CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Jill Bourne

SUBJECT: **Digital Empowerment and Broadband Strategy**

DATE: November 24, 2025

Approved  Date: 12/1/25

COUNCIL DISTRICT: Citywide

RECOMMENDATION

(a) Accept the status report on the Digital Equity Assessment and recommendations to renew the City's 2017 Broadband and Digital Inclusion Strategy.
(b) Adopt the Digital Empowerment and Broadband Strategy, affirming and continuing the City's hybrid approach to telecommunications partnerships.
(c) Adopt a resolution to formally utilize the Federal Communications Commission's broadband speed definition of 100/20 Mbps and aspirational future speed goal of 1 Gbps/500 Mbps.
(d) Direct staff to implement the Digital Empowerment and Broadband Strategy Work Plan and return to the City Council in 2027 with a status update.

SUMMARY AND OUTCOME

The Digital Empowerment and Broadband Strategy report outlines updated strategies to close the digital divide in San José and provides the first comprehensive assessment of the City of San José's (City) digital equity efforts since the adoption of the Broadband and Digital Inclusion Strategy in 2017. Acceptance of this report and approval of the recommended strategies will direct staff to continue implementing a citywide, public-private partnership and data-informed approach to digital inclusion, with a focus on universal connectivity, affordability, and digital skill-building.

Since 2017, San José has made substantial progress in expanding internet access, digital skills training, and community-based connectivity programs. However, the Digital Empowerment Assessment illustrates that barriers to internet adoption remain. Approximately 12% of San José households are still unconnected or under-connected. Cost remains a primary barrier, despite broader availability of low-cost plans. Access to reliable, high-speed broadband is constrained by a lack of provider competition and limited availability of Gigabit-speed services across San José.

The updated strategy positions San José to address these challenges and adapt to evolving technologies while fostering an inclusive digital environment where all residents can thrive. The strategy is structured around three core goals:

Goal 1: Close the Digital Divide in San José Through Digital Empowerment;
Goal 2: Ensure Broadband is Available to All and Future Ready; and
Goal 3: Provide Best-in-Class Broadband Processes and Enabling Structures.

BACKGROUND

The City's digital inclusion journey began after the realization in 2016 that San José lagged behind peer cities in creating an enabling environment for all residents to benefit from the opportunities of the modern digital economy. The City conducted a market and community assessment to better understand the digital divide in San José, which was completed in 2017 and identified the following findings:

- Approximately 95,000 San José residents were "unconnected" with no internet access or device at home.
    - Affordability: More than 50% of survey respondents cited affordability of internet plans and devices as the predominant reasons for not accessing the internet at home.
    - Safety and Fear: Beyond inadequate infrastructure and cost, 20% of families stated that they were choosing not to adopt the internet because they were fearful of harms present on the internet, such as fraud and scams, cyberbullying, and general insecurity associated with a lack of understanding of how to use the technology.
    - Infrastructure: In 2017, San José significantly lagged peer cities in home and mobile internet speeds and the deployment of technologies that could provide reliable high-speed broadband.

Informed by the assessment findings, City Council approved the City's Digital Inclusion and Broadband Strategy on November 13, 2017. The strategy adopted a hybrid approach to broadband deployment, prioritizing public-private partnerships that stimulate and accelerate private investments, and an intentional focus on delivering digital inclusion and equity programs to close the digital divide. The City Council opted not to pursue the creation of a municipal internet service program. This decision was based on the substantial and ongoing costs, as well as the risks associated with building and managing telecommunications infrastructure and services.

In 2018, the City Council approved public-private partnership agreements with AT&T, Verizon, and Mobilitie (on behalf of Sprint, now merged with T-Mobile) for small cell installations on City-owned streetlights. Based on the shared goal of expediting deployment of technology that expands access to modern and reliable connectivity using both wired and wireless networks, these public private partnership agreements established batch discount lease rates for streetlight attachments and established a

timeline for City permit review. In 2019, the City Council approved a public-private partnership with T-Mobile to expedite citywide macro site deployment. The partnership concluded on December 1, 2022, with 188 sites permitted and average permit review time improved from several months to within two weeks. A summary of small cells permitting performance is available in Attachment A.

The City Council further directed the City Manager to establish a "Digital Inclusion Fund" (DIF) within the General Fund to fund City programs and initiatives aimed at closing the digital divide in San José. The DIF is supported by the lease revenue from telecommunications installations on City streetlights, as well as donations from corporations and philanthropic organizations. Leveraging the DIF, the Administration developed the Digital Inclusion Grant Program to fund community-based organizations' digital adoption programs, which focus on supporting vulnerable populations, such as low-income youth, the elderly, or disabled residents. The first distribution of grants to community-based organizations was approved by the City Council on February 25, 2020. A summary of grant program outcomes is available in Attachment B.

In response to the COVID-19 pandemic, associated stay-at-home orders and the drastic shifts to remote work and distance learning, the City activated the Digital Inclusion Branch in the Emergency Operations Center. The Digital Inclusion Branch, led by the Library and staffed by representatives from Information Technology, Public Works, and the City Manager's Office, developed the Digital Inclusion Expenditure Plan, which was approved by the City Council in June 2020. The Expenditure Plan identified strategic investments and partnerships to fund 15,800 hotspots for student and community use, the expansion of City-funded outdoor Wi-Fi networks at select community centers, libraries, and parks facilities, and leveraged federal funding to rapidly expand the existing Community Wi-Fi program in partnership with East Side Union High School District (District) from three networks to eight by 2023. The distribution of these key investments was guided by the Digital Inclusion Priority Index, which uses census data to determine where there are high concentrations of need for connectivity and devices.

Changes in technology, specifically a shift away from streetlight attachments to monopole and building installations by telecommunications providers, have resulted in lower revenues to the DIF. On February 15, 2022, the City Council approved staff's recommendation to complete an assessment of the Digital Inclusion Grant Program to define the City's "next phase" for achieving its digital inclusion goals and to preserve the financial health of the DIF, due to declining revenue. In April 2023, the City Council approved staff's recommendation to transition the grant program to be managed by the Library Department, with the San José Public Library Foundation serving as the fiscal agent. This change was made to reduce costs to the DIF and further align staff efforts in digital inclusion programming.

To further bolster the DIF, the City Council approved staff's recommendation on June 13, 2023, to transfer 10% of the lease revenue from new macro site lease agreements with telecommunications providers for macro cell and tower installations on City-owned buildings and land to the DIF.

To streamline and centralize the City's strategic approach to digital equity, the Broadband Manager and a Broadband Permit Analyst staff positions that were previously budgeted in the City Manager's Office and Information Technology Department were moved to the Library Department (San José Public Library, SJPL, or Library) in June 2024. These Library positions are funded on an ongoing basis by the DIF.

Status reports and program updates have been approved by the City Council from 2022 through 2024, including through the Education and Digital Literacy Annual Report. Improving digital empowerment in communities with the greatest barriers to information and technology access directly advances the work of the citywide Children and Youth Services Master Plan (Master Plan), with intentional focus on providing direct support and safety net connectivity services in the Mayfair and Poco Way demonstration areas.

This is the first comprehensive assessment of the citywide strategy that has been conducted and presented since the original 2017 Digital Inclusion and Broadband Strategy was approved by the City Council.

ANALYSIS

Digital Equity Assessment and Renewed Citywide Strategy

To conduct a thorough assessment of the City's investments in digital empowerment and an environmental scan of the current state of digital need in San José, the City contracted with Guidehouse, Inc., the consulting partnership that supported the development of the City's original 2017 Broadband and Digital Inclusion Strategy. The assessment reviewed data from the Federal Communications Commission (FCC), American Community Survey, Ookla Speedtest data, and other publicly available and reputable datasets, as well as information from local programs and direct feedback from residents and community partners. A scan of municipalities supporting specialized funding or grant programs focused on digital inclusion was also conducted. The key findings regarding the current state are summarized below and detailed in the full text of the renewed Digital Empowerment and Broadband Strategy, which is provided as Attachment C.

Access:

- Internet Adoption: In 2017, 15% of households in San José lacked reliable home internet access. By 2023, the percentage decreased to 12%. Affordability is the primary driver of this gap, disproportionately affecting those with lower levels of income and educational attainment, seniors, and Black and Hispanic/Latino residents.
- Choice in Service Providers: In 2017, about 90% of households in San José could receive service from only 1 or 2 providers. In 2024, the percentage decreased to 68%, with 32% of San José having a choice of three or more providers.
- Lack of Infrastructure: Mobile homes and multifamily housing are most impacted by inadequate broadband infrastructure and limited options for service providers.
- Fiber: In 2017, 1% of San José had access to fiber internet service. By 2024, the percentage increased to 37%, providing access to future-ready broadband with the capability to offer Gigabit speeds and beyond. However, San José lags the national level of 56% fiber availability. Fiber access varies widely across major cities due to factors such as local competition, high deployment costs, and complex network compositions that include both wired and wireless infrastructure. San José's large and dispersed geography, as well as high local cost of labor and goods, adds to the deployment challenges for telecommunications companies.
- Cable: In 2017, most census blocks in San José had access to cable that met the basic speed of 25 Mbps download and 3 Mbps upload (25/3 Mbps). In 2024, cable availability is 99% at the basic speed of 100/20 Mbps, with Gigabit and higher speeds available as well, through DOCSIS 4.0 (Data Over Cable Service Interface Specification version 4.0) upgrades introduced in 2023 and currently being deployed.
- Digital Subscriber Line (DSL): In 2017, most census blocks in San José had access to a DSL that met the basic speed of 25/3 Mbps. DSLs can no longer meet modern internet speed requirements and is being retired by telecommunications companies. Currently, only 10% of DSL connections achieve the basic speed benchmark of 100/20 Mbps.
- Home Wireless: In 2017, fixed wireless access was only available for business internet service in San José. In 2024, 52% of San José has access to fixed wireless access internet service, including home internet, at 100/20 Mbps.
- Mobile Wireless: Mobile 5G service covers 91% of San José, meeting the FCC's minimum speed of 35/3 Mbps for outdoor mobile service. However, service quality can vary due to signal strength, network congestion, environment, and provider-specific operations. While coverage has improved since 2017, mobile wireless remains limited in the southern foothills of Districts 2 and 10.
- Speed Performance: Internet speeds in San José have improved since 2017 but continue to lag peer cities in the U.S. based on home internet and mobile service speeds. In 2017, typical home internet download speeds in San José ranged from 26 to 54 Mbps. Table 1 shows San José rankings among the 100 major

U.S. cities, according to the 2024 Ookla Speedtest data:

Table 1: Ookla Speedtest Data

Service	San José Ranking	Speed (Median)
Home Internet		
- Download	37th	264 Mbps
- Upload	55th	35 Mbps
- Latency	30th	20 ms
Mobile Wireless		
- Download	89th	132 Mbps
- Upload	73rd	11.5 Mbps
- Latency	23rd	42 ms

Affordability:

- Internet Service Cost: Despite growth in below-market-rate internet plans, cost remains a significant barrier to internet adoption, with many low-income families unable to afford the California average $83.60/month[1] internet bill.
- Free Outdoor Wi-Fi: Community Wi-Fi provided in partnership with the District is now fully constructed, serving over 200,000 users with 76,800 unduplicated unique devices per month. The eight Community Wi-Fi networks have ongoing District funding for maintenance and periodic technology upgrades, sourced through the District's voter-approved Technology Bond. However, scaling Community Wi-Fi beyond its current deployment is prohibitive due to high capital and operating costs. To explore options for upgrading the existing Community Wi-Fi networks starting in 2026, the City secured a $500,000 Local Agency Technical Assistance grant from the California Public Utilities Commission in March 2023. The grant is funding a pilot of wireless technologies to validate the potential to deliver 100 Mbps symmetric speeds while reducing costs. The pilot concluded in fall 2025 and the results are under review.
- Free Hotspot and Connected Device Lending: Provided as an emergency program supported through temporary Covid-19 funding sources between 2020 and 2024, more than 15,700 hotspots and 1,500 laptops with mobile internet services were available for lending through libraries for student and community use, with an overall 98% checkout rate over the duration of the program. Due to the high cost of monthly mobile internet service as well as the lifecycle for replacement, maintenance, and management of devices, the program was retired in August 2024 when emergency funding was exhausted. The Library's SJ Access lending program continues to offer 950 devices, including laptops, Chromebooks, and iPads that can connect to the internet through public or private Wi-Fi, with an overall checkout rate of 98%.

[1] Bar, F., Galperin, H., Le, T., "2023 Statewide Digital Equity Survey" August 2023. Accessed at 2023 Statewide Digital Equity Survey – University of Southern California (broadbandforall.cdt.ca.gov)

- Device Cost: 5% of San José households rely exclusively on a smartphone without access to any other type of device, a 2% increase compared to 2017. The highly variable cost and capabilities of computers, laptops, tablets, and smartphones continue to be a key factor impacting full participation in the digital economy, as well as a lack of skill using the devices, related software, and the internet, particularly for seniors and those with lower levels of income and educational attainment.
- Federal Subsidies*:* In February 2021, the FCC launched a temporary $50/month internet subsidy program called the Emergency Broadband Benefit (EBB). The EBB also provided a one-time device discount of up to $100. The EBB transitioned to the Affordable Connectivity Program (ACP) on December 31, 2021, intended as a long-term successor program continuing the one-time device discount and a $30/month internet discount. Due to a lack of renewed funding by Congress, the ACP ended on June 1, 2024, when all funds were expended.
- Impact of ACP Termination: At its conclusion, approximately 39,900 households in San José were enrolled in the ACP, covering approximately 63% of the estimated 62,900 total eligible San José households. Together, the ACP discount saved enrolled households an estimated $1,197,000 a month on internet service. Through engagement with ACP enrollees, staff estimates that approximately 16% of those enrolled chose to cancel their internet service when the ACP subsidy ended, with most citing affordability of comparable plans as the reason for cancellation.
- Universal Service Fund (USF): The Telecommunications Act of 1996 directed the FCC to ensure access to telecommunications services for all Americans, particularly schools, libraries, and rural areas. In response, the FCC established and administers the USF, which supports programs that promote universal connectivity. The USF is funded by mandatory contributions from telecommunications providers, who often pass these costs on to consumers as a line item on phone bills. The USF helps fund critical programs for low-income individuals, educational institutions, libraries, and underserved communities. On March 26, 2025, the U.S. Supreme Court heard a challenge to the USF funding structure. On June 27, 2025, the Supreme Court affirmed the constitutionality of the FCC's USF funding mechanism and held that it does not violate the Constitution's nondelegation doctrine. Following this decision, attention now turns to modernizing the USF and advocating for reforms, such as USF funding an ACP successor subsidy program.

SJ Access Initiative – Digital Skill Building and Technology Programming:

- Digital Literacy Program Quality Standards: Developed by the Library and adopted by City Council in 2020, the Digital Literacy Program Quality Standards establish evidence-based quality standards that ensure all residents receive high-quality programs and services offered by the City and its partners. It includes eight program quality areas, emphasizing technology access, privacy and security, and safe, supportive learning environments, while adhering to the City's privacy principles.

- Digital Inclusion Grant Program: Launched in 2020 with funding from small cell lease revenue, the program has distributed approximately $4 million to community-based organizations and schools, providing 4,000 students with devices for remote learning and benefiting more than 11,000 residents through digital skill-building and support with gaining affordable internet and devices. In 2023, the City transitioned management of the Digital Inclusion Grant Program from the City Manager's Office to the Library, leveraging the Library's award-winning SJ Access Initiative, and the San José Public Library Foundation (SJPLF) as fiscal agent, to strengthen operations and ensure the program's continued success. In 2024-2025, the program was renamed to the SJ Access Grant Program, with grants awarded to fund Tech Hubs operated by trusted community-based organizations providing digital navigation supports as well as other wraparound services. The SJ Access Grant Program has ongoing funding from the City's DIF and through fundraising efforts by SJPLF. The SJ Access Initiative and Tech Hub model are further explained on Page 9.
- Digital Skill Building Pathways: Launched in April 2023, SJPL's Digital Skill Building Pathways have supported over 800 participants through in-person programming and reached over 13,900 participants via the online platform, offering courses in multiple languages. Comprised of seven inclusive pathways—Digital Skills, Tech for Fun, Career, Education, Health/Telehealth, Online Forms and Applications, and Finances—that empower community members to develop essential digital competencies for civic engagement, employment, accessing services, and lifelong learning. Covering foundational to intermediate skills, the pathways include topics like internet safety, job applications, social media, and artificial intelligence (AI).
- Continuous Digital Skill Curriculum Enhancements: Through ongoing curriculum enhancements, such as adding AI 101 and 102 lessons in July 2024 used by more than 3,500 participants, as well as the AI for All San José initiative launched in November 2025, SJPL regularly updates digital skill programing and lesson offerings to best equip learners with relevant and timely tools to navigate emerging technologies and evolving safety and ethical considerations.
- Computer Science and Technology Programming: Under the Education & Digital Literacy Strategy, the Library leads the development of public training and educational programs focused on building digital skills. In addition to the Digital Skill Building Pathways, residents of all ages have regular access to in-person and virtual programming focused on developing skills, sparking curiosity, and removing barriers to accessing technology and technology-adjacent programming. In 2024-2025, Library hosted 2,345 programs focused on technology, computer science, coding, robotics, and AI for 8,784 residents. The summer Digital Discovery workshops, which follow a day-camp format for children ages 6-12, served 600 students from June to August 2025.

Broadband Market Shifts and Digital Inclusion Fund Impacts

Current broadband market trends indicate a broad slowdown in small cell deployments nationally as mobile network providers focus on macro site installations, which support both mobile and home wireless services.

The deployment of small cells began to decline in 2020 and has since retracted rather than returned to growth. At the peak, more than 2,000 streetlights were leased by the telecommunications companies for small cell installations. As of April 2025, the number of leases had decreased to 1,800, and by 2028, the deployment will not achieve the 4,000 small cell leases that were assumed in the City's small cell public-private partnerships.

The reduced deployment of small cells has resulted in a 50% revenue deficit for the Digital Inclusion Fund compared to the initial 2018 projection, with estimated 10-year revenue at approximately $10 million instead of $20 million. The shortfall means that small cell revenue alone is insufficient to sustain the City's digital equity efforts, including the Digital Inclusion Grant Program (now the SJ Access Grant Program) and the City staff overseeing citywide broadband and digital equity programs. Strategies to address the deficit include:

- Seeking new and renewed public-private partnerships realigned to current City, community, and internet provider needs;
- Seeking applicable state and federal grant funding;
- San José Public Library Foundation fundraising for the SJ Access Grant Program; and
- Considering other cost recovery methods.

SJ Access – New Digital Empowerment Programs

SJ Access Grant Program – Tech Hubs (formerly Digital Inclusion Grant Program): In 2024, the SJ Access Grant Program was restructured to focus on creating "Tech Hubs" — community-centered spaces within multi-service centers operated by community-based organizations in low-income areas. During the initial launch from September 2024 to August 2025, six Tech Hubs operated at least 20 hours per week (1,040 hours annually) and collectively supported over 5,600 resident visits, providing free internet access, devices, culturally tailored digital navigation support, and skill-building classes to help residents achieve long-term success in education, employment, health, and civic engagement.

The SJ Access Grant Program has renewed the six Tech Hubs through June 2026 to support approximately 5,000 resident visits between September 2025 and June 2026.

Key services at Tech Hubs include, but are not limited to:

- Computer labs with set hours of operation for public access;
- Staff are onsite to answer questions and provide one-on-one tech support;

- Assistance with internet plan selection and signup, as well as obtaining devices;
- Individual needs assessments to align support with the actual needs of the person;
- Implement SJPL's Digital Skill Building Pathways curriculum;
- Community outreach and promotion of Tech Hub services; and
- Gather and report community input and program performance data.

Resilience Corps SJ Access Pathway: The Resilience Corps program at SJPL offers unemployed and underemployed young adults living-wage part-time employment and work experience opportunities. The SJ Access Pathway launched as a pilot from January through May 2025 with four Resilience Corps Associates (Associates) who received $25.50 per hour and worked a cumulative 1,492 hours during the program. The Associates gained work experience in the Library's Information Technology Unit, support for learning to code, and assistance in achieving a technical certification. The pilot cohort was funded through grants from Apple Inc. and PricewaterhouseCoopers. Through continued funding from Apple Inc. and new philanthropic contributions, the SJ Access Pathway will scale to a full Academic Year program and five Associates for FY 2025-2026. Future years are expected to be funded by grants in partnership with the San José Public Library Foundation.

Participants in the SJ Access Pathway receive on-the-job technical skills training in coding and library IT functions, support community digital empowerment initiatives, and are supported in achieving industry-recognized certifications. By combining meaningful work opportunities with community impact, the program empowers participants to grow personally and professionally while helping to close the Digital Divide in San José and offering a stepping-stone into the technology industry.

Federal Digital Equity Competitive Grant: On January 17, 2025, the National Telecommunications and Information Administration recommended the award of $11.6 million from the Digital Equity Competitive Grant Program, funded through the Digital Equity Act (Digital Equity Act Grant). The grant would expand SJPL's Digital Skill Building Pathways and the Tech Hub model—currently implemented through the Digital Inclusion Grant Program in San José—into Santa Clara and San Mateo Counties. This regional expansion was developed in partnership with Joint Venture Silicon Valley, which would have overseen grant administration.

On May 8, 2025, President Trump announced his decision to end the Digital Equity Act programs. More information on the impact of the elimination of these federally funded programs is available in Attachment D.

Future State

Renewal of the City's Broadband and Digital Inclusion Strategy: The concluding step of the assessment is to update the City's Broadband and Digital Inclusion Strategy to ensure that the City is prepared to adapt to rapid technological change while fostering an inclusive digital environment where all residents can thrive. Technology, coupled with the internet, is reshaping the world's economic and social landscape, bringing both new opportunities and challenges at local, national, and global levels. As technology advances, it drives the rapid emergence of innovations that demand digital access and understanding to keep pace and take advantage rather than fall behind on the use of digital services of all kinds, AI, machine learning, digital currencies like cryptocurrency, digital twins (virtual models of physical assets), immersive virtual spaces, and more.

Over the coming decades, this technological evolution is expected to transform human experience in ways yet to be imagined. These advancements will deeply influence how residents access and interact with education, healthcare, transportation, construction, goods and manufacturing, food and agriculture, and everyday services—including retail, banking, and government.

Given San José's commitment to closing the digital divide and continued investment in advancing meaningful outcomes, the newly titled citywide Digital Empowerment and Broadband Strategy (Strategy) focuses actions on strategic goals, which are outlined in the Work Plan summary in Attachment E and fully described in Attachment C:

Goal 1: Close the Digital Divide in San José Through Digital Empowerment

- Outline broadband and digital empowerment strategy programs and funding by 2027
- Increase City funded digital skills, cybersecurity, and workforce training programs
- Optimize Tech Hubs to increase access to digital skill building, home internet, and devices
- Expand partnerships for skill-building and hiring in technology and trades jobs
- Advocate for affordable devices and internet service plans

Goal 2: Ensure Broadband is Available to All and Future Ready

- Achieve universal availability of 1 Gigabit/500 Mbps for commercial broadband by 2030
- Achieve universal choice between 2+ commercial broadband providers by 2030
- Assess and improve broadband infrastructure resilience during emergencies by 2027
- Upgrade City network infrastructure by 2035

Goal 3: Provide Best-in-Class Broadband Processes & Enabling Structures

- Evaluate and streamline broadband permitting and City regulations by 2027
- Optimize City asset utilization for broadband deployment by 2028

- Integrate commercial broadband deployment into City plans and regulations by 2028

The Strategy integrates, aligns with, supports, and reinforces multiple City initiatives across departments to advance digital inclusion, equitable access, and upward mobility for all residents. Attachment F highlights these key initiatives and their connections to the Strategy. These programs collectively strengthen the City's digital infrastructure, expand broadband access, and build pathways for education, workforce development, and community resilience. Together, these coordinated investments in technology, partnerships, and skill-building drive inclusive economic growth and ensure every resident can participate in the digital economy.

