Statewide Survey on Broadband Adoption 2023
Internet Adoption and the “Digital Divide” in California

Results from a Survey Conducted for the California Department of Technology (CDT) and the California Emerging Technology Fund (CETF)

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About the Statewide Survey on Adoption

• **Population:** California Adults (Age 18 and Older)
• **Method of Collection:** Multimodal (RDD + Text-to-Web)
• **Languages:** English, Spanish, Mandarin, Vietnamese
• **Margin of Error:** <3% for 95% Confidence Level
• **Fieldwork Dates:** February – June 2023
• **Sampling:** Main Sample + 3 Oversamples
# Sampling Strategy and Sample Size

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Description</th>
<th>Amount</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Sample</strong></td>
<td>Telephone Surveys Complete</td>
<td>1,000</td>
<td>1,899</td>
</tr>
<tr>
<td></td>
<td>Telephone Surveys Basic</td>
<td>249</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Online Text-to-Web</td>
<td>650</td>
<td></td>
</tr>
<tr>
<td><strong>Oversample</strong></td>
<td>Rural County Regions (4)</td>
<td>1,059</td>
<td>1,661</td>
</tr>
<tr>
<td></td>
<td>Low-Income HHs (Pre-Paid)</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Rehabilitation</td>
<td>319</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>3,560</td>
</tr>
</tbody>
</table>
Main Topics

1. Adoption Across Covered Populations and Regions
2. Broadband Costs
3. Reasons for Non-Adoption
4. Service Reliability and Customer Service
5. ACP Awareness and Participation
6. Telehealth
7. Access and Devices Among K-12 Households
8. Digital Skills
Main Topics

1. Adoption Across Covered Populations and Regions
2. Broadband Costs
3. Reasons for Non-Adoption
4. Service Reliability and Customer Service
5. ACP Awareness and Participation
6. Telehealth
7. Access and Devices Among K-12 Households
8. Digital Skills
Broadband Adoption Remains High While Share of Underconnected (Smartphone-only) Continues to Drop
Adoption Gaps for Several Covered Populations and Disadvantaged Groups Are Closing

Source: 2021/23 from USC; 2017-2019 from Berkeley RSS Poll; 2014 to 2016 from The Field Poll.
Income Gap in Broadband Adoption Has Decreased Thanks to Jump in Adoption Among the Poorest Households (<20K)

Source: 2021/23 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.
Covered Populations: Low-income and Households with Language Barriers Still Lag Behind in Broadband Adoption
Main + rural oversample: Broadband Adoption Varies Across the State, San Joaquin Valley Lags Behind Other Regions

Connectivity by Region
Ordered by Decreasing Percent of Unconnected Respondents

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Respondents</th>
<th>Percent Connected</th>
<th>Percent Underconnected</th>
<th>Percent Unconnected</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Joaquin Valley</td>
<td>393</td>
<td>87%</td>
<td>12%</td>
<td>11.1%</td>
</tr>
<tr>
<td>San Diego County</td>
<td>123</td>
<td>87%</td>
<td>13%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Los Angeles County</td>
<td>353</td>
<td>88%</td>
<td>12%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Central and Pacific Coast</td>
<td>270</td>
<td>89%</td>
<td>11%</td>
<td>9.2%</td>
</tr>
<tr>
<td>North Bay North Coast</td>
<td>224</td>
<td>90%</td>
<td>10%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Inland Empire</td>
<td>147</td>
<td>92%</td>
<td>8%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Orange County</td>
<td>126</td>
<td>91%</td>
<td>9%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Bay Area</td>
<td>335</td>
<td>91%</td>
<td>9%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Sacramento Valley</td>
<td>159</td>
<td>94%</td>
<td>6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Other Rural</td>
<td>329</td>
<td>91%</td>
<td>9%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Main Sample and Rural Counties Oversample; All Respondents; Valid Responses n = 2744
Hispanic/Latinx Residents More Likely to be Unconnected than Other Racial/Ethnic Groups

Connectivity by Race and Ethnicity
Ordered by Decreasing Percent of Unconnected Respondents

<table>
<thead>
<tr>
<th>Number of Respondents</th>
<th>Hispanic or Latinx</th>
<th>Native Hawaiian and Pacific Islander</th>
<th>African-American</th>
<th>Native American or Alaska Native</th>
<th>Other / Mixed</th>
<th>Asian</th>
<th>White Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected</td>
<td>353</td>
<td>10</td>
<td>80</td>
<td>9</td>
<td>80</td>
<td>214</td>
<td>476</td>
</tr>
<tr>
<td>Underconnected</td>
<td>14</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Unconnected</td>
<td>51</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>15</td>
</tr>
</tbody>
</table>

