



Mapping the Digital Divide: Using ACS Data to Analyze Internet Access in NYC

Jack Mullan, Research Associate



**Citizens' Committee
for Children** of NEW YORK

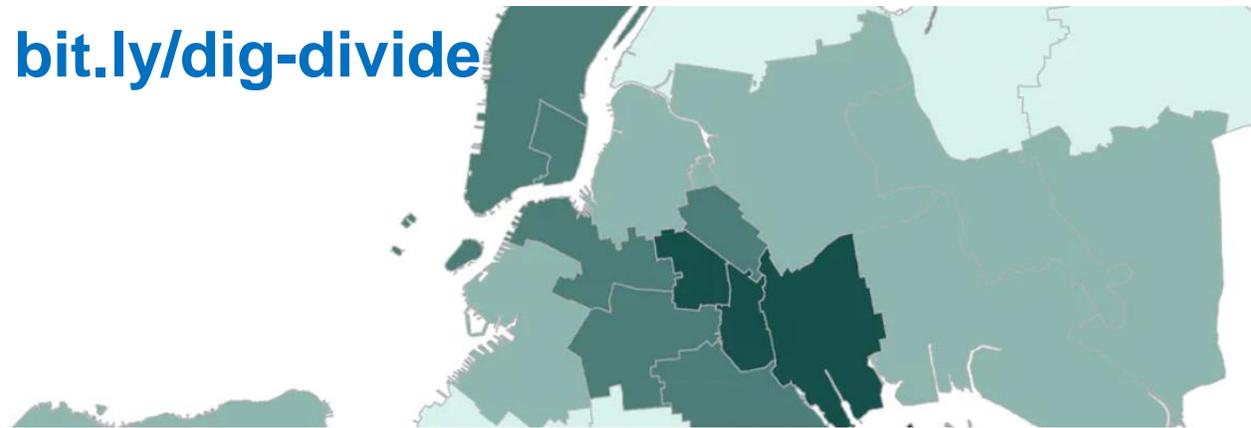
Photo: Iwan Baan, New York Magazine

Overview

@cccnewyork
#ACSCConf21

- I. Who we are: Citizens' Committee for Children of New York
- II. Mapping digital inequities in NYC: Findings from ACS data
- III. Inquiries, insights, and impact from NYC

bit.ly/dig-divide



New York City's Digital Divide: 500,000 NYC households have no internet access when it is more important than ever before

April 24, 2020



EVERY CHILD HEALTHY

HOUSED

EDUCATED

SAFE



Citizens' Committee
for Children of NEW YORK



Since 1944, Citizens' Committee for Children of New York has convened, informed, and mobilized New Yorkers to make the city a better place for children.

Mapping Digital Inequities in NYC

American Community Survey

9 At this house, apartment, or mobile home – do you or any member of this household have access to the Internet?

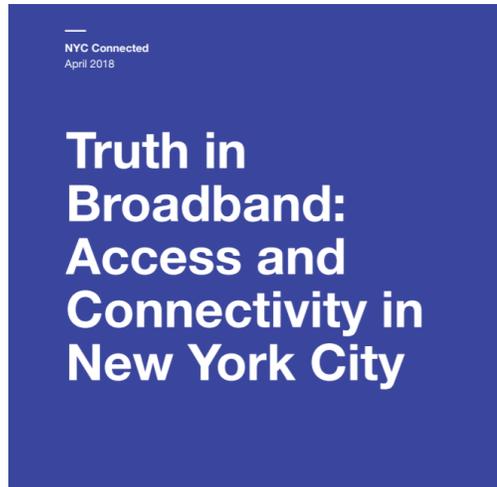
Yes, by paying a cell phone company or Internet service provider

Yes, without paying a cell phone company or Internet service provider → *SKIP to question 11*

No access to the Internet at this house, apartment, or mobile home → *SKIP to question 11*

10 Do you or any member of this household have access to the Internet using a –

	Yes	No
a. cellular data plan for a smartphone or other mobile device?	<input type="checkbox"/>	<input type="checkbox"/>
b. broadband (high speed) Internet service such as cable, fiber optic, or DSL service installed in this household?	<input type="checkbox"/>	<input type="checkbox"/>
c. satellite Internet service installed in this household?	<input type="checkbox"/>	<input type="checkbox"/>
d. dial-up Internet service installed in this household?	<input type="checkbox"/>	<input type="checkbox"/>
e. some other service? <i>Specify service</i> ↴	<input type="checkbox"/>	<input type="checkbox"/>

