California State Assembly

Agenda

Assembly Budget Subcommittee No. 7 on Accountability and Oversight

Assemblymember Avelino Valencia, Chair

Wednesday, February 28, 2024

9:00 A.M. – 1021 O Street, Room 1100

Oversight of the Statewide Broadband Network Implementation

I. Welcome and Opening Remarks

- Assemblymember Valencia, Chair

II. Overview of California's Broadband Infrastructure Plan

- Brian Metzker, Principal Fiscal & Policy Analyst, Legislative Analyst Office

III. Update on California's Unserved and Underserved Populations and Last Mile Projects

- Rachel Peterson, Executive Director, California Public Utilities Commission
- Maria Ellis, Deputy Director for Broadband, California Public Utilities Commission

IV. Update on the Middle-Mile Broadband Initiative

- Liana Bailey-Crimmins, State Chief Information Officer & Director, California Department of Technology
- Mark Monroe, Deputy Director of Middle-Mile Broadband Initiative, California Department of Technology

V. Public Comment

VI. Adjournment

Background & Supporting Materials

Addressing the Broadband Digital Divide

The digital divide refers to the gap between households, communities, and geographic areas that have access to high-speed internet services and those that have limited to no access. This divide became increasingly pronounced during the COVID-19 pandemic, as more Californians relied on high-speed internet to work remotely, participate in online education, and access critical services. The Public Policy Institute of California notes that, although broadband access has grown in recent years, a significant gap persists across racial groups, with 81% of Latino, 83% of Black, 87% of white, and 88% of Asian households reporting having broadband access at home in 2021. In addition, 76% of households with annual income below $50,000 are less likely to have broadband access at home.

To address this digital divide, the Legislature and the Administration reached in 2021 a multi-year, $6 billion agreement to develop and implement a statewide broadband infrastructure plan. This plan, implemented through Senate Bill 156 (Committee on Budget and Fiscal Review, Chapter 112, Statutes of 2021), AB 14 (Aguiar-Curry, Chapter 658, Statutes of 2021) and SB 4 (Gonzalez, Chapter 671, Statutes of 2021), leverages both federal and state funds to implement a middle-mile network and enable last-mile projects to connect unserved and underserved communities and households.

The spending plan has significantly evolved since 2021. Including the additional resources requested by the Administration as part of the 2024-25 budget, the state's broadband infrastructure spending plan now totals $7.6 billion. The Legislative Analyst's Office handout reflects the most up-to-date information on the state's broadband spending plan.

Defining Underserved and Unserved Households

The speed of an internet connection is generally measured in Megabits per second (Mbps) download and upload speed. These speeds, and related criteria such as reliability, are used to define and identify households that are unserved or underserved in the context of access to broadband service. Under state and federal definitions, a household is considered to be "unserved" if it lacks access to service capable of providing at least 25 Mbps download and 3 Mbps upload (25/3Mbps). A household which only has access to service below 100 Mbps download and 20Mbps upload is considered to be "underserved". According to recent figures published by the California Public Utilities Commission in 2023, there are at least 362,517 unserved households across the state. However, that number can increase depending on the specific definitions used. For example, the CPUC has also published official figures that estimate nearly 1 million households are unserved and underserved when also taking into account the

reliability of the service available. While clearly there are households across the state that fall into the unserved and underserved categories, establishing an accurate accounting of all the households has proven to be a difficult task for the state and across the nation.

The Middle-Mile Network

The middle-mile segment of an internet network is the physical infrastructure required to enable internet connectivity for homes, businesses and community institutions. The middle-mile consists of high-capacity fiber lines that carry large amounts of data at high speeds over long distances between local networks ("last mile") and global internet networks. Under the state's broadband plan, the California Department of Technology (CDT) and its third-party administrator GoldenStateNet, are developing a statewide open-access middle-mile network known as the Middle-Mile Broadband Initiative. The project is being developed primarily along the state's highways and other rights of way through a combination of new construction, leases, and purchasing of existing infrastructure. As an open-access network, this middle-mile infrastructure will be available to local Internet Service Providers (ISPs) public entities, and other organizations that can deliver last-mile broadband service particularly to unserved and underserved communities and households.

CDT has identified that the middle-mile network needs a total of 10,513 miles of infrastructure to reach all of California's unserved communities with a resilient network. At the time of writing, 8,317 miles of middle-mile projects are under contract as a standalone construction project, a joint-built project, a lease, or a state purchase. Although a key component of broadband, it is important to note that middle-mile segments do not provide internet access on their own: it relies on last-mile projects to connect households.