- Percent Unconnected: 12.2% Hispanic or Latinx, 9.1% Native Hawaiian and Pacific Islander, 7.7% African-American, 7.7% Native American or Alaska Native, 5.5% Other/Mixed, 3.5% Asian, 3.0% White Non-Hispanic
- Percent Underconnected: 3.3% Hispanic or Latinx, 0.0% Native Hawaiian and Pacific Islander, 4.4% African-American, 23.1% Native American or Alaska Native, 6.6% Other/Mixed, 2.2% Asian, 2.0% White Non-Hispanic
- Percent Connected: 84% Hispanic or Latinx, 91% Native Hawaiian and Pacific Islander, 88% African-American, 69% Native American or Alaska Native, 88% Other/Mixed, 94% Asian, 95% White Non-Hispanic

Main Sample; All Respondents; Valid Responses n = 1352
Main Topics

1. Adoption Across Covered Populations and Regions
2. Broadband Costs
3. Reasons for Non-Adoption
4. Service Reliability and Customer Service
5. ACP Awareness and Participation
6. Telehealth
7. Access and Devices Among K-12 Households
8. Digital Skills
Average Cost of Broadband in CA $83.6/month, Generally Higher in Rural Areas
Higher than Average Broadband Costs for Several Covered Populations

Average Monthly Internet Service Cost by Covered Populations ($)

- Veteran Households: $105.6
- LGBTQIA+: $100.9
- Rural Households: $88.2
- Households with Disabilities: $86.3
- Aged 60 or Older: $85.9
- Overall: $83.6
- Women: $82.2
- Racial or Ethnic Minorities: $79.9
- Households with Language Barriers: $76.5
- Low-Income Households: $69.4

Main Sample; All Connected Respondents
Main Topics

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Cost Is the Main Barrier to Broadband Adoption, Followed by Concerns About Privacy

### Reasons for Not Having Internet (Multiple Answers)

- Home internet services are too expensive: 61.0%
- Concerned about privacy, identity theft and other types of security: 41.5%
- The smartphone can do everything I/we need: 41.5%
- Home internet services are not available or adequate where I/we live: 33.9%
- Nobody in my household has a desktop, laptop, or tablet computer: 33.1%
- Nobody in my household knows enough about using a computer/laptop: 32.2%
- Other: 21.2%

Main Sample: Unconnected and Underconnected Respondents; Valid Responses n=118

### Top Reason Why not Connected (Single Response)

- Internet service is too expensive: 35.6%
- The smartphone can do everything I/we need: 13.7%
- Concerned about privacy, identity theft and other: 12.3%
- Nobody in my household knows enough about: 12.3%
- Refused/Don't Know: 5.5%
- Nobody in my household has a desktop, laptop, or: 4.1%
- Home internet services are not available or: 2.7%

Main Sample: Underconnected and Unconnected Respondents; Valid Responses: n=73
For Most Low-income Households (~70%), Cost Exceeds FCC-recommended Threshold (2% of Disposable Income)
Public/Community Broadband Remains a Key Access Alternative for Unconnected Households

<table>
<thead>
<tr>
<th>Where Respondents Can Connect, Not Using Their Own Plan</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>At a retail store</td>
<td>50.0%</td>
</tr>
<tr>
<td>At the home of relatives or friends</td>
<td>41.4%</td>
</tr>
<tr>
<td>At a school or library</td>
<td>41.4%</td>
</tr>
<tr>
<td>At work</td>
<td>32.8%</td>
</tr>
<tr>
<td>At a public space</td>
<td>29.3%</td>
</tr>
<tr>
<td>Using a community WiFi</td>
<td>29.3%</td>
</tr>
<tr>
<td>At a parking lot of a school or library</td>
<td>22.4%</td>
</tr>
<tr>
<td>On public transit</td>
<td>10.3%</td>
</tr>
<tr>
<td>Other</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Main Sample; Unconnected and Underconnected Respondents; Valid Responses n= 58
Main Topics

1. Adoption Across Covered Populations and Regions
2. Broadband Costs
3. Reasons for Non-Adoption
4. Service Reliability and Customer Service
5. ACP Awareness and Participation
6. Telehealth
7. Access and Devices Among K-12 Households
8. Digital Skills
Most Respondents Consider Broadband Service Reliable, Lower Level of Satisfaction with Customer Service
Main Topics

