

DIGITAL REDLINING 101: Systematic Underinvestment by Internet Service Providers (ISPs) in Low-Income Communities of Color is a Driver of Digital Inequity

Access to the internet is required to fully participate in modern society, a utility alongside electricity and water. However, many Los Angeles communities - especially low-income communities and communities of color - do not have access to fast, affordable, and reliable broadband.

Research shows that Los Angeles County's Digital Divide is rooted in part in widespread underinvestment in broadband infrastructure in low-income communities and communities of color, resulting in limited access to quality internet options with high speeds at reasonable costs. This pattern of disinvestment is called "digital redlining."

The Public Advocates Office of the California Public Utilities Commission defines *Digital Redlining*¹ as practices which:

- Limit investments in the installation, expansion, or upgrading of internet service infrastructure within specific geographic areas.
- Limit broadband availability or adoption in specific areas. For example, redlining could include pricing practices that make broadband less affordable, or marketing practices that under-promote broadband services.
- Limit broadband access, impact service quality, and make broadband services less affordable to specific communities.

Why "Redlining"?

In the 1930s, The Home Owners' Loan Corporation (HOLC) created "Residential Security" maps of major American cities. These maps were used by loan officers, appraisers and real estate professionals to drive lending decisions. Neighborhoods considered high risk or "hazardous" - the lowest score on the maps - were often "redlined" by banks, which simply refused to offer mortgage loans for properties in those areas. Redlining was explicitly race-driven. Areas that were designated as "hazardous" or "declining" received that designation because they were "infiltrated" with "undesirable populations."

¹ [Reply Comments of the Public Advocates Office on the May 28, 2021 Administration Law Judge Ruling, Rulemaking 20-01-001 of the California Public Utilities Commission, p1](#)



Boyle Heights was designated “hazardous,” on the basis of its 50% “foreign families,” including “Russian, Polish, Armenian, Jews, Slavs, Greeks, American Mexicans, Japanese, and Italians,” and “subversive racial elements increasing.”

Jefferson and Arlington Park were also designated “hazardous,” thanks to 20% “foreign families” and 45% “Negros,” noting, “Negroes and Japanese increasingly numerous.”

San Gabriel was saddled with a “hazardous” designation despite its “0% Negro” population with this jaw-dropping explanation:

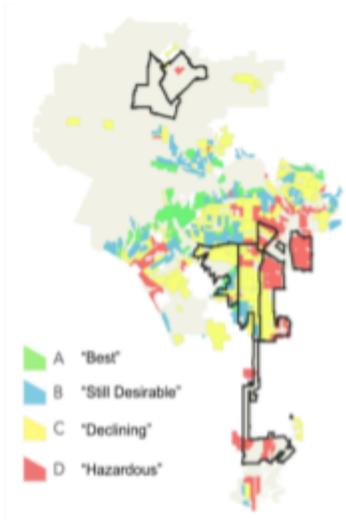
“The vast majority of the population, while American-born, are still “peon Mexicans”, and constitute a distinctly subversive racial influence. Many of the Mexican-born inhabitants were repatriated during the depression years and their places in many cases are said to have been taken by hybrid Mexicans of American birth who are a distinctly less desirable type. Construction and maintenance are uniformly of poor quality and area has an extremely shabby and ill-kept appearance. This area is considered a menace to this whole section and pressure is being exerted to confine the population and keep it from infiltrating into other districts. The area is accorded a “medial red” grade.”

Meanwhile, Beverly Hills’ “desirable” designation is credited to its 0% “foreign families,” and 0% “Negroes.”²

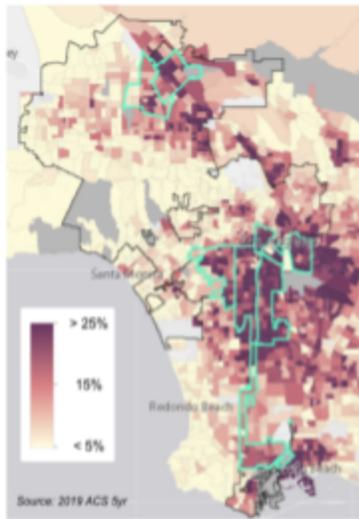
While this type of neighborhood classification is no longer legal thanks to the Fair Housing Act of 1968, the effects of this racially-driven disinvestment are readily apparent today.