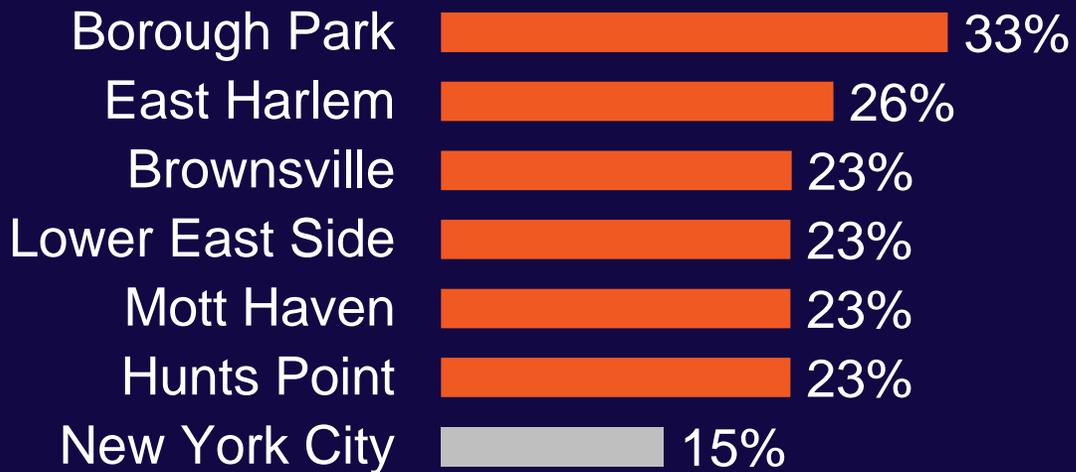


Office of the
Chief Technology
Officer

- Is internet access universal?
- Do all households have broadband or cellular data plans?
- Do all children have devices to participate in remote learning?
- Do homes with internet have sufficient choice among internet service providers (ISPs)?

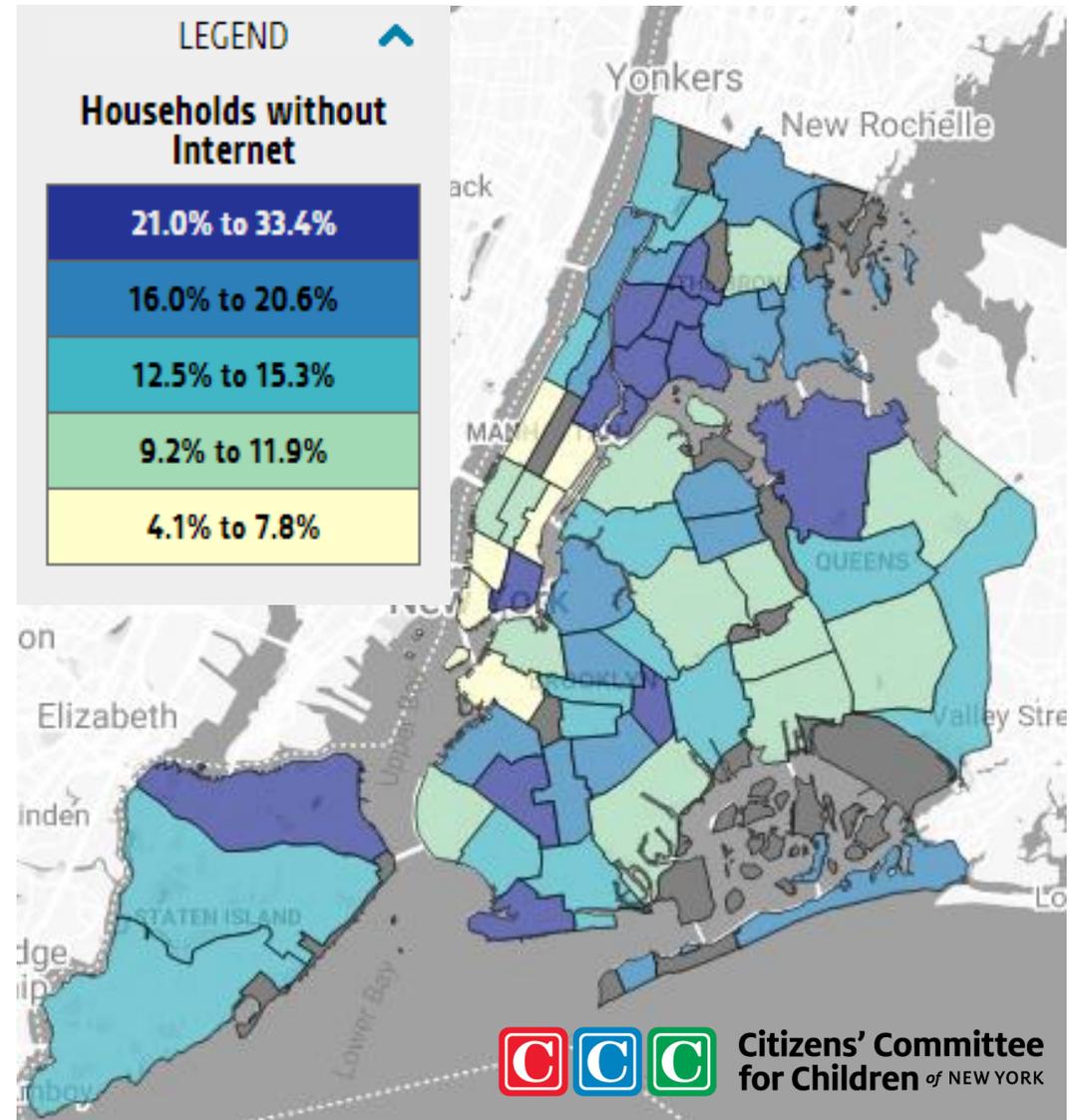
470,000 NYC households lack internet access

