



CPUC Low Income Oversight Board November 22, 2016

CALIFORNIA EMERGING TECHNOLOGY FUND

Mission

CONNECT ✦ COMMUNICATE ✦ COMPETE

Mobilize leadership statewide to close the Digital Divide by accelerating the deployment and adoption of broadband to unserved and underserved communities.

Ensure that California is a global leader in the availability and use of broadband technology.

FOCUS ✦ ACTION ✦ RESULTS



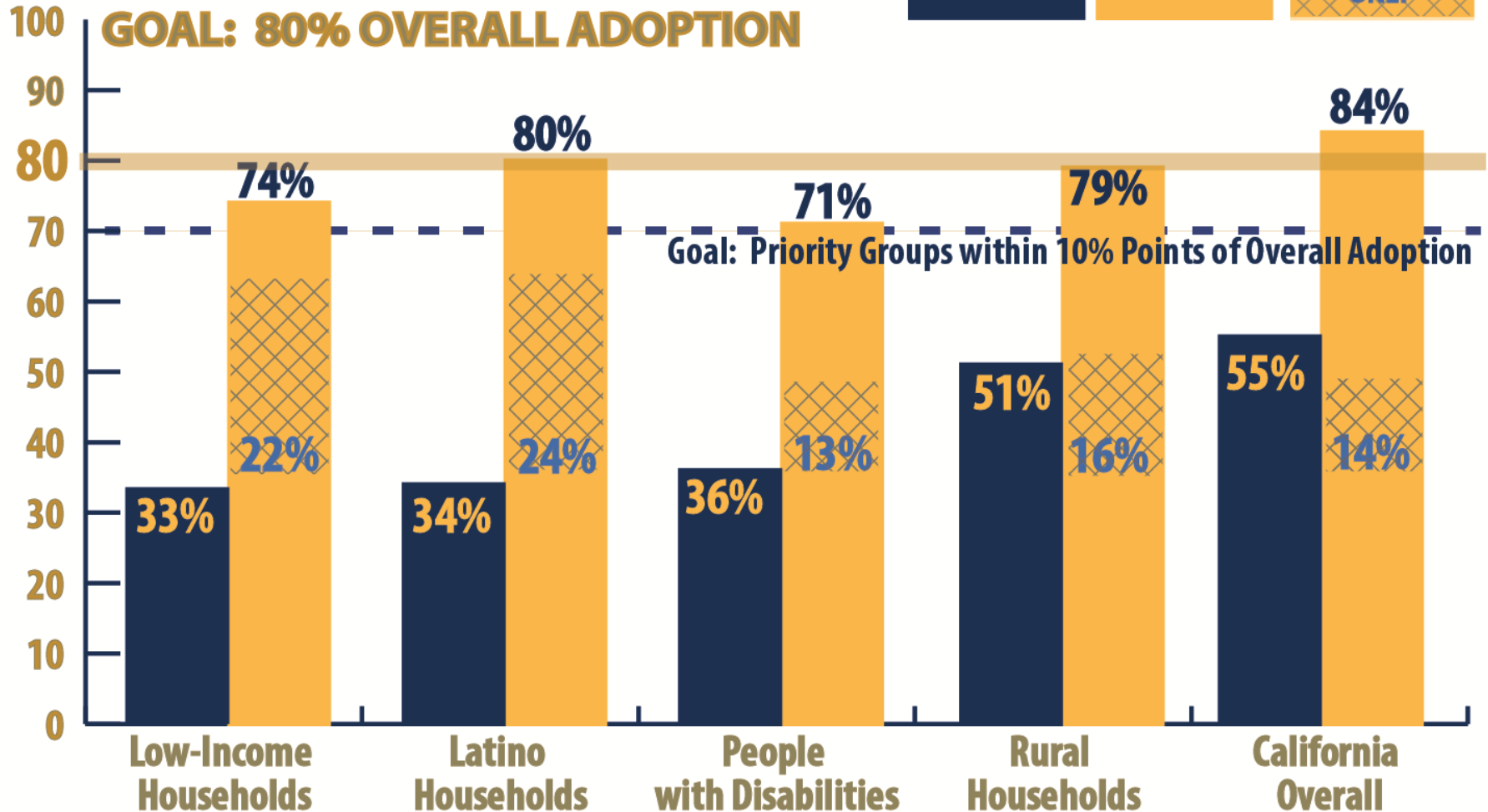
2016 Statewide Survey Results

CALIFORNIA BROADBAND ADOPTION GROUPS

2008

2016

SMARTPHONE ONLY



Digital Divide is Greatest for the Disadvantaged

Percentage of Californians with Broadband at Home (Unconnected and Underconnected)