EVALUATION AND FOLLOW-UP

Staff will return to the City Council in 2027 with a status update on the implementation of the Digital Empowerment and Broadband Strategy Work Plan.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the December 16, 2025, City Council meeting.

The following outreach was undertaken for this item in addition to the agenda posting described above. See Attachment G for an outreach and feedback summary.

- City Departments/Offices between March and April 2025
- Tech Hub operators on July 2, 2025
- Comcast on July 22, 2025
- AT&T on July 23, 2025
- County of Santa Clara IT and Library on July 29, 2025
- T-Mobile on August 4, 2025
- Verizon on August 12, 2025

COMMISSION RECOMMENDATION AND INPUT

On January 15, 2025, the Library and Education Commission received an update on the digital divide in San José, an assessment of current broadband and digital equity gaps, and an update to the City's existing Broadband and Digital Inclusion Strategy. Commissioners engaged in discussion and accepted the update with unanimous support.

This item was also heard at the February 13, 2025, Neighborhood Services and Education Committee meeting. Upon motion by Councilmember Domingo Candelas, seconded by Councilmember Bien Doan, the Committee accepted the status report at that time and the updated strategy, and referred this item to the City Council.

CEQA

Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action.

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

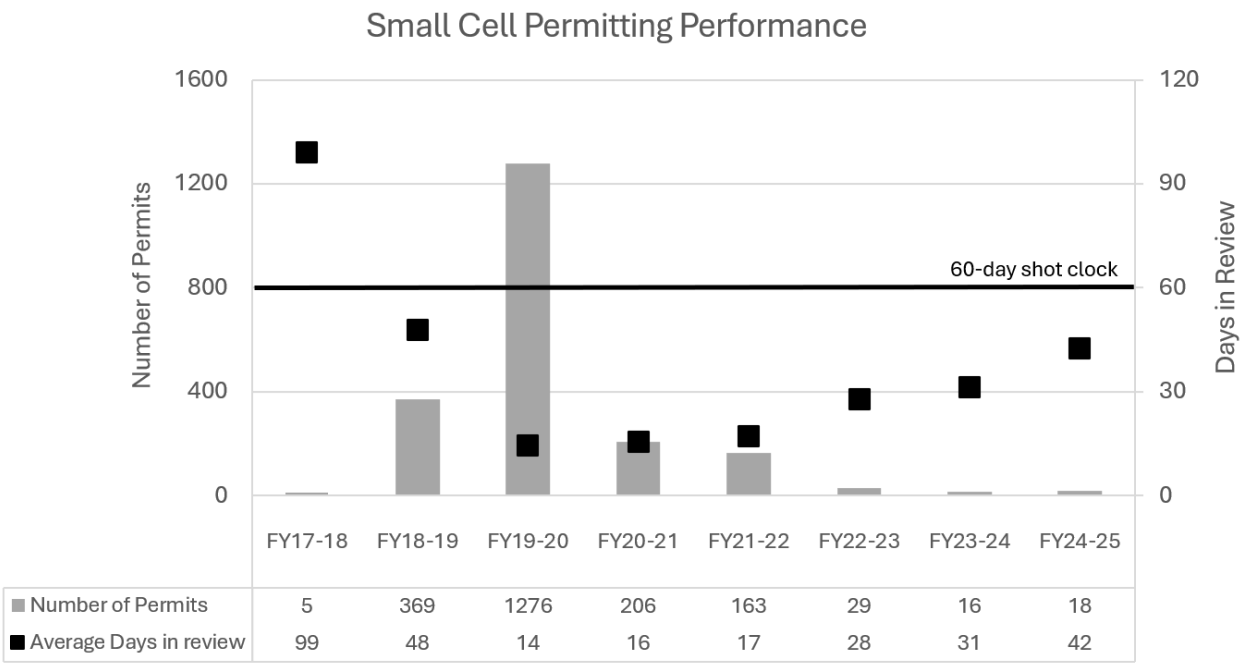
/s/
Jill Bourne
Director, Library Department

The principal author of this memorandum is Abigail Shull, Division Manager for Digital Empowerment and Public Technology, Library Department. For questions, please contact Abigail.Shull@sjlibrary.org or (408) 808-2170.

ATTACHMENTS:

Attachment A – Public-Private Partnership Permitting Performance 2018-2025
Attachment B – Summary of Digital Inclusion Grant Program Outcomes
Attachment C – Digital Empowerment and Broadband Strategy
Attachment D – Impact of Federal Elimination of Digital Equity Act Funding
Attachment E – Summary Work Plan 2025–2030
Attachment F – City Initiatives and the Digital Empowerment & Broadband Strategy
Attachment G – Summary of outreach and feedback on Digital Empowerment and Broadband Strategy

Attachment A – Public-Private Partnership Permitting Performance 2018-2025



	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24	FY24-25
Number of Permits	5	369	1276	206	163	29	16	18
Average Days in review	99	48	14	16	17	28	31	42

Attachment B - Summary of Digital Inclusion Grant Program Outcomes

Grant Cycle	Grant Period	Total Distributed	Number of Grantees	Number of Residents/ Visits Supported
Covid	May 2020 – March 2021	$1,390,723	1	4,000*
1	July 2020 – December 2021	$803,750	21	3,215
2	January 2021 – June 2022	$389,900	9	1,046
3	July 2022 – June 2023	$583,800	11	1,668
4	July 2023 – June 2024	$205,392	7	770
5	September 2024 – August 2025	$450,000	6 Tech Hubs	5,677**
6	September 2025 – June 2026	$396,049	6 Tech Hubs	5,000**
TOTAL		**$4,219,614**	**61 grants**	**21,376**

* Emergency grants to Santa Clara County Office of Education to provide 4,000 computing devices to students.

**Estimated number of resident visits, including first time and return visits, across the six Tech Hubs, each of which is designed to offer broad, ongoing opportunities for residents to access digital resources, receive tailored assistance, and advance their digital literacy.

Digital Empowerment and Broadband Strategy

September 2025

SJ.Access
CITY OF SAN JOSE

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

San José Public Library

Table of Contents

Acknowledgements

City of San José

- Abigail Shull – Division Manager – Digital Empowerment & Public Technology
- Angel Rios – Deputy City Manager
- Ann Grabowski – Library Deputy Director of Public Services
- Jill Bourne – City Librarian
- Uarporn Nopmongcol – Broadband & Partnerships

Guidehouse Inc.

Thank you to the countless people and organizations that provided inputs into this plan whether through an interview, focus group, survey response, or another channel.

Executive Summary

Executive Summary

The *Broadband and Digital Equity Strategy* (Strategy) outlines the City's ambitious roadmap for addressing the persistent digital divide while embracing technological advancement and equitable access. It builds on past successes, such as the 2017 Broadband and Digital Inclusion Strategy, with a renewed focus on universal connectivity, affordability, and digital skill-building. The Strategy calls for sustained investment, innovative public-private partnerships, and robust community engagement to ensure all residents have equitable access to the tools and opportunities of the digital age. By achieving the outlined goals, San José aims to position itself as a national leader in digital empowerment.

Further Details: For specific data and programs, refer to:

- Broadband Availability Statistics (p. 8-10),
- Digital Inclusion Programs (p. 15-19),
- Funding Models and Needs (p. 19-30).

Key Findings and Objectives

Current Digital Equity Landscape:

1) **City Digital Infrastructure and Community Wi-Fi**:
    - Despite progress since 2017, 12% of households in San José remain unconnected or under-connected, disproportionately affecting those with lower levels of income and educational attainment, seniors, and Black and Hispanic/Latino populations (p. 17-18).
    - Future-ready broadband speed availability varies significantly, with only 36% of households capable of accessing 1 Gbps service (p. 26-27).
    - The City has identified the need for $6.9 million to upgrade its outdated copper networks and $26 million for citywide deployment of smart streetlight controllers (p. 23).

- Free outdoor Wi-Fi in partnership with East Side Union High School District serves over 200,000 users but faces sustainability challenges from operational and upgrade costs (p. 10, 28).

2) **Digital Literacy and Skills Training**:

- The San José Public Library's Digital Skill-Building Pathways have supported over 700 participants, offering courses in multiple languages (p. 16).
- Future efforts will incorporate advanced topics like AI literacy and cybersecurity to keep pace with evolving digital demands (p. 30).

3) **Barriers to Equity**:

- Cost remains a significant barrier, with many low-income families unable to afford the average $84/month internet bill despite growth in low-cost internet plans (p. 20-23).
- Multifamily housing and mobile home residents face unique challenges due to inadequate infrastructure and internet service provider competition (p. 27).

4) **Policy and Regional Collaboration**:

- The Strategy aligns with federal and state initiatives for grant funding eligibility, including the federal Broadband Equity, Access, and Deployment Program and California's Broadband for All plan (p. 5).
- San José seeks to foster regional partnerships to better address broadband deployment inefficiencies and funding opportunities (p. 25).

5) **Funding Challenges**:

- The Digital Inclusion Fund (DIF), financed by telecom partnerships, faces a significant shortfall with a 52% projected revenue decline over the next five years (p. 23).

Key Strategic Goals:

1. **Close the Digital Divide Through Digital Empowerment**

- Increase digital skills and technology related training programs to empower residents for digital age workforce and social engagement (p. 32).
- Optimize City grant funded Tech Hubs and expand partnerships to enhance access to broad digital skill-building opportunities and support getting home internet and devices (p. 32).
- Align legislative and advocacy priorities with digital equity objectives by 2026 (p. 32).

2. **Ensure Universal Broadband Availability and Future-Ready Connectivity**

- Achieve universal broadband access exceeding 1 Gbps by 2030 and ensure residents have a choice between two or more service providers to foster competition (p. 38).
- Encourage broadband service competition and implement a citywide Broadband Resilience Plan by 2027 (p. 38).

3. **Provide Best-in-Class Broadband Permit Processes and Enablement Structures**

    - Streamline permitting to issue 80% of broadband permits faster than federally required timelines by 2027 (p. 40).
    - Inventory all City-owned assets and broadband infrastructure by 2026 (p. 40).

Introduction

The Broadband and Digital Equity Strategy (Strategy) builds upon the City's previous digital equity efforts, which have been ongoing since 2016. The City adopted its first Broadband and Digital Inclusion Strategy in 2017 (2017 Strategy). The 2017 Strategy identified several key challenges: a lack of affordable home internet options, limited access to fiber and next-generation wireless broadband, insufficient smart-city infrastructure, and a need for diverse broadband deployment models to enhance the availability, quality, and equity of service options for residents and businesses. The resulting programs operated and managed by the City have increased broadband deployment and decreased the digital divide in San José. However, both old and new gaps remain. Rapid and continual technological change demands ongoing work to address evolving community needs and disparities. The Strategy updates the City's approach to further its broadband and digital equity work and defines the path to a future in which all San José residents are empowered to benefit from the digital age.

This Strategy ensures the city can adapt to rapid technological change while fostering an inclusive digital environment where all residents can thrive. Technology coupled with the internet is reshaping the world's economic and social landscape, bringing both new opportunities and challenges at local, national, and global levels. As technology advances, it drives the rapid emergence of innovations such as next-generation wireless networks (5G, 6G, and beyond), Artificial Intelligence (AI), machine learning, digital currencies like cryptocurrency, digital twins (virtual models of physical assets), and immersive virtual spaces like the Metaverse. Over the coming decades, this technological evolution is expected to accelerate further, transforming human experiences in ways yet to be imagined.

These advancements will deeply influence how residents access and interact with education, healthcare, transportation, construction, goods and manufacturing, food and agriculture, and everyday services—including retail, banking, and government. Reliable internet access is now also seen as a "super determinant" of health, shaping health outcomes directly and affecting other key social factors like civic and community engagement, education, jobs, and access to care.[1] Through the Strategy, the City of San José aims to proactively address these challenges with a comprehensive approach that combines infrastructure development, community engagement, and forward-thinking programs and partnerships.

Vision for Digital Equity

Our vision is for all San José residents to be empowered to benefit from and fully participate in the digital economy. Access to the internet, along with the technology and skills to use it safely and effectively, is essential in today's world. We call this *Digital Empowerment*. Without it, people cannot fully engage in modern life.

[1] Chidambaram, Swathikan, et al. "An introduction to digital determinants of health." *PLOS digital health* 3.1 (2024): e0000346. Accessed at: https://journals.plos.org/digitalhealth/article?id=10.1371/journal.pdig.0000346

Digital Empowerment stems from achieving *Digital Equity*—a state where everyone has:

1. Access to reliable, high-speed internet,
2. Personal technology, including devices and software, and
3. Opportunities to develop and maintain digital skills.

Alignment with City Council Policy & Directives

With the 2017 Strategy, City Council adopted a public-private partnership model to address the recognized broadband gaps and digital inequities—*the digital divide*—left unresolved by private market-led efforts. This hybrid approach emphasizes negotiating proactive value-exchange public-private partnerships with telecommunication providers ("telecoms") to serve the needs of the City, San José community, and the telecoms.

This Strategy builds on the hybrid model approach and other existing City Council policies that guide the deployment of telecommunication infrastructure:

- Smart City Vision[2]
- Citywide Education and Digital Literacy Strategy[3]
- Children and Youth Services Master Plan[4]
- City Council Policy 7-10: First adopted in 1996 and updated in 2007, this policy governs the placement of private communication facilities on City-owned properties (land, buildings, light poles) and public rights of way (PROW).
- Resolution No. 77551 (2015) provides a framework for telecoms to deploy structure on City property and PROW through structured agreements.
- City Council Policy 6-20: First approved in 1991 and updated periodically, this policy promotes the collocation of telecommunications equipment on existing structures whenever possible. Its intent is to streamline deployment while minimizing visual and environmental impacts of new construction.

Furthering the City's commitment to digital equity, the City Council directed the creation of the Digital Inclusion Fund (DIF) in 2019. Supported by telecom fees and private donations, the DIF finances the City's broadband and digital equity efforts. This includes the Digital inclusion Grant Program which funds digital empowerment programs implemented by trusted community-based organization partners.

[2] City of San José Smart City Vision: https://www.sanjoseca.gov/your-government/departments-offices/information-technology/smart-city-vision/-curm-5/trees
[3] City of San José Education and Digital Literacy Strategy: https://www.sjpl.org/education-policy-governance/
[4] City of San José Children and Youth Services Master Plan: https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.sjpl.org/wp-content/uploads/sites/142/2024/03/March-28-2024-Joint-Meeting-Supporting-Docs-v2.pdf

Alignment with County, State, and Federal Initiatives

All levels of government—federal, state, and county— are taking action to close the digital divide (See Appendix B). The Strategy aligns with these broader efforts, ensuring a cohesive approach to expanding broadband access and promoting digital equity and empowerment:

- Federal Communications Commission (FCC) broadband speed definitions[5] - March 2024

  The Strategy adopts the FCC broadband speed standards of 100 megabits-per-second (Mbps) download and 20 Mbps upload (100/20 Mbps) as the **Basic Benchmark** for assessing current availability of high-performing broadband in San José and 1000/500 Mbps as the **Aspirational Benchmark** for assessing the City's preparedness to meet future demands.

- Federal Broadband Equity, Access, and Deployment (BEAD) Program – Fiscal Year (FY) 2022-2028

  Part of the Infrastructure, Investment, and Jobs Act (IIJA), the BEAD program provides over $42 billion in federal funding to expand broadband infrastructure with a focus on ensuring equitable access to high-speed internet for underserved and rural communities across the U.S. The BEAD program defines reliable broadband as meeting speeds of 100/20 Mbps and latency of 100 milliseconds or less.[6]

- California State Broadband for All – Broadband Action Plan (December 2020) – Ongoing

  This initiative outlines strategies to expand high-speed broadband access throughout California, aiming to connect all residents with reliable and affordable internet services and digital skill training support.

- California State Broadband for All – Digital Equity Plan (December 2023) – FY2024-2028

  Building on the Broadband Action Plan, this plan focuses specifically on digital equity, ensuring that all Californians, regardless of socioeconomic status, can fully participate in the digital economy.

- California State's BEAD Five-Year Action Plan (August 2023) – FY2024-2028

  The plan provides a roadmap under the BEAD program to ensure universal broadband service availability for all residents, businesses, and institutions.

- County of Santa Clara Digital Equity Plan (Draft presented in April 2024; not yet adopted) – FY2024-2027

  This plan aims to enhance digital access and skills across the County of Santa Clara, focusing on public-private partnerships to address the needs of underserved communities.

[5] FCC Press Release, FCC Increases Broadband Speed Benchmark. Accessed at: https://www.fcc.gov/document/fcc-increases-broadband-speed-benchmark

[6] National Telecommunications and Information Administration, NTIA. Reliable Broadband Service & Alternative Technologies Guidance. Accessed at https://broadbandusa.ntia.gov/sites/default/files/2024-01/BEAD_Reliable_Broadband_Service_Alternative_Technologies_Guidance.pdf.

Building Upon Successful Efforts

Since implementation of the 2017 Strategy, significant progress has been made to address the digital divide. Key outcomes include multiple telecom public-private partnerships that have increased broadband availability citywide and the launch of the City's Digital Inclusion Grant Program. See Table 1 below.

TABLE 1. 2017 STRATEGY – KEY PROGRAMS AND OUTCOMES

Category	Program/Initiative	Partners	Outcome/Impact	Status
Broadband	**Small Cell Public-Private Partnerships**	AT&T[7], Verizon[8], Mobilitie (T-Mobile)[9]	Improved connectivity citywide through deployment of 2,060 4G/5G small cells (2018-2024). Generated over $6 million for the Digital Inclusion Fund (2018-2024).	Ongoing
	Macro Site Public-Private Partnership	T-Mobile[10]	Reduced permitting review time from months to weeks for macro site deployments on towers and rooftops.	Completed (2022)
	Microtrenching Demonstration Pilot	AT&T	Enhanced fiber deployment efficiency through innovative trenching methods in a pilot project.	Completed (2023)
	Community Wi-Fi	East Side Union High School District, SmartWAVE, AT&T	Free outdoor Wi-Fi serving 200,000+ users at libraries, downtown, fourteen community centers, and eight East Side Union High School District attendance areas.	Ongoing
	Lift Zones	Comcast	Free indoor Wi-Fi at three community centers.	Ongoing
	Airport-wide Cellular Coverage	AT&T, Verizon, T-Mobile	Improved major wireless carriers' cellular coverage throughout San José International Airport.	Ongoing
Digital Empowerment	**Digital Inclusion Grant Program**	AT&T, Verizon, T-Mobile, 17 donors	Over $4 million in grants awarded to 47 grantees, increasing household internet and device access, and digital skills.	Ongoing

[7] May 1, 2018, City Council Meeting, Agreement with AT&T for Permitting Small Cells Memo.
[8] June 26, 2018, City Council Meeting, Agreement with Verizon for Permitting Small Cells Memo.
[9] June 26, 2018, City Council Meeting, Agreement with Mobilitie for Permitting Small Cells Memo.
[10] January 29, 2019, City Council Meeting, Agreement with T-Mobile for Permitting Macro Sites Memo.

Category	Program/Initiative	Partners	Outcome/Impact	Status
Digital Empowerment	**SJ Access Program**	AT&T	Digital Skill Building: free classes in multiple languages. Devices: free checkout of Chromebook, iPad, or laptop. Free checkout of Wi-Fi hotspot for home internet access ended July 2024. Tech Support: Computer assistance tech assistance	Ongoing
	Distance learning during COVID-19	AT&T	Distributed 15,700 Wi-Fi hotspots to support remote learning during the pandemic.	Completed (2024)
	Tech for Good	AT&T	Delivered tablets and digital literacy training for youth and seniors.	Completed (2021)
	STEM Programs	Verizon	Funded workshops for K-12 students in targeted, underserved neighborhoods.	Completed (2021)
	Sponsorships	Comcast, AT&T, Verizon	Supported community internet sign-up events with food, raffles, and resources.	Ongoing
Smart Cities	**Smart Lighting Pilot**	AT&T[11]	Improved safety and energy efficiency with cellular smart light controllers at select San José parks.	Completed (2025)
	Smart Lighting Deployment	Ubicquia and AT&T[12]	Scaled from pilot to 8,000 smart light controllers at all City parks.	Ongoing
	Smart City Pilots - Safety	Verizon[13]	Delivered real-time fleet data, intersection safety analytics, and traffic insights.	Completed (2021)

[11] March 14, 2019, AT&T in-kind contributions for smart city, Pilot Program Agreement.
[12] December 14, 2021, City Council Meeting, Ubicquia Smart Outdoor Lighting Management solution Memo.
[13] June 26, 2018, City Council Meeting, Agreement with Verizon for Permitting Small Cells and Smart City solutions Memo.

Current State Assessment

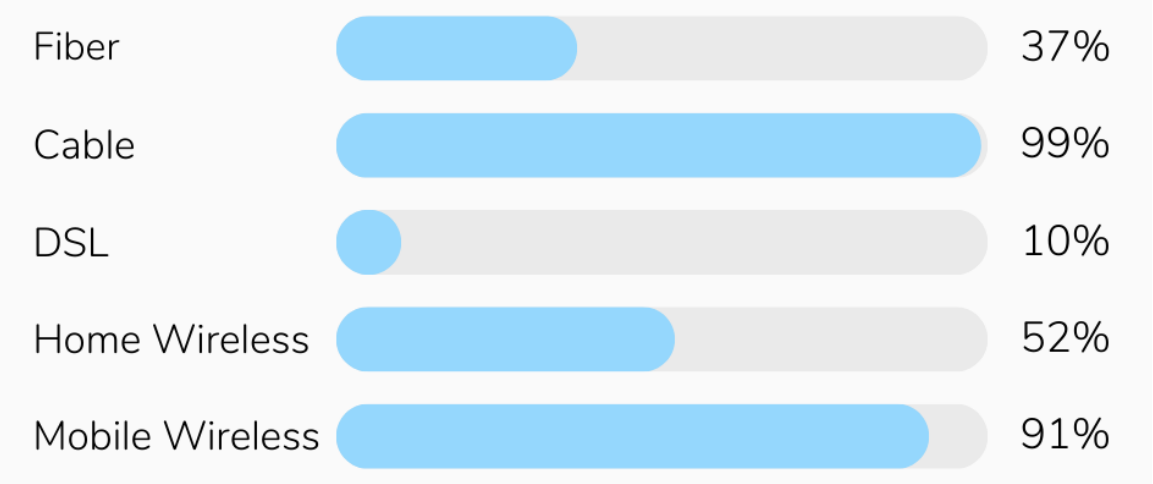
Broadband

Today, multiple technologies can deliver reliable broadband— service that meets high-speed thresholds of at least 100/20 Mbps, have low latency, can adapt to changing societal needs, and provide service for decades.[14] These include fiber-optic (fiber), hybrid-fiber coaxial (cable), and licensed fixed wireless (home wireless). Copper phone lines can deliver broadband via digital subscriber line (DSL), but this aging infrastructure cannot be relied on for decades and is being phased out in favor of fiber and wireless technologies. Mobile wireless, accessed through cell phones and hotspots, is evolving to offer higher speeds and excels in portability and convenience. However, it is generally not suitable as a primary home internet solution due to limitations such as data plan restrictions and the technical constraints of mobile devices. Other available technologies may not reliably deliver broadband, such as unlicensed fixed wireless and low earth orbit satellite. However, these technologies can play a complementing role in providing universal coverage.

