



Assembly Committee on Utilities and Commerce



**OVERSIGHT HEARING
BRIDGING THE DIGITAL DIVIDE IN CALIFORNIA:
A FOUNDATION FOR A BETTER WAY OF LIFE**

California Public Utilities Commission

March 11, 2013



CPUC Administered Broadband Programs

- Infrastructure Programs
 - Digital Infrastructure and Video Competition Act (DIVCA)
 - California Advanced Service Fund (CASF)
- Programs to Promote Adoption
 - California Teleconnect Fund
 - Consortia Grantees
 - Future Lifeline Model? (FCC Broadband Lifeline Pilot)
- State Broadband Initiative Grant
 - Broadband Mapping
 - Mobile Broadband Testing
 - Tribal Outreach
 - California Broadband Council Support



Digital Infrastructure and Video Competition Act (DIVCA)

- Created by statute in 2006
- Shifts cable television franchising from cities and counties to the state
- Designates the CPUC as the entity to issue State Video Franchise authorities
- Act encouraged video and broadband deployment by AT&T, Verizon and some rural telcos in their service territories
- DIVCA has reporting and build out requirements



DIVCA Build Out Requirements

Verizon

(Telephone corporation predominately deploying fiber optics)

2 year requirement	25% of households in telephone service area must have access	MET
5 year requirement	40% of households in telephone service area must have access	MET

AT&T

(Telephone corporation not predominately deploying fiber optics)

3 year requirement	35% of households in telephone service area must have access	MET
5 year requirement	50% of households in telephone service area must have access	DELAY PERMISSIBLE PER PU CODE §5890(e)(4)*

*Delay permissible if 30 % of households with access have not subscribed to video service for 6 consecutive months within the 3 years after it began providing service. Must submit validating documentation. AT&T recently submitted such documents.





DIVCA Low Income Requirement

Verizon and AT&T		
3 year requirement	25% of households in telephone service area with access to video service must be low-income households	MET
5 year requirement	30% of households in telephone service area with access to video service must be low-income households	MET





California Advanced Services Fund (CASF)

- Broadband Infrastructure Grant Account: Provides funding for the capital costs of broadband infrastructure projects in unserved and underserved areas in California
 - Maximum grant award: 70% of total costs for projects in unserved areas and 60% of total costs for projects in underserved areas
- CASF Loan Account: Supplemental financing for projects also receiving CASF grant funding
 - Up to 20% of project cost (\$500,000 at most), requires 20% equity and minimum TIER of 1.5, and offers prime rate loan of 5 years duration, 100% secured with collateral
- CASF Consortia Account: Provides funding for broadband deployment activities other than the capital costs of facilities
 - Can include local and regional government, Public safety, K-12 education, Health care, Libraries, Higher education, Community based organizations, Tourism, Parks and recreation, Agricultural, Business





CASF Awards to Date

CASF Accounts	Total Funding*	Authorized Awards	Description
Infrastructure Grant Account	\$200 million	\$41 million total: • \$2.3 million unserved • \$38.7 million underserved	<ul style="list-style-type: none"> • Unserved Areas – 15 projects benefiting 16,530 households • Underserved Areas – 19 projects benefiting 238,716 households
Regional Consortia Account	\$10 million	\$8.2 million to 14 consortia over 3 years	14 Consortia Groups covering 49 out of the 58 counties of CA
Revolving Loan Account	\$15 million	\$0	Supplemental financing CASF grantees (up to 20% of total project costs; \$500,000 maximum)

*CASF funding comes from 0.14% surcharge assessed on revenues collected from end-users for intrastate telecom services







