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August 8, 2018
Via Email and Postal Service

Mr. Chris Schmidt, Chief, Transportation Planning
Mr. Scott Sauer, Chief, Office of Multimodal System Planning
California Department of Transportation (Caltrans)
P.O. Box 942874
Sacramento, California 94274

Mr. Garth Hopkins, Deputy Director, Planning
Ms. Laura Pennebaker, Associate Deputy Director
California Transportation Commission (CTC)
P.O. Box 942873
Sacramento, California 94273

RE: California Emerging Technology Fund (CETF)
Comments on Caltrans and CTC Statewide Corridor Planning:
Caltrans Corridor Planning Guidebook
CTC Comprehensive Multimodal Corridor Planning Guidelines

CETF appreciates the opportunity to participate in and provide input on the Caltrans and CTC corridor planning process now underway. CETF was represented at the recent joint Caltrans and CTC corridor planning workshops on July 16 in Sacramento by CETF consultant Ann Spaulding and on July 20 in Los Angeles by Martha van Rooijen, Executive Director, Inland Empire Regional Broadband Consortium. Both provided verbal comments about the urgency and need for broadband to be considered in CTC and Caltrans corridor planning efforts.

CETF is submitting this written input to encourage your agencies to include broadband as an important and necessary component in the development of the CTC Comprehensive Multimodal Corridor Planning Guidelines, Caltrans Corridor Planning Guidebook, and ongoing statewide transportation planning.

Broadband is a "green strategy" that improves mobility and decreases impacts on the environment. Therefore, CTC and Caltrans should encourage the accommodation of broadband infrastructure deployment in all transportation plans and can start now by including broadband planning in the statewide corridor planning and guidelines process.

CETF is a California non-profit corporation that provides leadership statewide to close the "Digital Divide" by accelerating the deployment and adoption of broadband to unserved and underserved communities and populations, and to ensure that California is a global leader in the availability and use of broadband technology.

CETF facilitates improved broadband deployment through advocating that broadband be included in statewide planning, including the current corridor planning effort. Providing for broadband (high-speed Internet access infrastructure) beyond historic concepts of "telecommunication" lines is important to keep the state moving forward technologically.

CETF has been working on broadband policy with CTC and Caltrans for some time. CETF is a member of the California Broadband Council (CBC), of which the California State Transportation Agency (CalSTA) also is a member. State and other public agencies can accommodate installation and upgrades of high speed Internet access by integrating broadband into the construction of large infrastructure projects, such as transportation, water, education and other community facilities. Proactive planning and prudent management of these kinds of public assets can also lead to joint ventures with the private sector through fair competition that will facilitate and accelerate world-class broadband deployment throughout California.

CETF is pleased with the recent California 2017 General Plan Guidelines identifying broadband planning and "Dig Once" policies as required in the Public Utilities and Facilities Section of General Plan Circulation Elements (Chapter 4) and noting that the provision for access to broadband should be included Healthy Communities Sections (Chapter 6) as it is needed to allow for telemedicine capacity.

CETF supports "Dig Once" policies to advance broadband deployment and followed the progress of the Caltrans Broadband Working Group for the Caltrans Wired Broadband on State Highway ROW "Dig Once" Guidelines released January 2018 in compliance with AB1549. CETF helped inform the need for improved broadband deployment statewide, including the need for proactive identification of strategic corridors and key locations for broadband infrastructure installation.

At the July Caltrans and CTC corridor planning workshops, as well as at the recent Broadband Council Meeting on August 2, CETF emphasized the need for both Caltrans and CTC to include broadband stakeholders in the corridor planning and guideline development process to identify strategic broadband corridors in order to leverage resources and promote sensible broadband deployment solutions statewide. Based on attending the Caltrans and CTC workshops in July, having productive dialogue regarding the inclusion of broadband in the corridor planning process, and the discussion of this topic at the CBC meeting on August 2, CETF recommends the following action: **Caltrans and CTC should coordinate with the California Broadband Council to convene stakeholders in the near future to identify strategic corridors for the deployment of broadband and to standardize the specifications for installation of conduit in conjunction with transportation projects in those strategic corridors** (even if Internet Service Providers (ISPs) do not know if they want to participate in the open trench at the time of construction)**.**

The expected outcomes of this meeting are:

- Convene a collaborative process to promote broadband as a green strategy to improve mobility and decrease environmental impacts. (Attachment A delineates community benefits).

- Identify and prioritize strategic corridors for accommodation of broadband deployment and installation of conduit (even if no ISP notifies Caltrans that they want to participate in an open trench at the time of construction).

- Develop standardized broadband conduit specifications (size and type) of conduit to be planned for and installed in conjunction depending upon the location, geography, cost and type of corridor identified in conjunction with transportation projects.