Availability

The most robust source of broadband data is the FCC's national broadband map (FCC map).[15] The Strategy relies on this data as a key resource to assess the current state of broadband in San José and to track changes over time. The map, based on provider-submitted data, is updated by the FCC twice annually. While largely accurate, the map is not entirely precise. It relies on self-reported data from service providers, which may overstate actual service coverage and quality.

FIGURE 1: PERCENT COVERAGE IN SAN JOSÉ BY TECHNOLOGY TYPE



[14] National Telecommunications and Information Association. *Choosing the right mix of technologies to achieve Internet for All.* Accessed at: https://www.ntia.gov/blog/2024/choosing-right-mix-technologies-achieve-internet-all
[15] Federal Communications Commission, National Broadband Map. Accessed at https://broadbandmap.fcc.gov/

Fiber: The only technology capable of delivering Aspirational Benchmark speeds of 1000/500 Mbps or above, but it has moderate coverage of 37%[16]. Fiber coverage is most extensive in West and Central San José.

Cable: The most widely available technology, with 99% coverage at the Basic Benchmark speeds of 100/20 Mbps. It does not currently support 1000/500 Mbps. The upcoming adoption of DOCSIS 4.0 technology by cable providers may enable higher speeds. However, it is unclear if there will be a subscription plan offering 1000/500 Mbps speeds.

DSL: A legacy technology with limited availability, covering just 10% of the city at 100/20 Mbps. The main DSL provider, AT&T, is planning to phase out its DSL service.[17]

Home Wireless: Initially launched for business use, it now serves homes, covering 52% of the city at 100/20 Mbps speeds. Like current cable networks, it does not yet support 1000/500 Mbps.

Mobile Wireless: Mobile 5G service covers 91% of San José with outdoor speeds that meet FCC's minimum mobile benchmark of 35/3 Mbps.[18] The quality of mobile 5G service can vary significantly due to factors such as signal fluctuations, network congestion, environmental factors, and even operations specific to each service provider. While mobile network availability and speeds have improved across San José since 2017, coverage is less extensive in the southern foothills in District 2 and 10.

Speedtest Performance

Broadband performance is primarily measured by download and upload speeds, which determine how quickly data is received from (downloaded) or sent (uploaded) to the internet. Download speed affects activities such as streaming and web browsing, while upload speed is critical for things like video conferencing or live streaming and for file sharing. Higher speeds enable smoother and more reliable online experiences.

According to the FCC map and the FCC's broadband benchmarks, the **Basic Benchmark** 100/20 Mbps speeds are widely available to residential and business locations throughout the city. However, the **Aspirational Benchmark** 1000/500 Mbps speeds are only available to 36% of the city where there is fiber.

Fiber is the fastest broadband technology, offering gigabit-per-second speeds (Gbps) for both download and upload (symmetrical speed) with low latency. Cable offers high download speeds, often reaching 1-2 Gbps, but upload speeds are lower—typically up to 50 Mbps—and latency is slightly higher compared to fiber. DSL and home wireless internet typically offer download speeds of 25-100 Mbps and upload speeds of 3-20 Mbps. While DSL service is unlikely to improve, home wireless internet is expected to evolve. For example, 5G home wireless can deliver download speeds up to 1 Gbps, though upload speeds remain below 100 Mbps. Fiber, cable, DSL, and home wireless are considered **Home Internet** technologies.

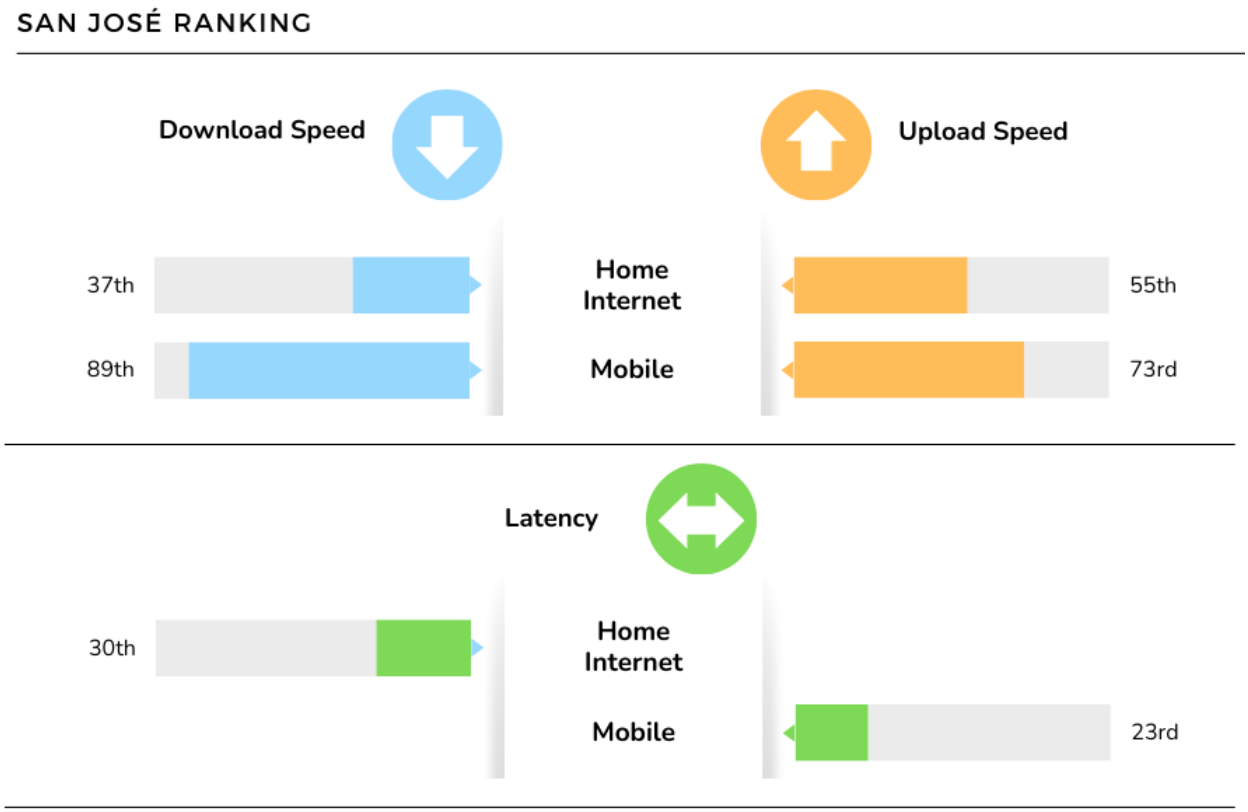
San José lags peer cities in the U.S. based on home internet and mobile service speeds. The median download speeds in San José rank 37th for home internet and 89th for mobile compared to the 100 most populous U.S. cities. Latency is ranked 30th (tied with Chula Vista, CA) for home internet and 23rd (tied with

[16] Compare to California-wide fiber coverage at 33%
[17] CPUC Proceedings A.23-03-002 and A.23-03-003. AT&T Applications regarding Carrier of Last Resort and Eligible Telecommunications Carrier Designation
[18] FCC's national broadband map: Mobile broadband 5G NR coverage as of June 2024.

Seattle, WA and Anaheim CA) for mobile. The rankings are derived from Ookla speedtest data collected between January and June 2024.[19]

San José's median home internet download speed is 264 Mbps (cities' range: 94-324 Mbps), and its median upload speed is lagging at 35 Mbps (cities' range: 10-181 Mbps). Its home internet latency is 20 ms (cities' range: 10-52). On the mobile wireless service, San José's median download speed is 132 Mbps (cities' range: 59-321 Mbps), its upload speed is 11.5 Mbps (cities' range: 8-25 Mbps), and its mobile latency is 42 ms (cities' range: 37-99 ms). This data highlights the broader opportunity to enhance both home internet and mobile network in San José.

FIGURE 2. SAN JOSÉ RANKING ON HOME INTERNET AND MOBILE SERVICE SPEEDS



Community Wi-Fi

In partnership with the East Side Union High School District (ESUHSD) and funded by a $2.7 million school technology bond, the City designed and deployed free outdoor Wi-Fi networks in eight ESUHSD attendance areas from 2017 to 2024. The project started with a successful pilot network at James Lick High School, built between 2017 and 2019. These networks utilize the City's fiber-optic infrastructure and internet bandwidth and are strategically located in densely populated residential areas with historically low household incomes and internet subscription rates. Approximately 41,000 residential households are within the eight active network areas (Table 2).

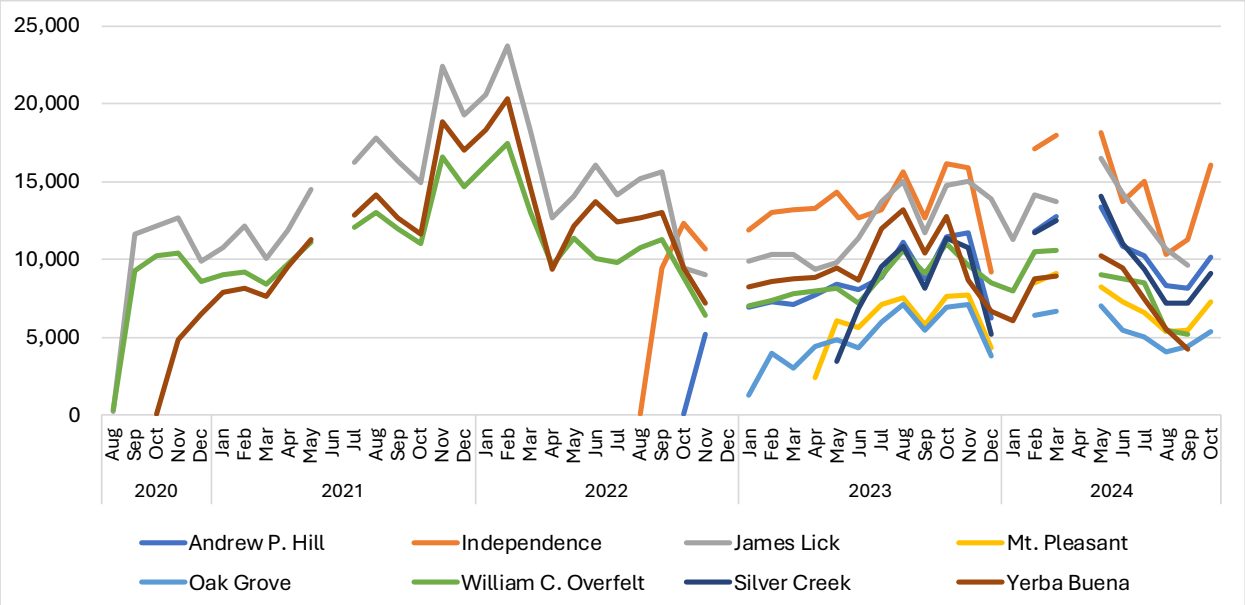
[19] Ookla Speedtest Connectivity Report. Data collection January – June 2024. Accessed at: https://www.ookla.com/research/market-reports/united-states-speedtest-connectivity-report-h12024

TABLE 2. HIGH SCHOOL AREA NETWORKS AND ACCESS POINTS

High School Attendance Area Network	Number of Access Points	Number of Households	Status
James Lick	200	6,768	Open to students in November 2017 and public access in April 2019
William C. Overfelt	200	4,450	Open to students in June 2020
Yerba Buena	200	7,774	Open for use in August 2020
Independence	340	8,177	Open for use in September 2022
Andrew P. Hill	200	4,486	Open for use in October 2022
Oak Grove	234	4,157	Open for use in November 2022
Mt. Pleasant	226	3,163	Open for use in May 2023
Silver Creek	208	2,681	Open for use in June 2023
Total	1,808	41,656	

The Community Wi-Fi networks show consistent use in each attendance area. In 2024, a monthly average of 9,600 individual devices accessed the network across each of the eight attendance areas, resulting in an average monthly use of 76,800 across all eight networks. Figure 3 shows the monthly Community Wi-Fi usage by attendance area, measured by the number of unique devices accessing the network.[20]

FIGURE 3. NUMBER OF UNIQUE DEVICES ACCESSING COMMUNUTY WI-FI BY ATTENDANCE AREA (2020-2024)



Note: The data gaps in June 2021, December 2022, and April 2024 are the result of an unexpected network server outage. Device access data could not be collected during the outages, but Wi-Fi service on the network was not impacted.

[20] As a free network that does not require a subscription, the City cannot count the number of individual people or households who have used the network. However, network data, which does not show personal information, allows for the number of individual devices that have connected to the network, such as a phone, tablet, or computer. Each device that connects is counted only one time, though it may connect to the network more than once within the timeframe for the count, such as a month or year.

Digital Inclusion

Broadband infrastructure alone does not guarantee universal internet access. Many households in San José remain either entirely unconnected—lacking any internet access—or under-connected, with limited or unstable access that hinders full participation in digital activities.

Thousands in San José remain unconnected or under-connected across income, age, and racial groups. Data from the annual American Community Survey (ACS) provides insight into the digital divide.

American Community Survey

To understand the state of digital inclusion in the city, the Strategy leverages data from the ACS, a national resource for identifying connectivity and access trends. The ACS is a statistically valid, ongoing survey conducted by the U.S. Census Bureau that provides detailed demographic, social, economic, and housing data to inform policy decisions and resource allocation. The most recent ACS data, spanning 2019-2023, shown in Table 3, reveals that approximately 39,200 households in San José (12%) are unconnected or under-connected. These households include those without a computing device or relying solely on a smartphone—an option often insufficient for fully engaging in the digital age and economy.

TABLE 3: AMERICAN COMMUNITY SURVEY: COMPARISON OF 5-YEAR ESTIMATES

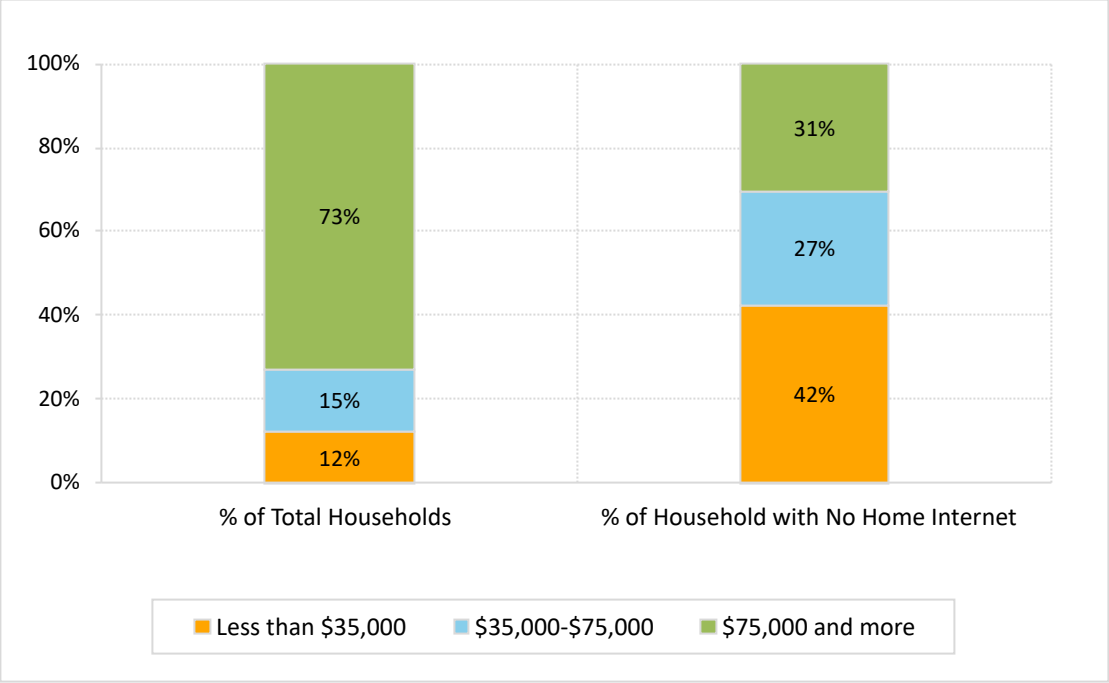
HOUSEHOLD INDICATORS	2014-2018	2019-2023	PERCENT CHANGE
TOTAL HOUSEHOLDS	321,835	326,767	+1.5%
NO INTERNET (UNCONNECTED)	7.9%	3.8%	-4.1%
CELLULAR ONLY (UNDER-CONNECTED)	6.4%	8.0%	+1.7%
DIAL-UP ONLY (UNDER-CONNECTED)	0.4%	0.2%	-0.2%
NO COMPUTER	5.7%	2.6%	-3.0%
SMART PHONE ONLY	2.9%	5.2%	2.3%

From 2019 to 2023, the number of residents with a cellular data plan (with and without other broadband subscription) increased from about 560,000 (58%) to 831,000 (86%), signifying continued growth in smartphone use. Despite this increased reliance on mobile internet access, mobile internet often cannot fully replace a home internet plan. Home internet plans provide more stable connections and allow for ease of internet access when performing more complex online tasks such as work or school assignments.

There is a clear disparity in internet access based on household income levels, as shown in Figure 3 below. In San José, 40,000 out of 327,000 households have annual household incomes of less than $35,000, making up 12% of the City's total households. Among these low-income households, 7,300 do not have an internet subscription, representing 42% of all households without internet subscription. In contrast, 4,600

households earning $35,000-$75,000 (15% of total households) and 5,300 households earning $75,000 or more (73% of total households) lack internet subscriptions, representing 27% and 31% of all households without access, respectively.

FIGURE 4: INTERNET SUBSCRIPTION STATUS BY INCOME LEVEL



Certain demographic groups are disproportionately affected by the digital divide, highlighting the need for targeted interventions, especially among low-income households, older adults, the Hispanic/Latino community, and individuals with lower educational attainment (see Figures 5 and 6 below):

- **Hispanic/Latino populations**: Represent 39% of those without internet subscriptions or computing devices, disproportionately impacted compared to other racial groups. Black or African American populations, though smaller in size, also experience significant disparities.
- **Older adults (65 and older)**: Face the most severe digital divide, making up 39% of those without internet subscriptions or computing devices and 56% of those lacking computing devices.
- **Individuals with less than a high school education**: Account for 23% of those without internet subscriptions or computing devices and 31% of those lacking computing devices.

These disparities emphasize the importance of focusing resources and strategies to bridge the gap for these vulnerable groups.

FIGURE 5: INTERNET SUBSCRIPTION AND DEVICE OWNERSHIP BY RACE

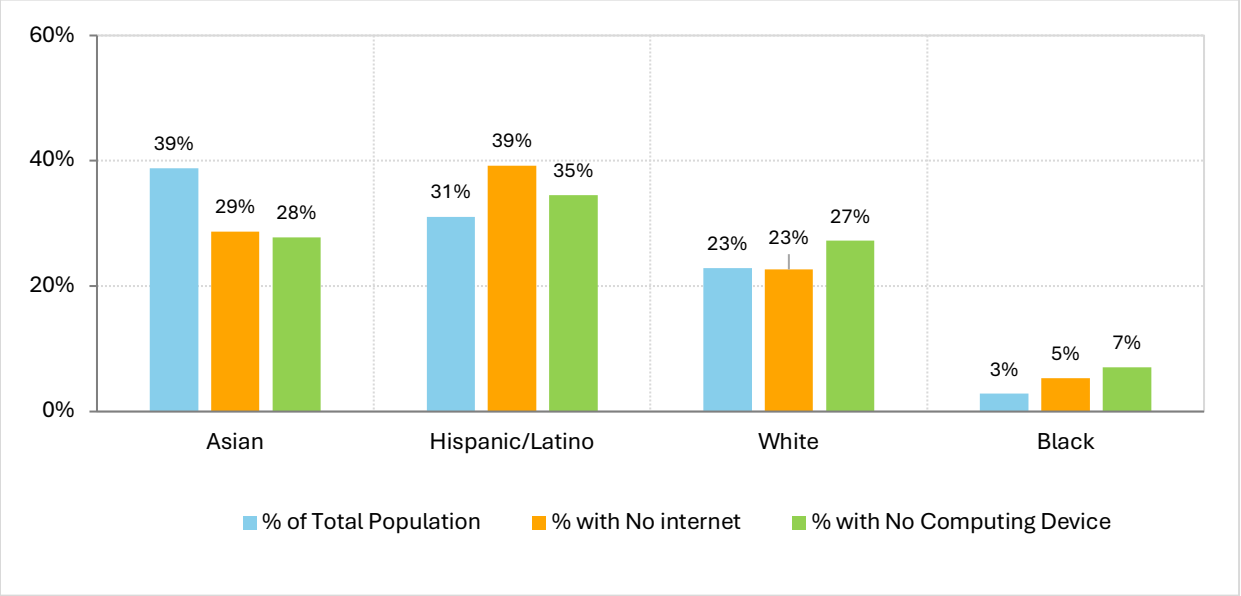
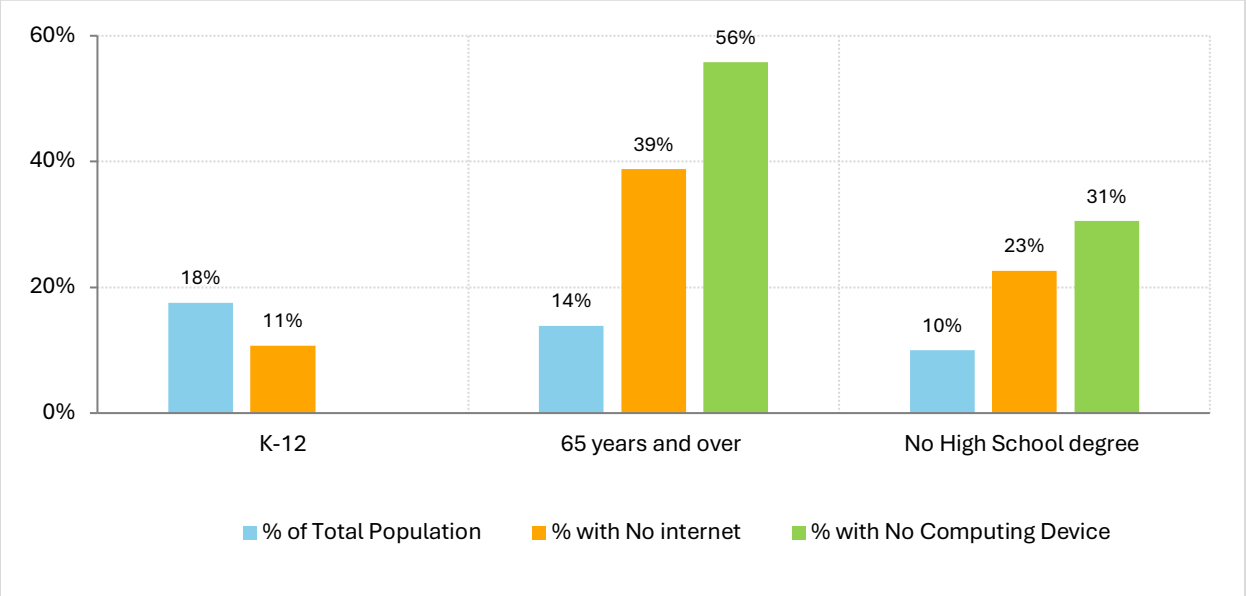


FIGURE 6: INTERNET SUBSCRIPTION AND DEVICE OWNERSHIP BY SELECTED DEMOGRAPHIC GROUP



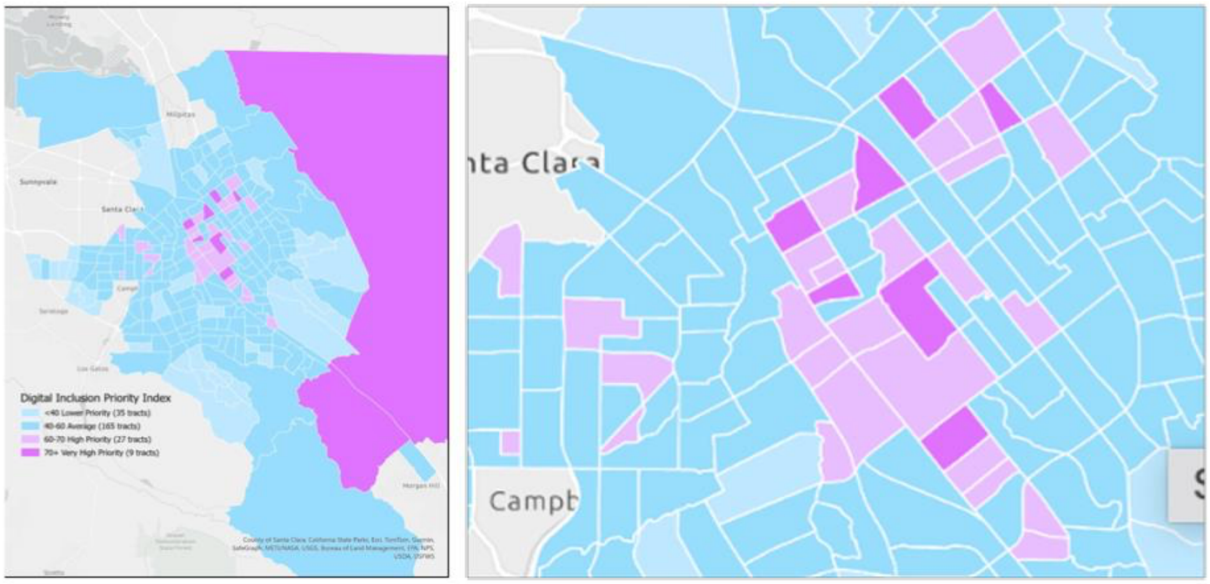
Digital Inclusion Priority Index

The City created a Digital Inclusion Priority Index (Index), a score ranging from 0 to 100, to identify areas most in need of digital empowerment support (see Figure 7).

