Title
Release #2019-01: While the “digital divide” persists in California, access to the Internet at home through a computing device has grown over the past two years.

Permalink
https://escholarship.org/uc/item/5x20c045

Author
DiCamillo, Mark

Publication Date
2019-03-12
While the “digital divide” persists in California, access to the Internet at home through a computing device has grown over the past two years.

By Mark DiCamillo, Director, Berkeley IGS Poll

A statewide Berkeley IGS Poll completed by the University of California at Berkeley’s Institute of Governmental Studies (IGS) among a random sample of 1,625 residents updated a ten-year time series tracking Californians’ connectivity to the Internet from home. The study was conducted on behalf of the California Emerging Technology Fund (CETF), a non-profit foundation that promotes Internet access throughout the state. The latest survey finds 88% of the state’s residents reporting that they can connect to the Internet at home through either a computing device or a smartphone. This is similar to 87% who reported having such access in 2017, when the study was last conducted.

However, some changes are observed in the survey. For example, more Californians now report being able to connect to the Internet at home through a desktop, laptop or tablet computer than in the past. Greater than three in four California households (78%) now report being able to access the Internet through such computing devices, up from 69% two years ago. This has been accompanied by a corresponding decline -- from 18% to 10% -- in the proportion of households whose only means of accessing the Internet at home is through a smartphone.

The largest observed increase in connectivity to the Internet via computing devices is found among households where children under the age of 18 reside, increasing from 67% in 2017 to 86% at present. This growth is related to the fact that many parent households (28%) are now reporting that their child is able to take a school computer home with them. Significantly, this is reported more frequently by Latino parent households and by parents with no more than a high school education than others, two groups that have historically lagged in their ability to access the Internet through home computing devices. This change is also contributing to the decline in the proportion of households whose only means of accessing the Internet at home is through a smartphone.

Greater access to the Internet through a computing device at home is a positive development, given that smartphone-only households are considered “underconnected” because they are at a disadvantage when trying to carry out a variety of online activities.
Nevertheless, a significant “digital divide” persists in California. For example, similar to prior years, the survey finds major segments of the public still either without any access to the Internet at home or report that their only means of access is through a smartphone. These include households with incomes of less than $20,000 (48%), adults who have not completed high school (47%), Spanish-dominant Latinos (43%), those age 75 or older (38%) and the disabled (36%), although in each case these proportions are down from 2017.

“The results of the 2019 statewide survey show clearly that proactive efforts by the State, schools, cities, counties and community-based organizations to promote digital inclusion are paying dividends in California,” said Sunne Wright McPeak, President and CEO of CETF. “We are grateful to the University of California’s Institute of Government Studies for their disciplined research to document results and guide the development of public policy.

Other major findings from the survey include the following:

**Many say accessing the Internet at home enables them to reduce the number of vehicle trips they need to make each month**

The study also finds that nearly two in three Californians (62%) report that using the Internet at home enables them to reduce the number of vehicle trips they need to make using a car, truck or SUV in a typical month. The most commonly reported activity by far is shopping online, which 55% of say reduces their need to make vehicle trips. Significant proportions also report that working online from home (21%), communicating with a doctor online (18%), and being able to take educational or training courses online from home (13%) reduces their need to make vehicle trips each month.

**Cost or lack of computer or smartphones the main reason for not having Internet connectivity at home**

The most commonly cited reason for not having access to the Internet at home relates to cost or the lack of a computer or smartphone. Over half (51%) of those not connected cite this. Other frequently cited reasons include not being comfortable using computer or going online (31%), being able to connect to the Internet from another place (26%), while 21% report that access to the Internet is unreliable or not available where they live.

**Unconnected households report low awareness of discounts available to low-income residents to reduce the costs of getting Internet service at home**

Just one in five (20%) California residents without access to the Internet at home are aware that Internet companies in California make discounts available to low-income households to reduce the costs of getting Internet service at home. This compares to 73% who say they are unaware of such discounts and 8% who aren’t sure.

**Those not connected to the Internet or are underconnected feel disadvantaged**

A number of reasons are offered by households who are either not connected to the Internet or are underconnected for feeling disadvantaged. For example, 45% of these households where a child resides say they feel disadvantaged when trying to assist a child to learn or keep up with their schoolwork. Others say they feel limited when trying to
take classes online or when trying to gain new career skills (24%), managing money or banking online (22%), learning about or gaining access to government services online (22%), and finding job opportunities online (22%).

Only about a third of these households (32%) report connecting to the Internet outside their home, such as at work, at a friend or family member’s house, or at a library, school, other public building or store.

**Households where children reside display a big increase in Internet access through computing devices**
The survey finds that the recent increase in access to the Internet through home computing devices compared to prior years was most pronounced among households where a child under age 18 resides. In such households 86% of Californians now report that household members can access to Internet at home through a computing device, up 19 points from 67% who reported this in 2017.

**About half of students in the k-12 schools reportedly have access to individually assigned computing devices at their school**
About half of those living in households where school-age children reside (52%) report that their child has been specifically assigned a computing device at school, while 43% have not. Of those who are assigned a school computer, about half say their child is allowed to take the device home with them.

*Note: A set of PowerPoint slides summarizing the findings in graphic form can be found here: escholarship.org/uc/item/7nj7p5vw*. Detailed tabulations to all Internet-related questions included in the survey were delivered to CETF under separate cover.

**About the Survey**
The results in this release are based a statewide survey conducted by the Institute of Governmental Studies (IGS) at the University of California, Berkeley. Findings updating the “digital divide” were obtained by adding questions about Internet access and connectivity onto the Berkeley IGS Poll of California adults on behalf of the California Emerging Technology Fund.