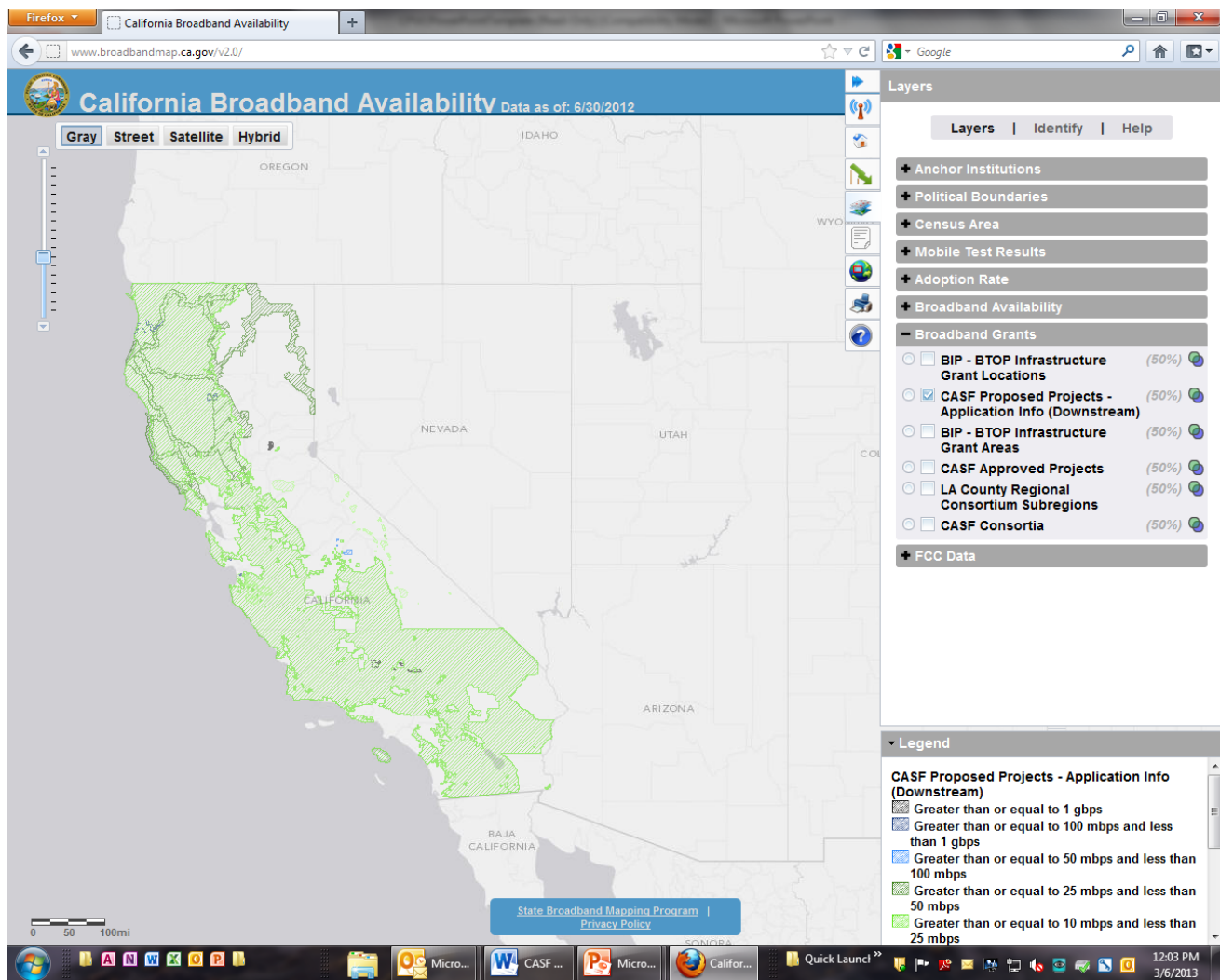
CASF Infrastructure Applications Under Review

- 28 eligible project applications totaling \$240 million for underserved and un-served areas, filed February 1, 2013:
 - May award up to \$150 million remaining in infrastructure budget
 - 7 loan requests for \$1.8 million, well below \$15 million budget
 - 24 last-mile projects
 - 2 middle-mile projects
 - 2 middle/last mile combinations
- 1 eligible project application for an un-served area, filed October 1, 2012:





Pending CASF Applications





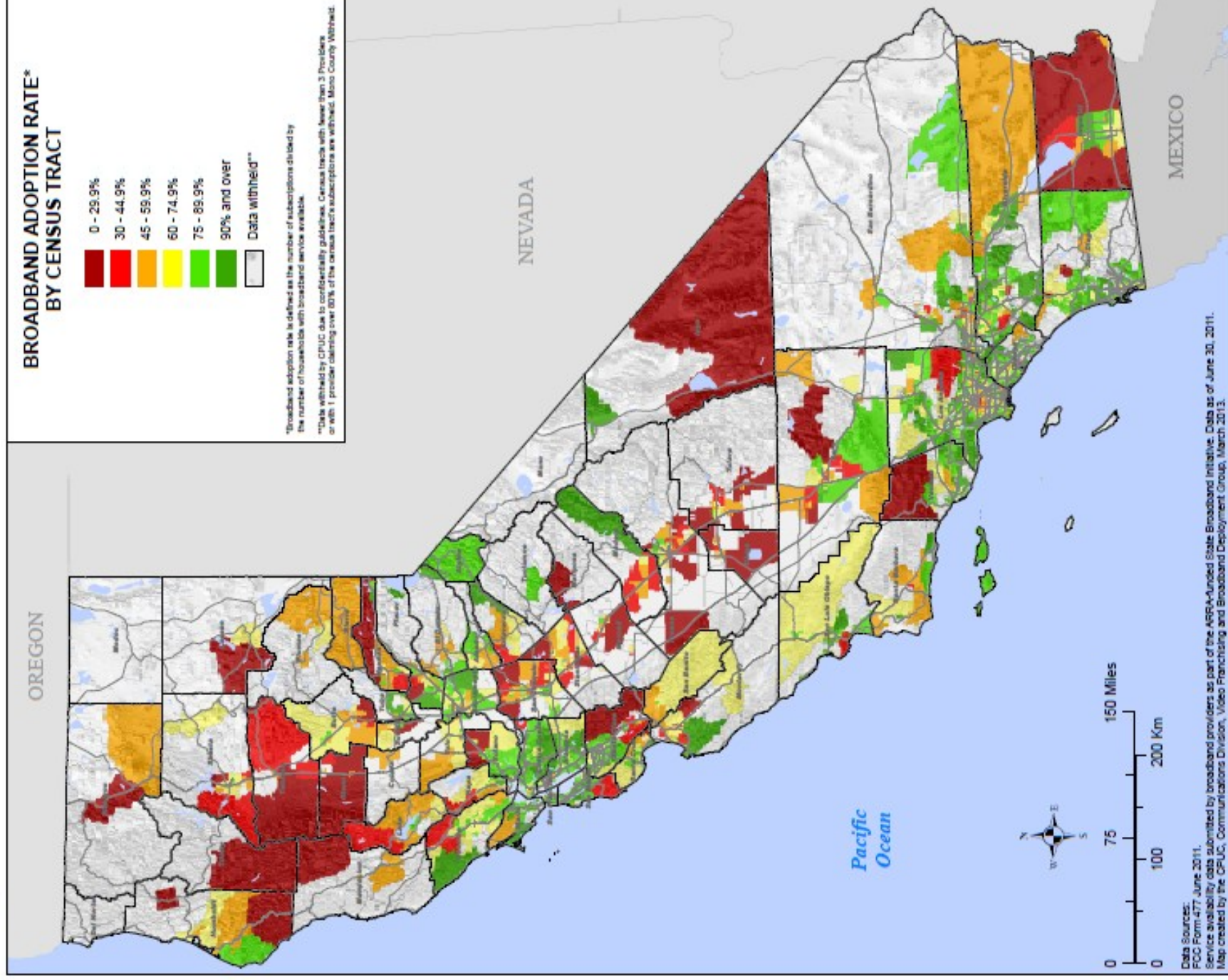
CASF Proceeding

- Commission is considering permitting non-regulated entities to apply for CASF grant funding
- Many non-regulated entities use low cost technologies, e.g., terrestrial fixed wireless using unlicensed spectrum
 - May provide cost effective solution where there is low population density and/or difficult terrain
 - May provide low cost access to target populations in urban areas
- Majority of infrastructure grants have not served last-mile consumers directly
 - Approximately 82% of funds to date for middle mile, 18% for last mile
- Change in eligibility requires a statutory amendment
 - SB740 would amend the statute to address this

