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## Via ECFS

February 22, 2021

Ms. Marlene H. Dortch Secretary Federal Communications Commission 45 L Street NE Washington, DC 20554

Re: Notice of Ex Parte Presentation Regarding the Emergency Broadband Benefit Program, WC Docket No. 20-445

Dear Ms. Dortch:

In accordance with Section 1.1206 of the Commission's rules, 47 CFR § 1.1206, we provide the Commission with notice of an oral ex parte presentation in connection with the above-captioned proceeding relating to the Emergency Broadband Benefit Program ("**EBBP**").

On February 19, 2021, the undersigned law student members and supervising attorneys of the Samuelson Law, Technology & Public Policy Clinic (the "Clinic") and Francella Ochillo, Corian Zacher, and Ryan Johnston of Next Century Cities ("NCC") met via videoconference with Trent Harkrader, Acting Special Advisor to Acting Chairwoman Jessica Rosenworcel and Deputy Bureau Chief of the Wireline Competition Bureau, to discuss EBBP implementation.

The Clinic, on behalf of NCC, presented information about a community mesh broadband network's success in providing internet to low-income households in San Rafael, California, who are among the intended beneficiaries of the EBBP. This innovative partnership of city and county agencies, volunteers, and nonprofit organizations illustrates the need for the Commission to take an expansive view of provider eligibility for the EBBP and future federal broadband affordability programs.

The digital divide in San Rafael's low-income Canal neighborhood is stark. The neighborhood of 12,000 residents, including 2,000 school-aged children, is one of the most densely populated and least-served neighborhoods in Marin County. A recent survey showed that 57% of Canal neighborhood residents do not own a computer, compared to 10% in the rest of San Rafael. Only 61% of residents have access to wired internet at home, and 44% of residents of the Canal said it

<sup>&</sup>lt;sup>1</sup> Ry Marcattilio-McCracken, *How San Rafael, California Built a Neighborhood Mesh Network That Turned into Something More* (Sept. 3, 2020), <a href="https://muninetworks.org/content/how-san-rafael-california-built-neighborhood-mesh-network-turned-something-more">https://muninetworks.org/content/how-san-rafael-california-built-neighborhood-mesh-network-turned-something-more</a>.

<sup>&</sup>lt;sup>2</sup> Canal Digital Access Equity Fund, <a href="https://donate.canalalliance.org/campaign/canal-digital-access-equity-fund/c294655">https://donate.canalalliance.org/campaign/canal-digital-access-equity-fund/c294655</a> (last visited Feb. 10, 2021).

is difficult to connect to internet at home.<sup>3</sup> Although San Rafael's struggles with broadband affordability predate the COVID-19 pandemic, the pandemic magnified the particular difficulties faced by students.<sup>4</sup>

The city addressed its broadband access and affordability challenges via a partnership to build its own mesh network. After hearing from a resident willing to donate his expertise to help the city build the network, San Rafael reached out to the Canal Alliance, a nonprofit providing community services in the neighborhood. Key to the effectiveness and impact of the network was time spent collecting data and mapping, in order to find the densest parts of the neighborhood to reach the maximum number of people in the shortest time possible. Once the city secured funding from a combination of public and private sources—raising about \$325,000 overall—it installed equipment in a variety of places in the neighborhood, including on street lights, pump stations, and government buildings, as well as on affordable housing buildings owned by the Canal Alliance.

The network is provided to residents for free.<sup>9</sup> When asked to provide their reasons for accessing the network, roughly 45% of users reported using the network for school and 25% reported using it for work.<sup>10</sup> The network thus provides a critical benefit to people who are often underserved and overlooked, particularly during the COVID-19 pandemic.

