



**County Administrative Office**  
Governmental & Legislative Affairs

**Bradley A. Jensen**  
Director

September 3, 2021

**RE: San Bernardino County Comments on Middle Mile Deployment - CPUC Rulemaking No. 20-09-001**

**Identifying Existing Middle Mile Infrastructure**

**What routes, if any, should be modified, removed from consideration, or revised? Provide an explanation for these suggestions.**

Based on the map provided in this document there appears to be significant gaps in coverage along highways where there are County borders or highway intersections. These artificial boundaries should not result in coverage gaps in the middle mile infrastructure. We recommend these gaps be addressed and include routes that are relevant to the stated goals along Highway Routes 2, 10, 15, 18, 38, 40, 58, 60, 62, 66, 71, 80, 83, 95, 127, 138, 142, 173, 188, 189, 210, 210U, 215, 247, 259, 330, 395 to make sure there is middle mile infrastructure and last mile access.

**Are there existing middle mile routes that are open access, with sufficient capacity, and at affordable rates on the county highway routes listed in Attachment A?**  
No County Response.

**In the context of these comments, what is sufficient capacity and affordable rates?**

100 Mbps should be sufficient to accommodate remote learning, telework, telemedicine, streaming, and banking needs. This service should be provided at \$0 to \$30 per month.

**For routes that are identified as being open access, with sufficient capacity, and at affordable rates, how should the Commission verify these claims (e.g., should Communications Division send a data request for service term sheets, rates, approximate dark fiber, lit fiber, and conduit capacity, etc.)? Are there any other criteria that should be used to verify these claims?**

No County Response

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### **Priority Areas**

**Is it reasonable to assume counties with a disproportionately high number of unserved households (e.g., 50% or more unserved at 100 Mbps download) are areas with insufficient middle-mile network access?**

This is a reasonable assumption, and all efforts should focus on identifying and addressing the need in these areas.

**What other indicators, if any, should the Commission use to identify priority statewide open-access middle-mile broadband network locations (i.e., built expeditiously, areas with no known middle-mile network access, regions underserved by middle-mile networks, regions without sufficient capacity to meet future middle-mile needs)?**

Additional indicators should be focused on the needs of areas with low-income households, high clusters of elderly, transportation challenges, disadvantaged youth, and populations with poor health that have limited access to health care, and areas designated as rural in a county.

### **Assessing the Affordability of Middle Mile Infrastructure**

**What are existing providers paying or charging for middle mile services?**

No County Response.

**Are there other factors or sources of information the Commission should consider for determining whether these services are affordable?**

No County Response.

**Is it reasonable for the costs of these services to change depending on the location where the service is provided (i.e., rural vs urban)?**

It is reasonable for the costs of these services to change but with any change, there may be a need to subsidize the cost of this service, especially in rural areas.

### **Leasing Existing Infrastructure:**

**If there is existing open access communications infrastructure with sufficient capacity to meet the state's needs, should the state purchase IRUs from that network?**

An analysis should be performed prior to purchasing an IRU. With continuing advancements in cellular, satellite and other technologies providing internet services, maintaining a 20-30 year contract may prevent the adoption of newer cost effective solutions.

**Is there any value in the state purchasing an IRU from the network if capacity is already available?**

An IRU is not necessary if network capacity is already available. This again could hinder the adoption of newer technologies due to funding already being allocated for the IRU.

**If the state relies on IRUs for the development of the statewide network, will the generational investment that this funding provides be diminished when the IRU leases end 20 to 30 years later? Will existing networks run out of spare capacity?**

An analysis should be performed to ensure a long term IRU would not prohibit the adoption of emerging internet service technologies.

**Interconnection:**

**At what points should the statewide network interconnect (e.g., to other networks, servers, etc.)?**

The statewide network would need to connect with ISPs and colocation datacenters to allow interconnectivity to services utilized by the public.

**Are additional exchange points necessary or strategic, and if so, where?**

If additional exchange points are required, they should be facilitated by ISPs or colocation providers.

**Network Route Capacity:**

**How many strands of fiber should the network deploy for each route?**

No County Response

**Are there other requirements or standards the Commission needs to consider to determine sufficient capacity?**

The Commission should also consider geography (both rural and urban areas), historical transit trends, building density, architectural design, the level of need in residential, commercial/business developments (including mixed use, multi-family households), and the number of devices per household or business location. With an area of 20,105 square miles, San Bernardino County is the largest county in the contiguous United States by area with distant, growing areas of population separated by mountains and desert terrain.

**Should the network also deploy additional conduit within each route for potential future expansion?**

Yes. Deploying additional conduit is a prudent strategic approach to plan for future growth.

**Should these factors change based on the population density and distance from the core network?**

Bringing broadband connectivity to underserved areas at a reasonable speed (100Mbps) and rate is the problem being addressed. Distance from the core network should not be a factor in addressing this challenge.

**Additional comments for CPUC Consideration:**

Connect middle-mile construction with last-mile deployment. It is essential to immediately focus on providing Internet access to the hardest-to-reach residents—rural unserved communities, Tribal Lands, and poor urban underserved neighborhoods. The construction of a middle-mile only network will not assure last-mile connectivity in a reasonable timeframe. However, construction of publicly subsidized open-access middle-mile infrastructure that includes last-mile deployment achieves the best of both objectives—assures immediate Internet access for unserved and underserved households while also allowing other last-mile providers to access the middle mile thereby increasing competition and expanding consumer choices to include moderate prices.

Incorporate effective public-private partnerships. Public-private partnerships with a record of proven investment and work product should be encouraged and rewarded when they leverage previous public investments (by consumers and taxpayers) in existing middle-mile backhaul and backbone to avoid duplication of middle-mile infrastructure, serve public interests, and push the envelope of innovation.

Coordinate actions among local and regional government. State investment should be aligned with collaboration among local governments through regional agencies, including Regional Consortia and Metropolitan Planning Organizations, to streamline and expedite permitting and achieve economies of scale.

CASF Infrastructure Grant Account. We recommend that middle mile funding, which is not allocated by December 31, 2022, should revert to the CASF Infrastructure Grant Account. In addition, we are encouraged by efforts to review and revise CASF rules to broaden and maximize more efficient participation. Stakeholder collaboration focused on aligning CASF with these objectives also should be encouraged.

If you have any questions regarding the County's position, please contact Bradley Jensen, Governmental and Legislative Affairs Director, at 909 387-4821 or [Bradley.Jensen@cao.sbcounty.gov](mailto:Bradley.Jensen@cao.sbcounty.gov).

Sincerely,



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Fourth District Supervisor  
Chairman, San Bernardino County Board of Supervisors

cc: San Bernardino County Legislative Delegation