In some community districts, a lack of internet access affects as many as a quarter to a third of all households



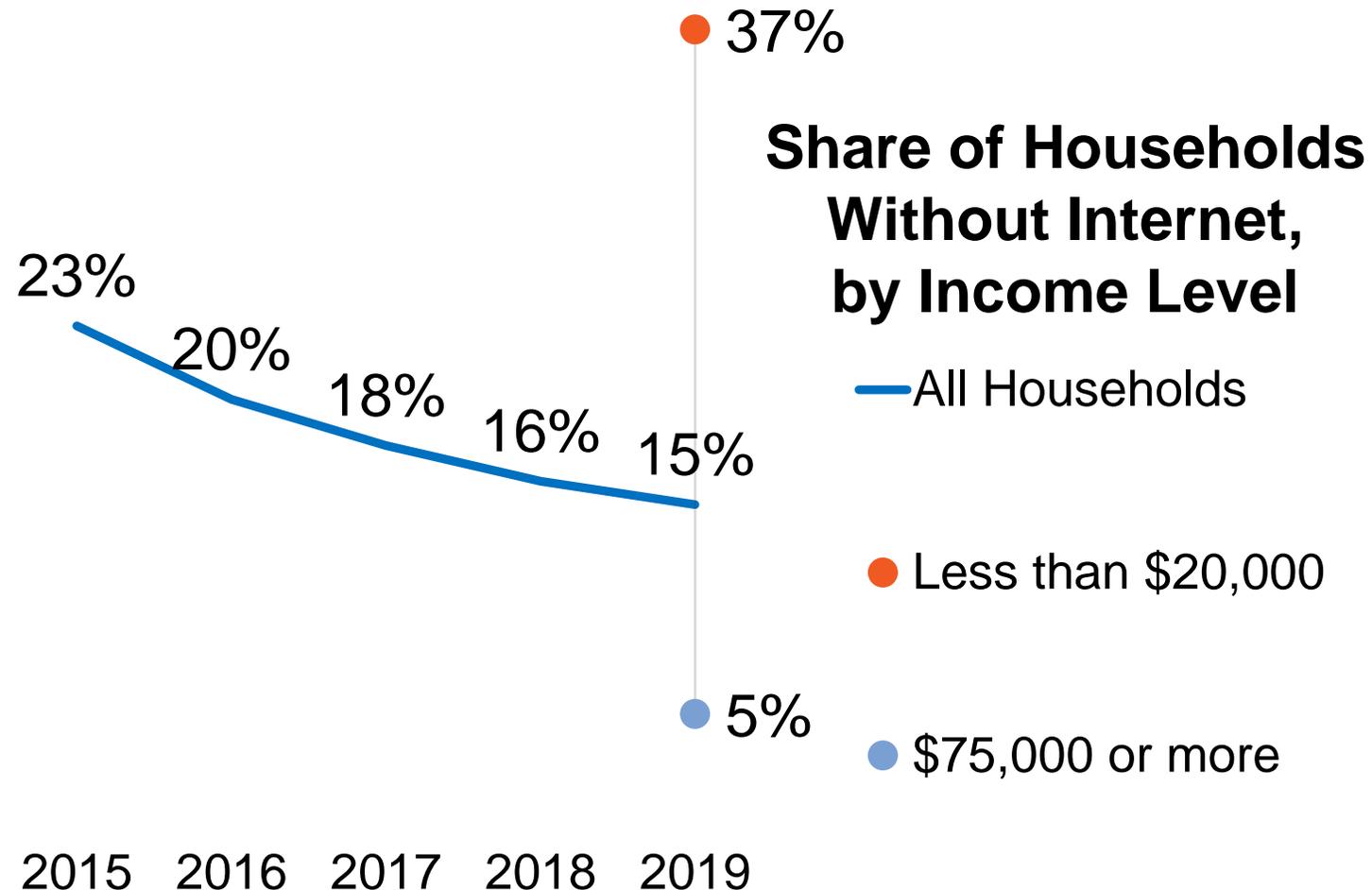
Household Internet Access

Households without Internet; Community District; Percent; 2019



The city has improved access, but there remains progress to be made particularly among low-income households

In 2019, more than one in three households earning less than \$20k were without internet