The Index was initially created to support the City's response to the pandemic and address remote learning needs. From 2020-2021, the Index prioritized K-12 students, very low-income households, residents without home internet or computers, individuals with limited English proficiency, and zip codes most impacted by COVID-19. In 2022, the Index was updated to broaden the focus on low-income and unconnected households to expanded beyond students.

The Index is recalibrated annually as new ACS data becomes available. For 2025, the Index is based on the ACS 2019-2023 five-year estimates and factors such as median household income, families below 200% of the poverty threshold, and households lacking internet access. **Census tracts with the highest scores are concentrated in City Council Districts 3 and 5, while Districts 3, 5, and 7 had the largest number of high-priority tracts.**

FIGURE 7: DIGITAL INCLUSION INDEX MAP



Note: Dark pink is very high priority area, light pink is high priority area, blue is average priority, light blue is lower priority.

San José Public Library

The San José Public Library's (Library, SJPL) mission is to enrich lives by fostering lifelong learning and by ensuring that every member of the community has access to a vast array of ideas and information. Central to this mission is providing equitable access to devices, internet connectivity, and digital skill-building opportunities across all 25 library branches. Each branch offers free Wi-Fi, computer access, and technology-enabled spaces that allow residents to connect, learn, and thrive. In FY 2024-25, there were over 265,800 computer sessions on library-owned computers. Excluding the Dr. Martin Luther King Jr. main library, there were an estimated 4.2 million Wi-Fi sessions held at library branches.

To support San José's most vulnerable residents, SJPL launched MyConnectSV in April 2025 at Dr. Martin Luther King Jr. Library and Tully Community Branch. The program provides dedicated computer stations with staff support to help participants experiencing homelessness or receiving housing services stay connected and access essential resources.

SJ Access Program

San José Public Library (Library, SJPL) leads the Citywide Digital Equity priority and implements several programs to address adoption disparities. These initiatives are collectively known as **SJ Access** and encompass various activities such as device lending, managing and implementing Community Wi-Fi projects expanding and maintaining Wi-Fi access in civic buildings, providing digital skills training, and implementing the SJ Access Grant program.

Launched in August 2020 during the pandemic, SJ Access quickly mobilized to address residents' urgent device and internet access needs, leveraging temporary emergency funding. Using 25 library locations as neighborhood hubs, the program distributed high-speed hotspots with unlimited data plans and computing devices to bridge San José's digital divide. This large-scale effort was made possible by one-time funding, including $9.5 million in federal Emergency Connectivity Fund support, which sustained the program through June 2024. Over its duration, SJ Access provided more than 8,000 hotspots (both filtered for student use and unfiltered) and 2,500 computing devices, connecting over 100,000 individuals between August 2020 and June 2024.

During FY 2023–24 alone, library hotspots circulated 34,900 times, maintaining a 98% checkout rate or higher and highlighting the program's value to the community. However, the hotspot lending program relied on one-time emergency funding and was not included in the City's 2024–2025 budget. As a result, hotspots were discontinued and mobile connectivity for laptops was deactivated. The City communicated the program's conclusion to residents and shared resources on free and low-cost internet plans, along with referrals to local nonprofits for personalized assistance.

Recognizing the need for sustainable solutions, SJ Access transitioned to a smaller-scale device lending program. While the Library continues to lend 925 computing devices, mobile data access was discontinued to reduce costs. These devices now rely on Wi-Fi for internet access. Additionally, the Library increased internet speeds at all locations to better serve patrons. Residents can bring their own devices to connect to the Library's high-speed Wi-Fi or reserve a computer for use. Nine library branches also provide outdoor Wi-Fi networks, ensuring connectivity outside library hours.

Digital Skill-Building Pathways

San José's commitment to digital literacy is reflected in its Digital Skill Building Pathways program, designed to make learning digital skills more convenient, inclusive, and impactful. The program offers flexible learning options tailored to meet diverse needs, including online self-paced lessons, live workshops, and virtual classes available through local libraries. Recognizing the importance of accessibility, the curriculum incorporates language accommodations and age-appropriate content, ensuring courses are relevant and engaging for all participants.

Since the launch of the Digital Skill Building Pathways in April of 2023, there have been over 400 programs with more than 1,600 participants through in-person programming and over 16,700 participants via the online platform, which provides flexible, self-paced lessons. In addition to the systemwide teen and adult Library programs that incorporate San José's Digital Skill Building Pathways curriculum, the curriculum is also

utilized by local community-based organizations to support their clients in gaining digital skills. The program has expanded to include 20 lessons in English, Spanish, and Vietnamese, with five new lessons added in 2024.

The curriculum draws on collaborations with organizations specializing in digital skill development and original content created by Library staff. All City-funded digital skills programs adhere to the Digital Literacy Quality Standards[21], ensuring consistent improvement and high-quality instruction. By prioritizing accessibility and innovation, San José continues to empower residents with the skills needed to participate fully in today's digital world.

SJ Access Grant Program

The SJ Access Grant program (Grant Program), funded by the City's Digital Inclusion Fund (DIF), builds local capacity and expansion of successful San José community-based organizations' (CBOs)—in-language, and in-culture—digital empowerment programs.

Since 2020, 47 grantee organizations have followed these three key components of Digital Empowerment:

- Internet Access – Providing internet connectivity to San José residents
- Digital Skills – Enhancing digital skills to access educational opportunities, jobs and critical services
- Device Access – Ensuring every San José resident has access to a suitable device

The program has assisted more than 13,000 households (see Table 4). Each round of the grant offers valuable takeaway lessons that the City incorporates into program implementation.

TABLE 4. SJ ACCESS GRANT PROGRAM SUMMARY

Grant Cycle	Grant Period	Total Awarded	Number of Grants	Number of Residents / Visits Supported
Covid	May 2020 – March 2021	$1,390,723	1	4,000*
Year 1	July 2020 – December 2021	$803,750	21	3,215
Year 2	January 2021 – June 2022	$389,900	9	1,046
Year 3	July 2022 – June 2023	$583,800	11	1,668
Year 4	July 2023 – June 2024	$205,392	7	770
Year 5	September 2024 – August 2025	$450,000	6 Tech Hubs	5,677**
Year 6	September 2025 – June 2026	$396,049	6 Tech Hubs	5,000**
TOTAL	[redacted]	$4,219,614	61 grants	21,376

* Emergency grants to Santa Clara County Office of Education to provide 4,000 computing devices to students
** Number of resident visits, including first time and return visits, across the six Tech Hubs. each of which is designed to offer broad, ongoing opportunities for residents to access digital resources, receive tailored assistance, and advance their digital literacy. The Year 6 number of visits is an estimate.

In 2020, in tandem with Round 1, the City distributed special grants to schools through the Grant Program specifically to address remote learning needs during pandemic. These special grants distributed approximately $1.4 million in DIF donations to seven San José school districts to provide approximately 4,000 computing devices to students.

[21] San José Public Library. "Digital Literacy Quality Standards." Accessed at https://www.sjpl.org/digital-literacy-quality-standards-0

Since its commencement in February 2020, the City has adapted the Digital Inclusion Grant Program to meet emerging challenges and community needs – starting with the pandemic. Between 2020-2022 the program was incubated by the former City Manager's Office of Civic Innovation which managed the first three grant rounds with fiscal management by the California Emerging Technology Fund (CETF). In 2023, prompted by declining revenue, the program was reorganized into the Library (Library Department) for assessment and next phase implementation. Fiscal management was transferred the San José Public Library Foundation (Library Foundation).

The Library Department and Library Foundation implemented the fourth round of grants (Round 4) in 2023-2024 as a bridge year, with minimal adjustments to the program structure, to assess and to gather feedback from grantees and community input on the program. The assessment informed the following requirements implemented in the fifth round of grants (Round 5) in 2024-2025:

1. Tech Hub creation: physical presence in a building or other structure (brick and mortar) that is open to the public at least 20 hours per week during set hours is required to ensure consistency across grant funded programs and to build community trust, awareness, and accessibility.
2. Program implementation is shifted from a service-driven, problem-based approach to a strengths-based, needs-driven approach, also known as a Wraparound approach.
3. Grant disbursement is shifted from reimbursement-based to full award up front, with claw back provisions, to alleviate fiscal hardship and administrative burden placed on non-profit grantees.
4. Grant cycle is shifted from being one year to up to five years to foster long-term commitment and program investment from non-profit grantees.

Round 5 Grantees must establish a ***Tech Hub*** at their organization's location that aims to provide a welcoming, safe, and secure space, offering in-language and culturally appropriate support. Located within multi-service centers in low-income communities, *Tech Hubs* will provide free, consistent access to digital resources. This space will facilitate repeated and tailored support, helping residents build skills and access essential resources to achieve long-term success in education, employment, health management, and social/civic engagement. Key *Tech Hub* activities include but are not limited to:

- Computer labs with set hours of operation
- Staff onsite to answer questions and provide one-on-one tech support
- Assistance with enrollment in internet plans and obtaining devices
- Outreach and program promotion
- Needs assessment to ensure services are aligned with the actual needs of residents
- SJPL's Digital Skill Building Pathway curriculum including basic digital literacy skills, career, education, social engagement, Health/Telehealth, Finances, and civic applications)
- Data collection and Reporting

San José Resilience Corps Program

In 2025, the Library added the SJ Access Pathway to the City's Resilience Corps (RC) Program. The RC program is a paid job training program for young adults in San José, which is administered by the Library and

first began in 2021 to address learning and skills gaps exacerbated by the pandemic. The RC Program and SJ Access Pathway create employment opportunities for disadvantaged young adults facing barriers to workforce participation. The SJ Access Pathway supports young adults who want to explore technology-related careers, including Information Technology (IT), coding, machine learning, and digital literacy. Youth participating in this pathway as SJ Access Resilience Corps Associates (SJ Access RCAs) gain hands-on experience in the Library's IT unit supporting network and device management, software integration, database administration, and cybersecurity. SJ Access RCAs also receive professional training in coding programming, with support to obtain an industry-recognized certification.

As part of the Digital Resiliency initiative, Associates perform a range of activities, including:

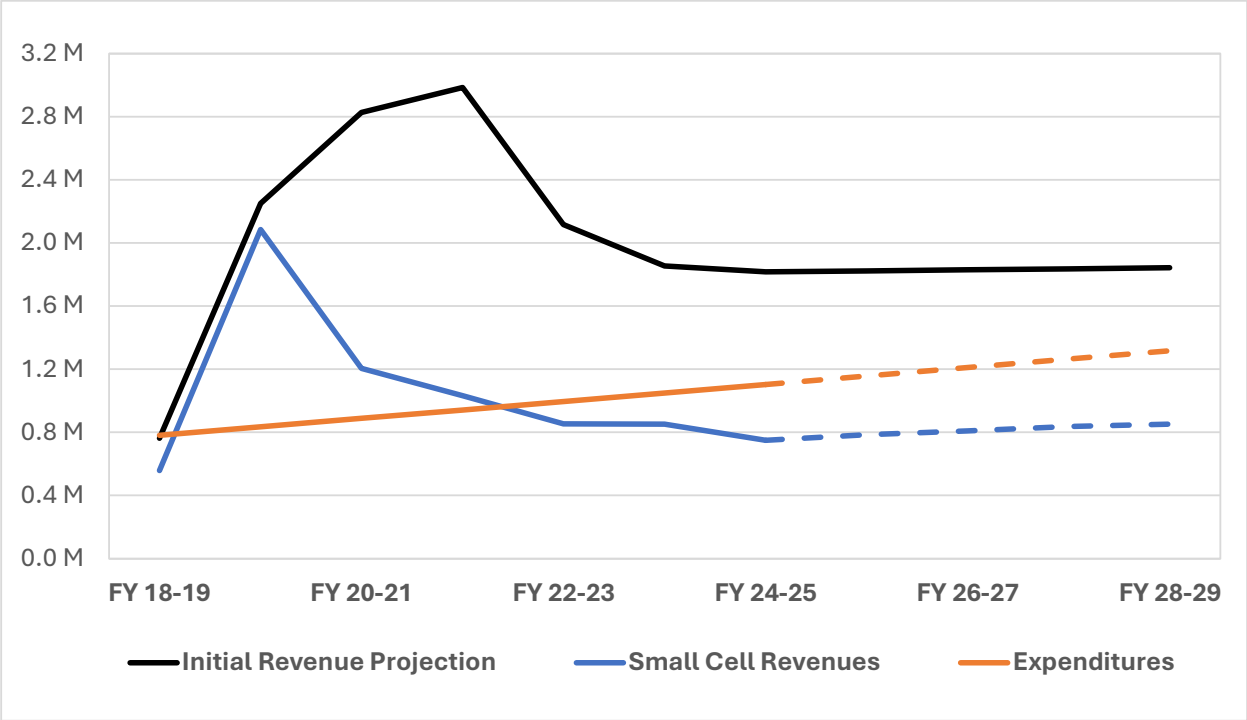
- Support Library IT unit functions, including hands-on projects such as troubleshooting, device management, and device support.
- Engage in structured training to learn foundational concepts of coding programming language.
- Complete testing to obtain an industry-recognized certificate(s).
- Support the planning and delivery of community-focused coding and AI/Machine Learning workshops for families

The SJ Access Pathway empowers RCAs to explore careers in technology fields such as coding, computer science, and information technology and offers RCAs foundational technical skills, hands-on professional experience, and opportunities to make meaningful contributions to their communities.

Current Funding Sources

The DIF is a crucial funding resource for the City's broadband and digital equity efforts to close the digital divide. From its inception in 2018 through the end of fiscal year 2023-2024, the fund has generated a total revenue of $6.5 million from leasing City-owned streetlights for small cell deployments. The small cell revenue has been declining from its peak in 2019-2020 and will not sustain projected annual expenditures (see Figure 8), highlighting the need for additional funding sources to continue supporting digital inclusion efforts. Approaches to address the DIF shortfall are in *Needs and Barriers* and *Strategy & Action Plan* sections.

FIGURE 8: DIGITAL INCLUSION FUND FINANCIAL SUMMARY: 2019-2029



Needs and Barriers

This section highlights the key challenges and opportunities San José faces in advancing digital equity, drawing on research, community surveys, federal and state program reports, and insights from the City's program outcomes.

Affordability

Broadband and Devices

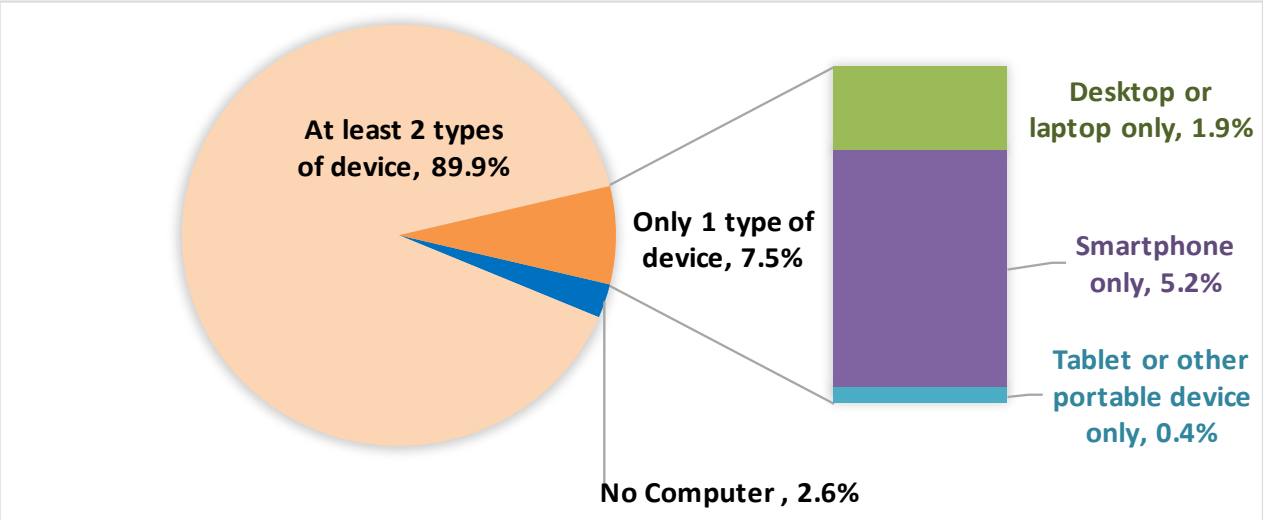
For low-income households, internet plans and devices are often deprioritized in their budgets. When under financial strain, a home internet plan may be seen as non-essential or redundant, especially if a mobile plan can meet basic needs and consolidate costs into a single bill. Of households surveyed by the National Telecommunications and Information Administration (NTIA) in 2021, $10 is the average cost unconnected households can sustainably pay for home internet.[22] Even with this average, many surveyed households stated that they were only willing to adopt the service if it were free. In San José and across the country, $10 of less home internet plans provide service below the Basic Benchmark 100/20 Mbps and are only available

[22] Pewtrusts.org. "Broadband Challenges and opportunities in Rental Housing." Accessed at Broadband Challenges and Opportunities in Affordable Rental Housing | The Pew Charitable Trusts (pewtrusts.org); U.S. Department of Commerce. "Digital Nation Data Explorer." Accessed at Digital Nation Data Explorer | National Telecommunications and Information Administration (ntia.gov)

to eligible households, not everyone. The average home internet monthly cost in California is $83.60,[23] which is unaffordable for many families.

Device affordability is a significant barrier contributing to the digital divide. While most San José households (97%) have access to at least one internet-capable device—such as a computer, smartphone, tablet, or portable wireless computer—not all devices are suitable for effectively engaging with all internet services and applications. For example, relying solely on smartphones can make tasks like word processing or large-screen browsing for school or work difficult or even impossible. Many financially strained residents can only afford one device and often rely on their smartphones. According to the ACS 2019-2023 data, 5% of San José households rely exclusively on a smartphone without access to any other type of device (see Figure 8).

FIGURE 9. DEVICE OWNERSHIP IN SAN JOSÉ HOUSEHOLDS



Source: 2019-2023 ACS 5-year data

The SJ Access device lending programs achieved significant success in bridging the digital divide by providing residents with critical access to technology. Initially supported by special grants and federal funds, these programs offered high-speed hotspots and computing devices to thousands of households. However, as program funding diminished and device inventories approached the end of their usable lifespan, sustaining the initiative became increasingly challenging. Rising costs further underscored the need for alternative strategies to ensure residents' long-term access to suitable devices and reliable internet connections.

Low-cost Internet plans

Many internet service providers (ISPs) offer low-cost home internet plans but have various eligibility criteria the household must meet to receive the discounted rate. Table 5 below lists major ISPs' plans in San José. However, availability and speeds vary by location, and the plans are limited to customers who meet specific eligibility criteria.

[23] Bar, F., Galperin, H., Le, T., "2023 Statewide Digital Equity Survey" August 2023. Accessed at 2023 Statewide Digital Equity Survey – University of Southern California (broadbandforall.cdt.ca.gov)

TABLE 5: LOW-COST INTERNET PLANS OFFERRED BY MAJOR PROVIDERS (AS OF NOVEMBER 2024)

Provider	Plan	Monthly Price	Advertised Maximum Speeds (download/ upload)	Meet 100/20 Mbps threshold	Data Cap	Discount
Comcast (Xfinity)	Internet Essentials*	$14.95	75/10 Mbps	No	None	-
Comcast (Xfinity)	Internet Essentials Plus*	$29.95	100/20 Mbps	Yes	None	-
Comcast (Xfinity)	NOW	$30 $45	100/10 Mbps 200/10 Mbps	Only download speed	None	autopay & paper-free billing mandatory
AT&T	Access*	$30 + taxes	100/NA Mbps	Only download speed	None	-
Verizon	LTE or 5G Home	$60	LTE 50/5 Mbps 5G 100/10 Mbps	Only 5G download speed	None	$10 autopay & paper-free billing Up to $30 Forward program discount* Bundled discount with mobile plan
T-Mobile	5G Home	$55	100/20 Mbps	Yes	None	$5 autopay

*Only available to customers who meet specific eligibility requirements; terms are subject to change

Affordable Connectivity Program

Affordability can be helped through subsidies like the Affordable Connectivity Program (ACP), launched by the FCC in November 2021 to assist households in need. The ACP provided eligible households with up to $30 per month for internet service and $100 for device purchases. Many ISPs introduced discount plans, as described above, enabling ACP-eligible households to access high-speed internet (100 Mbps download speed minimum) at no cost when combined with the ACP subsidy. Nationwide, over 23 million households (one in six) participated in the ACP, citing affordability as the primary barrier to internet access. [24]

[24] FCC surveyed ACP participants in December 2023. Accessed at https://www.fcc.gov/acp-survey.

In San José, the ACP and its predecessor program, the Emergency Broadband Benefit (EBB), delivered more than $23 million in subsidies, benefiting approximately 39,900 households—or about 120,000 residents.[25,26] This underscores the critical role of affordability initiatives in expanding internet access.

Despite its success, the ACP ended on June 1, 2024, without a successor program. While some ISPs have committed to offering $30 or lower-cost plans to low-income households, this remains substantially higher than the $10 per month many low-income families consider affordable.