The survey was completed by telephone among 1,625 California adults age 18 or older over a one-month period spanning January 21-February 20, 2019. Dual frame random-digit dial cell and landline telephone listings were used to construct the main statewide sample. Interviewing was completed by live, professionally trained interviewers calling from Davis Research, LLC’s central location call center in Calabasas (Los Angeles County), California. About 85% of the surveys were completed with residents on their cell phone, while 15% were conducted on a residential landline telephone.

To capture the diversity of the state’s multi-ethnic population, the survey was administered in six languages and dialects – English, Spanish, Cantonese, Mandarin, Vietnamese and Korean. Of the 1,625 interviews completed, 1,337 were conducted in English, 216 in Spanish and 72 in an Asian language. Up to six attempts were made to reach and interview with an eligible respondent at each listing dialed.
Non-English versions of the survey questions were prepared for IGS by Idem Translations of Palo Alto, California. Prior to the start of data collection, the English and non-English questionnaires were programmed onto Davis Research’s computer-assisted telephone interviewing system to ensure uniform survey administration across all languages. At the conclusion of data collection and processing, statistical weights were applied to align the sample to demographic and regional characteristics of the state’s adult population based on population estimates from the Census Bureau’s 2017 American Community Survey. The weighting process also accounted for the incidence of residential cell and landline telephones based on the latest estimates of the National Center for Health Statistics.

Sampling error estimates depend on sample size, the percentage distributions being examined, and the effect of sample weighting. The estimated sampling error applicable to results from the overall statewide sample is approximately +/-3 percentage points at the 95% confidence level. Results from survey subgroups are subject to somewhat greater margins of sampling error. Sampling error is only one type of error to which surveys are subject. Results may also be affected by factors such as question wording, question order and the timeframe of the survey.

### Questions Asked

Below are the questions upon which the results reported in this release are based:

*Can you (or can others in your household) connect to the Internet from home? This includes connecting to the Internet from a smartphone or from a desktop, laptop, or tablet computer?*

**(IF CONNECTED TO THE INTERNET AT HOME)**

*Are you (or are others in your household) able to connect to the Internet at home through a smartphone? Are you (or are others in your household) able to connect to the Internet at home through a desktop, laptop or tablet computer? (RE-CONFIRMED THROUGH FOLLOW-UP PROBES)*

I am going to read some things that people can do online that enables them to avoid having to drive or make a vehicle trip in a car, truck or SUV. For each, please tell me whether you’ve avoided having to make a vehicle trip by going online from home to do this activity. In the past month have you (shopped online) (worked online) (taken any education or job training courses online) (communicated with a doctor or other health professional online) from home to avoid having to make a trip to a store? (ITEMS READ IN RANDOM ORDER) IF YES: Over the past month about how many vehicle trips would you say weren’t taken because you were able to (shop online) (work online) (take these courses online) (communicate online) from home instead?

**(IF NOT CONNECTED)**

I am going to read some reasons why people do not have access to the Internet at home. For each, please tell me whether or not this is a reason why your household doesn’t have Internet access. (a) Internet service is too expensive, (b) don’t have a computer or a smartphone, (c) Internet service is not available or adequate where I live, (d) not comfortable using a computer or doing things online, (e) can connect to the Internet from another place if needed. (ITEMS READ IN RANDOM ORDER)
Are you aware of any discounts that Internet companies in California make available to low income households that can significantly reduce the costs of getting Internet service at home?

*(IF NOT CONNECTED OR CONNECTED ONLY THROUGH A SMARTPHONE)*
Do you feel that your household is at a disadvantage when trying to do any of the following tasks because your household (is not connected to the Internet) (can only connect to the Internet through a smartphone)? (a) when trying to learn about or obtain access to government services, (b) when trying to keep in touch with family or friends, (c) when trying to find out about job opportunities or to apply for a job, (d) when trying to manage money, transfer funds or bank online, (e) when trying to gain new career skills or take a class or training course, (f) when trying to get health or medical information or communicate with a doctor, (g) (IF CHILD IN HOUSEHOLD) when trying to assist the children in your household to learn or keep up with their schoolwork, (h) when trying to keep up with the news? *(ITEMS READ IN RANDOM ORDER)*

Do you (or do others in your household) ever connect to the Internet outside your home, such as at work, at or near a school, at or near a library or other public building or outdoor space, at or near a store like Starbucks, at the home of a friend or family member, or some other place?

*(IF CHILD IN HOUSEHOLD ATTENDS A K-12 SCHOOL)*
Do the children in your household who attend a K-12 school have a computing device, such as a computer, laptop or tablet, specifically assigned to them for their use at school? *(IF YES)* Does the school allow the child to take that device home with them to help them do their homework?

---

**About the Institute of Governmental Studies**
The Institute of Governmental Studies (IGS) is an interdisciplinary organized research unit that pursues a vigorous program of research, education, publication and public service. A component of the University of California system’s flagship Berkeley campus, it is the oldest organized research unit in the University system and the oldest public policy research center in the state.

IGS conducts periodic surveys of public opinion in California on matters of politics and public policy through its *Berkeley IGS Poll*. The poll, which is disseminated widely, seeks to provide a broad measure of contemporary public opinion, and to generate data for subsequent scholarly analysis. The director of the Institute of Governmental Studies is Lisa Garcia Bedolla. The director of the *Berkeley IGS Poll* is Mark DiCamillo. For a complete listing of stories issued by the *Berkeley IGS Poll* go to https://igs.berkeley.edu/igs-poll/berkeley-igs-poll.