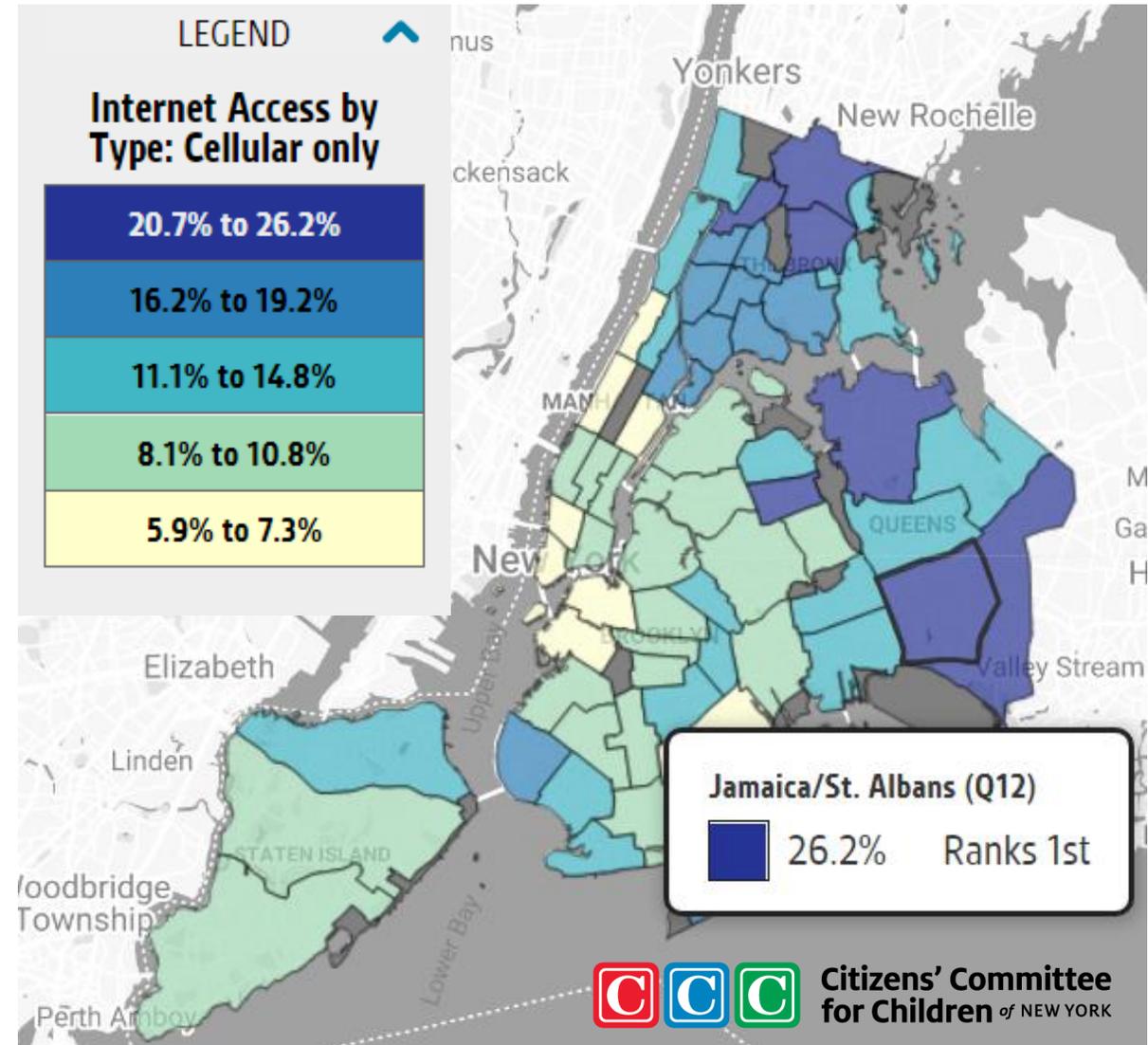


400,000 households access the internet exclusively via cellular data plans

The share of households that are accessing the internet exclusively through cellular data plans is growing – up to 13% in 2019