The City of Los Angeles Civil + Human Rights and Equity Department produced maps comparing HOLC redlined communities and a range of present-day indicators, including broadband adoption rates. The results are striking:

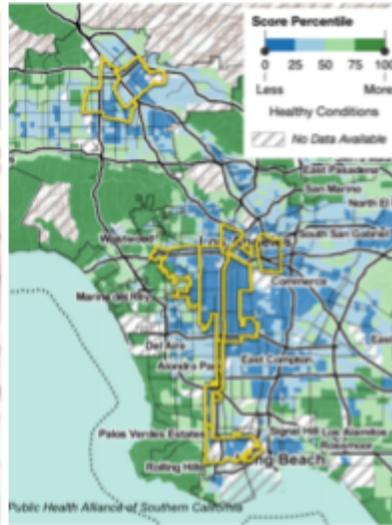
² See “[Mapping Inequality: Redlining in New Deal America](#)” for interactive HOLC maps and scans of original area descriptions.



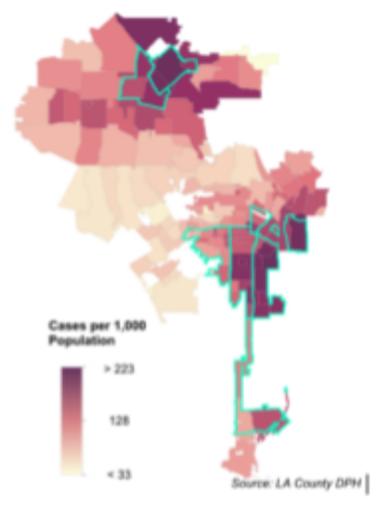
1939 HOLC Redlining Map



2019 % Households with no Internet

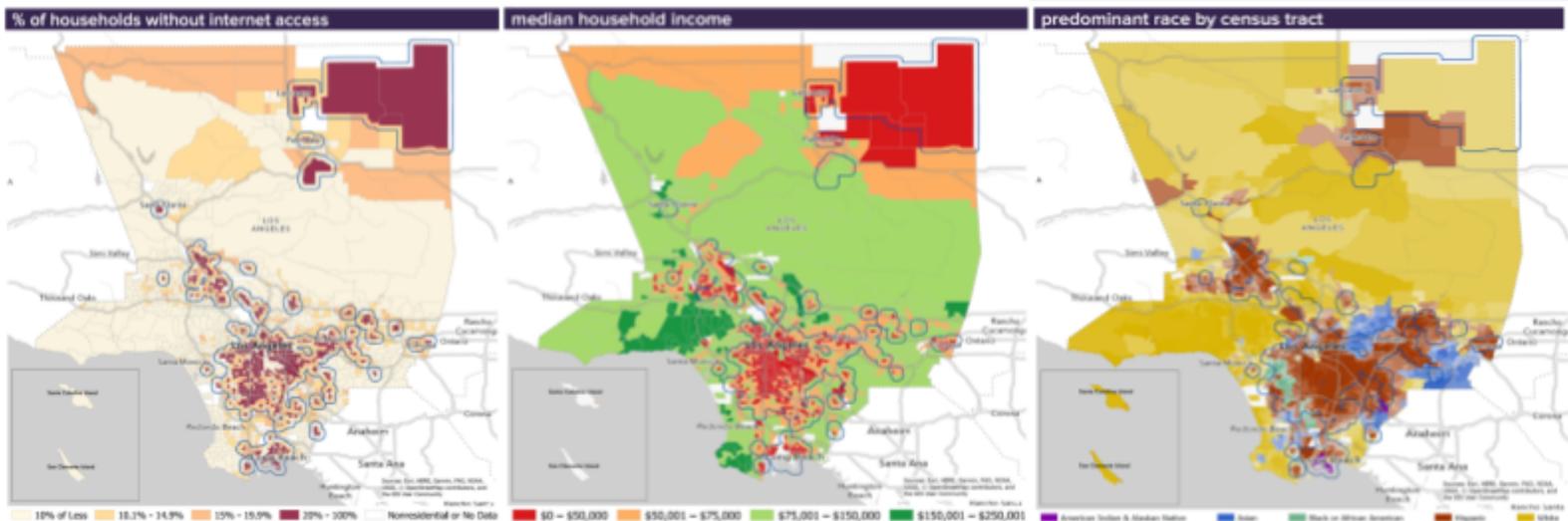


2018 Healthy Places Index



Cumulative COVID-19 Case Rate (as of April 28, 2021)