Last-Mile Broadband

Last-mile infrastructure refers to infrastructure components that connect middle-mile infrastructure to individual communities and households. Depending on an ISP's network design, a last-mile connection can be delivered through wireline connections (such as fiber-optic and coaxial cables) or wirelessly (through mobile networks, satellite, and fixed wireless radio waves). As the segment of an internet network that connects to households and end-users, it is the essential part of the network to provide connectivity.

Since at least 2007 the California Public Utilities Commission has administered a last-mile broadband infrastructure program through the California Advanced Services Fund (CASF) Program. The CASF Program is funded by a surcharge on customers' monthly bills, with collections currently authorized at up to $150 million per year through 2032. More recently, the portfolio of last-mile programs administered by the CPUC has expanded to include other last-

mile programs including the Federal Funding Account and Loan Loss Reserve Accounts, both established pursuant to SB 156. Additionally, in 2023 the Biden-Harris Administration announced an additional $1.86 billion of federal funding for the CPUC to administer another pot of last-mile broadband dollars through the federal Broadband, Equity, Access, and Deployment (BEAD) Program. Including the various subaccounts of the CASF, the CPUC is currently responsible for administering 7 different last-mile grant programs that operate on different grant timelines, with different program rules, and sources of funding. The vast undertaking of implementing so many programs has caused some bottleneck, resulting in almost no new infrastructure grants being awarded from the largest fund sources since 2021.

Federal Funding

California has leveraged the following federal funds to expand access to broadband:

- **American Rescue Plan Act (ARPA).** In addition to COVID-19 response and recovery, the 2021 ARPA provided federal investments to expand broadband infrastructure. To date, California has allocated $2.3 billion in ARPA funding for the middle-mile network and earmarked $550 million for last-mile projects.

- **Infrastructure Investment and Jobs Act (IIJA).** The IIJA provided significant federal funding for transportation and infrastructure spending, including expanding access to broadband internet. The IIJA specifically includes the following:

    - *Broadband Equity, Access, and Deployment (BEAD) Program.* Administered by the National Telecommunications and Information Administration (NTIA), the BEAD program will specifically fund last-mile project grants. California anticipates receiving $1.86 billion from BEAD over the next several years. More details about the BEAD program is discussed on the LAO's handout.

    - *Enabling Middle Mile Broadband Infrastructure Program.* Also administered by the NTIA, this program aims to expand middle-mile infrastructure. In 2023, the NTIA announced that California will receive $73 million from this program.

2024 Budget Proposals and Adjustments

Middle-Mile Network Proposal

Accounting for both state and federal funding, the middle-mile network funding to date totals $3.8 billion. The Governor's 2024 budget proposes an additional $1.5 billion in General Fund ($250M in 2024-25 and $1.25 billion in 2025-26) to fund the completion of the middle-mile network. As noted previously, approximately 8,317 miles of middle-mile projects are under contract at the time of writing. The Administration requests additional funding to complete the 10,513 miles and account for higher labor, materials, and equipment costs. CDT states that, without this additional $1.5 billion, the middle-mile network "will only be able to reach approximately 84 percent of the state's unserved households."

Last-Mile Funding Adjustments

The Governor's 2024 budget delays $100 million in state General Fund in 2024-25 to 2026-27 for the CPUC last mile infrastructure grants. This results in a total appropriation of $2 billion with $1.45 billion already appropriated and future appropriations of $100 million in 2024-25, $200 million in 2025-26, and $250 million in 2026-27. The budget also proposes a reduction of $250 million General Fund ($150 million in 2024-25 and $100 million in 2025-26) for the Broadband Loan Loss Reserve Fund. This maintains $500 million for the program, with $175 million in 2023-24, $150 million in 2024-25, and $175 million in 2025-26. The Broadband Loan Loss Reserve Fund is a program that will provide local government entities and nonprofit organizations with grants to assist with the costs of constructing new broadband networks, such as the costs of debt issuance and securing fund reserves for broadband infrastructure projects.

Of note, the funding provided by SB 156, and subsequent increases, aimed to fund construction of the state middle-mile network. Funding has not been allocated for ongoing costs of network operation and maintenance, as the middle-mile network is anticipated to be a self-sustaining operation by generating sufficient revenues to cover ongoing costs. Similarly, the CPUC's last-mile grant programs require each applicant to demonstrate "project viability" with a five-year business plan showing profitability, revenues and expenses based on expected customers.