Household Internet Access

Internet Access by Type: Cellular only; Community District; Percent; 2019



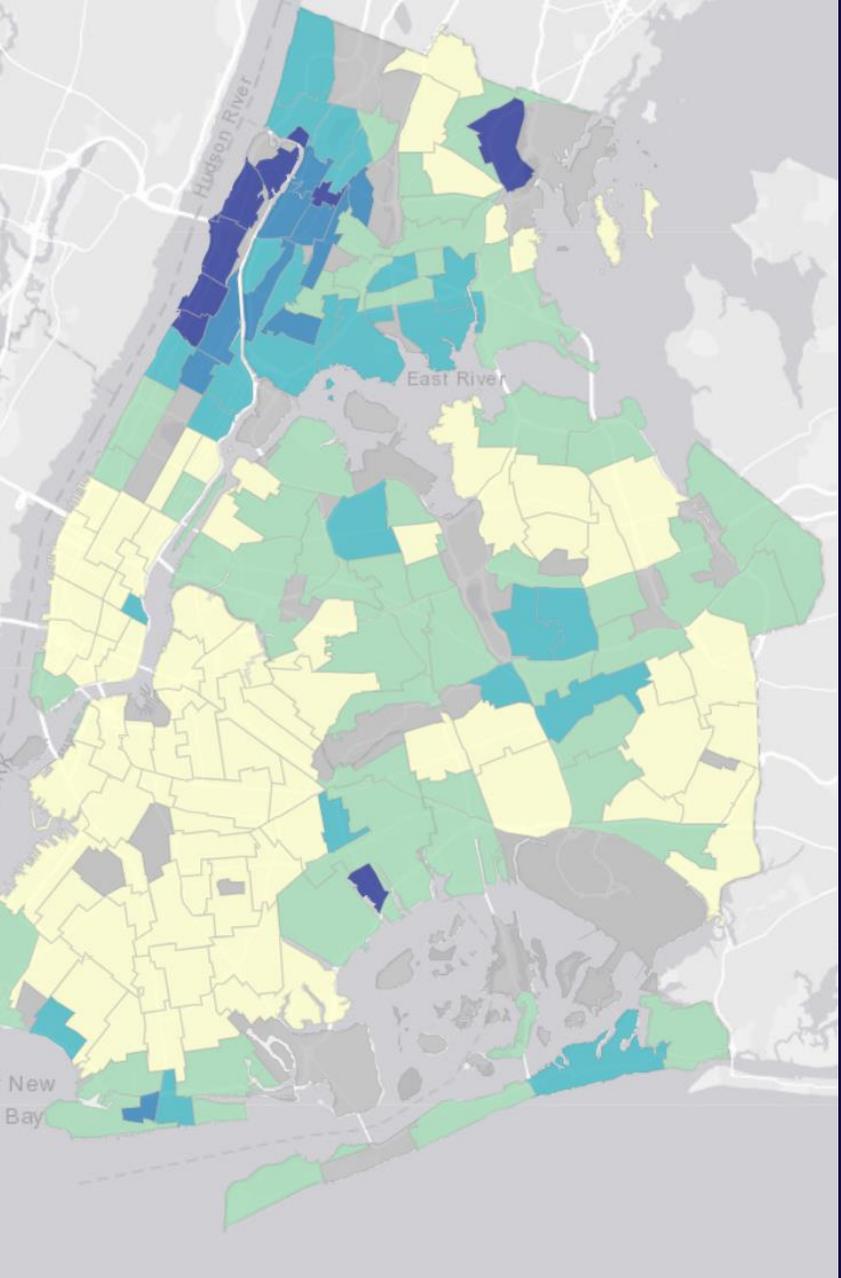
Household ISP Availability

Share of Households with a Single ISP

OneISP

- 56% to 90%
- 36% to 56%
- 19% to 36%
- 7% to 19%
- 0 to 7%
- Park/Cemetery/Uninhabited

ISP = Internet Service Provider



14% of NYC households have just one internet service provider (ISP) within a block of their home

Thousands of homes in Northern Manhattan, University Heights, and Co-op City have just one ISP available

A lack of internet access impacts populations in particularly severe ways

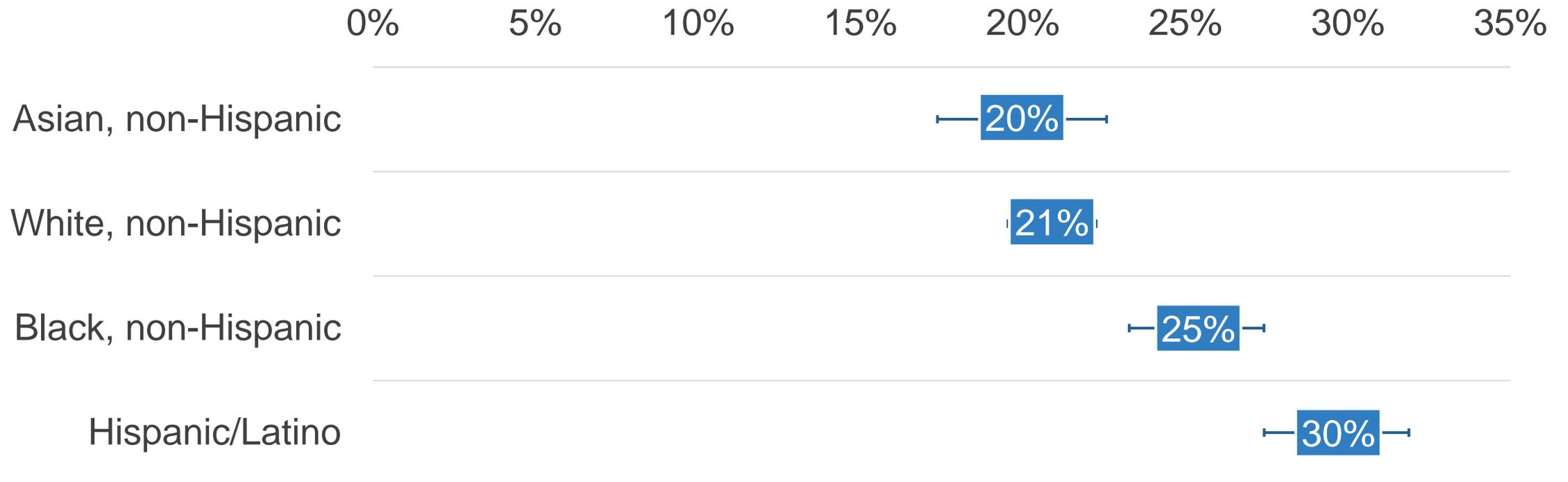
- More than 185,000 school-aged children (5 to 17 years old) in NYC have no broadband internet at home.
- More than 90,000 school-aged children in NYC have no internet access at all.
- Approximately 75,000 school-aged children in NYC have internet access but may lack a device to learn from.

A lack of internet access impacts populations in particularly severe ways

- More than 130,000 New Yorkers who reported TANF/cash assistance reciprocity in 2019 live in households without internet.
- More than 300,000 New Yorkers who reported SNAP reciprocity in 2019 live in households without internet.
- More than 400,000 New Yorkers who reported enrollment in Medicaid/other low-income insurance plans in 2019 live in households without internet.

