in size), before summing the households in those blocks.[37]

The census blocks and street segments with no providers could not be directly selected and summed, since they overlap each other (they are not spatially exclusive). So instead, that total

[36] With the possible exception of the most rural counties, such as Alpine, Modoc, or Trinity.

[37] Note that census blocks and street segments with a non-zero provider count are spatially exclusive, due to the 2 square mile SBDDGP criteria; so a simple additive approach was used.

was derived by subtracting the census block / street segment household totals for 1, 2, 3, and 4 providers from the statewide household grand total.

An implicit assumption in this method is that a single served street segment causes an entire block (and all households in it) to be classified as served. The same assumption is also made regarding the number of households being served by 0, 1, 2, 3, and 4 video providers, in this, and previous, years' reports.

Limitations of Census Tract Reporting

The data presented in this DIVCA report was reported to us in several different units (address, street segment, census block, census tract). Address-level availability data was aggregated to either the census block or street segment level before being incorporated into the analyses in this report. For the purpose of estimating households, street segment availability was also rolled up the census block level. Most of our work here, therefore, deals only with census geographies (block and tract).

Although census blocks are a much more granular mapping unit than census tracts, and therefore provide a much improved picture of broadband availability than we could produce in previous years, the unavoidable fact of aggregation means that staff's ability to perfectly analyze and depict the availability of broadband and video service is still limited. The table below compares the relative sizes of census tracts and blocks.

Geography	Count	Min. size in sq. mi.	Ave. size in sq. mi.	Max. size in sq. mi.	Min. no. of HH	Ave. no. of HH	Max. no. of HH
Census block	532,900	<0.000001	0.31	1,278	0	24	2,367
Census tract	7,049	0.021	22	8,007	0	1,628	8,530

In addition, census tract basis reporting, rather than actual addresses reporting, for video availability data makes it impossible to obtain an accurate, absolute number of households offered video service, either by census tract or statewide. Individual franchise holders reported the number of households to which they offered service by census tract, and for census tracts where they were the only provider, this figure could be used as an accurate estimate of the total number of households offered service in that tract. But for census tracts in which there were multiple providers, it was impossible to know whether the two (or more) services were offered to different households, or to the same households. Therefore, simply adding the household figures from two or more providers could result in double or triple counting, bringing some availability and subscription rates to over 100%.

Consequently, mapping where competition has occurred (one of the core concerns of DIVCA) is complicated. Rather than being able to show where different franchise holders are providing service in a census tract, we were forced to classify an entire census tract as being either served or unserved by each provider, then simply add up the number of providers for each tract, regardless of where they are actually offering service within that tract. In this way, the current level of video competition was also overstated.

Similarly for broadband, if one household in a census block was offered service by any franchise holder, then it was assumed that all households within it were offered the service, and the block was considered 'served.' This naturally resulted in an overstatement of the level of availability. Error estimation was not done for this report, so it is not known how inaccurate these estimates are.

On the other hand, the population density within California varies widely (as evidenced by the extreme variation in its census geography sizes). This means that the total number of census tracts comprising California's rural heartland (where most of the error in the results may lie) are relatively few, and that the total number of households this represents are also relatively few.

Adoption or subscription to broadband and video services was analyzed using penetration rate, or the ratio of households that purchase broadband or video service to the total number of households in the block or tract. The holders used a variety of consultants to derive census numbers for 2009, since the Census Bureau does not report household counts by for inter-census years. Accordingly, the block/tract values reported by the holders vary. For this third DIVCA Report, to estimate the number of households in California, we used the estimates derived by the California Department of Finance (DOF).

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Appendix C:

Implementing DIVCA: Decisions and Resolutions

Rules Adopted to Implement DIVCA

Shortly after DIVCA was enacted on September 29, 2006, the CPUC, on October 5, 2006 issued its Order Instituting Rulemaking to consider the adoption of a General Order and procedures to implement the Digital Infrastructure and Video Competition Act of 2006 (R. 06-10-005) ("Rulemaking"). Under this Rulemaking, the CPUC has developed rules for implementing DIVCA. This was accomplished in three phases.

Phase I - Adopting Rules to Implement the DIVCA

On March 1, 2007, following the receipt of comments and reply comments on the OIR and subsequent Proposed Decision, the CPUC issued Decision 07-03-014 establishing rules for implementing DIVCA and adopting General Order 169. ("Rules") These rules set forth application requirements, CPUC procedures for considering applications, build-out, anti-discrimination, annual reporting requirements of both cable and broadband information by census tract, and other requirements as mandated by DIVCA. [38]

Phase II - Adopting Non-Discriminatory Build-out Requirements for Small LECs

On May 7, 2007 the assigned Commissioner issued a Scoping Ruling setting out issues to be addressed in Phase II of the Rulemaking. On October 4, 2007, the CPUC issued a Phase II decision adopting non-discriminatory build-out requirements for smaller companies and additional reporting requirements.[39] In Phase II, the CPUC determined that the "reasonable time" deployment standard applicable to franchise holders who are telephone companies with fewer than one million telephone customers should largely mirror the build-out timetable required of the larger telephone companies. Further, the CPUC determined that, in their annual reports to the CPUC, holders must provide video subscriber data, finding that such data are necessary in order for the CPUC to determine whether state franchise holders are adhering to the requirements of DIVCA.[40]

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[38] On October 5, 2006, the Commission issued an Opinion Modifying Decision 07-03-014, in order to amend the form of the franchise certificate adopted in Phase I to conform to statutory requirements (available at http://docs.cpuc.ca.gov /published /FINAL_DECISION/65225.htm).