- Complement or augment "Dig Once Guidelines" and Caltrans notification process for trench opportunities and potential broadband co-location.

- Formulate a check list regarding accommodation of broadband deployment for Caltrans and CTC transportation planning.

CETF recommends that CTC and Caltrans consider and include the following broadband stakeholders to participate in the corridor planning strategy meeting and as part of ongoing corridor planning efforts:

- California Department of Technology
- CBC
- Caltrans
- CTC
- CalSTA
- California Public Utilities Commission (CPUC)
- California Office of Emergency Services (Cal OES)
- ISP's (telecommunications and cable companies): AT&T, Frontier, Charter, Comcast, Cox, Inyo Networks (Praxis), Race, GeoLinks, Sonic, Verizon, Mediacom, Conifer, Fire2Wire, DigitalPath, etc.
- Regional Broadband Consortia (See Attachment B)
- CENIC (California Education Network)
- California K-12 High-Speed Network
- California Telehealth Network (CTN)
- California State Association of Counties (CSAC)
- Rural Counties Representatives of California (RCRC)
- League of California Cities (LCC)
- Tribal Representatives
- CETF

Including broadband stakeholders early in the corridor planning process will enable Caltrans and CTC to accommodate broadband planning at project inception and improve broadband deployment opportunities statewide, helping California close the "Digital Divide." Collaborating with CBC will provide additional momentum to the consultation process and efficiently use professional staff time.

CETF looks forward to working with CBC, Caltrans, CTC and other broadband stakeholders to identify strategic corridors that will advance statewide deployment of broadband and achieve much-needed community benefits.

Sincerely,

Sunne Wright McPeak
President and CEO
California Emerging Technology Fund

Copy:
Amy Tong, California Broadband Council
Cynthia Walker, Director, Communications Division, CPUC
Matthew Yosgott, Associate Deputy Director, CTC
Erik Alm, Senior Transportation Planner, Planning for Operations Branch Chief
Jeanie Ward-Waller, Sustainability Program Manager, Caltrans
Gaylon "Rusty" Thornton, Senior Transportation Planner, Caltrans

ATTACHMENT A

California Emerging Technology Fund (CETF)
Community Benefits of Broadband in Comprehensive Corridor Planning

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Greenhouse Gas Emissions (GHG) Reductions – The best trip is the "virtual trip."

Mobility: Reduce congestion and improve mobility statewide:
Uber, Lyft, commuter trains, light rail, and highway systems rely on online access for real-time traffic data sensor mapping, incident reporting, and on-demand transportation services.
(Note: Mobility planners consider that Uber/Lyft model may replace traditional transit).

Telecommuting/Skyping/Video Conferencing are all "virtual trips" that result in reduced Vehicle Miles Traveled (VMT), improved air quality, and reduction in GHG Emissions

Education: K-12, Community Colleges, Universities, and other education facilities rely on high speed internet and online education reduces VMT, improve air quality and reduce GHG emissions.

- CENIC is key statewide stakeholder that should be consulted (CENIC mission is to connect K-University through dedicated broadband network).

Telehealth: Disadvantaged communities and rural areas need Telehealth which will provide equity and social justice in healthcare service delivery statewide.

- California Telehealth Network is statewide stakeholder that should be consulted.

E-Government: Residents and business rely on online access for government services local to state and federal levels resulting in reduction in VMT, improved air quality and reduced GHG emissions.

Utilities: Conservation, metering and Time of Use (TOU) rates rely on internet availability. Online access provides lowest cost for service and environmental justice for rural and disadvantaged communities.

California Agriculture relies on real-time data and online access to maximize productivity, conserve water and power.

Emergency Services: First responders and virtually all government agencies rely on internet in emergencies for mobilization, resource deployment, communication, news, weather reports, incident updates, evacuations, temporary shelter (Cal OES, State Fairgrounds, schools, etc.) and emergency benefits claims.

Sustainable Communities and Smart Cities include smart buildings, smart grids, and broadband, which provide innovation, power system management and result in improved air quality and reduced GHG emissions.

"Dig Once" Policies substantially reduce costs for providing broadband service to communities and provides more efficient use of resources.

Transportation System Technology Innovation requires online access along strategic corridors (and potentially on all transportation facilities. Autonomous vehicles will require online access for real time data connection.

Public-Private Partnerships (P3) focusing on broadband opportunities with ISP's can leverage transportation resources resulting in reduced costs for building and maintaining the facilities.

