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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

*Order Instituting Rulemaking
Regarding Broadband Infrastructure
Deployment and to Support Service
Providers in the State of California*

Rulemaking 20-09-001
(Filed September 10, 2020)

**REPLY COMMENTS OF NEXT CENTURY CITIES ON ASSIGNED
COMMISSIONER'S RULING**

September 21, 2021

Next Century Cities
1828 L Street NW, Suite 300 – A
Washington, D.C. 20036

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I. Introduction

Next Century Cities (“NCC”) respectfully submits these reply comments in response to the California Public Utilities Commission (“CPUC” or “Commission”) on its role in implementing California’s open-access middle-mile network.¹

Broadband access and adoption remain crucial for all California residents. Both are inextricably tied to economic outcomes, educational opportunities, and overall well-being. As the record reflects, residents living in all corners of the state face connectivity challenges. The state’s middle-mile network could provide the necessary infrastructure to support long-term solutions.

Affordability for last-mile providers and residents must remain a central priority. The State’s role in improving not just broadband speeds, but also redundancy, reliability, latency, and competition. The Commission can help ensure that the state’s middle-mile network enables last-mile broadband service that is affordable and high-quality, equipping millions of Californians for current needs and decades into the future.

II. Local and regional commenters agree that partnerships with communities can ensure that middle-mile networks are effectively developed and utilized.

Partnering with local governments to develop the Commission’s middle-mile plan could help to reduce information gaps, synchronize last-mile projects, and mobilize local support for middle-mile network deployment. Municipal and government association commenters discussed several opportunities for partnerships with communities that could generate efficiencies for California’s middle-mile network design and enhance data collection.²

¹ California Public Utilities Commission, Assigned Commissioner’s Ruling, Rulemaking 20-09-001 (Aug. 6, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M397/K312/397312171.PDF>.

² See e.g. Connected Capital Area Broadband Consortium Comments (Sept. 3, 2021) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M407/K765/407765399.PDF>; County of Los Angeles

The presence of a middle-mile network will only support ubiquitous connectivity if last-mile providers fill persistent service gaps. As the Corporation for Education Network Initiatives in California explains, “middle mile that doesn’t align with the need of last mile means communities will miss an opportunity to reap the maximum benefit of these one-time investments.”³

Local governments and community organizations should partner on this endeavor. With state and federal funding available for municipal projects, coordination with communities will help to identify remaining needs and ensure that the middle-mile network supports widespread broadband access and adoption.

Since American Rescue Plan (“ARP”) State and Local Fiscal Recovery funding must be encumbered before December 31, 2024, and expended before December 31, 2026, the Commission should ensure that the state’s middle-mile network deployment aligns with funding timelines for local governments. As the California Association of Counties rightly notes, “construction should be pursued as quickly as possible in every area of the state both to provide the benefits of the network more quickly and to ensure the federal funds being used are encumbered in the time required.”⁴

Comments (Sept. 3, 2021); City of Los Angeles Comments at 4 (Sept. 3, 2021); Rural County Representatives Comments at 2 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K081/405081966.PDF>; Coachella Valley Association of Governments Comments at 4-5 (Sept. 3, 2021)

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M406/K564/406564295.PDF>.

³ Corporation for Education Network Initiatives in California, 2 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K048/405048228.PDF>.

⁴ California Association of Counties Comments at 2 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M404/K292/404292376.PDF>.

Collaborating with community anchor institutions could enhance the Commission's understanding of local needs. As the City and County of San Francisco proposes:

The Commission should seek information on affordability from community anchor institutions. Pricing information from carriers is important, but the Commission cannot ignore the experience of potential network users. Obtaining information from similar types of community anchor institutions spread throughout the State would be invaluable. These community institutions could include libraries, sheriff's departments, county offices of education, and county offices of economic opportunity. Independent regional internet service providers could also be a valuable source of information.⁵

Opening meaningful channels for communication with local governments and community organizations, inside and outside this proceeding, can help the Commission answer many of the questions offered for comment.

