CASF Public Housing Account
Site Visit Report

January 25, 2023

Tenderloin Neighborhood Development Corporation

- 939 Eddy St. SF, CA.
- 951 Eddy St. SF, CA.

Introduction and Background

Decision (D.) 14-12-039 requires CASF Broadband Public Housing Account (BPHA) grantees to maintain and operate the broadband network for five years after receiving Commission funding on post-installation and completion of the project. Grantees are required to submit quarterly post-completion reports for five years that provide: Percentage of Uptime,[1] Number of Unique Log-ons by individuals,[2] and Amount of Data used.[3]

As recommended per the State Controller's Office (SCO) audit in 2017 and required by Public Utilities (Pub. Util.) Code section 912, subdivision (a), the Communication Division (CD) Staff (Staff) have dedicated and performed project management tasks, such as on-site visits to project locations to determine the status of the infrastructure projects. The CPUC has maintained the number of site visits until the spread of the COVID-19 global pandemic, which began in 2020 and ended in 2023 with the termination of state's COVID-19 State of Emergency.[4] Site visits resumed in early 2023, beginning with two projects from Tenderloin Neighborhood Development Corporation (TNDC). Site visits consist of interviews with grantees and/or contractors, observations and recommendations during a site walk of the installation, configuration, operations and maintenance (O&M) of wireless access points, digital subscriber lines, switched ethernet circuits, and its network components, conducting speed tests around or inside the residential units, reviewing the Internet Service Provider (ISP) circuits at the main point of entry (MPOE) and its subscribed internet bandwidth to ensure that the broadband network is capable of providing the minimum required internet service speed to residents pursuant to D. 14-12-039.

This report summarizes the observations and recommendations made during site visits of the two TNDC infrastructure projects in 2023.[5]

[1] The time or the percentage the network service is up and operational.
[2] Given that the Wi-Fi and DSL networks funded through the BPHA typically do not have a network log-on; network usage is, instead, tracked by the number of individual devices that access the network monthly.
[3] Data usage occurs whenever an individual stream, download, upload, use apps, or open browsers.
[4] https://www.gov.ca.gov/2023/02/28/governor-newsom-marks-end-of-californias-covid-19-state-of-emergency/
[5] Site visits were conducted on January 25, 2023.

Site Visits

Objective:

To determine whether the BPHA project and grant recipient is complying with the following program requirements:

- Providing minimum required Upstream and Downstream internet data rate to the residents;
- Subscribed an adequate ISP bandwidth at MPOEs to meet the minimum internet data rate or internet speed for the resident's use; and
- Providing quarterly service availability uptime status reports to the commission for review.

Methodology:

For the site visit, Staff met with a Public Housing Representative and/or Network Vendor. Active surveys were conducted throughout the property to investigate finer details of the installation and commissioning quality, system integration parameters check such as Signal Strength, SSID, Frequency channels, Point-to- Point Protocol over Ethernet (PPPoE).

In addition, surveys were done to test internet data speed performance and the connectivity ability throughout the Wi-Fi Access Points, Repeaters, and DSL Modems. Further, Staff used the 'Site Visit Checklist' document[6] and tools such as Wi-Fi Analyzer, CalSPEED mobile, and desktop applications to check the data service speed and signal quality.

Site Visit Observations and Recommendations:

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The two sites were a relatively historical architecture multi-story brick building situated near downtown San Francisco in the Tenderloin community (*Figure 1*). The Main Distribution Frame (MDF) for the network system serving the site was securely located in an accessible and well-maintained communication room located on the first floor of the building (*Figure 2*). This MDF served both the 939 Eddy St. and 951 Eddy St. TNDC projects.

[6] Site Visit Checklist' document contains 18 points Yes or No checklist items used by CD Staff during active site survey/site walk on post completion CASF BPHA projects to check on Operations and Maintenance (O&M) performance.

Figure 1: 951 Eddy St. TNDC property SF, CA

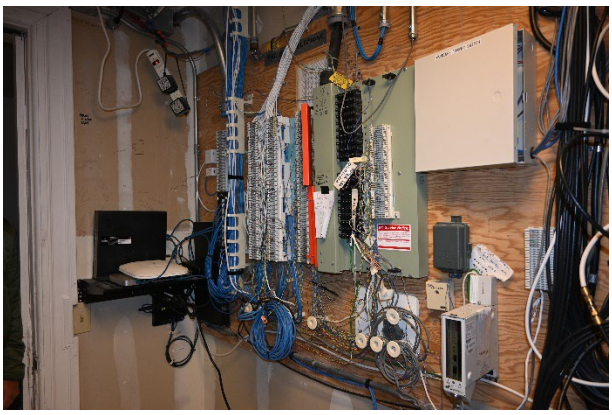

Figure 2: 951 & 939 Eddy St. MDF Room

Staff found the equipment installation of the MDF to be adequate with proper securing and anchoring of the network devices to the equipment tray and to the wall and proper cable management via the use of tie-wraps and routing of cables through an organized array of backboard mounted cable raceways to the distribution patch panels with clearly labeled network port assignments for the system switch and interfaced wireless access points being distributed throughout the building (*Figure 3*).[7]

Staff performed an active survey by walking both sites and following the 'site visit checklist to ensure the installation and engineering details were meeting the industry standards to deliver Quality of Service (QoS).