A key challenge highlighted by the ACP was the lack of awareness among unconnected residents about available programs. In some communities, up to 75% of eligible households were unaware of these benefits. By the program's end, only 50% of eligible households—about 2.9 million in California—had enrolled, though enrollment steadily increased as awareness grew.[27, 28]

The City supported ACP outreach and signups through the Digital Inclusion Grant Program and the Library's *SJ Access* initiative. However, the significant gap between eligible households and participants highlights the need for more robust and targeted outreach efforts in future programs to maximize participation and ensure more residents can benefit.

Lifeline

The federal and state Lifeline programs provide subsidies of up to $9.25 per month to help residents pay for internet access, but several barriers limit their effectiveness. Many subsidized plans fail to meet the Basic Benchmark speeds of 100/20 Mbps. The enrollment process is complex, as with other federal and state assistance programs, and is further hindered by limited awareness, low provider participation, and the requirement for periodic recertification. As of December 2024, only 23% of eligible households nationwide—approximately 8.8 million—are enrolled in the program, underscoring the need for improvements in accessibility and outreach.[29]

Funding

The City's existing broadband and digital equity initiatives cannot be sustained without adequate funding.

Since 2020, there has been a sharp decline in small cell and fundraising revenue, impacting the health of the City's Digital Inclusion Fund (DIF), which finances City broadband operations staff and Grant Program. In 2018, AT&T, Verizon, and T-Mobile expected small cell deployments to reach or exceed 4,000 installations on City-owned streetlight poles by the end of 2022. This projection was made prior to the pandemic and the FCC auction of new 5G licenses for "mid-band" spectrum (C-Band), which is deployed on macro cell towers instead of streetlight-mounted small cells. As of June 2024, carriers expect to seek a combined 1,800 small cell installations, less than half of the 4,000 targeted. As of December 2024, the DIF 10-year revenue projection (2019-2029) for small cell revenue is approximately $10.5 million, which is a 52% reduction from

[25] In 2021, the ACP replaced the Emergency Broadband Benefit (EBB) program that had been instituted at the onset of the COVID-19 pandemic. FCC data conjointly analyzes fund distribution data for both programs across geographical areas.
[26] FCC. "Total EBB and ACP Support by Geographic Region." Accessed at https://www.fcc.gov/reports-research/maps/total-ebb-acp-support-by-geographic-region/
[27] Education Superhighway. *No Home Left Offline: Accelerating Affordable Connectivity Program Adoption*. Education Superhighway, October 2022. No-Home-Left-Offline_Accelerating-ACP-Adoption_2022.pdf (educationsuperhighway.org)
[28] California All. *Affordable Connectivity Program Enrollment Tracker.* Affordable Connectivity Program enrollment tracker | Broadband for All (ca.gov)
[29] Lifeline participation as of December 2024. Accessed at https://www.usac.org/lifeline/resources/program-data/#Participation

the 2019 projection of $22 million. In addition, the cumulative shortfall, considering program operations and programmatic costs, is approximately $700,000 annually or in a total of $3.5 million for 2025-2029 period.

The City's legacy copper infrastructure needs to be upgraded to fiber to meet the City's current and future demands over the coming decades. Converting approximately 105 miles of copper links at signalized intersections would cost an estimated $6.9 million and would improve City communications, enable the City to deploy IoT applications at lower cost, and enhance public safety. In the short term, a $70,000 investment is needed to cover fiber repair costs due to theft and vandalism, an immediate action essential to maintain current service levels.

Streetlights are essential assets for both City and private broadband and smart cities, Internet of Things (IoT) deployments. With over 65,000 streetlight poles citywide, San José able to leverage these assets to negotiate value-exchange partnerships. Installing new light controllers citywide is estimated at $26 million for 65,000 units. Cultivating new public-private partnerships is a key opportunity to find innovative ways to meet City, community and carrier needs. This could include exploring partnerships to modernize streetlight infrastructure to support real time maintenance alerts and enhance network connectivity, especially to stem the increase in copper wire theft and resulting costs, and IoT attachment leases to support stabilizing DIF revenue.

Beyond infrastructure improvements, staff resources are needed to overcome operational hurdles such as joint trench opportunities, and to enable private investment through new market strategies and municipal code updates. Staff resources are also needed for advocacy efforts to navigate evolving regulations, policy shifts from congress and presidential administrations, and to secure grants and other external funding opportunities. A stable and dedicated funding stream is essential to address the city's broadband and digital equity challenges and ensure San José remains a trusted leader. The Strategy and Action Plan outlines measures as identify alternative funding sources, streamlining operations, and pursuing public-private partnerships to close the gap and ensure the program's sustainability.

Legislation & Regulation

The City's Legislative Program priorities informed by the 2017 Strategy are centered around equity and inclusion for all San José residents and will continue to be the focus.

The 2025 Legislative Program priorities[30] aligned with the Strategy include:

Affordability
Expand and Extend Funding: Increase the availability to the ACP or a successor subsidy program and enhance the Universal Services Fund (USF). **Modernize ERATE**: Update the Education Rate (ERATE) program to include reimbursement for wireless and Wi-Fi enabled devices to be lent through the library without onerous restrictions. **Increase Federal and State Funding:** Establish new funding channels for local governments to effectively plan and implement local digital equity initiatives. **Update Funding Programs:** Modernize compensation programs for the use of the public right-of-way, including cable franchises, to reflect the shift to content streaming services.

[30] City of San José's Legislative Program 2025.

Service Availability and Quality
Equitable Broadband Deployment: Accelerate broadband deployment in an equitable and inclusive manner. **Enhance services and reduce costs**: Improve the quality and resilience of broadband services while reducing costs for consumers. **Bolster Public Private Partnerships** for Broadband, Smart City and IoT. **Promote competition**: Encourage the availability and competition of broadband across all technologies. **Support Research and Scientific Studies**: Advocate for continued scientific research on telecommunications technologies, including emerging broadband innovations, network security, and potential health and safety impacts.
Local Control
Preserve Local Regulation: Protect the government's ability to regulate broadband deployment. **Maintain Land Use Control**: Retain local governments control over land use decisions.
Safety and Resiliency
Emergency Readiness: Advocate for funding to enhance the resilience of wireline and wireless networks to ensure communication readiness during emergencies and natural disasters. **Service Resiliency**: Improve wireline and wireless infrastructure to enhance public safety and communications. Advocate for funding to expand roadway safety and efficiency.
Supporting Families, Education and Employment
Language Access: Support policies and investments that create materials and services for limited and non-English speaking residents. **Increase Educational Opportunities**: Wrap around supports for building digital skills. **Workforce Development**: Support youth workforce development programs. **Seniors**: Support programs and services that increase independent living and reduce social isolation

Regional Coordination

Efforts to close the digital divide by public entities can greatly benefit from regional collaboration[31]. This concept has been reinforced at the federal and state level with the release of grant opportunities that prioritize regional scopes and coordinated efforts or require it to be eligible for funding. Historically, the San José-San Francisco-Peninsula region has not coordinated to take advantage of these opportunities. The San Francisco, San Mateo, and Santa Clara Counties are the only jurisdictions in California that have not developed a state recognized consortium and therefore are ineligible for consortium grants.[32]

[31] Neighboring areas tend to experience similar barriers that local jurisdictions can overcome as a collective rather than as individual entities. This can generate efficiencies and economies of scale, which is particularly valuable when considering the costly activities typically involved in broadband expansion (e.g., fiber deployment). Private partners may be encouraged by greater collaboration as well, as coordination between governments can help streamline regulatory processes for broadband development.

[32]California Public Utilities Commission. "California Advanced Services Fund – 2023 Active Consortia Grants." Accessed at California Advanced Services Fund – 2023 Active Consortia Grants

At the national level, San José is regularly engaged with multiple working groups, including the National Digital Inclusion Alliance (NDIA), the National Association of Telecommunications Officers and Advisors (NATOA), the Schools, Health & Libraries Broadband Coalition (SHLB), and the National League of Cities (NLC). While these efforts provide valuable opportunities to learn from peers, they emphasize the necessity of strong local and regional coordination to drive meaningful change on a national scale.

The Bay Area's lack of regional broadband and digital equity collaboration is noticeable in other ways. For instance, broadband is not an area of work for the Association of Bay Area Governments (ABAG). Although Santa Clara County developed a Digital Equity Consortium in 2021, Santa Clara County is independently pursuing its own broadband development plans.

This presents an opportunity for San José to foster local collaboration. The City could convene and work with regional partners and organizations, such as Santa Clara County, San Mateo County, Joint Venture Silicon Valley, Silicon Valley Education Foundation, community-based organizations with *Tech Hubs,* and others to create a more cohesive approach to broadband and digital equity efforts in the region.

Availability

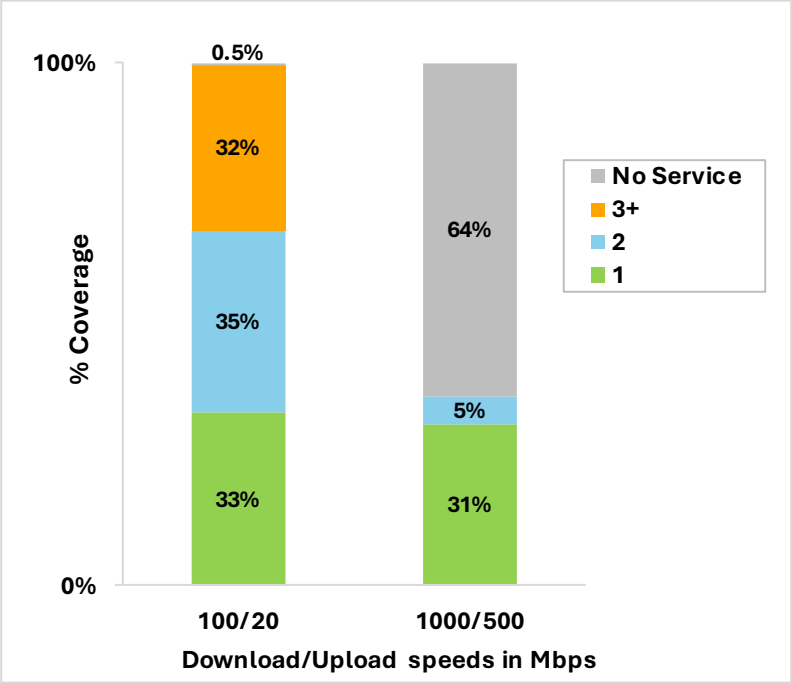
Limited Internet Service Providers

The residential broadband market in San José is largely dominated by established carriers such as Comcast Xfinity for cable and AT&T for fiber and DSL. According to the FCC's national broadband data, about 68% of San José can currently receive service from just 1-2 providers at 100/20 Mbps (see Figure 10). Only 36% can receive service at 1000/500 Mbps from 1-2 providers.

Limited competition is a concern for achieving competitive pricing in broadband services. National research has shown that areas with at least three providers see prices that are about 15% lower than in areas served by only one provider. [33] The difference can increase to as much as 40% in cities with the most competition among providers. The City can take proactive steps to address this gap and ensure that all residents have access to competitively priced and high-quality services.

[33] Cooper, Tyler; BroadbandNow. "Competition and Pricing: How Starlink Could Change the Internet Industry." Accessed at https://broadbandnow.com/report/starlink-competition-and-pricing

FIGURE 10. NUMBER OF INTERNET PROVIDERS IN IN SAN JOSÉ



MOBILE HOMES

Mobile home communities face substantial challenges to accessing broadband services. The California Public Utilities Commission (CPUC) has identified 16,200 unserved locations in San José[34], with 3,800 (24%) of these located within mobile home communities. Mobile homes are typically located in privately-held areas where right-of-way access requires negotiating agreements with homeowners' associations. While the approach for mobile homes may differ from that for multifamily housing, targeted strategies are essential for both types of housing. These strategies must accommodate the specific logistical and legal complexities associated with each housing type.

MULTIFAMILY HOUSING

Broadband service availability in multifamily housing, including public housing, deserves more attention. The City of San Francisco estimated that 25% of households lacking high-speed broadband access reside in multifamily housing.[35] The State Digital Equity Plan identifies specific challenges for these buildings, including inadequate connections and limited options where multiple families reside in the same unit due to industry practices. Additionally, broadband maps often inaccurately represent individual units in these buildings. Detailed analyses are needed to verify the accuracy of these maps and assess the actual internet service quality in San José multifamily housing.

[34] Senate Bill 156 and CPUC Decision 22-04-055, which sets the Federal Funding Account rules, define an area as 'unserved' if no wireline broadband provider reliably offers broadband service at speeds of at least 25/3 Mbps. Web access Federal Funding Account Public Map

[35] County and City of San Francisco. Comments on the BEAD program five-year action plan. August 7, 2023. Accessed at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M516/K655/516655290.PDF

Legacy Landline Transition

As telecommunication providers phase out traditional copper landlines, both City operations and residents must prepare for the transition to newer technologies such as voice over internet protocol (VOIP) delivered over fiber, cable, or wireless networks. These newer technologies rely on different backup power approaches, which may not offer the same reliability as copper. In San José, about 12,000 residential and 12,000 business locations currently use landline service. Transition to a reliable alternative is essential for all communications, and effective planning and coordination will be critical in managing this transition because alternative service options differ across the city.

Community Wi-Fi

The Community Wi-Fi Networks continue to show significant use in each attendance area. However, they require ongoing operational costs and will need a technology refresh. Wi-Fi technology typically requires major upgrades every 5-7 years to keep pace with advancements and the growing demand for faster speeds and higher data usage. The current networks were funded through the ESUHSD Technology Bond and a Community Development Block Grant, with support and maintenance currently secured only through 2026.

To address the higher data usage challenge, the City secured a $500,000 Local Agency Technical Assistance (LATA) grant from the CPUC in March 2023. This grant funds an assessment of upgrading the Community Wi-Fi network to provide reliable indoor broadband with symmetrical 100 Mbps speeds. The project is set to conclude in September 2025 and will determine the feasibility of these upgrades.

As the City evaluates the next stage of its Community Wi-Fi, it is essential to assess the long-term financial and operational viability of upgrading and maintaining the networks against alternative solutions. These alternatives include prioritizing support for resident enrollment in low-cost internet plans, which may offer greater stability and scalability while addressing the growing need for high-speed broadband. A strategic decision will be necessary to balance the immediate benefits of the Community Wi-Fi network with the broader, sustainable objective of ensuring affordable, reliable internet access for all residents.

Specifying Community Needs

The last comprehensive survey conducted in the City in 2017 is outdated due to rapid technological advancements, particularly those spurred by Artificial Intelligence and shifts during the pandemic. Although ACS 2019-2023 data provides broad demographic insights, it does not identify specific barriers to internet access or provide disaggregated data for population groups, such as veterans and individuals with disabilities, who may need tailored assistance.

Libraries are a natural community space for convening residents and provides access to underserved populations through local engagement. Even with this community space, digital inclusion programs are limited in where they operate and can reach residents. Relying solely on spaces like libraries and schools risks excluding residents who have difficulty accessing these locations or are unaware of the services offered.

Reassessing City channels can mean identifying different locations that community events would occur, or areas where residents frequently congregate. Expanding access can even mean spreading more awareness about the City's digital equity programs; the City can draw in more community support depending on their community engagement and digital equity goals. Digital inclusion program co-development may better help

the City understand where to target digital equity efforts and ensure all City programs directly meet the needs of vulnerable and disadvantaged residents.

The SJ Access program has maintained several channels to solicit feedback from the community. The primary mechanism for soliciting feedback has been the use of direct surveys distributed in-person at Libraries, through social media, and through Library programs. Additionally, the Library has and expects to continue to host Community Conversations to solicit feedback about resident needs and desires. Further, specific and technical feedback on the functionality and service delivery of community wi-fi networks is assessed through SJ 311. Moving forward, the Library expects to host a series of Community Conversations focused on revisioning the Digital Inclusion Grant Program, resetting the program outcomes, and assessing the skills and expertise needed for an organization to be eligible to apply for future grant funds.

To expand the next phase of community engagement, the Library has initiated a trial period of focus group conversations with community members. These discussions have provided valuable insights, even if they represent small initial steps. This feedback provided key actions to pursue and set the direction for further initiatives such as the redesign of the Digital Inclusion Grant Fund to fund SJ Access Centers. To build on this foundation, the Library plans to implement additional strategies to address community needs comprehensively, including conducting a formal needs assessment survey to community members.

During this process, the Library is considering barriers to addressing community needs. Specific challenges include language barriers that may hinder effective communication, limited access to transportation for residents to participate in feedback sessions, and low awareness of digital equity programs among underserved populations. Additionally, some neighborhoods may have a lack of trust in government initiatives, which could impact participation rates.

To address these barriers, the Library intends to implement targeted strategies such as providing multilingual materials and interpreters to ensure inclusivity, hosting events in accessible locations within the community such trusted local organizations hosting SJ Access Centers to build rapport and encourage engagement. Outreach efforts will include social media campaigns, direct engagement through existing library programs, and partnerships with grantees of the Digital inclusion Fund Grant to raise awareness.

These barriers and corresponding strategies will be documented in subsequent discussions and tables, forming a comprehensive approach to ensure successful completion of the needs assessment and meaningful engagement with all segments of the community.

By integrating these efforts, the City aims to refine its digital equity and inclusion programs to ensure they are both impactful and aligned with the specific needs of its residents.

Digital Skills

Even with internet access and devices, many residents still struggle to navigate new technology and associated software. This challenge is particularly true among older populations who need devices and internet for accessing City services. Digital skills are simply defined as the ability to effectively find, use, and integrate information and technology. The City is addressing this gap through the SJ Access's Digital Skill-building Pathways. Residents can access both in-person and online training opportunities by visiting the Library's SJ Access website. These courses cover a varied beginner-level digital topics, including accessing the internet, managing online information, and integrating online information. Courses are available in three languages, including Spanish and Vietnamese. While the program has been successful, there are opportunities for further development.

The rapidly evolving digital landscape demands a shift from foundational digital skills to more advanced topics such as Artificial Intelligence (AI), cybersecurity, data privacy, and the use of complex software applications. Other targeted initiatives for older adults will emphasize digital tools for healthcare management, communication with family, and financial planning, to help them navigate the digital world with greater confidence and independence. These competencies are increasingly essential for safeguarding personal information, addressing the broader demands of a technology-driven world, and enabling residents to thrive in an ever-changing environment. Tailoring programs to address the unique needs of specific demographic groups presents another significant opportunity. For example, workshops focused on generative AI, video editing tools, and other creative technologies could align with current trends and interests among young adults.

AI is increasingly shaping daily life, yet gaps in awareness and access create barriers to digital equity[36,37]. Young people often interact with AI tools without fully understanding their implications, such as bias, misinformation, and privacy concerns. Similarly, parents and educators face challenges in guiding youth through these complexities, given their own limited knowledge and resources. Adults and the workforce face the need for upskilling to meet growing demands for AI-related competencies. Underrepresented communities face additional barriers which exacerbate inequities in AI literacy.

Research from Common Sense Media[38] highlights differences in how various racial and ethnic groups engage with generative AI tools, such as image and video generators. Black and Latino teens, for instance, are more likely to use these tools compared to their White peers, reflecting distinct interests and engagement patterns. These trends reveal the importance of culturally relevant and targeted approaches to AI education that resonate with diverse communities. There is a clear and growing need to embed AI literacy into Digital Skills Building pathways, ensuring individuals from all backgrounds can engage meaningfully with the evolving AI landscape. Regular updates will be needed to keep these programs relevant as AI technologies and their societal impacts continue to advance.

Improving the accessibility of digital tools and training resources is crucial to fostering inclusivity. For individuals with disabilities, the lack of access to assistive technologies remains a significant barrier.

---

[36] U.S. Department of Education, Office of Educational Technology. (2023). Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations. Web access: https://tech.ed.gov/ai/

[37] National Artificial Intelligence Initiative Office. (2023). Enhancing AI Literacy for the United States of America: Recommendations for Public Awareness and Understanding. Web access: https://ai.gov/wp-content/uploads/2023/12/Recommendations_Enhancing-Artificial-Intelligence-Literacy-for-the-United-States-of-America.pdf

[38] Common Sense Media. (2024). The Dawn of the AI Era: Navigating the Impact of Artificial Intelligence on Youth and Education. Web access: https://www.commonsensemedia.org/sites/default/files/research/report/2024-the-dawn-of-the-ai-era_final-release-for-web.pdf

Expanding the curriculum to include training on tools such as screen readers, speech-to-text applications, and alternative input devices like adaptive keyboards would empower residents to use these resources effectively. Practical demonstrations of how assistive technologies can be applied in everyday scenarios—such as managing personal finances, accessing online services, or participating in virtual meetings—can further enhance usability and confidence.

Providing workshops tailored to the needs of individuals with disabilities is another critical step. These sessions could focus on navigating websites with accessibility tools, adjusting device settings for enhanced usability, and utilizing mobile apps designed for assistive purposes. Partnering with organizations specializing in assistive technologies and services for individuals with disabilities can strengthen program offerings and expand outreach efforts. These collaborations would help raise awareness among residents who would benefit most, ensuring equitable access to resources. These enhancements of the Digital Skill-Building Pathways program can address barriers, empower individuals, and advance the City's commitment to creating a digitally inclusive community where all residents can participate and thrive.

Strategy & Action Plan

FRAMEWORK	WHAT TO ACHIEVE	HOW TO ACHIEVE
General – High Level:	GOALS	STRATEGIES
Specific – Detail Level:	OBJECTIVES	TACTICS

Goal 1: Close the Digital Divide in San José through Digital Empowerment

Strategies:

A. Cultivate partnerships to develop and enhance workforce development and digital skill building initiatives.

B. Leverage libraries, community centers, and other shared spaces to provide access to current technologies and digital empowerment programs.

C. Leverage Grant Program funded San José Tech Hubs to ensure equitable access to digital opportunities for households in San José.

D. Leverage public private partnerships, policy, advocacy to expand low-cost options for high quality broadband services and devices.