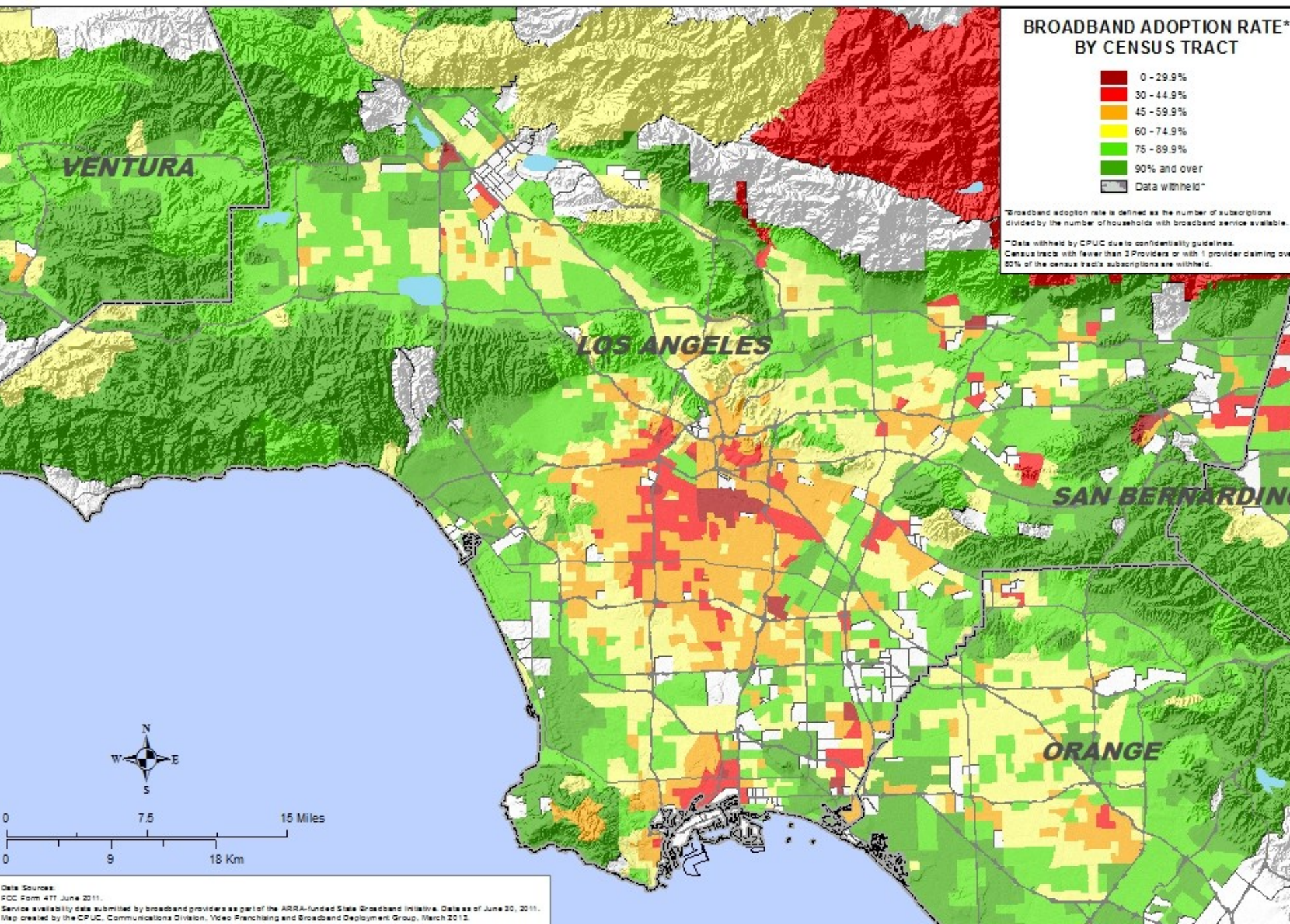




STATE OF CALIFORNIA BROADBAND ADOPTION



CALIFORNIA BROADBAND ADOPTION RATE - LOS ANGELES



Data Source:
FCC Form 477 June 2011.
Service availability data submitted by broadband providers as part of the ARRA-funded State Broadband Initiative. Data as of June 30, 2011.
Map created by the CPUC, Communications Division, Video Franchising and Broadband Deployment Group, March 2013.



Significant Broadband Adoption Influencers

FIGURE 4.8: Statistically Significant Influencers of Adoption: Correlation Summary			
Variable	Percent of Adoption Rate Explained	Direction of Relationship	Type of Relationship
<i>Median Household Income</i>	39.8%	+	Logarithmic
<i>Percentage of Population 25 or Above with a Bachelor's Degree</i>	37.2%	+	Logarithmic
<i>Percentage of Population 18 or Above with a High School Diploma</i>	32.6%	+	Logarithmic
<i>Percentage of Population Speaking English "Not Well" or "Not At All"</i>	23.1%	-	Linear
<i>Median Age</i>	14.1%	+	Logarithmic
<i>Density</i>	.004%	-	Linear

Source: California Broadband Report, Released by CPUC, September 2012

Available at: http://www.cpuc.ca.gov/NR/rdonlyres/7D2EFC43-A4E3-46CE-BE3B-18E765CF4D08/0/California_Broadband_Report_June_2011_CPUCmmCLEAN.pdf

Subscription data matched against Census data. Not a multivariate analysis. Largest factors are probably correlated.





