San Francisco’s Digital Deserts

How San Francisco Chinatown and other neighborhoods are left behind in the digital divide

English Report Briefing

April 4, 2024

caasf.org
Today’s Agenda

1. Welcome
2. Opening Remarks
   a. Amos Lim, Chinese for Affirmative Action
3. Report Overview
   a. Anisha Hingorani, Chinese for Affirmative Action
4. Panel Discussion
   a. Calvin Yan, Office of San Francisco Supervisor Aaron Peskin
   b. Jennifer Chan, Chinatown Community Development Center
5. Looking Ahead
   a. Anh Nguyen, California Department of Technology Office of Broadband and Digital Literacy
6. Questions & Answers
7. Call to Action
Opening Remarks
Report Overview
Background

- CAA staff witnessed community members experiencing internet connectivity challenges in Chinatown for many years.
- These disparities worsened for vulnerable neighborhood residents during COVID–19 and impacted community resiliency and recovery efforts.
- Despite government efforts and internet companies’ promises, the digital divide continues to persist in Chinatown.
- Unequal access to internet exacerbates racial inequities and limits opportunities.
- Internet access is no longer a ‘nice to have,’ but a basic need.
Research Plan

CAA staff and interns engaged in a months-long process to research the disparities in internet access in Chinatown:

- Reviewed federal, state, and local broadband internet policies and data
- Interviewed government, advocacy, and Chinatown stakeholders
- Analyzed home and business internet pricing and speeds for 105 addresses across all 11 supervisorial districts of San Francisco
- Tested internet speeds in-person
Report Findings
Chinatown is ‘underserved’ by cable internet

This graphic shows that according to FCC’s National Broadband Map data, unlike the rest of San Francisco, many households in Chinatown lack access to residential cable internet service.

Almost half of Chinatown households (44%) do not have an internet broadband subscription.
Chinatown is ‘underserved’ by cable internet

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Source: FCC National Broadband Map, November 2023
Fiber internet is ‘virtually nonexistent’ in Chinatown

This graphic shows that according to FCC’s National Broadband Map data, fiber internet in Chinatown is virtually nonexistent.

The map illustrates what advocates call ‘digital redlining,’ which describes discriminatory practices that exclude poor communities of color from digital investments and draws parallels to historical practices of redlining.

Source: FCC National Broadband Map, November 2023
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Source: FCC National Broadband Map, November 2023
Chinatown community members lack choice in internet options

There are three cable and fiber internet providers that offer high speed plans in Chinatown. However, fiber is virtually non-existent, meaning residents only have one option (Comcast) for high-speed internet.

Chinatown community members do not have the same options to high-speed internet compared to the rest of San Francisco. This lack of choice fuels high prices for Chinatown customers.
Chinatown experiences slow, unreliable, and expensive internet

According to our conversations and survey, Chinatown residents who do have internet access find it slow and unstable, making it difficult to use videoconferencing or streaming platforms. These issues are especially prevalent in single room occupancy residences (SROs).

“It takes me 30 minutes to send 3 photos.”

“When my child was halfway through reading, the internet got stuck and was so slow.”

“The internet is slow and sometimes disconnects for no reason.”

“When you are watching a video, you find that you cannot push or update, and the network is suddenly disconnected.”

“Sometimes when video chatting with friends or loved ones, the picture freezes and sometimes stutters.”
Chinatown experiences slow, unreliable, and expensive internet

Broadband internet can cost between $30-$60 a month in Chinatown. This is unaffordable for many families in Chinatown, where one-third live in poverty and which has the lowest median income in the city ($31,000).

Higher speed plans are often priced with an introductory discount, where prices surge after one year. These are predatory practices for Chinatown’s low-income residents who rely on internet access for education, jobs, and healthcare.

Internet service providers offer discounted plans for eligible low-income households but this requires digital and English literacy to sign up. Research shows that these types of plans designed for low-income families are too slow to be relied on.
AT&T offers slower plans in high-poverty neighborhoods for the same price as faster plans in low-poverty neighborhoods

For AT&T plans, 23% of high-poverty addresses had access to plans with 100 Mbps or faster speeds compared to 50% of addresses in low-poverty neighborhoods.

Pricing comparisons revealed that slower plans in high-poverty neighborhoods cost about the same as high-speed plans in low-poverty neighborhoods.

Higher poverty neighborhoods get less for the same price.

Source: CAA, July 2023
Case Study #1: Verizon offers higher speeds outside of Chinatown for the same price

The Verizon plan available at the North Beach address offers maximum speeds that are six times higher than the maximum speeds available at the Chinatown address for the same cost despite being only 0.4 miles, or five blocks, apart.