Access to COVID vaccines: digital equity matters

Share of NYC seniors (65 years and older) living in households without internet, by race/ethnicity (2019 1-year est.)



Learn more from CCC's database

Visit
data.cccnewyork.org/

Keeping Track Online
THE STATUS OF NEW YORK CITY CHILDREN

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EXPLORE DATA RANK COMMUNITIES BY RISK MAP COMMUNITY RESOURCES CREATE LOCATION PROFILES

Thousands of data points from local, state, and federal sources for all New Yorkers to know the facts, share the facts, and be part of solutions in every community.

An estimated 93% of families with young children cannot afford center-based care in New York City. [Read our brief](#) on the unaffordable cost of child care and [explore our data](#) on child care affordability.

500,000 households have no internet access when it is more important than ever before as our [brief on NYC's digital divide](#) reveals.

Take action today
[Urge your representative](#) to pass a state budget that ensures all children and families can access the Early Intervention and Preschool Special Education services they need!

Inquiries, insights, and impact from NYC

Feedback for the ACS questionnaire



Inquiries, insights, and impact from NYC

Feedback for the ACS questionnaire



- Household expenditures on internet services (in addition to other utilities)

```
ELEP      Numeric      3
Electricity cost (monthly cost, use ADJHSG to adjust ELEP to constant
dollars)
bbb       .N/A (GQ/vacant/included in rent or in condo fee/no
         .charge or electricity not used)
3..999   .$3 to $999 (Rounded and top-coded)

GASP      Numeric      3
Gas cost (monthly cost, use ADJHSG to adjust GASP to constant dollars)
bbb       .N/A (GQ/vacant/included in rent or in condo
         .fee/included in electricity payment/no charge or gas
         .not used)
4..999   .$4 to $999 (Rounded and top-coded)
```

Inquiries, insights, and impact from NYC

Feedback for the ACS questionnaire

- Household expenditures on internet services (in addition to other utilities)
- Children's access to education, other services via internet



*Centre for Children's Rights,
Queens University, Belfast*

Inquiries, insights, and impact from NYC

Feedback for the ACS questionnaire

- Household expenditures on internet services (in addition to other utilities)
- Children's access to education, other services via internet
- Digital and technological literacy



“The benchmarks for digital literacy continue to evolve and will require ongoing community-level partnerships.”