Of course, challenges persist even after building out a functioning mesh network. The city must communicate availability of the network to a population where about 75% of the population speaks a language other than English at home. <sup>11</sup> Further, San Rafael must put in place additional infrastructure to ensure network resiliency in the face of brownouts or natural disasters so that a core area of the mesh network will remain connected and officials will be able to get information to residents. <sup>12</sup> In 2019, for example, during the local power company's rolling brownouts to preempt fire risk, officials taped posters to the walls of government buildings to get information out. <sup>13</sup>

Noting the success of San Rafael's mesh network in expanding broadband access to a hard-toreach low-income population, we discussed the crucial function community mesh networks serve

 $<sup>^3</sup>$  Id.

<sup>&</sup>lt;sup>4</sup> Marcattilio-McCracken, *supra* note 1.

<sup>&</sup>lt;sup>5</sup> Zach Quaintance, *How One City Built a Wi-Fi Network During a Pandemic* (June 18, 2020), https://www.techwire.net/news/how-one-city-built-a-wi-fi-network-during-a-pandemic.html (defining a mesh network as "a network that uses largely the same routers and other equipment that people have in their homes, affixing several of them to streetlights and other public structures to spread coverage through an area").

<sup>&</sup>lt;sup>6</sup> Marcattilio-McCracken, *supra* note 1.

<sup>&</sup>lt;sup>7</sup> *Id*.

<sup>&</sup>lt;sup>8</sup> *Id*.

<sup>&</sup>lt;sup>9</sup> Community Broadband Networks Podcast, *Episode* 427, Community Networks, at 22:27–24:47. (Sept. 17, 2020), https://muninetworks.org/content/transcript-community-broadband-bits-episode-427.

<sup>&</sup>lt;sup>10</sup> Canal WiFi, Network Metrics, <a href="https://canal-wifi.com/index.php/home-page/wifi-dashboard/">https://canal-wifi.com/index.php/home-page/wifi-dashboard/</a> (last visited Feb. 19, 2021).

<sup>&</sup>lt;sup>11</sup> Mitchell Crispell, The Center for Community Innovation at UC Berkeley, Canal: An Immigrant Gateway in San Rafael at Risk. Case Study on Gentrification and Displacement Pressures in The Canal Neighborhood of San Rafael, CA at 4 (2015); *see also*, Canal WiFi, https://canal-wifi.com/ (last visited Feb. 20, 2021) (the website for the Canal WiFi network is trilingual: English, Spanish, and Vietnamese).

<sup>&</sup>lt;sup>12</sup> Marcattilio-McCracken, *supra* note 1.

<sup>&</sup>lt;sup>13</sup> *Id*.

in the low-income broadband ecosystem. Accordingly, we recommended that the Commission ensure municipal projects like San Rafael's mesh network can participate to the fullest extent possible in the EBBP and other federal broadband deployment and affordability programs.

We discussed the difficulties that community mesh networks—who do not charge for their services or have customer rosters—might face in meeting the EBBP's eligibility requirements. Although we recognized that some types of nontraditional networks might not be eligible for EBBP in its current form, construing EBBP eligibility requirements broadly will allow for maximum participation in the program. Similarly, the Commission should draw on community-based organizations' expertise when designing its outreach plan to inform households eligible for the EBBP.

In addition, we recommended that the Commission prioritize reaching out to eligible nontraditional providers who may be less familiar with federal broadband programs. We also recommended that the Commission ensure the pathway to eligibility for these providers is no more burdensome than for eligible telecommunications carriers or other commercial broadband providers. Finally, we requested that future Commission initiatives aimed at addressing the digital divide provide support for community mesh networks and other nontraditional providers as these community-based models are uniquely qualified and committed to serve residents who perpetually struggle with broadband connectivity.

Respectfully submitted,

/s/ Shalev Netanel

/s/ Ross Ufberg

/s/ Gabrielle Daley

/s/ Erik Stallman

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Counsel for Next Century Cities

cc: Trent Harkrader Francella Ochillo Corian Zacher Ryan Johnston

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<sup>&</sup>lt;sup>14</sup> See NCC Comments at 6 (urging the elimination of unnecessary steps for non-ETCs in the approval process).