The Los Angeles County's Internal Services Department documented the persistent connection between race, income, and lack of access in three maps:



As the Public Advocates Office at the CPUC noted, "redlining practices produce differential *outcomes* related to broadband availability and affordability for different communities, regardless of whether those outcomes are the product of discriminatory *intent*."³ The data is

³ [Reply Comments of the Public Advocates Office on the May 28, 2021 Administration Law Judge Ruling, Rulemaking 20-01-001 of the California Public Utilities Commission, p8](#)



exceedingly clear: the outcomes of digital redlining are wildly inequitable for low-income communities and communities of color across Los Angeles.

What is the Evidence for Digital Redlining?

Beyond the clear outcomes of redlining, multiple investigations have found and documented clear evidence that ISPs are underinvesting in low-income communities of color.

USC Professor Hernan Galperin published a study utilizing the ISP’s own data (self-reported as required to the Federal Communications Commission) to document underinvestment as measured by competition and upgraded fiber infrastructure in two demographically different areas of Los Angeles. Dr. Galperin found that between 2014 and 2017, the whiter, wealthier communities in Glendale went from about 50% of areas with at least two options to 100% choice, and about 60% of Glendale was upgraded to fiber. Meanwhile, the same data showed that the predominantly Black and Latino communities of South LA, Watts, and Compton saw no increase in competition, and remained left behind entirely from fiber upgrades: they had no fiber infrastructure in 2014, and still had none in 2017.⁴

Chart 1. California State

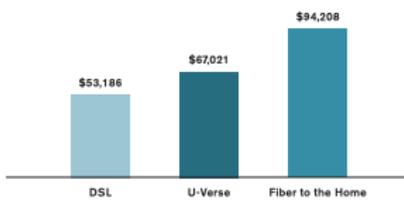


Chart 2. Los Angeles County

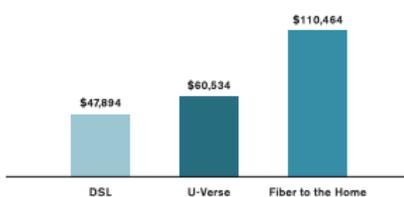
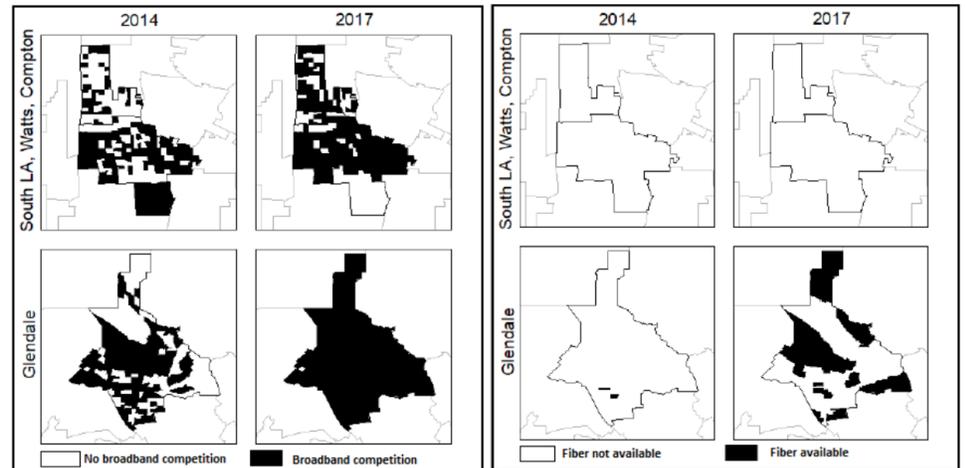


Figure 9: Broadband competition and fiber availability in South LA vs Glendale (2014 and 2017).