<table>
<thead>
<tr>
<th>Chinatown Address</th>
<th>North Beach Address</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LTE Home</strong></td>
<td><strong>5G Home</strong></td>
</tr>
<tr>
<td>Home internet you can count on.</td>
<td>Wireless home internet, powered by 5G Ultra Wideband.</td>
</tr>
<tr>
<td>$60 /mo</td>
<td>$60 /mo</td>
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<tr>
<td>$50 with Auto Pay.</td>
<td>$50 with Auto Pay.</td>
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<tr>
<td>$25 New with any Unlimited plan &amp; Auto Pay.</td>
<td>$25 New with any Unlimited plan &amp; Auto Pay.</td>
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<tr>
<td><strong>Powered by Verizon</strong></td>
<td><strong>Powered by 5G Ultra</strong></td>
</tr>
<tr>
<td>Award-winning 4G LTE network</td>
<td>5G Ultra Wideband</td>
</tr>
<tr>
<td>Download speeds of 25 - 50 Mbps</td>
<td>Download speeds of 85 - 300 Mbps</td>
</tr>
<tr>
<td><strong>Equipment and features</strong></td>
<td><strong>Equipment and features</strong></td>
</tr>
<tr>
<td>Wi-Fi 6 router included</td>
<td>Wi-Fi 6 router included</td>
</tr>
<tr>
<td>2 Year Price Guarantee.</td>
<td>2 Year Price Guarantee.</td>
</tr>
</tbody>
</table>

Source: CAA, July 2023
Case Study #2: Chinatown businesses experience slower internet compared to Financial District businesses

Anecdotal evidence suggests that Chinatown community members do not consistently experience speeds advertised in their plans.

Internet Service Providers (ISPs) are not required to publish actual or guaranteed speeds.

Our case study suggests that the Financial District has greater accessibility to faster speed and potentially more affordable internet than in Chinatown.

Poor internet access impacts businesses in Chinatown, with merchants losing out on revenue-generating opportunities.

Figure 5. Average Speed Test Results in Chinatown and Financial District Businesses (Mbps)

Source: CAA, July 2023
Chinatown internet users experience subpar internet support

Signing up for internet service is a challenge for limited English proficient (LEP) communities due to the lack of computers and in-language resources. 47% of Chinatown households do not own a computer.

LEP customers find it difficult to connect with ISPs when issues or service disruptions occur. In Chinatown, internet service requests can sometimes take up to three months to fix.

AT&T and Comcast lack adequate customer and technical support in Cantonese, the primary language spoken by Chinatown residents. Chinatown internet users do not receive timely and adequate technical support in-language.

Chinatown residents experience a form of digital discrimination, or unequal access to broadband due to income, race, ethnicity, color, religion, or national origin.
Chinatown community-based organizations and service providers have gone above and beyond to address the digital equity gap for local residents

Chinatown organizations have connected with ISPs for grants to cover internet and device costs, hosted computer labs for students who lack internet at home, helped residents sign up for internet subsidies, provided in-language digital literacy training, and more. This is often separate from and on top of their regular work duties.

Chinatown residents receive critical internet assistance from local CBOs and direct service providers who are trusted to support residents’ health, educational, and economic needs.
Recommendations
Policy Recommendations

We urge the city to:

1. **Expand San Francisco’s Fiber to Housing Program** and provide free high-speed fiber internet to all low-income neighborhoods through robust community collaboration.

2. **Hold ISPs that service San Francisco residents accountable** to providing low-cost, quality internet access by requiring all ISPs to:
   a. Publish guaranteed minimum speeds.
   b. Provide price information, including price increases, time-limited discounts, and low-income plans in plain and accessible language.
   c. Provide customer and technical support in the top 10 most-spoken languages in the city, according to the latest Census data.

3. **Publish the Digital Equity Scorecard** by July 1, 2024 and commit to annual data collection and reporting.
Panel Discussion
Looking Ahead
Questions & Answers
Calls to Action
Calls to Action

● **Read and share the report**
  ○ Executive summaries available in English, Chinese (Traditional and Simplified), Spanish, Tagalog, Vietnamese, and Korean

● **Click to send emails to the Mayor and Board of Supervisors**
  ○ Urge them to take action on our policy recommendations to address digital inequity in San Francisco
  ○ Stay connected to receive policy campaign updates

● **Connect with our policy team to continue the conversation**
  ○ Contact CAA’s Policy Manager: ahingoran@caasf.org