California Teleconnect Fund

- Facilitates broadband adoption by providing a 50% discount on specific communications services to over 7,000 participants including:
 - qualifying schools and libraries
 - government owned and operated health care facilities
 - California Telehealth Network
 - Community colleges
 - community based organizations – many providing job training and placement
 - 211 referral services
- Program does not provide discount to residential customers
- Commission proceeding (R.13-01-010) to conduct an examination of the program
 - evaluates goals, eligibility requirements for participants, service providers, and services





California Teleconnect Fund

Approved CTF Participants and Budget

Fiscal Year		Schools	Libraries	Comm. Based Org.	Gov't Health Care	Comm. Colleges	California Telehealth Network	Total	Budget	Surcharge
FY	08-09	2043	301	1359	50	85		3838	46.6	0.079%
FY	09-10	2161	303	2243	66	93		4866	60.3	0.079%
FY	10-11	2312	308	3132	77	93	1	5923	69.9	0.079%
FY	11-12	2491	315	4094	95	93	1	7089	75.2	0.079%
FY	12-13								77.2	0.590%
FY	13-14								92.4	0.590%

Sources/ Notes

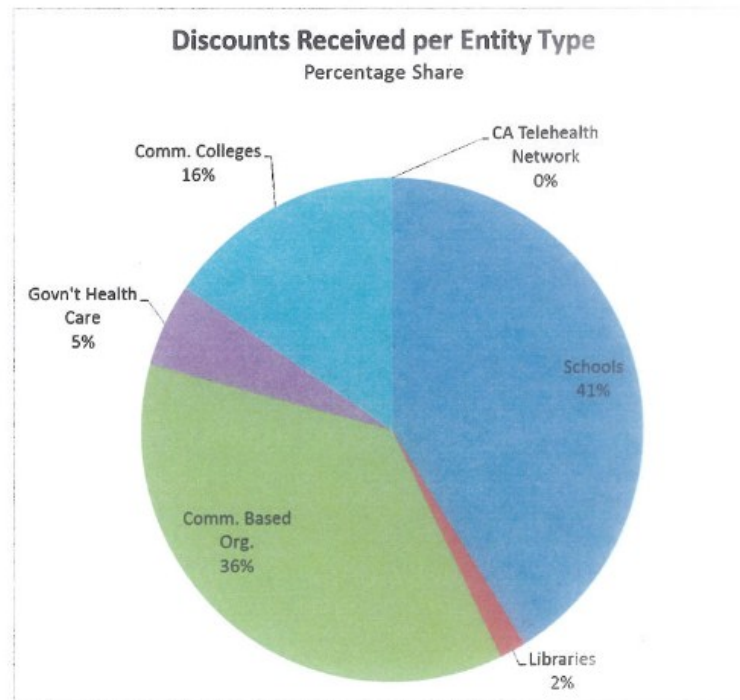
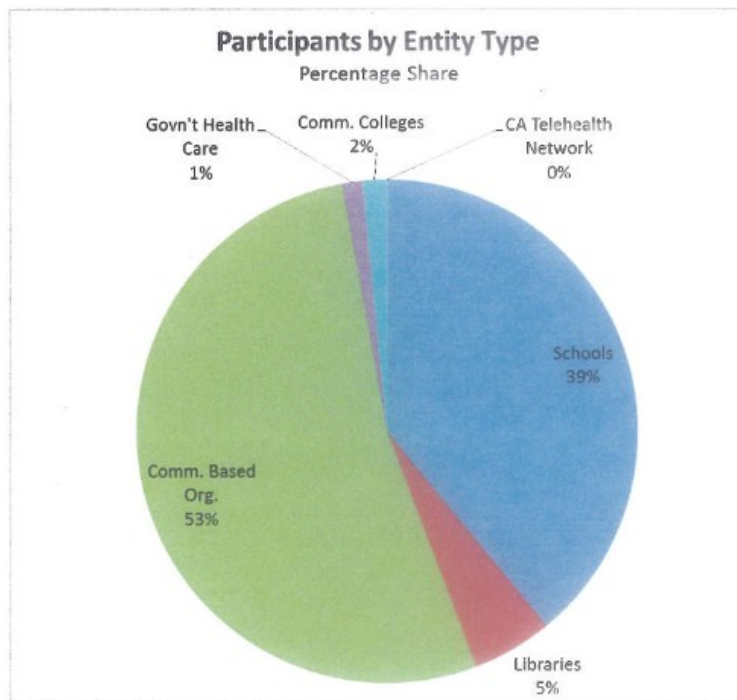
1. Approved Participants: CTF Website 10/1/ 2012 - sorted by approved date
2. Budget for FYs 08-09 through FY 11-12: Resolutions T- 17046, T- 17104, T- 17162, T- 17214 , T-17290.
 - a. The FY 08-09 budget is the sum of the original budget of \$33.2 M in Resolution T-17104 and the supplemental appropriation of \$13.3 5 M from Resolution T- 17163
 - b. On 10/ 2/2012 CD was notified that the CTF FY 12-13 budget had been reduced from \$92.2 M to \$77.2 M
 - c. FY 13-14 budget: Resolution T- 17377
3. Surcharge rates : CTF Website. The surcharge rate of 0.079% became effective on 06/01/2008. The prior surcharge was 0.13%. Surcharge of 0.59%, effective 12/01/2012 - Resolution T- 17375