1. Adoption Across Covered Populations and Regions
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6. Telehealth
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8. Digital Skills
ACP Awareness and Participation Rates Remain Low Among Eligible Households

ACP Awareness and Enrollment Among ACP Eligible Respondents

- Have Not Heard of ACP: 61.2%
- Have Heard of ACP: 34.9%
- Don't Know/Refused: 4.0%
- Aware and Enrolled in ACP: 19.6%
- Aware but Not Enrolled: 80.4%
ACP Awareness Varies Across the State, Higher in San Joaquin/Sacramento Valley, Lower in Inland Empire

Percent Who Have Heard of ACP by Region

- San Joaquin Valley: 41.4%
- Sacramento Valley: 38.5%
- Orange County: 36.8%
- Central and Pacific Coast: 36.8%
- North Bay North Coast: 36.7%
- All Categories: 34.9%
- Bay Area: 34.3%
- Los Angeles County: 32.5%
- Other Rural: 30.6%
- San Diego County: 29.1%
- Unknown: 28.6%
- Inland Empire: 27.4%

Main Sample and Rural Counties Oversample, All Respondents
Beyond Awareness, Lack of Information/Misinformation Also Reduce Participation in ACP and Similar Programs

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will probably not qualify</td>
<td>29.20%</td>
</tr>
<tr>
<td>I don't know how to apply</td>
<td>23.10%</td>
</tr>
<tr>
<td>I don't need it</td>
<td>20.80%</td>
</tr>
<tr>
<td>Application takes too much time</td>
<td>5.40%</td>
</tr>
<tr>
<td>I applied but never received a response</td>
<td>5.40%</td>
</tr>
<tr>
<td>I applied but was told I am not eligible</td>
<td>4.60%</td>
</tr>
<tr>
<td>Application process is too difficult</td>
<td>4.60%</td>
</tr>
<tr>
<td>I was sold a more expensive plan</td>
<td>1.50%</td>
</tr>
<tr>
<td>I was enrolled before but I was told I am no longer...</td>
<td>0.80%</td>
</tr>
<tr>
<td>Other Reason</td>
<td>16.20%</td>
</tr>
</tbody>
</table>

Main Sample; ACP Eligible and Not Enrolled
1. Adoption Across Covered Populations and Regions
2. Broadband Costs
3. Reasons for Non-Adoption
4. Service Reliability and Customer Service
5. ACP Awareness and Participation
6. **Telehealth**
7. Access and Devices Among K-12 Households
8. Digital Skills
Following Pandemic Surge, Telehealth Utilization Has Declined in Particular for Older Adults
Telehealth Utilization Lower for Those With Language Barriers and Low-income Households

Percent of Covered Population Respondents Using Telehealth

- Households with Disabilities: 66%
- Veteran Households: 59%
- LGBTQIA+: 56%
- Women: 55%
- Aged 60 or Older: 52%
- All Respondents: 46%
- Rural Households: 44%
- Racial or Ethnic Minorities: 43%
- Low-Income Households: 42%
- Households with Language Barriers: 37%

Main Sample; All Respondents
Main Topics

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5. ACP Awareness and Participation
6. Telehealth
7. Access and Devices Among K-12 Households
8. Digital Skills
Broadband Adoption Among K-12 Households Has Decreased to Just Below Pre-pandemic Levels

Source: 2021/23 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.
Device Availability Has Also Decreased, in Particular Among Low-income K-12 Households
Main Topics

1. Adoption Across Covered Populations and Regions
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Share of High-skills Users is Lower Among Non-English-Language HHs, Low-income HHs, and HHs with Disabilities

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent of Respondents Reporting High Digital Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGBTQIA+</td>
<td>71.0%</td>
</tr>
<tr>
<td>Women</td>
<td>58.0%</td>
</tr>
<tr>
<td>All Respondents</td>
<td>56.0%</td>
</tr>
<tr>
<td>Racial or Ethnic Minorities</td>
<td>54.0%</td>
</tr>
<tr>
<td>Veteran Households</td>
<td>52.6%</td>
</tr>
<tr>
<td>Rural Households</td>
<td>51.0%</td>
</tr>
<tr>
<td>Aged 60 or Older</td>
<td>49.0%</td>
</tr>
<tr>
<td>Households with Disabilities</td>
<td>43.0%</td>
</tr>
<tr>
<td>Low-Income Households</td>
<td>42.0%</td>
</tr>
<tr>
<td>Households with Language Barriers</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

Main Sample; All Respondents
THANK YOU

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