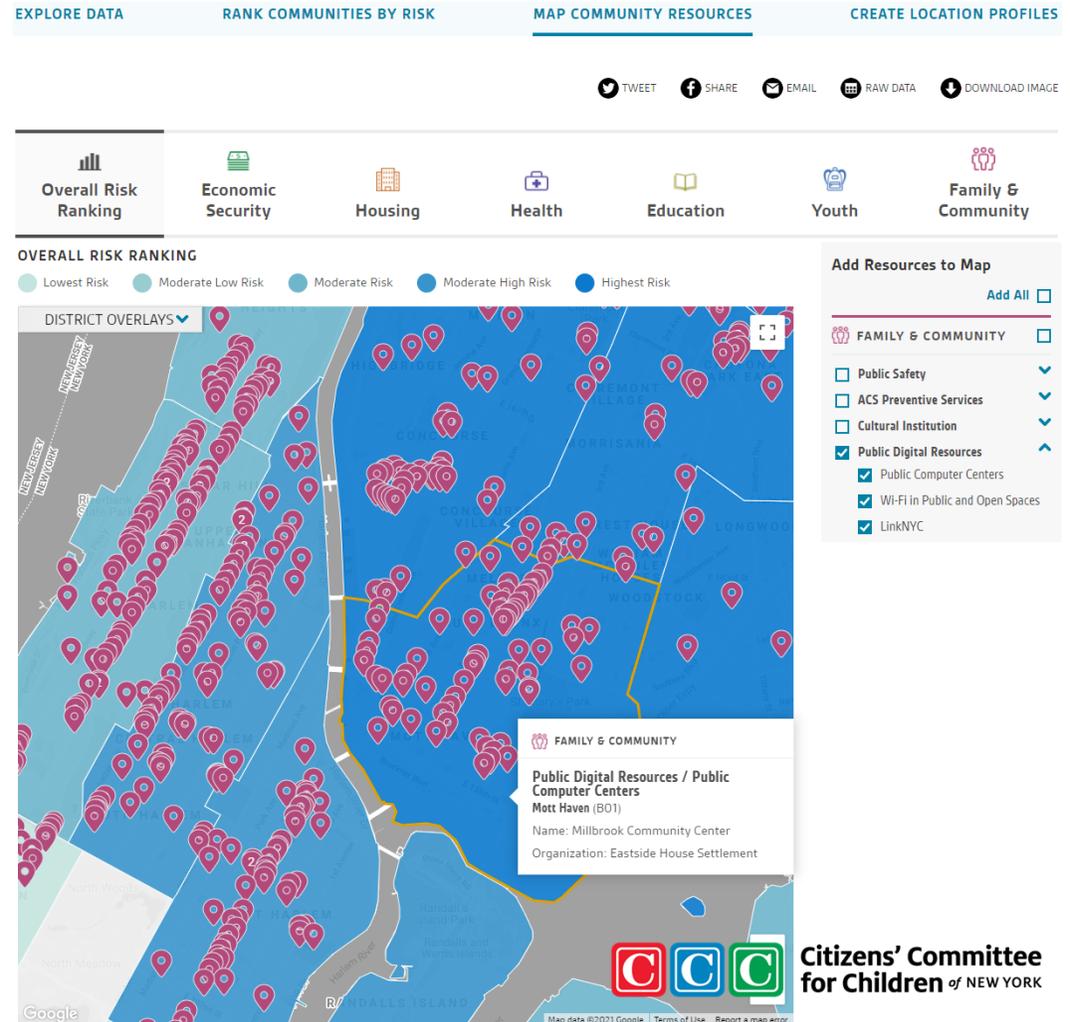
Francella Ochillo



Inquiries, insights, and impact from NYC

- Local sources of measuring digital access and resources, including:
 - Public computer centers
 - WiFi in Public and Open Spaces
 - LinkNYC kiosks

NYC OpenData

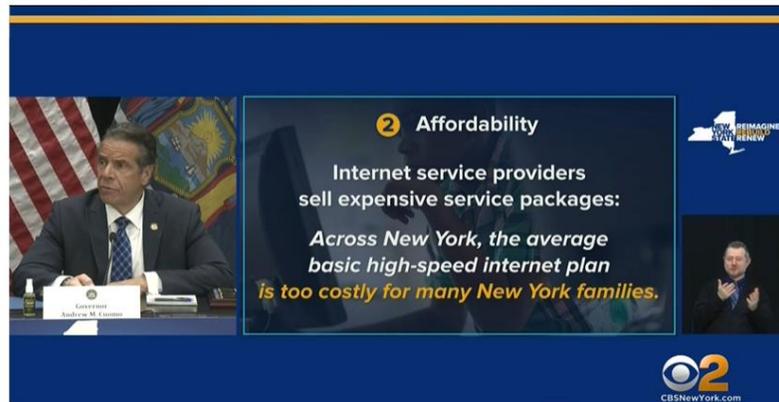


Inquiries, insights, and impact from NYC

- Mobilizing around the data to advocate for digital access and affordability

Gov. Cuomo Signs Bill Requiring Internet Providers To Offer \$15 Plans To Low-Income Households

By CBSNewYork Team | April 17, 2021 at 7:03 am | Filed Under: Andrew Cuomo, Digital Divide, Internet, Local TV, New York



REMOTE LEARNING | LEADERSHIP & MANAGEMENT | NEW YORK CITY DEPARTMENT OF EDUCATION

NYC should subsidize internet for low-income remote learners, Stringer says

About 100,000 school age children live in households without internet, Stringer estimates.

By Reema Amin | Updated Nov 6, 2020, 5:40pm EST

For low-income families who cannot afford reliable internet service for remote schooling, the city should offer subsidies, said New York City Comptroller Scott Stringer.

Families would get “internet passports” they could use to purchase broadband service, Stringer wrote Monday in a letter to Mayor Bill de Blasio and Chancellor Richard Carranza.

About 100,000 school age children live in 40,000 households without internet, Stringer wrote, citing an [April report](#) by the Citizens’ Committee for Children and his office’s analysis of Census data. It should cost at most \$16 million to cover internet costs for low-income families without such service for the rest of the school year, based on estimates of the cost per household using currently advertised internet fees, but the city could use its purchasing power to negotiate “well below” that, according to Stringer.

Thank you!

Questions?

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for Children *of* NEW YORK**