CTF Participants and Funding

California Teleconnect Fund Fiscal Year 2010-2011





Future Lifeline Discount for Broadband Model?

- Lifeline discount for broadband in federal trials
 - CPUC filed comments supportive of pilot
- February 1, 2013, the FCC has approved an 18 month pilot program to test how the Lifeline program could be structured to promote the adoption and retention of broadband services by low-income households
 - Nexus pilot in Los Angeles and Fresno areas
 - CPUC will track outcomes





CA State Broadband Initiative (SBI)

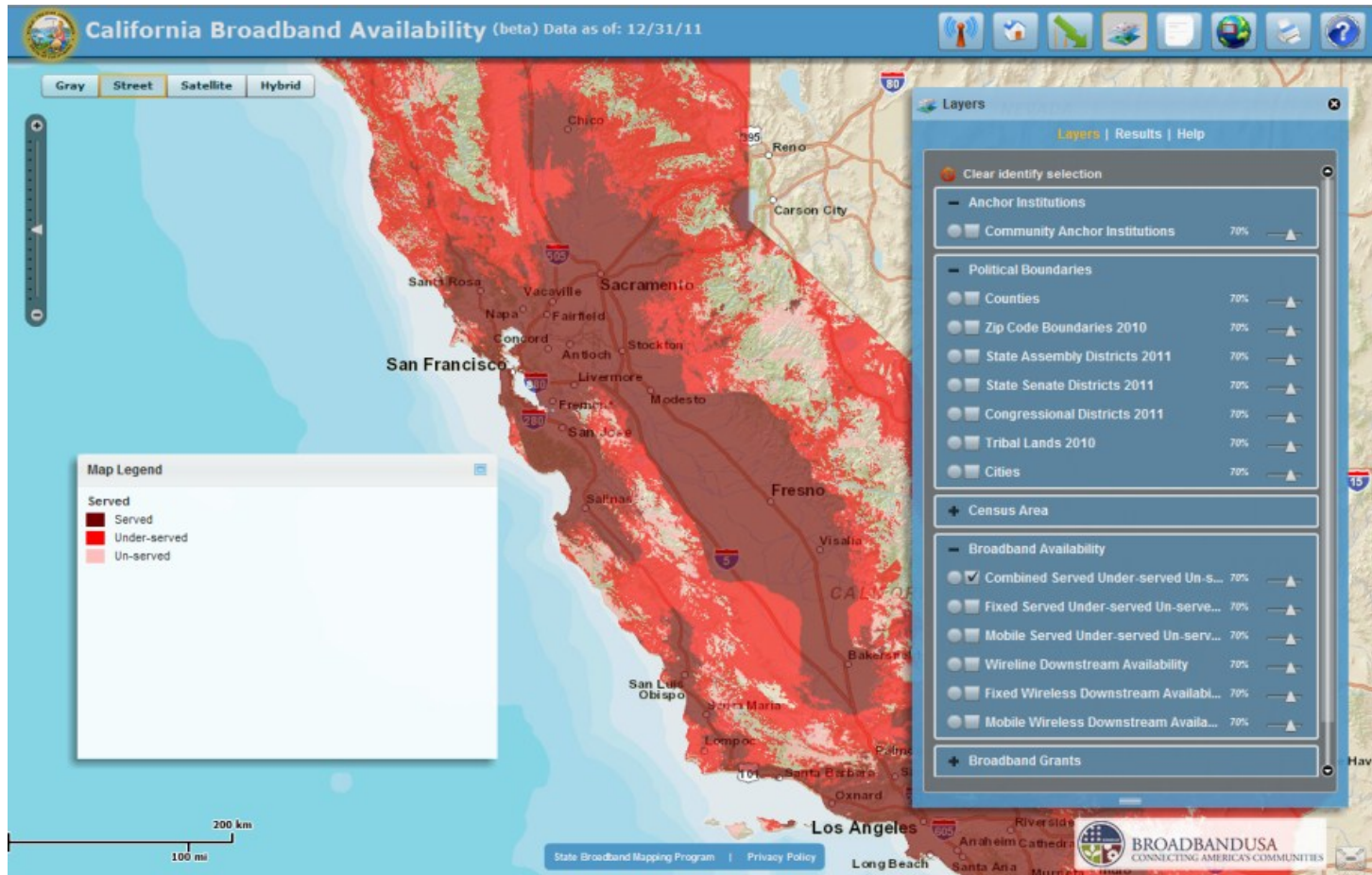
- CPUC implementing \$8M ARRA/ NTIA mapping and planning grant for 5 years
- CA Broadband Interactive Map (www.broadbandmap.ca.gov/)
 - Providers report availability and maximum advertised speeds
 - CPUC processes and submits data to the NTIA
 - Map features:
 - CASF grant application tool
 - Search by address, provider and wireline, fixed wireless or mobile technology types
 - Political boundaries can be turned on, including assembly districts
 - Provides links to available provider's website
 - Adoption/ Penetration rates shown by census block groups