Objective 1.1: Outline Broadband and Digital Equity Strategy programs and funding by 2027

Objective 1.2: Increase City funded Digital Skills, Cybersecurity, and Workforce training programs

Objective 1.3: Optimize Tech Hubs to Increase access to digital skill building, home internet, and computing devices

Objective 1.4: Expand partnerships for skill-building and hiring in technology and trades jobs

Objective 1.5: Advocate for Affordable Devices and Internet Service Plans

GOAL 1 ACTION PLAN:

	Tactics	Timeframe	Priority
Objective 1.1 Stabilize Programs & Funding	Implement a multi-faceted approach to develop a sustainable funding mechanism for digital equity programs	2025-2027	
	Develop annual Digital Inclusion Grant Program Fundraising Plan with the San José Public Library Foundation (Library Foundation) to leverage private sector donor-investor funding with the City's investments from the Digital Inclusion Fund.	2026	1
	Develop a donor pitch with the Library Foundation showcasing the impact and value (cost per outcome) of Tech Hubs to cultivate private investments to enable additional Tech Hubs and digital empowerment programming across San José.	2026	1
	Evaluate broadband permit fees and cost recovery structures to incorporate all relevant staff costs, including broadband planning and project management.	2027	1
	Consider the feasibility of using the City's retired devices for refurbishing and deployment to Tech Hubs or for recycling with the redemption value going into Digital Inclusion Fund.	2027	2
	Evaluate and update small cell lease rates for City-owned assets to ensure fair market value, encourage broadband investment, sustain City maintenance costs, and support digital inclusion initiatives.	2027	2
	Apply for state and federal grant funding opportunities that align with the City's broadband and digital equity goals, programs, and initiatives.	Ongoing	2
	Convene with telecommunications companies and internet service providers to explore value-exchange partnership opportunities that would address the City's broadband and digital equity needs.	Ongoing	2
	Assess the City's Cable Franchises and explore options to address annual revenue decline.	2027	3
	Explore Digital Empowerment sponsorships from corporations and sports teams, such as Bay Football Club, Earthquakes, Sharks, San José Giants, and 49ers, to promote and fund the City's digital equity programs.	2027	3
Objective 1.2 Increase Digital Empowerment	Strengthen digital empowerment initiatives and foster community-based partnerships	2025-2030	
	Maintain partnerships with ESUHSD to ensure the continued operation of the eight Community WiFi network areas	2025	1
	Host community workshops, informational sessions, and mobile outreach events at library branches, community centers, Tech Hubs, and schools to promote digital empowerment resources and develop community awareness and use of available resources.	Ongoing	1

	Safeguard and expand individual freedoms–ensuring open access to information while combating digital discrimination, defending net neutrality, and protecting personal privacy–so that everyone can exercise true agency in the digital realm.	Ongoing	1
	Advocate for community interest technology and ensuring citizen advantage/benefit from innovation and technology – cybersecurity, AI, IoT, Smart Cities tech, digital literacy skills	Ongoing	1
	Champion community-focused innovation to ensure every resident benefits from emerging technologies–bolstering cybersecurity, guiding AI, IoT, and Smart City solutions with citizen priorities, and fostering digital literacy skills for an equitable digital future.	Ongoing	1
	Expand training opportunities in emerging technologies, including cybersecurity, Artificial Intelligence and machine learning, to ensure residents are equipped with skills that are increasingly part of daily life and are in demand in the workforce, such as personal and enterprise cybersecurity in an increasingly digital and AI-integrated world; using AI text generators like ChatGPT, image creators like Midjourney and DALL-E, real-time translation like Google Translate; services powered by AI-driven such as robo-advisors, healthcare and medical diagnostics, Smart Home and Smart City devices such as Nest Thermostats and virtual assistants like Siri, Google Assistant and Alexa; AI-powered cameras and traffic management, autonomous vehicles such as Waymo and Tesla.	2025-2028	1
	Explore ways to expand the Resilience Corps' Information Technology and Computer Science Pathway to increase the annual number of Resilience Corps Associates who can participate in the program.	2026	1
	Brand design and promotion – develop recognizable brand for digital equity initiatives in San José to ensure outreach efforts related to the City's Digital Empowerment programs carry a unified message and build trust and recognition across diverse communities.	2026	2
	Incorporate into the Digital Inclusion Index measurement of Covered Populations, per federal and state definitions, and underinvested neighborhoods and developments as identified by the FCC map, such as mobile home communities and low-income housing.	2026	2
	Revise the Digital Literacy Quality Standards to take a more holistic approach in evaluating Tech Hubs and the services provided within the space, not only Digital Literacy. This will ensure the updated standards reflect its adaptability and the city's contributions to all Digital Inclusion services. The refreshed standards will be rebranded as Digital Equity Quality Standards.	2026	2
	Centralize training resources for consistency across City and Tech Hub programs to provide residents access to clear and standardized pathways for digital skill development, regardless of whether engagement is through the City or a CBO partner's Tech Hub.	2027	3

	Seek ways to improve broadband and digital equity program implementation efficiency through region-wide collaboration, including through the Santa Clara County Digital Equity Consortium, Schools, and collaboration with regional stakeholders to coordinate outreach and joint funding opportunities, such as from state and federal grants.	2028	4
Objective 1.3 Increase Community Tech Hub Supports & Engagement	Increase the percentage of households subscribed to home internet and with a suitable computing device.	Ongoing	1
	Explore opportunities to support CBOs with embedding digital empowerment into existing operations, including establishing long-term physical presence in San José (if operations are currently mobile or pop-up) and becoming a reliable community space to access the internet and devices, digital skill building resources, and assistance with choosing and signing up for home internet.	Ongoing	1
	Increase the number of organizations offering digital skill building programs that meet the City's Digital Literacy Quality Standards and increase the number of participants in these programs.	Ongoing	2
	Optimize Tech Hub model through iterative adjustments to centralize resources and provide a full range of opportunities for residents to access digital skill-building programs in one-stop physical locations for training in technology skills, including upskilling and reskilling, and support achieving home internet and suitable devices.	2027	2
	Increase City-created resources to support City and Tech Hub programs based on community feedback and input.	2027	2
	Leverage Tech Hubs to gather impact metrics and community feedback insights that show community broadband and digital empowerment needs and barriers to support City decision-making regarding future programming, resource development, and implementation of the Grant Program.	2027	2
	Conduct outreach to community-based organizations to raise awareness of City resources to support digital empowerment programs, including the Digital Inclusion Grant Program, and encourage grant applications to expand the network of Tech Hubs in San José.	2028	3
	Help community organizations close the digital divide while providing universal access to digital technology, skill building opportunities and intentionally removing barriers by building community trust in the availability of relevant digital services.	2028	3
Objective 1.4 Increase Hiring in Technology & Related Trades Jobs	Advance workforce development and economic empowerment	2025-2027	

	Consider the development of City-led college to career program for broadband deployment that would help address the City's shortage in electrical and structural engineering trades and support meeting the Strategy's permitting timeline and workforce development goals.	2027	5
	Explore the feasibility of developing a City apprenticeship program in partnership with regional city and county governments and private sector to create a pipeline to a job within local government or private companies after completing a skilled-trade or technology apprenticeship at the City.	2027	6
	Explore the feasibility of skilled-trades job training partnerships between the City, private sector, and higher education to address local gaps relevant to broadband deployment, including permitting and inspection specialists, structural and electrical engineering, construction crews, fiber optics specialists, telecommunications technicians, tower technicians, surveying, utility locating, and project management.	2027	6
	Explore the feasibility of technology job training partnerships between the City, private sector, and higher education to upskill and reskill workers interested in learning and adapting to the growing fields of Artificial Intelligence, cloud computing, cybersecurity, and digital transformation, including data scientists, AI research scientists, robotics and internet of things (IoT) engineers, data and machine learning engineers, cloud architects and solutions engineers, security analysts and engineers, full-stack and mobile app developers, product managers, technology and digital transformation consultants, technology policy advisors, and governance, risk and compliance specialists.	2027	6
Objective 1.5 Internet and Device Affordability	Promote affordable home internet and computing device	2025-2027	
	Seek device donation, reuse, and/or recycling partnerships with local companies, including direct donor funding for new devices or to subsidize devices, or used device donations to be refurbished and provided to eligible individuals or recycled to generate funds to purchase refurbished or new devices for eligible individuals.	2026	1
	Create an annual Digital Equity Communications Plan that includes marketing to elevate awareness of City initiatives and promotion of current low-cost broadband service plans.	Ongoing	2
	Disseminate promotional materials and messaging as described in the Communications Plan, which will include active partners such as City departments, CBOs, schools, and others.	Ongoing	2
	Seek low-cost plans of $15 per month for 100/20 Mbps and $50 per month for 1 Gbps/500 Mbps, or lower for eligible households.	2027	2
	Engage with ISPs to identify ways to support and enable the establishment of low-cost broadband service plans for eligible households in San José, including defining eligibility.	2027	2
	Explore ways to achieve low-cost plans through ISP partnerships, and advocate for State and Federal regulations, grants, and subsidy programs, including Universal Service Fund modernization and State or Federal standards for wired and wireless broadband services.	2027	2

	Engage with original equipment manufacturers (OEMs) and ISPs to identify ways to support and enable offering quality low-cost device options for eligible households in San José, including defining eligibility and quality.	2027	3
	Seek ways to offer quality computing devices for eligible individuals at costs between $50 and $350, or lower.	2027	3
	Engage with device refurbishing and recyclers to identify ways to support and enable offering quality zero to low-cost device options for eligible households in San José, including defining eligibility and quality.	2027	3
	Advocate for federal investments to address the digital divide, including modernization of the Universal Service Fund, national broadband subsidy program, and funding to address broadband infrastructure gaps in urban areas.	Ongoing	3
	Advocate for local, state and federal funding sufficient to cover 100% cost recovery for local broadband and digital empowerment staff and programs.	Ongoing	3
	Coordinate with local CBOs, schools, and local agencies such as the County of Santa Clara and Housing Authority to promote low-cost broadband service plan options to eligible households and facilitate subscription sign-ups.	2028	4

Goal 2: Ensure Broadband is Available to All and Future Ready

Strategy:

A. Focus broadband infrastructure development efforts on increasing private investment and equitable citywide deployment through public-private partnerships.

B. Encourage broadband service competition and implement a citywide Broadband Resilience Plan.

Objective 2.1: Achieve universal availability of greater than 1 Gbps/500 Mbps broadband by 2030

Objective 2.2: Achieve universal choice between two or more broadband service providers by 2030

Objective 2.3: Assess and improve broadband infrastructure resilience during emergencies by 2027

Objective 2.4: Upgrade City network infrastructure by 2035

Goal 2 Action Plan:

	Tactics	Timeframe	Priority
Objective 2.1 Service Availability	Achieve universal broadband access through private investment, advocacy, and regional coordination	2025-2030	
	Draft a resolution for City Council approval establishing 100/20 Mbps as the City's basic speed minimum for broadband availability	2025	1
	Set an aspirational speed of greater than or equal to 1 Gbps download and 500 Mbps upload to achieve by 2030.	2025	2
	Establish and implement an annual legislative and advocacy agenda to guide ongoing engagement and other activities to influence and represent the City's interests regarding State and Federal legislation, rulemaking, and grants to achieve Goal 2.	2026	1
	Engage with internet service providers (ISPs) to identify public-private partnership opportunities and encourage private investment in fiber and home wireless broadband deployments in San José to achieve Goal 2.	2030	2
	Coordinate with telecommunications and internet service providers to understand and collaborate on future network deployment planning and coordinate or collaborate on state and federal infrastructure grant funding opportunities.	Ongoing	2
	Identify and develop opportunities to increase regional coordination on broadband deployments and closing the digital divide, including expanded collaboration with the County of Santa Clara, Santa Clara County Office of Education, Santa Clara Housing Authority, schools, Bay Area cities, and community-based organizations (CBOs).	2028	5

Objective 2.2 Provider Choice	Engage with ISPs to identify ways to support and diversify broadband deployments in San Jose to increase the number of service provider options available citywide.	2030	3
Objective 2.3 Broadband Resiliency	Collaborate with ISPs to catalog the status of hardening wireless infrastructure and seek to develop a coordinated resilience plan for emergency response protocols and to ensure broadband infrastructure resilience in general.	2027	1
	Develop a Citywide copper landline transition coordination plan with ISPs to ensure service continuity.	2027	1
	Advocate for State and Federal agencies to share data and information with cities, which each collect through various telecommunications resiliency regulations, so localities are informed about telecom readiness for disasters and emergencies.	2027	1
	Advocate for State or Federal mobile and voice over internet protocol (VOIP) service standards to ensure reliability during emergencies and disasters.	2027	1
Objective 2.4 Upgrade City Network Infrastructure	Implement upgrades to City's infrastructure to ensure improved reliability, capacity, and future readiness.	2030-2035	
	Coordinate cross-departmental stakeholders to catalog the resiliency status of the City's network infrastructure and develop a resilience plan that identifies gaps and a timeline for improvements to ensure City networks and wireless communications are prepared for emergency response with appropriate restoration protocols and priorities in place.	2027	1
	Endeavor to secure $6.9 million to upgrade the City's outdated copper networks to fiber to support City operations.	2028	1
	Endeavor to secure $26 million for citywide deployment of smart streetlight controllers.	2030	2

Goal 3: Provide Best in Class Broadband Permit Processes and Enabling Structures

Strategies:

A. Leverage process improvements and public-private partnerships to reduce permit processing times for all broadband permit types.
B. Leverage and align internal, cross-departmental efforts to maximize and increase private broadband investment and City and community benefits, including relevant City initiatives, ordinances, policies, citywide plans (example: General Plan, Housing Element), permitting, and leasable assets.

Objective 3.1: Evaluate and streamline broadband permitting and City regulations by 2027

Objective 3.2: Optimize City asset utilization for broadband deployment by 2028

Objective 3.3: Integrate Broadband deployment into City plans and regulations by 2028

Goal 3 Action Plan:

	Tactics	Timeframe	Priority
Objective 3.1 Permitting & Regulatory Alignment	Streamline permitting processes and enhance regulatory alignment to improve efficiency and ensure regulatory compliance	2025-2027	
	Coordinate with the Planning, Building, Code Enforcement Department (PBCE) to evaluate regulations for wireless broadband projects to consider how regulations or processes may be modified to simplify broadband permitting, including considering how to shift Conditional Use Permit projects to Over the counter (Administrative) or Special Use Permits.	2027	1
	Coordinate with the permitting departments to identify and plan to streamline permit processes, including considering automation within AMANDA and ProjectDox to reduce manual processes and ensuring permit data in these systems enable insights that drive further process improvement.	2027	1
	Optimize and promote the PBCE's Best Prepared Designer (BPD) Program to increase telecoms participation and streamline broadband permitting.	2027	1
	Prepare Standard Operating Procedures to clarify and facilitate cross-departmental coordination to expedite permitting during a disaster or emergency to ensure telecommunications and internet services are restored as quickly as possible.	2027	2
	Review and update the San José Municipal Code wireless regulations to align with federal and state broadband regulations	2027	3
	Collaborate with cross-departmental teams to create a broadband permit dashboard to track all permit submissions and the permit processing timeline from intake to final inspection and permit closure.	2027	4
Objective 3.2 Utilize City Assets	Optimize City asset utilization for broadband deployment by leveraging existing infrastructure, improved coordination, and facilitate efficient network expansion	2025-2028	
	Develop an inventory of all City-owned assets and determine suitability for broadband deployments, including third party installation and property use leases that would generate revenue for the City and Digital Inclusion Fund.	2025	1
	Assess suitability of all City-owned land and buildings for broadband deployments.	2026	2
	Pre-certify City properties to host wireless installations through lease agreements.	2026	3
	Coordinate with multiple departments to identify the gaps in broadband access and barriers to deployments in and around City parks and trails to consider how City-owned assets may be used to resolve the gaps.	2027	4

Objective 3.3 Policy & Coordination	Develop infrastructure policies and coordination to promote efficient planning, streamline development, and ensure alignment across stakeholders	2025-2028	
	Preserve and protect the City's local control, authority, and decision-making power to manage its own affairs and respond to the unique needs of the community and ensure that policies and services are tailored to local priorities, promotes accountability, and allows for quicker and more flexible decision-making at the city level.	Ongoing	1
	Embed broadband and digital equity into existing efforts through mandates that support and reinforce the Strategy's goals, including San José Municipal Code Ordinances, the City's General Plan, Housing Element, Children & Youth Master Plan, and Age Friendly Action Plan.	2028	2
	Leverage the Children and Youth Masterplan and other City plans to integrate digital empowerment goals into broader policy frameworks to ensure digital equity objectives are prioritized in key City projects, including those related to youth development, older adult programs, education, housing, and economic empowerment.	2028	2
	Share upcoming development plans with ISPs to enable coordinated broadband deployment opportunities.	2028	5
	Facilitate pilot projects and partnerships to test and evaluate new broadband technologies while ensuring City assets are safeguarded.	Ongoing	5

Evaluation and Performance Metrics

The table below outlines Strategy's goals, objectives, baselines, and targets to close the digital divide and future-proof broadband infrastructure. Outcomes will be reviewed annually by measuring the target based on program performance metrics and comparison with baselines from national data, including the FCC broadband map and the ACS.

TABLE 6. MEASURABLE OBJECTIVES, BASELINES, AND TARGETS

Goal	Objective	Baseline	Target	Metrics
Goal 1: Close the Digital Divide in San José through Digital Empowerment and Public Technology				
Set Programs & Funding	**Objective 1.1** Outline Broadband and Digital Equity Strategy programs and funding by 2026	Digital Inclusion Fund (DIF) revenue gap is $700,000 annually.	Maximize staff cost recovery through fees and charges by 2026 and close the DIF revenue gap by 2028. 50% of SJ Access Grants are funded by donor and investor contributions by 2026	% of citywide Broadband planning and permitting project management activity costs are recovered through fees and charges % of SJ Access Grants funded through donor and investor contributions
Increase Digital Empowerment	**Objective 1.2** Increase City-funded digital skills, cybersecurity, and workforce training programs	City-led digital skill training: 13,900 participants	Increase participants - 35% by 2027 and by 50% by 2030	# of participants in City-led digital skill building training
		4 Resilience Corps – SJ Access Pathway Program	Continue and scale the SJ Access Pathway Program by increasing from 4 to 8 or more Resilience Corps Associates hired annually	# of SJ Access Resilience Corps Associates that complete the workforce program # of certifications achieved by Resilience Corps Associates # of Resilience Corps Associates hired into a desired job after the program
Increase Community Tech Hub Supports & Engagement	**Objective 1.3** Optimize Tech Hubs to increase access to digital skill-building, home internet, and computing devices	Tech Hub: 6 Community organizations serve as Tech Hubs 3,200 participants assisted at Tech Hubs annually	Increase Tech Hub participants - 35% by 2027 and 50% by 2030	# of participants supported by the Tech Hubs # of Tech Hub led digital skill building trainings # of participant needs/experience surveys completed at Tech Hubs
Increase Hiring in Technology & Related Trades Jobs	**Objective 1.4** Expand partnerships for skill-building and hiring in	Ad-hoc or informal framework	Deliver a feasibility analysis and recommendations identifying local	# of partnerships for skill-building and hiring in technology and trades jobs

	technology and trades jobs by 2030		workforce gaps and potential City-led or City-supported programs by 2027	
Broadband and Device Affordability	**Objective 1.5** Advocate for affordable Internet and Computing Devices	Advocacy: Ad-hoc or informal framework of advocacy priorities	Ensure all broadband and digital empowerment legislative and advocacy priorities are in the City's Intergovernmental Relations (IGR) priorities and align with the Strategy by 2026	% of broadband and digital empowerment priorities that are integrated into IGR priorities # of legislative measures tracked (bills, rulemakings, etc.) # of advocacy measures (letters, outreach campaigns, meetings with County, State, or Federal officials, etc.)
		Home Internet: 3.8% of households lack home internet; 8% rely solely on cellular data	Reduce the percentage of households reliant solely on cellular data and increase the percentage that have home internet by 25% by 2028 and by 50% by 2030	% of households in San José without a home internet subscription % of households in San José with cellular service only and no home internet subscription
		Device: 2.6% of households have no device; 5.2% rely solely on smartphone	Reduce the percentage of households reliant solely on smartphones and increase the percentage that have a home computing device by 25% by 2028 and by 50% by 2030	% of households in San José without a computing device at home # of computing devices distributed by Tech Hubs
Goal 2. Ensure Broadband is Available to All and Future Ready				
Service Availability	**Objective 2.1** Universal availability of greater than 1 Gigabit symmetric broadband by 2030	36% of serviceable locations have access to at least 1000/500 Mbps	To the extent possible, all serviceable locations have access to at least 1000/500 Mbps by 2030	% of serviceable locations with 1000/500 Mbps service option available % of unserved locations that gain a service option and % with 100/20 Mbps option and % with 1000/500 Mbps option % coverage assessed by underserved areas
Provider Choice	**Objective 2.2** Universal choice between two or more broadband service providers by 2030	67% of serviceable locations have two or more providers offering at least 100/20 Mbps	Achieve citywide choice between two or more providers offering at	% of serviceable locations with two or more service providers offering 100/20 Mbps service

			least 100/20 Mbps by 2030	% of low-income census tracts with two or more providers
Broadband Resiliency	**Objective 2.3** Assess and improve broadband infrastructure resilience during emergencies by 2027	No established citywide broadband resilience plan	Create and adopt a Broadband Resilience Plan by 2027	% of macro sites with 72-hour, 24-hour, 4-8 hour, and 1 to 2-hour back-up power % of macro sites with no back-up power % of central offices and hub sites with 72-hour back-up power
City Network	**Objective 2.4** Upgrade City network infrastructure by 2035	Insufficient fund allocation for City network upgrade	Secure $6.9 million for copper-to-fiber upgrades by 2028 and $26 million for smart streetlight controllers by 2030	% copper upgraded to fiber % City facilities with City-owned fiber broadband service % City facilities with non-City-owned broadband service % City facilities with less than 1000/500 Mbps broadband
Goal 3: Provide Best in Class Broadband Permit Processes and Enablement Structures				
Permitting & Regulatory Alignment	**Objective 3.1** Evaluate and streamline broadband permitting and City regulations by 2027	Of about 20 permits requested in 2024, 75% were issued within 60 days	80% of broadband permits issued faster than federally timelines by 2027	% of small cell permits issued under 60 days for existing structures and 90 days for new structures % macro site permits issued under 90 days for existing structures and 150 days for new structures % of incomplete permit applications returned to applicant within 10 days for small cell and 30 days for macro cell from the date of submission and within 10 days of any resubmission
Utilize City Assets	**Objective 3.2** Optimize City asset utilization for broadband deployment by 2028	Asset inventory is incomplete and does not include a broadband readiness component	Broadband-ready City-owned assets inventory by 2026	% City-owned assets inventoried % City-owned assets pre-certified for wireless installations
Policy and Coordination	**Objective 3.3** Integrate broadband deployment into City plans and regulations by 2028	Currently, broadband and digital empowerment is not sufficiently integrated into relevant City plans.	Strategy goals are incorporated into relevant City plans and programs by 2027	# of City plans that integrated broadband # of City plans that integrated digital empowerment

Appendix

Appendix A. Glossary

Term	Definition
5G	5th generation wireless telecommunications standards; associated with network speeds of up to 1 Gpbs or more.[39]
Bandwidth	The capability of telecommunications and internet networks to transmit data and signals.[40]
Backhaul	The portion of a broadband network in which the local access or end user point is linked to the main internet network.[41]
Broadband	Wide bandwidth data transmission that enables high-speed internet access. Allows user to access internet and internet-related services at speeds unavailable through traditional dial-up services.[42] Broadband can be mobile (i.e., enabling internet connectivity on phones) or fixed (i.e., enabling internet connectivity at specific locations- a home, or business).
Cable	Cable is a broadband transmission technology that uses coaxial cables for television to transmit data and connect users to the internet[43]
Digital adoption	The use of broadband in places where it is available.[44]
Digital divide	The gap between those with internet access and other communication technologies and those with limited or no access. [45]
Digital empowerment	Equipping individuals and communities with the means, resources, and skills needed to navigate and engage with the digitized world.[46]
Digital equity	A state in which all individuals and communities have the technological capacities required to fully participate in modern digital society.[47]
Digital inclusion	Individual and community-level access to developed broadband infrastructure; access to internet-connected devices to meet digital needs; the skills necessary to create, communicate, and collaborate in the digital world.[48]
Digital skills	Knowing how to use technology to find information, communicate, create, and solve problems.[49]

[39] NTIA. "Broadband Glossary." Web Access at https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_broadband_glossary.pdf
[40] NTIA. "Broadband Glossary." Web Access at https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_broadband_glossary.pdf
[41] NTIA. "Broadband Glossary." Web Access at https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_broadband_glossary.pdf
[42] Federal Communications Commission. "Getting Broadband Q&A." Web Access at Getting Broadband Q&A | Federal Communications Commission (fcc.gov)
[43] Federal Communications Commission. "Types of Broadband Connections." Web access at https://www.fcc.gov/general/types-broadband-connections
[44] NTIA. "Broadband Glossary." Web Access at *https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_broadband_glossary.pdf*
[45] National Telecommunications and Information Administration. "Connecting America's Communities." Web Access at BroadbandUSA: Connecting America's Communities (doc.gov)
[46] Forgeard, Valerie. "What is Digital Empowerment? A Comprehensive Exploration." Web Access at What is Digital Empowerment? A Comprehensive Exploration - Brilliantio
[47] Rockefeller Institute of Government. "Addressing Digital Literacy and Other Reasons for Non-Adoption of Broadband." Web Access at Addressing Digital Literacy and Other Reasons for Non-Adoption of Broadband – Rockefeller Institute of Government (rockinst.org)
[48] National Telecommunications and Information Administration. "What does Digital Inclusion mean?" Web Access at What does Digital Inclusion mean? | BroadbandUSA (doc.gov)
[49] San José Public Library. "Digital Skill Building Pathways." Web Access at Digital Skill Building Pathways | San José Public Library (sjpl.org)