Source: www.tinyurl.com/DigitalDivideLA

UC Berkeley’s Haas Institute for a Fair and Inclusive Society published a detailed analysis of AT&T’s fiber deployment, again using data provided by AT&T to the FCC as well as their advertised rates and services. The analysis “reveals disturbing trends that will exacerbate the digital divide in California. First, AT&T’s initial fiber-to-the-home deployment is disproportionately focused on high-income communities. Second, AT&T has left too many

⁴ [Who Gets Access to Fast Broadband? Evidence from Los Angeles County 2014-17](#)



Californians stuck in the slow lane on the information highway, unable to participate fully in the expanding digital economy. Despite its large size and profitability, AT&T has fallen short of providing equitable access to high-speed broadband in California.”⁵

The study found that the concentration of broadband investment in wealthy communities was worst in Los Angeles County, where the median household income for households benefiting from fiber-to-the-home upgrades was nearly double that of the households left in the slow lane by AT&T.

What Do the ISPs Say?

In official filings in response to the California Public Utilities Commission’s inquiry into redlining, ISPs deny and deflect without specifically countering any of the research that clearly documents redlining practices. Moreover, they actively discourage the Commission from thoroughly investigating the issue:

- AT&T: “AT&T does not engage in redlining. The Ruling’s use of the highly-charged term “redlining” – which has historically implied intentional discrimination – is not relevant to, and creates an unnecessary distraction from, the task at hand, which is to ensure all Californians have access to broadband services ... A proper assessment of broadband deployment should account for all technologies, both wireless and wireline. In this regard, AT&T’s broadband offerings cover virtually all Californians”⁶
- Comcast: “In short, redlining is not a systemic problem in California, and it would not be productive or realistic for the Commission to embark on a formal “investigation” of this topic.”⁷
- California Cable and Telecommunications Association (CCTA): “...the Commission should decline to move forward with an unneeded and undefined investigation into baseless allegations of systemic “digital redlining” practices.”⁸

The ISPs and the Associations representing their interests also claim that:

- 95% of California households have access to broadband, based on data they report to the FCC that counts an entire area as “served” if a single address (which doesn’t have to be a home or business) in it has

⁵ [AT&T’s Digital Divide in California, p4](#)

⁶ [OPENING COMMENTS OF AT&T CALIFORNIA \(U 1001 C\) ON THE FIRST AMENDED SCOPING MEMO AND RULING](#)

⁷ [REPLY COMMENTS OF COMCAST PHONE OF CALIFORNIA, LLC \(U-5698-C\) ON ASSIGNED ADMINISTRATIVE LAW JUDGE’S RULING](#)

⁸ [REPLY COMMENTS OF THE CALIFORNIA CABLE AND TELECOMMUNICATIONS ASSOCIATION](#)



access. Notably, this data is widely acknowledged to be problematic, and is currently under review at the FCC.⁹

- There is no meaningful difference between wireless and wired (fiber or cable) broadband service, and that households with lower-income families of color do not have wired broadband subscriptions because they prefer not to have the same fast and reliable service their wealthier, whiter neighbors enjoy.¹⁰ Surveys clearly demonstrate this is not the case: the large majority of households without broadband subscriptions at home say the reason is there is not an affordable option.¹¹

About the CCF Digital Equity Initiative

The *Digital Equity Initiative* is a multi-year project of the California Community Foundation that will seed a digital equity movement in Los Angeles County with the power and capacity to successfully advocate for systems-change solutions that provide for fast, reliable, and affordable broadband for all Angelenos. While all aspects of digital equity are critical, The CCF Digital Equity Initiative is not at present focused on digital literacy or devices. Our efforts are centered on empowering and building capacity within affected communities to fight for and win equitable access to broadband that will make literacy and devices most useful. For more information, email digitaldivide@calfund.org, or call Shayna Englin at 323.217.3565

⁹ [CNET: Millions of Americans can't get broadband because of a faulty FCC map. There's a fix.](#)

¹⁰ [CTIA COMMENTS ON THE ADMINISTRATIVE LAW JUDGE'S EMAIL RULING ORDERING ADDITIONAL COMMENTS ON MIDDLE-MILE DATA COLLECTION](#)

¹¹ [Statewide Survey on Broadband Adoption 2021, p16](#)