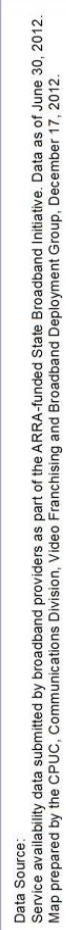
CA State Broadband Initiative (SBI)

Served /Under-served /Un-served Map





Wireline and Fixed Wireless Broadband Availability





Mobile Broadband Testing (SBI funded)

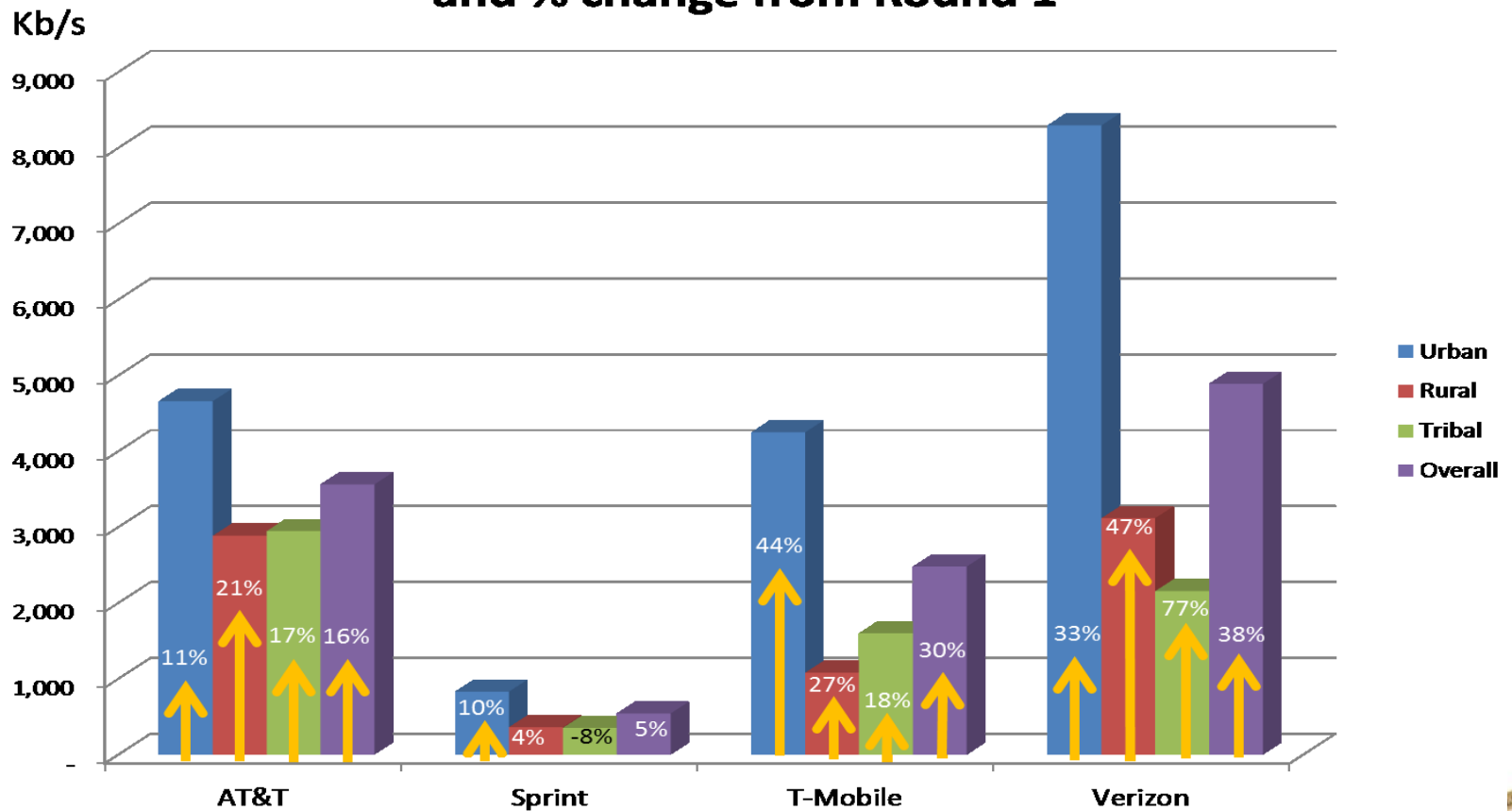
- Field Test of 4 largest carriers using smart phones and data cards
Testing of Mobile Broadband Service Quality
 - 1,200 test points distributed among urban, rural and tribal areas
 - Tests for throughput, latency, streaming capability and other quality measures
 - 8 testers drive 35,000 across the state
 - Tests conducted bi-annually
 - The first report was published Summer 2012, the next report is expected April 2013 (results are already public – see <http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/Broadband+Availability+Maps.htm>)
 - Quality improvements seen between first and second tests