The Utility Reform Network, ("TURN") agrees, stating that,

The Commission Staff should verify whether the current open access provisions for the identified fiber routes are available to all potential customers, including (but not limited to) wireline and wireless telecom service providers, ISPs, Tribes, broadband regional consortia, government agencies and non-profits. In addition to the data request, the Staff should solicit input from current and potential middle mile customers in each region, including but not limited to competing ISPs and WISPs, Tribes, counties, local agencies, and the US Department of Agriculture, to better understand their experiences with obtaining and using existing infrastructure and whether current facilities meet their needs.⁶

Local perspectives are an essential informational resource that the Commission should consult to verify that the state's middle-mile network supports community initiatives. The people

⁵ City and County of San Francisco Comments at 2-3 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K048/405048221.PDF>.

⁶ The Utility Reform Network Comments at 4 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K024/405024281.PDF>.

living and working in the communities the state's network will ultimately serve have valuable insights that could inform the Commission throughout the planning process.

III. Affordability, high service speeds, and other quality factors are all important considerations when developing the state's middle-mile plan.

The Commission proposes that areas with more than 50% of households without 100 Mbps download speeds indicate insufficient middle-mile infrastructure. Commenters largely agree that this metric alone is not enough to fully capture the breadth of communities that may benefit from a public open-access middle-mile network.

In addition to households unserved by service that offers 100 Mbps download speeds, millions of residents who are considered served face connectivity obstacles when service is unaffordable, upload speeds are too slow to support daily needs, or other quality limitations hinder reliable access to the Internet.

A. The Commission should prioritize both middle-mile and last-mile affordability.

Affordability remains a dominant concern, even in locations where service is generally available. Several commenters noted the importance of ensuring that the State's middle-mile network enhances both wholesale and retail affordability.

If the middle-mile network lowers prices for consumers, for example by introducing competition that drives prices down, it will be equally as important in served areas as unserved. As UniteLA observes,

Affordability and quality are driven by increased competition and innovation. The current model of broadband deployment has stymied competition in underserved

communities, so that many of the LA DEAL’s partnering organizations have complained that if their clients have an option, they only have one option, and it is unaffordable.⁷

Working with local governments would inform, and improve the effectiveness of, the Commission’s efforts to address affordability. The Los Angeles Economic Development Corporation proposes several factors for affordability that can accompany local partnerships:

Factors that should be considered in determining affordability include household median income, adjusted cost of living, and poverty rates. To better understand these factors, it is important for communities’ voices to be heard to determine what is deemed “affordable.” Although there are several low-income internet plans offered by providers in Los Angeles County, our conversations with community-based partners have revealed that many residents are still unable to afford the price points or are hesitant to accept the offers based on the terms and conditions associated with them.⁸

Millions of Californians remain disconnected because home broadband subscriptions are too expensive. A public open-access network could help address affordability for residents by enabling competition. Affordable access to the state’s middle-mile network is an important precursor to robust last-mile competition. As several commenters explain, while ILEC’s offer interconnection to their middle-mile network, it is not necessarily affordable.⁹ The State has the opportunity to ensure that communities have affordable middle-mile network access that persists even after interconnection obligations expire.¹⁰

⁷ Unite LA Comments at 4 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M407/K765/407765390.PDF>.

⁸ Los Angeles Economic Development Corporation at 10 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M407/K793/407793980.PDF>.

⁹ See e.g. Utility Consumers’ Action Network Comments at 5 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K024/405024275.PDF> (“Second, simply because middle mile infrastructure may be available, such availability does not mean that access to that infrastructure is affordable nor does it mean that the rates, terms, and conditions are reasonable. Where adoption rates are low, affordability may well be a barrier.”).

¹⁰ See TURN Comments at 4-5 (explaining that the current unbundled dark fiber transport obligations are set to expire in October 2028).

Even if the Commission chooses to deploy in unserved and underserved areas first, that does not supplant the need to investigate areas with persistently low adoption rates and determine whether the middle-mile network could provide ancillary support.

B. Slow broadband speeds remain a barrier to adequate connectivity.

While some commenters cautioned against building the state's middle-mile network to serve areas already served by 25/3 Mbps, this metric does not accurately capture the vast need for high-speed broadband access and increased opportunities to promote adoption.