- 68% of Households Earning Less Than \$22,000 a Year
(25% by smartphone only – 32% not connected)
- 69% of Households with Spanish-Speakers
(30% by smartphone only – 31% not connected)
- 71% of People with Disabilities
(13% by smartphone only – 29% not connected)
- 56% of Adults Age 65 or Older – Seniors
(5% by smartphone only – 44% not connected)
- 63% of Non-High School Graduates
(29% by smartphone only – 37% not connected)

All Customers Online: Benefits To Utilities

- Transaction costs for utility will decrease for billing and communications; smaller carbon footprint.
- Low-income customers will have equal access to emergency notification and information.
- Low-income customers will have equal access to products and services that require Internet access.
- Low-income customers can use information from smart meters to manage their usage.
- Low-income customers can pay bills online when cash is available without having to spend time and money to pay bills in person.

Update on Energy Utility Collaboration

- **SMUD-CFILC Partnership**
 - _ 90,000 letters: 4,055 contacts (4.5% response rate); 1,021 adoptions (25% of contacts).
- **SCE-CFILC Pilot**
 - _ 10,000 letters to PWD: 594 calls; 38 adoptions; 35 inquiries from currently unserved areas.
 - _ Follow up with Program Manager and SCE COO.
- **SDG&E Pilot Planning for Launch**
 - _ Met with CBOs in August; launch by end of 2016.
 - _ Committed \$10,000 but more is needed.
- **LADWP-SCG Interested**
- **PG&E to be Engaged**

ENERGY ASSISTANCE SAVINGS PROGRAM

FUNDING – WHAT THE LAW SAYS

- Assembly Bill 793 (Chapter 589, Statutes of 2015) amended the Energy Savings Assistance Program (EASP) to allow “energy management technology” to count as a weatherization program.
- Further, the statute defines “energy management technology” and says it “. . . may include a product, service, or software that allows a customer to better understand and manage electricity or gas use in the customer’s home.”
- Statute establishing LIOB says CPUC shall examine methods to improve CARE enrollment and participation. This examination shall include, but need not be limited to, comparing information from CARE and the Universal Lifeline Telephone Service (ULTS) to determine the most effective means of utilizing that information to increase CARE enrollment . . .

WHAT THE CPUC ESAP REGULATIONS SAY

- In order to provide the maximum opportunity for eligible customers to receive all feasible measures:
 - _ A home must receive all feasible measures offered under the ESA Program.
 - _ For homes that need fewer than 3 measures, the energy savings achieved must be at least 125 kWh annually or 25 therms annually.
 - _ Homes that require 3 or more individual energy efficiency measures qualify for ESA Program participation regardless of energy savings.
- Outreach should target customers with the highest energy usage, energy burden and/or energy insecurity, but not at expense of all other customers.

ENERGY SAVINGS THROUGH BROADBAND USAGE

- According to the FCC's Broadband.gov web site: Studies have repeatedly demonstrated that when people get feedback on their electricity usage, they make simple changes that save energy. Real-time information can also inform automated thermostats and appliances, enabling consumers to save energy and money automatically.
- Whirlpool and GE have both released a line of wifi-connected, smart appliances.
- The "Internet of Things" cannot benefit customers who don't have high-speed Internet service.

ENERGY SAVINGS THROUGH BROADBAND USAGE

A Sample Calculation

- The following calculation shows the potential energy savings from a relatively new and popular thermostat called Nest:
 - _ According to the Energy Information Administration, the average California household consumes 6,684 kWh of electricity annually.
 - _ According to Nest: In independent studies, the Nest Thermostat saved an average 15% on cooling bills.
 - ▶ $6,684 \text{ kWh Annually} \times 15\% = 1,002.7 \text{ kWh}$
Annual Electricity Reduction

CONCLUSIONS

- AB 793 allows for technology to be eligible for ESAP funding, including for “service or software”.
- Nothing else in statute or in the CPUC regulations prohibits ESAP funding from being used for broadband adoption outreach if it meets the other criteria.
- Statute repeatedly states goal of ESAP is to maximize benefits to customers.
- Broadband technology is required for consumers to recognize the benefits of smart thermostats and other Internet-enabled devices and appliances.
- IOUs may include in ESAP activities to get low-income customers online and LIOB is within statutory role to encourage and recommend such action.