[39] *Order Instituting Rulemaking to Consider the Adoption of a General Order and Procedures to Implement the Digital Infrastructure and Video Competition Act of 2006*, Decision 07-10-013, *Opinion Resolving Issues in Phase II* (Cal. P.U.C. October 4, 2007).

[40] Previously, the Commission's Rules required the submission of data related to the number of households offered video services, but not the number of households subscribing to such services.

Phase III - Adopting New Rules to Administer DIVCA

On March 27, 2008, the CPUC issued a Scoping Ruling setting out issues to be addressed in the third, and final, phase of the DIVCA Rulemaking. On July 10, 2008, the CPUC issued the Phase III decision amending the bonding requirements under DIVCA, adopting new rules regarding deadline extensions for build out requirements, and additional reporting requirements.

Under DIVCA, holders of a state video franchise are subject to statutory requirements regarding, among other things, the extent and pace at which state franchise holders must build out facilities and offer video services to households. The statute provides that state franchise holders may apply to the CPUC for an extension of the time for such build out requirements to be satisfied, under certain circumstances. The Phase III added procedural requirements to ensure that holders' extension requests are made and decided in a timely fashion.

Further, Phase III eliminates an unintended and unfair asymmetry in the bond requirement under GO 169 between new entrants in the video marketplace and incumbent cable operators. Local franchises held by incumbent cable operators tend to be held by many separate affiliates of an ultimate parent. Verizon and AT&T, by contrast, have each applied for only one state franchise covering their entire video service areas. The Phase III decision changes the rules under DIVCA to require only one bond to be posted to cover all affiliated holders rather than separate bonds so that "incumbent" applicants for video franchises do not have additional burdens placed on them due to their historic corporate organization under the local franchising scheme.

Finally, Phase III requires holders to include in their annual data submitted to the CPUC broadband speed "tiers" that state video franchise holders make available. Numerous commenters urged the CPUC to wait until the FCC released its order requiring broadband reporting by census tract, broken down by speed tier and technology, and, thereafter, to adopt the FCC's speed reporting regime. The FCC released its Report and Order and Further Notice of Proposed Rulemaking adopting new requirements for reporting broadband service by speed tier on June 12, 2008. [41] The CPUC issued this decision to reflect the FCC's speed tier reporting requirements. Holders are now required to report the same broadband speed information that it reports to the FCC to the CPUC.

[41] *Order Instituting Rulemaking to Consider the Adoption of a General Order and Procedures to Implement the Digital Infrastructure and Video Competition Act of 2006*, Decision 08-07-007, *Decision amending General Order* 169 (Cal. P.U.C. July 10,2008) (Phase III Decision).

Resolutions

After gaining experience in processing applications, CPUC staff has made several recommendations for revisions to the application forms through two resolutions, T-17107 and T-17141, which were subsequently adopted by the CPUC. In addition, DIVCA provides for video franchise holders to pay fees to the CPUC calculated to equal the amount authorized in the CPUC budget for DIVCA implementation. Resolution T-17137 set the user fee due per household in a video franchise holders' service area for the 2007-2008 fiscal year. Subsequent to this Resolution, the user fee will be determined annually based on the pro-rata percentage of all state video franchise holders' gross state video franchise revenues that is attributable to an individual state video franchise holder.

DIVCA Application Process

The application process was designed to be simple and straight forward. It requires applicants to file the following: a completed application form; a $2,000 application fee; confirmation of technical, managerial, and financial qualifications demonstrated through the posting of a bond ($100,000 to $500,000); an affidavit attesting to the lawful operation of the franchise; a definition of the video service area sought; demographic information by census block group; the expected date for the deployment of video service in the video service area; and, a list of affected local entities.

The CPUC must determine within 30 days if an application is complete and issue the franchise within 14 days of such determination.[42] If the application is not complete, CPUC staff is required to notify the applicant, and the 30-day clock restarts. If the CPUC does not issue the franchise within the required 14 days, it is deemed issued. The new franchise holder and Commission staff then notify the affected local entities.[43]

The CPUC's Phase I Decision allowed applicants, except for incumbent cable operators, to begin filing applications for state-issued video franchises as of March 1, 2007.[44] The first such application was filed by Verizon California Inc. on March 2, 2007. AT&T California filed its application on March 7, 2007. These franchise applications were reviewed for completeness, and video franchises Nos. 0001 and 0002 were issued to Verizon and AT&T on March 8 and March 30, 2007, respectively. All franchise applications and grants may be viewed on the Commission's web site.

[42] P.U. Code §5840 (h).

[43] See P.U. Code

§5840 (n).