The 25/3 Mbps benchmark was developed by Federal Communications Commission in 2015.¹¹ Six years and a global pandemic later, it no longer meets the needs of residents who rely on connectivity to complete schoolwork, attend healthcare appointments, seek out employment opportunities, work from home, and so many other essential functions that have migrated permanently online. As the Los Angeles Economic Development Corporation explains,

Former internet speed standards of 6/1, 10/1 and even the current FCC standard of 25/3 Mbps are obsolete today, especially in the densely populated households of our low-income communities where multiple members of the same household need broadband access to work and learn from home or access telehealth or social services or basic information available to others only through the internet.¹²

In addition to the quantity of unserved and underserved residents, the Commission should also build to areas with low adoption rates that could be addressed through public open-access middle-mile availability. For example, the City of Los Angeles and Los Angeles Economic

¹¹ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment (Feb. 4, 2015), <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2015-broadband-progress-report>.

¹² Los Angeles Economic Develop Corporation Comments at 5.

Development Corporation propose that the Commission use American Community Survey data and collaborate with communities to better understand affordability needs.¹³ The Greenlining Institute’s proposal includes additional factors that can help the Commission determine which routes can facilitate last-mile connections to areas with the greatest need.¹⁴

As the City and County of San Francisco explain,

While poor connectivity at the household level may be related to low levels of investment in both middle-mile and last-mile networks, establishing a definition of unserved household based solely on download speeds would not appropriately consider other requirements for a robust middle-mile network, such as upload speeds. A measure that does not consider upload speeds is not helpful for identifying a robust middle-mile network.¹⁵

Characterizing the need for middle-mile infrastructure should be determined through a holistic analysis of all the factors contributing to gaps in broadband access and adoption at the household level. Network utilization may vary between communities facing different connectivity challenges, but the need for open-access middle-mile infrastructure persists even in areas currently served by 100 Mbps download service.

C. Redundancy, resiliency, latency, and competition are also important quality considerations.

The Commission should not preclude routes from the state network solely because middle-mile infrastructure already exists. As commenters point out, resilience, redundancy, latency, and

¹³ See City of Los Angeles Comments at 3; LAEDC Comments at 10.

¹⁴ Greenlining Institute Comments at 5 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K052/405052387.PDF> (“the Commission also consider factors such as rural population density, income level, competition and adoption rate when prioritizing middle-mile constructions as this can improve broadband connectivity for communities of color and low income families that need it the most.”)

¹⁵ City and County of San Francisco Comments at 1-2.

other quality factors remain important concerns that the Commission should investigate before precluding a route from the state's middle-mile network plan.

The state middle-mile network does not only support the needs of residents and businesses but enables government functions and service delivery. Regarding its important public safety role, the California Association of Counties explained,

For areas that have access to existing privately owned middle mile networks, a state-owned network would provide redundancy, which improves resilience in the face of increasingly frequent and severe natural disasters, and which increases the reliability of communications in times of disaster, improving safety for the public and disaster-response teams that rely on those communications.¹⁶

Similarly, the Electronic Frontier Foundation discussed the network's role in enabling equitable 5G deployment, also proposing that the state solicit interest in last-mile service offerings in low-income areas.¹⁷ As new technologies are introduced that enhance communications, healthcare, education, and quality of life, the digital divide will only continue to grow unless communities are equipped with tools to support equitable deployment.

The San Diego Association of Governments rightly stated, "Modern society's reliance on information and communications technology is rapidly growing. SANDAG recommends that the CPUC deploy a resilient and integrated open access middle-mile network that can adequately meet future demands, beyond the State's 100/20 Mbps broadband standards."¹⁸

¹⁶ California Association of Counties at 4.

¹⁷ Electronic Frontier Foundation Comments at 7-8 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M405/K052/405052385.PDF>.

¹⁸ San Diego Association of Governments Comments at 5 (Sept. 3, 2021), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M404/K292/404292157.PDF>.

IV. Conclusion

California's open-access middle-mile network offers a unique opportunity to address various obstacles to connectivity across the state. Residents in various communities – rural, urban, and Tribal alike – need affordable, high-quality broadband service to fully participate in society. Collaborating with local officials and community leaders can help the Commission develop a comprehensive plan that paves the way for all residents to be able to contribute to and benefit from a digital economy.

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Respectfully submitted,

/s/ Corian E. Zacher

Corian Zacher
Policy Counsel, State and Local Initiatives
Next Century Cities
Tel: (405) 762-0571
E-mail: corian@nextcenturycities.org