Mobile Testing Results

Round 2 Mean Downstream and % change from Round 1





Mobile Broadband Testing (SBI Funded)

- Consumer Mobile Broadband App
 - Will provide crowd sourced data on speeds and availability and improve reporting data quality
 - Android operating system phones only
 - Anticipated Spring 2013 release





Tribal Outreach (SBI Funded)

- Goal is to understand broadband needs and assist in getting resources to close digital divide
- Conducted broadband survey to all 111 Federally recognized tribes
 - Only 23% response rate
 - Trying to improve outreach through the Governor's tribal advisor
 - Need permission from tribes to conduct on premise mobile testing





California Broadband Council

- Goals
 - Marshal state's resources to increase broadband deployment, and eliminate the Digital Divide by expanding accessibility, literacy, adoption, and usage
 - Review implementation of 2008 Broadband Task Force Report recommendations and improve coordination among state agencies
 - Helped applicants compete more effectively for federal funds under American Recovery and Reinvestment Act (ARRA) and California Advanced Services Funds
- Three working groups have been established to
 - Find ways to lower local barriers to deployment
 - Improve process of distributing surplus state computers to be used for training and educational purposes to diminish the Digital Divide
 - Improve access to state owned and controlled properties for the collocation of broadband infrastructure.





California Broadband Council

- Examples of topics currently being considered at the CBC
 - California Telehealth Network and its efforts to obtain additional funding from the FCC
 - State Librarian's program to use WiFi to extend its Internet access to card holders in the library's neighborhood
 - May serve as a model for the other state agencies with a local presence
 - The state of broadband on Tribal Lands, and Governor Brown's Executive Order to state agencies regarding Tribal issues
 - Status of CASF consortia on the their grant-funded efforts





Comparison of AB 1299 and CASF Programs

AB 1299	CASF Program	
Expand CASF program to encourage broadband deployment and adoption for public housing residents in urban regions	Deployment: infrastructure grants awarded to CPCN/WIR recipients to deploy middle-mile and last-mile projects in unserved and underserved areas; served areas where a public housing project might exist are not currently grant eligible	
	Adoption: grants awarded to regional consortia for non-infrastructure deployment and adoption programs; \$1.5 million remaining in account and the CPUC by order would need to address how to spend it; the provisioning of Wi-Fi “hot-spots” is within the approved workplan of one consortium; Los Angeles County Regional Broadband Consortium (page 27 of CASF Annual Report, 2012)	





Thank you!
For Additional Information:
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