Digital Subscriber Line (DSL)	Wired broadband transmission technology that sends data over traditional copper telephone lines[50]
Fiber	A flexible, hair-thin plastic or glass strand capable of delivering large amounts of data at high transfer rates.[51]
Internet	Electronic communications network that connects computer networks and computer facilities around the world.[52]
Last mile	The technology and process of connecting the end customer's home or business to the local network provider[53]
Open access network	Networks that offer wholesale access to network infrastructure or services on fair and reasonable terms. [54]
Public-private partnership	Public-private partnerships (PPPs) are a mechanism for government to procure and implement public infrastructure and/or services using the resources and expertise of the private sector.[55]
Rights of way	Legal rights to pass through property owned by another. ROWs are often required to access land for digging trenches, deploying fiber, constructing towers and deploying equipment on existing towers and utility poles.[56]
Satellite	Wireless broadband transmission technology that uses satellites in space to provide links for broadband. Satellite broadband has two main types, such as conventional geostationary orbit satellites (GSO), which employ high earth orbit satellites to transmit broadband, and low-earth orbit (LEO) satellites, which operates at closer distances to the earth's surface. [57]
Transmission technologies	Technologies and/or architecture that is used to deliver broadband services to end users. This can include DSL, Cable, Wireless (Fixed or Mobile), Fiber, or Satellite transmissions.[58]
Wi-Fi	Technology using radio transmissions to allow electronic devices to connect to a local area network. [59]
Wireless	Wireless broadband connects a home or business to the internet using a radio link between the customer's location and the service provider's facility. Wireless broadband can be mobile or fixed.[60]

[50] Federal Communications Commission. "Types of Broadband Connections." Accessed at https://www.fcc.gov/general/types-broadband-connections
[51] National Telecommunications and Information Administration. "Connecting America's Communities." Accessed at BroadbandUSA: Connecting America's Communities (doc.gov)
[52] Merriam-Webster. "Internet Definition & Meaning." Accessed at Internet Definition & Meaning - Merriam-Webster
[53] NTIA. "Broadband Glossary." Accessed at https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_broadband_glossary.pdf
[54] National Telecommunications and Information Administration. "Connecting America's Communities." Accessed at BroadbandUSA: Connecting America's Communities (doc.gov)
[55] PPPLRC, "What are PPPs." Web Access at https://ppp.worldbank.org/public-private-partnership/about-us/about-public-private-partnerships#:~:text=Public%2Dprivate%20partnerships%20(PPPs),expertise%20of%20the%20private%20sector.
[56] NTIA. "Broadband Glossary." Web Access at https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_broadband_glossary.pdf
[57] Federal Communications Commission. "Types of Broadband Connections." Web access at https://www.fcc.gov/general/types-broadband-connections
[58] MBI. "Broadband Transmission Technologies." Web Access at Broadband Transmission Technologies | MBI (masstech.org)
[59] BroadbandUSA. "Connecting America's Communities." Web Access at BroadbandUSA: Connecting America's Communities (doc.gov)
[60] Federal Communications Commission. "Types of Broadband Connections." Accessed at https://www.fcc.gov/general/types-broadband-connections

Appendix B. State, County, City Digital Equity Strategy and Goals Matrix

State of California (Approved)	County of Santa Clara (Tentative)	City of San José (Proposed)
Goal 1: All Californians have high-performance broadband available at home, schools, libraries, and businesses.	**Goal 1**: Availability. Expand connectivity in unserved and underserved areas in the county with a focus on measurable outcomes.	**Goal 2:** Ensure broadband is available to all and future ready. **Goal 3:** Provide best in class broadband permit processes and enablement structures.
Goal 2: All Californians have access to affordable broadband and necessary devices.	**Goal 2:** Affordability and Devices. Promote equitable access to affordable, reliable broadband service and the computing devices necessary to participate online.	**Goal 1:** Close the Digital Divide in San José through Digital Empowerment.
Goal 3: All Californians can access training and support to enable digital inclusion.	**Goal 3:** Digital Skills. Enhance digital literacy skills and training support so residents have the knowledge to effectively use technology.	**Goal 1:** Close the Digital Divide in San José through Digital Empowerment.
Objective 1.1: Increase the percentage of Californians who are connected to broadband internet service.	**Objective 1.1:** Reduce the number of households without internet access by deploying free public wireless networks to neighborhoods in East San José, South San José, and South County.	**Objective 2.1:** Universal availability of greater than 1000/500 Mbps broadband by 2030
Objective 1.2: Increase the percentage of Community Anchor Institutions that are connected to broadband internet service.	**Objective 1.2:** Conduct data analysis to guide investments in unserved and underserved areas in the county.	**Objective 2.2:** Universal choice between two or more broadband service providers by 2030
Objective 1.3: Increase the percentage of Californians who report that their internet service is reliable.	**Objective 1.3:** Engage small businesses in the county to understand and collaborate on their needs for broadband access.	**Objective 2.3:** Assess and improve broadband infrastructure resilience during emergencies by 2027
Objective 1.4: Increase the percentage of Californians who have a choice of at least three internet service providers.	**Objective 1.4:** Coordinate with ISPs to understand and collaborate on network planning, low-income service offerings, and state and federal infrastructure (last mile and middle mile) funding opportunities.	**Objective 2.4:** Upgrade city network infrastructure by 2035
Objective 2.1: Decrease the percentage of Californians who cite cost as the primary barrier to internet service.	**Objective 2.1:** Reduce the number of households earning less than $35,000 without an internet subscription.	**Objective 3.1:** Evaluate and streamline broadband permitting and city regulations by 2027
Objective 2.2: Reduce the percentage of Californians who rely solely on a smartphone to use the internet due to devices being inaccessible and unaffordable and increase the	**Objective 2.2:** Increase the percentage of enrollments for eligible households through targeted outreach in the county.	**Objective 3.2**: Optimize city asset utilization for broadband deployment by 2028

percentage with a home computing device.		
Objective 2.3: Increase the percentage of Californians enrolled in low-cost internet options and subsidies, including the Affordable Connectivity Program or successor program.	**Objective 2.3:** Reduce the number of older adult residents and students (pre-k-12th grade) without computing devices through the promotion, investment, and expansion of existing computing device distribution programs in the county.	**Objective 3.3**: Integrate Broadband deployment into City plans and regulations by 2028
Objective 2.4: Reduce the average cost that covered populations pay for internet service.		
Objective 3.1: Increase the availability of digital literacy, cybersecurity, and skills training programs.	**Objective 3.1:** Through the Digital Equity Consortium, lead, coordinate and manage the County's implementation of the broadband and digital equity strategy.	**Objective 1.1**: Stabilize digital equity strategy governance, programs, and funding by 2027
Objective 3.2: Increase the percentage of Californians who have access to technical support services for internet-connected devices.	**Objective 3.2:** Conduct a statistically valid survey to identify main challenges to broadband adoption as well as digital literacy needs in the county.	**Objective 1.2**: Increase an availability of digital skills, cybersecurity, and workforce training programs
Objective 3.3: Reduce the percentage of Californians whose concerns for privacy and cybersecurity prevents broadband adoption or effective use.	**Objective 3.3:** Expand digital literacy classes and training programs in the county.	**Objective 1.3** Optimize Tech Hubs to increase access to digital skill-building, home internet, and computing devices
Objective 3.4: Increase the percentage of Californians who possess basic, intermediate, and advanced digital literacy skills.	**Objective 3.4:** Expand local Digital Navigator programs to provide residents access to one-on-one assistance with technology needs in the county.	**Objective 1.4**: Expand opportunities for upskill and reskill training and hiring in technology and trades job
Objective 3.5: Expand the number of members of covered populations trained/hired in broadband infrastructure and technology jobs.		**Objective 1.5**: Promote affordable internet and computing devices
Objective 3.6: Increase the percentage of Californians who utilize the internet to apply for or use public benefits and other essential services and can participate in civic and social engagement online.		

Appendix C. State and Federal Funding

Funding	Program goal	Timeline*/Opportunity	Staff's recommendation/action
Infrastructure			
State Senate Bill 165 (SB165) - $6 billion	Middle-mile infrastructure	Not eligible to apply. The California Department of Technology (CDT) is overseeing the State's open-access Middle-Mile Broadband Initiative, which includes 134 miles of open access in Santa Clara County, expected to benefit San José.	Support opportunities that leverage the State's middle mile.
	Last-mile infrastructure	Preference to fiber municipal networks and rural areas. $36M available for projects in Santa Clara County with limited eligible areas in San José. Grantmaking from September 2023 until depleted.	AT&T was the only carrier submitting proposals in San José in Round 1 but was not awarded funding. Santa Clara County is not included in Round 2 grant solicitation, which is focused on six counties that did not receive funding in Round 1.
Federal Broadband Equity, Access, and Deployment (BEAD) via Infrastructure Investment and Jobs Act (IIJA) -$42.5 billion[61]	Last-mile infrastructure	California has been allocated $1.86 billion in BEAD funding. Initially, the program prioritized fiber deployments in defined eligible areas, and coverage in San José was already very limited. In July 2025, NTIA revised the program rules to classify unlicensed wireless as reliable broadband, further reducing eligible areas in San José.	San José is unlikely to benefit from BEAD based on updated eligibility and provider interest.
State California Advanced Services Fund (CASF) infrastructure grants via Assembly Bill 1665	Infrastructure and Public Housing Account- Internet access to low-income communities	Available annually through 2032. Open to wireline and wireless technology	Monitor closely and evaluate partnership opportunities for eligible multifamily housing, mobile parks, and low-income communities.
Digital Equity			
Federal Digital Equity Act under IIJA (*currently suspended)*	Competitive Grant -- Digital skills training, workforce development, devices access programs, and other	In January 2025, the NTIA recommended an $11.6 million Digital Equity Act grant to expand Tech Hubs in Santa Clara County, San José, and San Mateo County. This regional expansion was developed in	All funds under the Digital Equity Act have been suspended. On May 8, 2025, President Trump announced his decision to end the Digital Equity Act

[61] U.S. Department of Commerce. "Fact Sheet: Department of Commerce's Use of Bipartisan Infrastructure Deal Funding to Help Close the Digital Divide." Web Access at https://www.commerce.gov/news/fact-sheets/2021/11/fact-sheet-department-commerces-use-bipartisan-infrastructure-deal-funding

1. Competitive Grant -- $1.25 billion administered by NTIA 2. Capacity Grant -- $1.44 billion; $70 million allocated to California, administered by CDT	digital inclusion measures	partnership with Joint Venture Silicon Valley (JVSV), which would have overseen grant administration. The grant would have supported: • 16 Tech Hubs run by 8 community-based organizations in San José and Santa Clara County • $700,000 for SJPL staff to develop curriculum • Funding for 11 Resilience Corps IT/CS Pathway participants over four years	programs. On May 9, 2025, the state received a letter from the U.S. Department of Commerce providing notice of immediate termination of the state's $70 million State Digital Equity Capacity Grant. On May 12, 2025, the CDT suspended the CalDEP application process until further notice.
	Capacity Grant – Local government digital equity planning, Digital Inclusion programs	Building on the NTIA proposal, SJPL, in partnership with JVSV and the Santa Clara County Library District, was prepared to apply for $1.5 million in California Digital Equity Program (CalDEP) grant funding allocated to Santa Clara County. The program has been suspended.	
State California Advanced Services Fund (CASF) via Assembly Bill 1665	Adoption Account - Digital skills training and outreach	Available semiannually through 2032. SJPLF previously received funding in FY 20-21.	Assess how the San José Digital Inclusion Grant Program can further leverage this fund to amplify impacts. The Grantees have collectively received over $1 million since July 2022.

*Timeline is as of August 2025 and subject to change.

Appendix D. Lifeline

Federal Lifeline Program[62] has provided a discount on phone service for qualified households since 1985. The Program currently includes voice service (e.g., mobile or fixed – i.e., landline), broadband, or a package of voice and broadband service. The table below outlines the current Lifeline standards that are evaluated annually. As of January 2024, Lifeline has over 1 million participants in California, including about 30,000 in Santa Clara County, mostly enrolled in the bundled voice and broadband service.

California LifeLine Program, administered by the CPUC, provides additional discounts to basic landline and wireless phone service of up to $19. Lifeline identifies eligible households through income-based eligibility and public assistance. In FY23-24, California Lifeline had 1.4 million participants statewide, including 34,734 in Santa Clara County.[63]

Minimum Service Standards

Service Type	Minimum Service Standards
Mobile Voice	1000 Minutes
Fixed Voice-only	NA
Mobile Broadband	Speed: 3G or better; Usage Allowance: 4.5 GB
Fixed Broadband	Speed: 25/3 Mbps; Usage Allowance: 1230 GB

LifeLine plans and participants as of January 2024

Plan	Description	Monthly subsidy	# of participants in Santa Clara County
Voice *	a Voice only service that meets the minimum service standards.	$5.25	5,710
Broadband	a Broadband only service that meets the minimum service standards.	$9.25	1
Bundled Voice*	a Voice and Broadband service that meets the Voice minimum service standards only.	$5.25	101
Bundled Broadband	a Voice and Broadband service that meets the Broadband minimum service standards only.	$9.25	1,107
Bundled Voice and Broadband	a Voice and Broadband service that meets both the Voice and Broadband minimum service standards.	$9.25	23,050

* phase-out by Dec 1, 2026

[62] Federal Lifeline. Accessed at https://www.usac.org/lifeline/

[63] CPUC 2024 LifeLine Annual Report Fact Sheet. Accessed at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/lifeline/fact-sheets/ca-lifeline-fact-sheet-fy-23-24.pdf.

Appendix E. Broadband Availability

Service coverage by census block varies among technologies. Cable is currently the most available. For speeds of 100/20 Mbps, over 94% of census blocks have more than 80% cable coverage within the block (Figure 11). Coverage is less widespread in the northern and southern parts of San José. There are pockets of lower coverage across the city too. Comcast Xfinity is the primary cable broadband provider in San José, offering maximum advertised speeds of up to 1200/35 Mbps in most areas.

Home wireless internet is expanding in San José. Coverage today is higher than fiber at 52%. While the maximum advertised download speed of home wireless is up to 1 Gbps in some areas, upload speed remains below 100 Mbps. Geographically, home wireless availability tends to fill in gaps in areas where fiber coverage is low or not available (comparing Figure 12 and Figure 13).