ATTACHMENT B

CALIFORNIA ADVANCED SERVICES FUND (CASF)
REGIONAL BROADBAND CONSORTIA

ATTACHMENT B

CALIFORNIA ADVANCED SERVICES FUND (CASF)
REGIONAL BROADBAND CONSORTIA

Regional Broadband Consortia	Contact
Broadband Consortia of the Pacific Coast **Counties Served:** San Luis Obispo Santa Barbara Ventura	Bruce Stenslie President & CEO Economic Development Collaborative of Ventura County 1601 Carmen Dr. Camarillo, CA 93010 805-794-0455 bruce.stenslie@edc-vc.com
Central Coast Broadband Consortium **Counties Served:** Monterey San Benito Santa Cruz	Stephen Blum Principal Tellus Venture Associates 831-582-0700 steveblum@tellusventure.com
Central Sierra Connect Broadband Consortium **Counties Served:** Amador Calaveras Tuolumne Mariposa Alpine	Patrick Kane Central Sierra Connect Manager Amador-Tuolumne Community Action Agency 209-781-0700 pkane@atcaa.org
Connected Capital Area Broadband Consortium **Counties Served:** Sacramento Sutter Yolo Yuba	Trish Kelly Senior Vice President Valley Vision 916-325-1630 Trish.Kelly@valleyvision.org Bill Mueller Valley Vision 2320 Broadway Sacramento, CA 95818 916-325-1630 bill.mueller@valleyvision.org
East Bay Broadband Consortium **Counties Served:** Alameda Contra Costa Solano	Linda Best Former President & CEO Contra Costa Economic Partnership 925-246-1880 linda-best@comcast.net

Regional Broadband Consortia	Contact
Eastern Sierra Connect Regional Broadband Consortium **Counties Served:** Eastern Kern	Judy Hyatt Project Manager ESCRBC 6413 Vienna Place Bakersfield, CA 93306 661-378-6628 judy@hyattconsultinggroup.com
Gold Country Broadband Consortium **Counties Served:** Sierra Nevada Placer El Dorado Alpine	Chelsea Walterscheid Sierra Business Council 10183 Truckee Airport Road, Ste 202 Truckee, CA 96161 530-582-4800 cwalterscheid@sbcouncil.org
Inland Empire Regional Broadband Consortium **Counties Served:** Riverside San Bernardino	Martha van Rooijen Project Manager 951-845-4391 martha@iebroadband.com
Inyo-Mono Broadband Consortium **Counties Served:** Inyo Mono	Nate Greenberg Mono County & Town of Mammoth Lakes PO Box 7657 I452 Old Mammoth Road, Ste 224 Mammoth Lakes, CA 93546 760-924-1819 ngreenberg@mono.ca.gov
Los Angeles County Regional Broadband Consortium **Counties Served:** Los Angeles	Diana Rodriguez Youth Policy Institute 6464 Sunset Boulevard, Ste 650 Los Angeles, CA 90028 213-688-2802 drodriguez@ypiusa.org
North Bay North Coast Consortium **Counties Served:** Mendocino Sonoma Marin Napa	Tom West Program Manager, Broadband 714-220-3436 tom@westfamily.org

Regional Broadband Consortia	Contact
Northeastern California Connect Consortium **Counties Served:** Siskiyou Modoc Shasta Lassen Tehama Butte Plumas	David Espinoza Broadband Specialist Geographical Information Center California State University, Chico Chico, CA 95929-0327 530-898-3945 despinozaaguilar@csuchico.edu
Redwood Coast Connect Consortium **Counties Served:** Del Norte Humboldt Trinity	Connie Stewart California Center for Rural Policy Humboldt State University 1 Harpst St. Arcata, CA 95521 707-826-3402 conniestew@humboldt.edu
Southern Border Broadband Consortium **Counties Served:** San Diego Imperial	Timothy Kelley 3051 N. Imperial Ave., Ste 102 El Centro, CA 892243 760-353-8332 tim@ivedc.com
San Joaquin Valley Regional Broadband Consortium **Counties Served:** Fresno Kern Kings Madera Merced San Joaquin Stanislaus Tulare	Eduardo Gonzalez Director, San Joaquin Valley Rural Development Center California State University, Fresno 559-278-0542 edgonzalez@mail.fresnostate.edu Shelby Gonzales Finance Director, Community & Economic Development California State University, Fresno 4910 N. Chestnut Ave. Fresno, CA 93726-1852 559-278-0517 sagonzales@mail.fresnostate.edu
Tahoe Basin Project	Heidi Hill Drum Tahoe Prosperity Center 948 Incline Way Incline Village, NV 89451 775-298-0265 Heidi@tahoeprosperity.org

Regional Broadband Consortia	Contact
Upstate California Connect Consortium **Counties Served:** Lake Glenn Colusa Sonoma	David Espinoza Broadband Specialist Geographical Information Center California State University, Chico Chico, CA 95929-0327 530-898-3945 despinozaaguilar@csuchico.edu