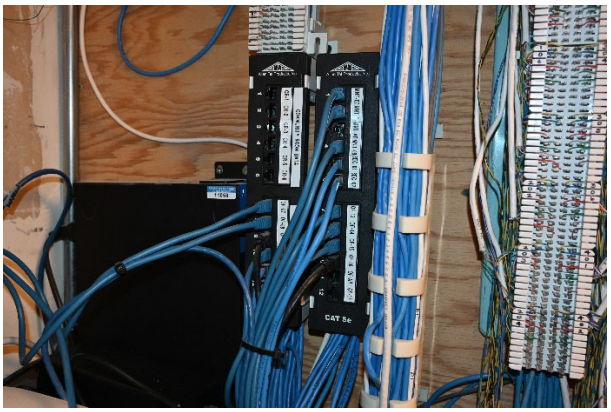

Figure 3: MDF Room cable management and labels

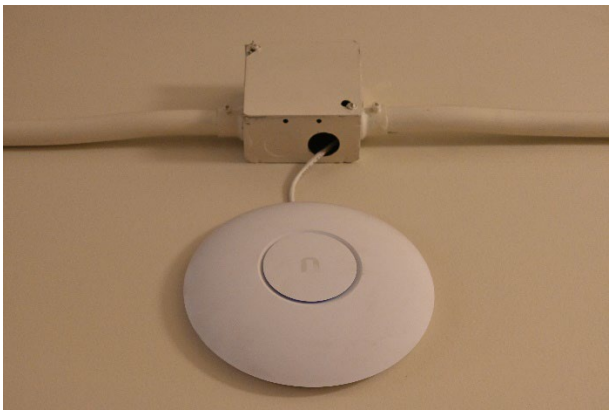

Figure 4: 939 Eddy St. WAP

[7] The Plain Old Telephone System (POTS) interconnect between the 66 blocks and the lightning fuse blocks with taped scratchpad labeling and power strip for the Viking elevator phones hanging from the wall, was not part of the BPHA grant.

Site installations *Figure 4* through *Figure 8*, captured by Staff during the site walk, found that the grantee's network vendor followed the required standards during the deployment on both the sites. Staff also found that the grantee had its own network staff to provide assistance for the residents and perform network operations and maintenance (O&M) post-deployment and has been maintaining both sites well.

Key Observations:

Below are Staff's key observations during the site visit of the above two sites.

- Installation checklists were available for the sites but detailed Network Engineering & Design documentation were not available
- In addition to its own network staff, grantee had a contract with the network vendor for operations and maintenance (O&M) and quarterly performance reporting for all the sites
- Indoor wiring and cables were run through proper conduits
- All the wireless access points on the two sites were secured and password protected
- Multiple CalSPEED tests were conducted at multiple locations on each floor for all the project sites. The test results met and exceeded grant's minimum internet speed requirement, except for two areas of 951 Eddy St. in the corners of the hallway, where test results were borderline and at times struggled to meet the minimum internet speed requirement

Figure 5: 939 Eddy St. WAP

Figure 6: 951 Eddy St. WAP

Figure 7: 951 Eddy St. WAP

Figure 8: 951 Eddy St. WAP

Recommended Corrections:

- There were no recommended corrections for 939 Eddy St. and 951 Eddy St. sites.
- Discussed with the grantee, on-site accessible as-built engineering design document for references. The grantee will coordinate with its network staff to provide documentation available on site.
- Discussed with the grantee that all network devices be inspected and upgraded to the latest software and firmware updates working with the grantee's network staff and the network vendor on a regular basis.
- Discussed with the grantee that after the updates, the grantee should work with the network staff and the vendor to check the wireless access point signal quality using network tools such as CalSPEED. The two coverage areas in the corners of the hallway at 951 Eddy St. need to be re-checked to ensure proper signal strength and maintain Quality of Service on a regular basis.

Conclusion

The installation workmanship, engineering design, and internet services speed of the two TNDC projects were well maintained and operated by its own network staff and the grantee's network vendor.

Staff conducted a survey of all the above sites with a Public Housing Representative and made recommendations of the findings under key observations. Staff used a site visit checklist,

photography and Calspeed network tool to document and capture the awarded projects' as-built installations and workmanship, performance and their state of operations and maintenance in meeting the program requirements.

The site visits provided Staff an opportunity to visit with the grantee in person and to discuss and provide feedback on the grantee's installed systems and to share Staff's guidance for the system maintenance and improvement for these awarded projects.