[44] DIVCA required the CPUC to begin accepting applications no later than April 1, 2007; P.U. Code §5847(g)

Appendix D: Collecting Data Mandated by DIVCA

A. DIVCA's Data Reporting Requirements

Holders of state video franchises are required to submit data relating to their provision of video and broadband services annually by April 1.[45] Pursuant to DIVCA, all video franchise holders must report, by census tract, the following:[46]

1. Broadband Information:

a. The number of households to which the franchise holder makes broadband available in California. If the holder does not maintain this information on a census tract basis, in its normal course of business, the holder may reasonably approximate the number of households based on information it keeps in the normal course of business.
b. The number of households that subscribe to broadband that the holder makes available in this state.
c. Whether the broadband provided by the franchise holder utilizes wireline-based facilities or another technology.
d. Number of subscribers to each download and upload broadband speed tier
a. Types of technology used to deploy broadband services

2. Video Information:

a. If the franchise holder is a telephone corporation:
   i) The number of households in the holder's telephone service area.
   ii) The number of households in the holder's telephone service area that are offered video service by the holder.
b. If the holder is not a telephone corporation:
   i) The number of households in the holder's video service area.
   ii) The number of households in the holder's video service area that are offered video service by the holder.

3. Low-Income Household Information:

a. The number of low-income households in the holder's video service area.
b. The number of low-income households in the holder's video service area that are offered video service by the holder.

DIVCA directs the CPUC to aggregate the data described above and to report the aggregated totals to the Governor and the Legislature annually no later than July 1.[47] In the following sections, we will discuss the broadband and video data submitted by the Video Franchise holders as of April 1, 2008.

[45] P.U. Code §5960.
[46] *Id*.
[47] *Id*. The issuance of this first Report has been delayed due to start-up issues regarding data formatting and the delayed hiring of staff.

B. Census Tract Data Limitations

CPUC staff created methodologies to obtain, quantify and analyze data describing where video franchise holders offer broadband and video services in California and to what extent households are purchasing those services.

As specified in DIVCA and the CPUC's DIVCA Decisions, video franchise holders provided the CPUC with data identifying the number of households to which they offer broadband and video services in each of the state's census tracts. In addition, they reported by census tract the number of households that subscribe to their broadband and video services.

This census-tract level granularity is one of the key limitations of the data submitted under DIVCA.[48] All mapping and analysis had to be done at the level at which the data was submitted. Census tracts are too large a minimum mapping unit to accurately map broadband and video services throughout the state of California. There are 7,049 census tracts in California, ranging in size from 0.021 square miles to 8,007 square miles, averaging 22 square miles. The number of households in each tract ranges from 0 to 8,530, averaging 1,628 households per census tract. These variations made it difficult to determine the actual distribution of broadband and video availability in certain locations within the state.

At this time, DIVCA does not require franchise holders to provide the street-level, census block-level, or household-level data that would be needed to determine precisely where households are actually offered broadband and video services.

As a result, we found it to be impossible to determine where, within each census tract, service is being provided. Therefore, we assumed that if any household in a census tract was offered broadband by any video franchise holder, all households within that census tract are offered broadband and the entire tract was mapped as 'served' by broadband. We used the same methodology for video. This assumption results in some over counting of the number of households to which service is made available within some census tracts. For example, in some rural census tracts, it appears as if a census tract is completely served when in reality only a small geographic area within a rural tract is offered broadband or video service. Fortunately, because relatively few households in California are located in predominately rural census tracts, relatively few households are in the overstated category. Unfortunately, the areas where results may be somewhat overstated are exactly the areas where high accuracy would be important to identify unserved areas.

For census tracts in which there were multiple providers, it was impossible to know how many providers offered service to any given household. Adding the "households offered" figures from two or more providers could result in double or triple counting and create significant inaccuracies in estimates of service availability.

The methodology we used attempted to overcome these limitations. In most census tracts, we believe this methodology yielded accurate data. However, without census-block, street-level or household-level data, the precision of our estimates of the availability of service within a census tract is uncertain. As a result, in some census tracts, this methodology resulted in an overstatement of the estimated level of broadband or video availability.

[48] The granularity of data refers to size of the geographic areas by which data are reported.

Our ability to analyze where competition exists was also limited. When multiple service providers report that they offer service in the same census tract, there was no way of knowing where within the tract each operates, and we were faced with the double-counting issue again. For example, consider an average sized census tract with 1,600 households. If two franchise holders each report that they offer broadband service to 800 households, it is not possible to know which of the households are served broadband by one, both, or neither of the service providers. It is possible that both service providers might be competing by offering services to the same 800 households, while the other 800 households are offered no service by either provider. Or, it is possible that all 1,600 households might be offered service by one provider and there is no real competition taking place within the census tract.

Finally, it is important to keep in mind that throughout this Report, only services offered by state-issued video franchise holders and their affiliates are reflected in DIVCA data. Broadband and video services are likely offered in many areas by other entities, unrelated to state video franchise holders. Examples of this would be small local exchange carriers, which provide broadband service, but are not yet providing video services, wireless and satellite ISPs, which provide broadband but are not affiliated with state franchise holders. These providers did not report data so we did not include them in the analysis contained in this Report.