FIGURE 11. CABLE COVERAGE (%) OFFERING AT LEAST 100/20 MBPS BY CENSUS BLOCK

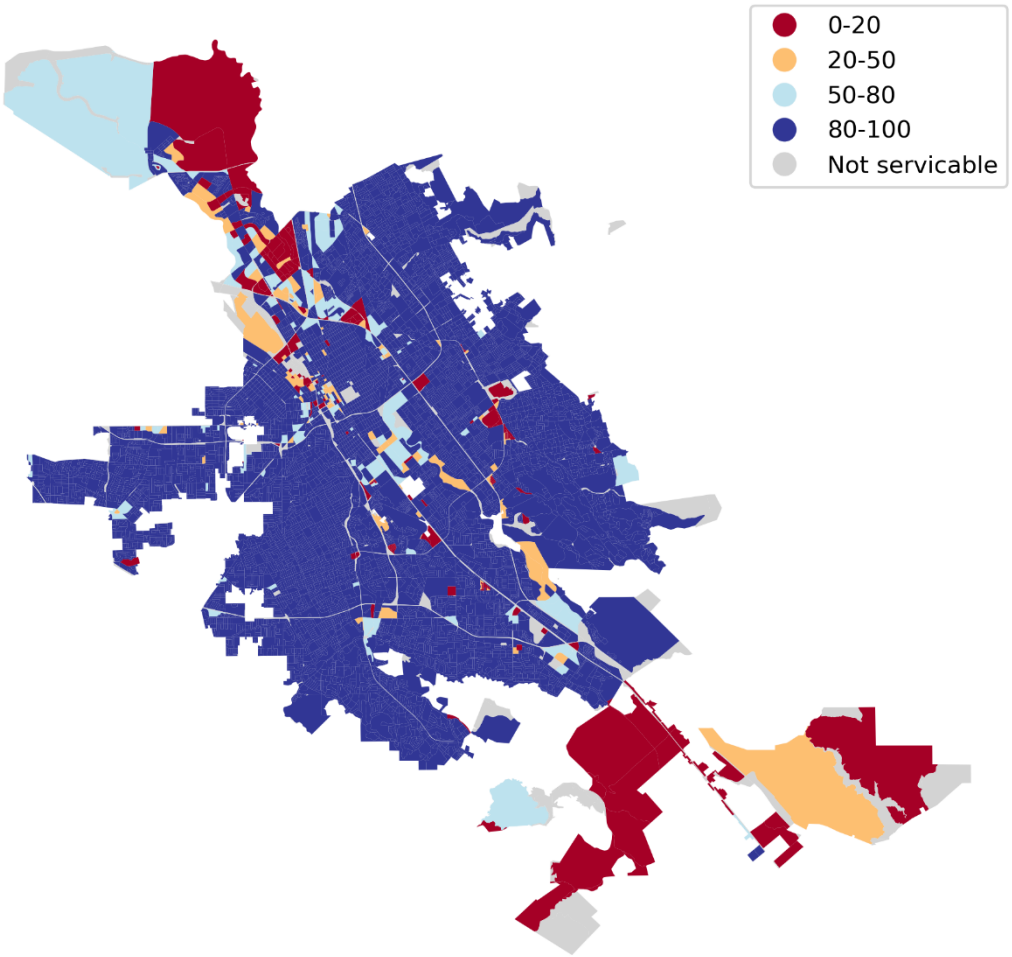


FIGURE 12. FIBER COVERAGE (%) OFFERING AT LEAST 100/20 MBPS BY CENSUS BLOCK

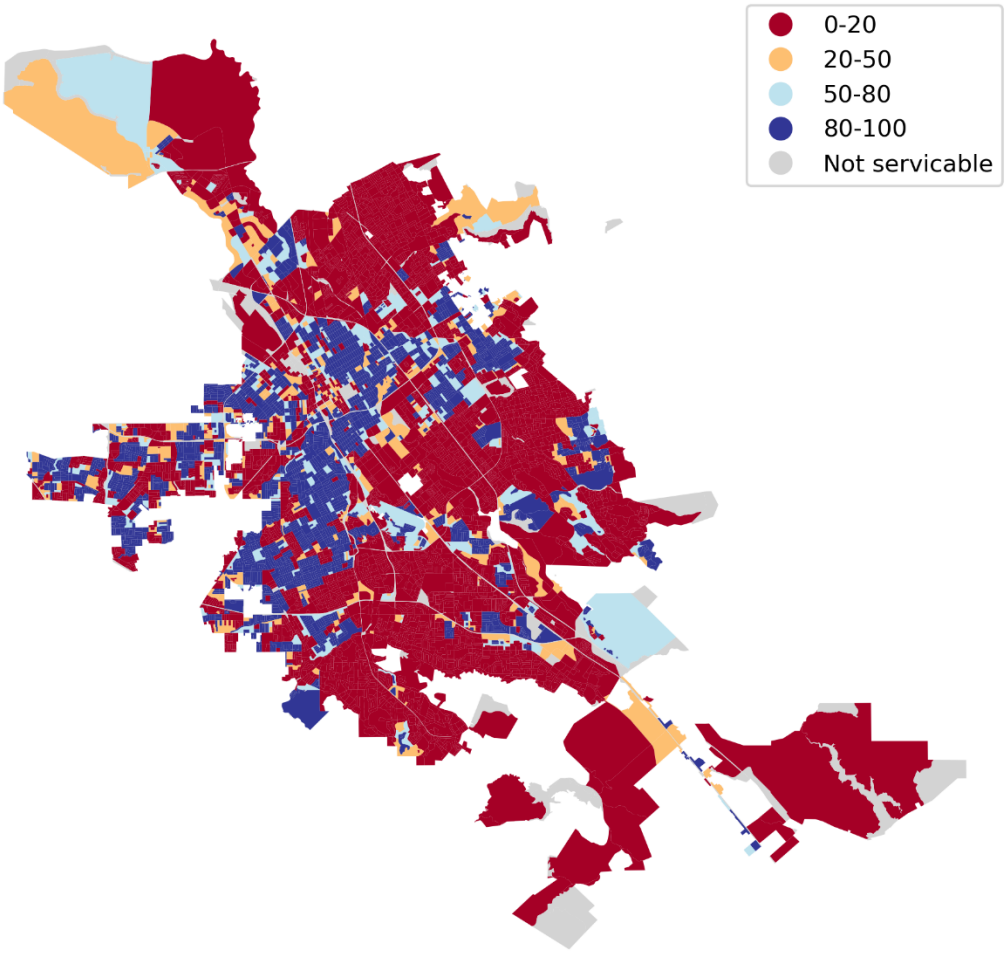
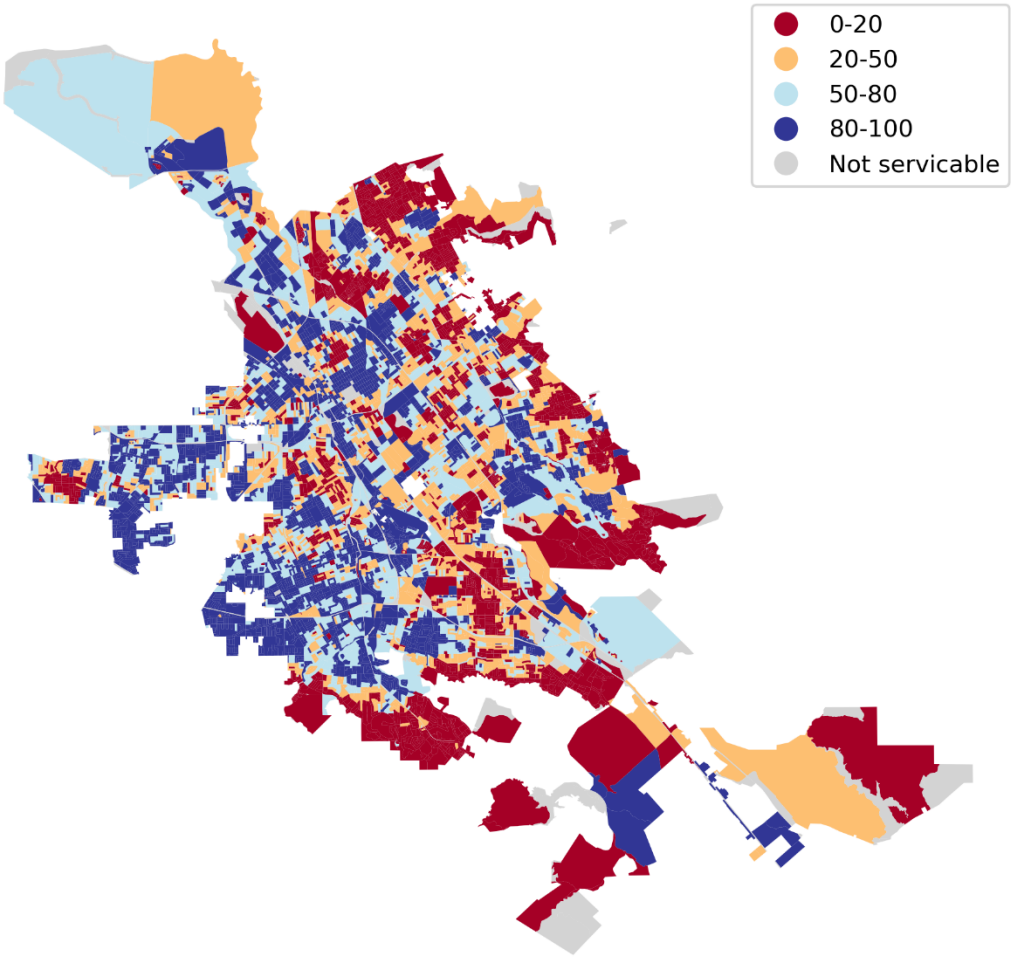
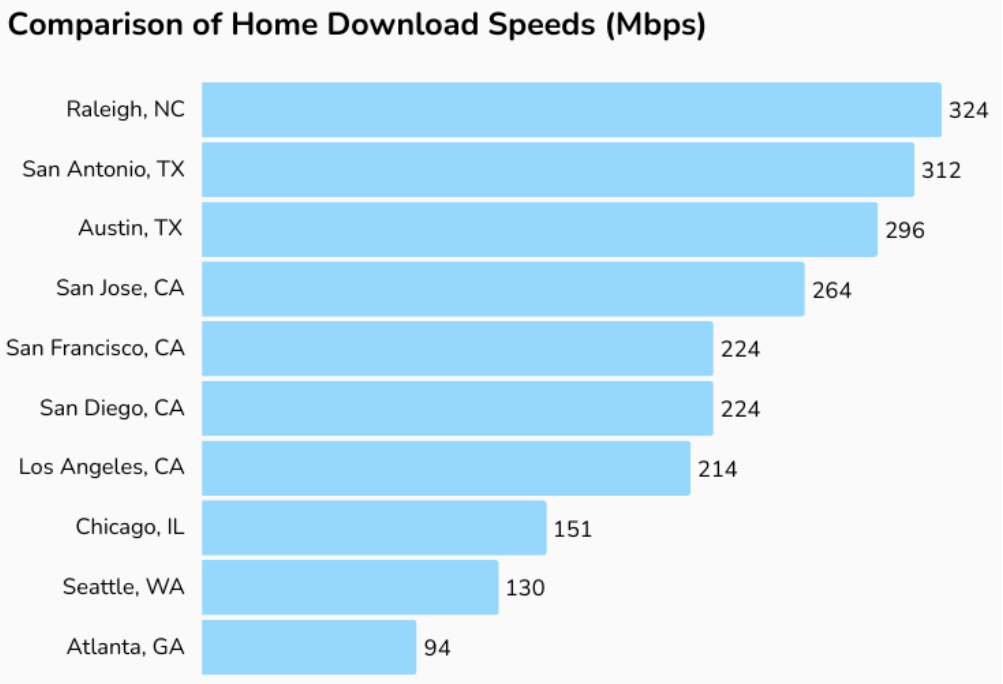
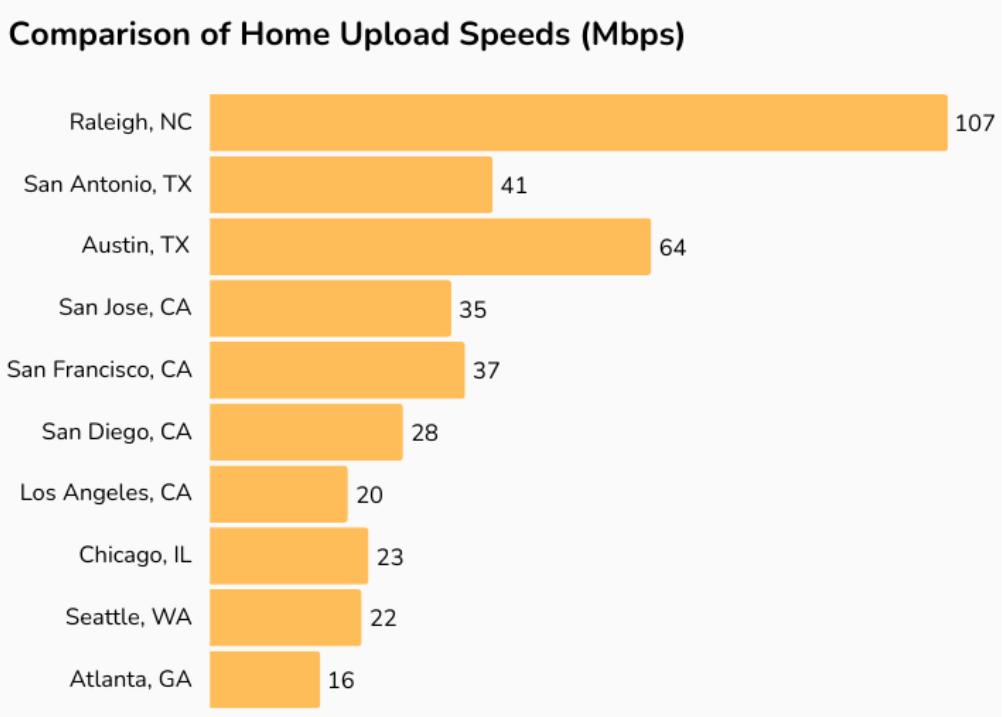


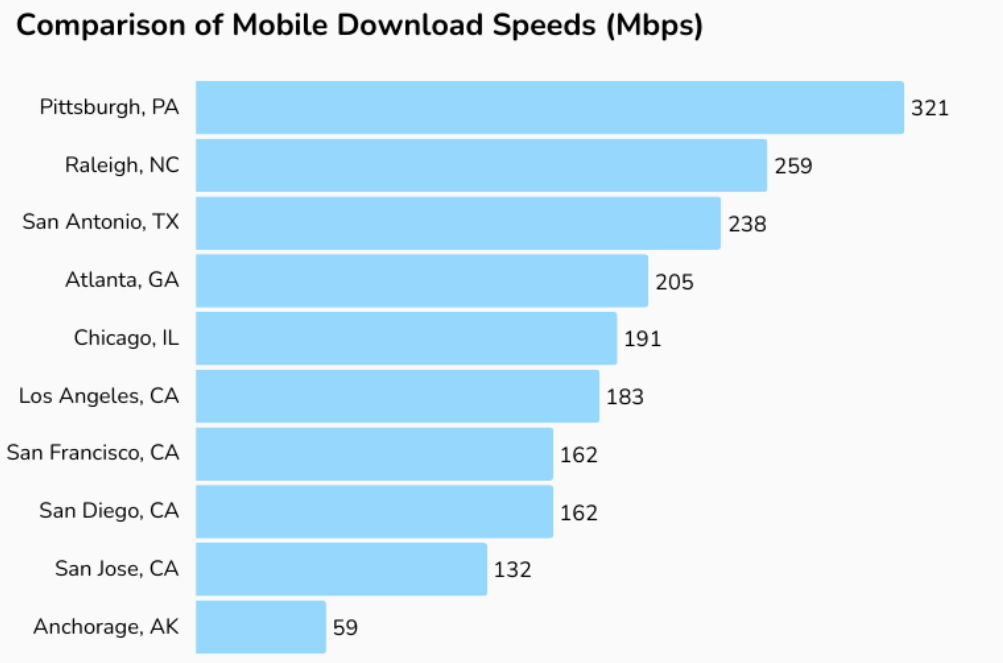
FIGURE 13. HOME WIRELESS COVERAGE (%) OFFERING AT LEAST 100/20 MBPS BY CENSUS BLOCK

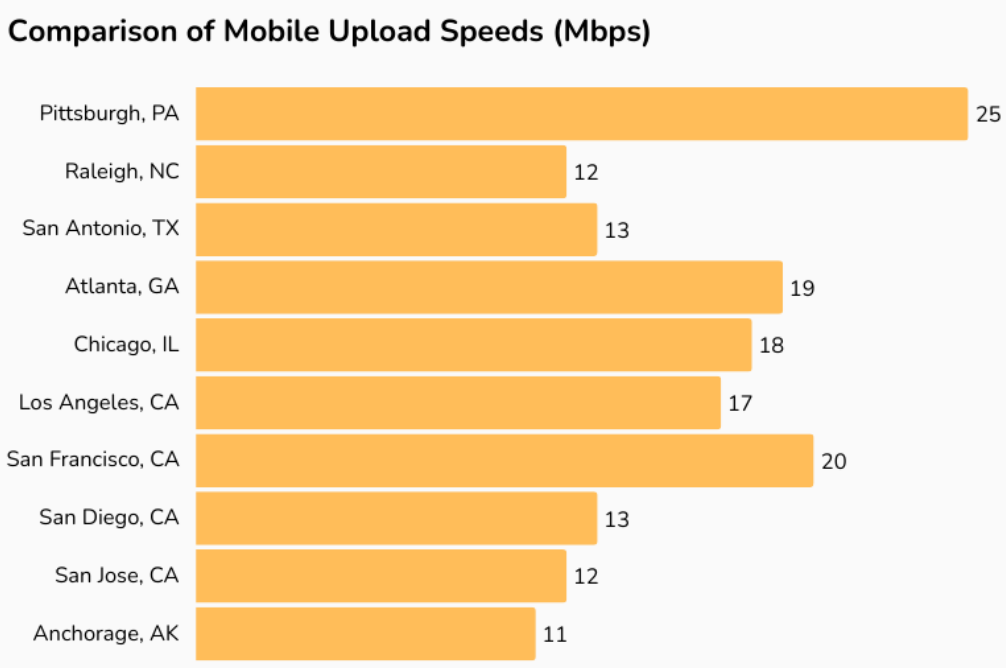


Appendix F. Ookla Speedtest Data U.S. Cities Comparison






Comparison of Mobile Download Speeds (Mbps)
Pittsburgh, PA
321
Raleigh, NC
259
San Antonio, TX
238
Atlanta, GA
205
Chicago, IL
191
Los Angeles, CA
183
San Francisco, CA
162
San Diego, CA
162
San Jose, CA
132
Anchorage, AK
59


Comparison of Mobile Upload Speeds (Mbps)
Pittsburgh, PA
25
Raleigh, NC
12
San Antonio, TX
13
Atlanta, GA
19
Chicago, IL
18
Los Angeles, CA
17
San Francisco, CA
20
San Diego, CA
13
San Jose, CA
12
Anchorage, AK
11

ATTACHMENT D: Impact of Federal Elimination of Digital Equity Act Funding

Federal Digital Equity Competitive Grant: On January 17, 2025, the National Telecommunications and Information Administration (NTIA) recommended the award of $11.6 million from the Digital Equity Competitive Grant Program, funded through the Digital Equity Act (Digital Equity Act Grant). The grant would expand SJPL's Digital Skill Building Pathways and the Tech Hub model—currently implemented through the Digital Inclusion Grant Program in San José—into Santa Clara and San Mateo Counties. This regional expansion was developed in partnership with Joint Venture Silicon Valley, which would have overseen grant administration.

On May 8, 2025, President Trump announced his decision to end the Digital Equity Act programs.

The Digital Equity Act was enacted under the Infrastructure Investment and Jobs Act and established and funded three separate grant programs:

1. The Digital Equity (DE) State Planning Program, a $60 million formula grant program for states, territories and Native Entities to develop state and tribal digital equity plans.
2. The DE Capacity Program, a $1.44 billion formula grant program for states, territories and Native Entities to implement their state digital equity plans.
3. The DE Competitive Program, a $1.25 billion competitive program under which NTIA can issue grants to support digital equity activities consistent with the Digital Equity Act.

The Digital Equity Act Grant would have allowed SJPL to:

- Lead County-wide coordination and oversee the implementation of $8.7 million dollars to expand and enhance the City's proven digital equity model at eight community-based organizations that will operate sixteen Tech Hubs—fifteen in San José and one serving SCC.
- Directly receive a subgrant of $700,000 to fund a Library staff position for four years to develop additional digital skills curricula for City, community-based organizations, and public use.
- Fund eleven Resilience Corps IT/CS Pathway participants over four years.

In San Mateo County (SMC), $1.5 million of the NTIA grant would have served 7,250 people by funding seven Tech Hubs operated by four CBOs, one SMC match-funded Tech Hub, and an on-demand Digital Navigator program.

California Digital Equity Program Grant: Building on the NTIA proposal, SJPL, in partnership with Joint Venture Silicon Valley and the Santa Clara County Library District, was prepared to apply for $1.5 million in California Digital Equity Program (CalDEP) grant funding allocated to Santa Clara County. However, on May 9, 2025, the state received a letter from the U.S. Department of Commerce providing notice of

immediate termination of the state's $70 million State Digital Equity Capacity Grant. On May 12, 2025, the California Department of Technology suspended the CalDEP application process until further notice.

Attachment E: Summary Work Plan 2025–2030

1. Ensure Universal Broadband Availability and Future-Ready Connectivity		
Key Actions:	**Timeframe**	**Priority**
Adopt Broadband Definitions:	2025-2026	
Consider City Council adopt the FCC's broadband speed minimum of **100/20 Mbps** for current availability.	2025	1
Set an aspirational goal of **1 Gbps/500 Mbps** for future-ready connectivity.	2025	2
Leverage Public-Private Partnerships to Close Gaps:	2025-2030	**Priority**
Engage with **internet service providers (ISPs)** to:	2025	
Assess and improve the **resilience of broadband infrastructure** during emergencies.	2027	1
Expand **fiber and home wireless broadband** through private investment.	2030	2
Achieve **citywide choice between two or more service providers**.	2030	3
Achieve **universal access to broadband exceeding 1 Gbps by 2030**.	2030	4
Upgrade City Network Infrastructure:	2030-2035	**Priority**
Secure **$6.9 million** to upgrade the City's outdated **copper networks to fiber** to support City operations.	2028	1
Secure **$26 million** for **citywide deployment of smart streetlight controllers**.	2030	2
2. Provide Best-in-Class Broadband Permit Processes and Enablement Structures		
Key Actions:	**Timeframe**	**Priority**
Improve Permitting Processes and Regulatory Alignment:	2025-2027	
Evaluate and streamline broadband permitting and City regulations to:		
Simplify and automate broadband permit processes where possible, by **2027**.	2027	1
Implement **expedited emergency permitting protocols**.	2027	2
Update the **San José Municipal Code** to align with federal broadband regulations.	2027	3
Develop a **broadband permit dashboard** to track applications, review timelines, inspections, and construction.	2027	4

Optimize City Asset Utilization for Broadband Deployment:	2025-2028	**Priority**
Inventory all City-owned broadband infrastructure assets by **2025** to:	2025	1
Assess suitability for broadband deployments.	2026	2
Pre-certify City properties for wireless lease potential.	2026	3
Explore broadband coverage expansion in **parks and trails** using City assets.	2027	4
Integrate assets into **Broadband Opportunity Zones** to attract private investment.	2028	5
Develop Infrastructure Policy and Coordination Initiatives:	2025-2028	**Priority**
Advocate for **local control over broadband policies**.	Ongoing	1
Assess the feasibility of:		
Integrating broadband deployment and **digital equity goals** into City planning documents (e.g., General Plan, Housing Element, Children & Youth Master Plan).	2028	2
Developing a **City-led broadband workforce program** to address shortages in structural, electrical, and mechanical engineering skilled-trade workers.	2027	3
3. Close the Digital Divide Through Digital Empowerment		
Key Actions:	**Timeframe**	**Priority**
Expand Digital Empowerment and Community-Based Partnerships:	2025-2030	
Host **digital empowerment workshops** at libraries, community centers, and schools.	Ongoing	1
Expand and promote **Tech Hubs** as **community digital skill-building centers** offering internet access, devices, and training.	Ongoing	2
Advocate for **open internet principles, digital rights, and privacy protections**.	Ongoing	3
Promote **digital literacy programs** aligned with the City's **Digital Literacy Quality Standards**.	Ongoing	4
Develop a **standardized digital training framework** for all City and Tech Hub programs.	2027	5
Enhance **digital skills and technology training programs** to support workforce development and social engagement.	2027	6
Strengthen **community and regional partnerships** to advance digital equity goals.	2028	7

Explore sponsorships from **corporations and sports teams** to fund digital equity programs.	2030	8
Advocate for Affordable Internet and Devices:	2025-2027	**Priority**
Work with **ISPs and the City's Intergovernmental Relations team** to:		
Secure **corporate partnerships** for **donating used computing devices** for digital equity programs.	2026	1
Advocate for **low-cost internet plans** (100/20 Mbps at **$10/month** and 1 Gbps/500 Mbps at **$50/month** for eligible households).	2027	2
Engage **ISPs, manufacturers, and refurbishers** to encourage availability of **low-cost quality computing devices**.	2027	3
Advance Workforce Development and Economic Empowerment:	2025-2028	**Priority**
Expand the **Resilience Corps IT and Computer Science Pathway** to train more participants.	2026	1
Establish **training programs** in:		
Artificial Intelligence (AI)	2025	2
Cybersecurity	2026	3
Cloud Computing	2027	4
Digital Transformation	2028	5
Develop **skilled-trades training partnerships** with ISPs for broadband deployment roles, such as engineering, fiber optics, telecommunications technicians.	2027	6
Explore the **feasibility of City-led apprenticeship programs** in broadband and digital technology fields.	2027	6

ATTACHMENT F: City Initiatives and the Digital Empowerment & Broadband Strategy

Program / Initiative	Lead Dept.	Focus Area	Connection to Strategy	Upward Mobility Impact
Broadband Permitting & Partnerships	Library	Broadband infrastructure, public-private partnerships	Supports infrastructure investment, universal deployment, and Digital Inclusion Fund revenue for SJ Access.	Leverages private funding to expand high-speed broadband citywide.
SJ Access	Library	Broadband, devices, digital skills, workforce	Funds CBOs and library programs for connectivity, device lending, and skill-building.	Empowers low-income, multilingual, and older residents through digital access and training.
Tech Hubs powered by SJ Access	Library	Community digital empowerment	Operates 6 CBO sites with free devices, internet, and bilingual support.	Provides hands-on training and boosts digital confidence in underserved areas.
Education & Digital Literacy Strategy	Library	Education, digital empowerment	Offers learning paths in careers, college readiness, coding, and digital skills.	Builds foundational digital and career skills for lifelong learning.
College & Career Pathways	Library	Education & employment	Includes Career Online HS, Resilience Corps, SJPL Works.	Prepares youth and adults for living-wage careers.
King Library & SJSU AI Hub	Library	AI education & innovation	Partners with SJSU/private sector for digital and AI training.	Expands access to advanced tech and inclusive economic opportunities.
AI Governance & GovAI Coalition	Information Technology	Ethical AI use	Promotes transparent, equitable AI for City services.	Ensures fair access to AI-enabled government tools.
Children & Youth Services Master Plan	PRNS	Youth equity & tech access	Integrates digital tools into youth development.	Connects youth to mentorship, jobs, and education.
work2future	OEDCA	Workforce development	Offers digital literacy, device access, and job training.	Prepares residents for sustainable, tech-enabled employment.
Emergency Resiliency	OEM	Telecom during disasters	Ensures network capacity and equity in alerts.	Protects digital access to emergency services in vulnerable areas.

ATTACHMENT G: Summary of outreach and feedback on Digital Empowerment and Broadband Strategy

Stakeholders expressed broad support for the Digital Empowerment and Broadband Strategy (Strategy) goals, objectives, and work plan. Specific feedback and recommendations are summarized below and have been addressed in the Strategy.

Stakeholder:	Outreach Date	Feedback
City Manager's Office of Emergency Management	March 21, 2025	• Approve of the goals and objectives; support the work plan. • Recognize the cross-departmental collaboration needed to achieve the telecommunications resilience objectives. • Support from the Broadband Team in the Library is needed to lead and coordinate with internal and external stakeholders.
Transportation	March 26, 2025	• Approve of the goals and objectives; support the work plan. • Support objective 2.4 to upgrade the City's network infrastructure; reasonable stretch goal; currently there is no funding.
Planning, Building and Code Enforcement (PBCE)	March 26, 2025	• In support of the goals and objectives. • Recognize the cross-departmental collaboration needed to achieve the goals and objectives. • City Council direction is needed for PBCE to prioritize the Strategy work plan.
Housing	April 1, 2025	• Approve of the goals and objectives; support the work plan. • Expressed strong alignment with the Strategy. • Values ongoing collaboration.
City Manager's Office of Economic Development and Cultural Affairs	April 1, 2025	• Approve of the goals and objectives; support the work plan. • Expressed strong alignment with the Strategy. • Values ongoing collaboration.
Public Works	April 1, 2025	• Approve of the goals and objectives; support the work plan. • Work plan items under goal 3: provide best-in-class broadband permit processes & enabling structures were adjusted based on feedback regarding feasibility.
Information Technology	April 11, 2025	• Approve of the goals and objectives; support the work plan. • Expressed alignment with the Strategy.

ATTACHMENT G: Summary of outreach and feedback on Digital Empowerment and Broadband Strategy

Stakeholder:	Outreach Date	Feedback
		• Values ongoing collaboration.
Parks, Recreation and Neighborhood Services	April 23, 2025	• Approve of the goals and objectives; support the work plan. • Expressed strong alignment with the Strategy. • Values ongoing collaboration.
City Manager's Office of Administration, Policy, and Intergovernmental Relations	April 28, 2025	• Approve of the goals and objectives; support the work plan. • Values ongoing collaboration.
Tech Hub Operators	July 2, 2025	• Strongly support continuation of SJ Access Grant Program
Comcast	July 22, 2025	• Hybrid fiber-coax upgrades are in process; 2 Gigabit symmetric service; aligns with Strategy goals. • San José permit processes are consistent; good turnaround time. • Simplifying/eliminating permitting for certain equipment swaps outside the public right-of-way would reduce costs and speed deployment. • 12–24 months advance notice on new development projects would support infrastructure planning and coordination; especially in/near un/underserved areas. • Copper theft is a growing, costly issue; interested in City partnership on solutions. • Open to exploring local workforce development collaboration.
AT&T	July 23, 2025	• Fiber and wireless deployments are in process; aligns with Strategy goals. • Modifying microtrench standards; pre-construction meeting structure; underground service alert timing; and permit reviewer and inspector coordination would reduce costs and speed deployment. • Advance notice on new development projects would support infrastructure planning and coordination; especially in/near un/underserved areas.

ATTACHMENT G: Summary of outreach and feedback on Digital Empowerment and Broadband Strategy

Stakeholder:	Outreach Date	Feedback
		• Copper theft is a growing, costly issue; interested in City partnership on solutions. • Open to exploring local workforce development collaboration.
County of Santa Clara Information Technology and Library	July 29, 2025	• In support of the goals and objectives. • Values ongoing collaboration. • Interested in relaunching the County's Digital Equity Consortium in collaboration with the City.
T-Mobile	August 4, 2025	• Wireless upgrades and expansion are in process. • Macro sites are preferred over streetlight poles; interested in exploring options to support deployment. • 18–36 months advance notice on new development projects would support infrastructure planning and coordination. • Open to exploring local workforce development collaboration.
Verizon	August 12, 2025	• Wireless deployments are in process to achieve 1gb/500mpbs. • Fixed wireless deployment at multi-dwelling units (MDUs) and possibly mobile home parks is under evaluation. • Multiple digital empowerment programs that are potentially aligned with the City's Tech Hubs program. • Copper theft is a growing, costly issue; interested in City partnership on solutions. • Open to exploring local workforce development collaboration.