California Broadband Council
November 18, 2020
Meeting Minutes

The California Broadband Council (CBC) met on Wednesday, November 18, 2020 at 10:00am via virtual conference (per California Executive Order N-25-20).

Agenda Item 1 – Welcome

Council Chair Amy Tong welcomed Council members.

Roll Call

A quorum was established for the meeting.

Member		Designee	Present	Absent
California Department of Technology Director	Amy Tong		X	
California Public Utilities Commission President	Marybel Batjer	Rob Osborn*	X	
California Office of Emergency Services Director	Mark Ghilarducci			X
Superintendent of Public Instruction	Tony Thurmond	Jerry Winkler	X	
Department of General Services Director	Daniel Kim	Brent Jamison	X	
California State Transportation Agency Secretary	David Kim	Lori Pepper	X	
California Emerging Technology Fund President	Sunne Wright McPeak		X	
California Department of Food and Agriculture	Karen Ross**	Arturo Barajas	X	
State Librarian	Greg Lucas	Anne Neville-Bonilla	X	
Governor's Office of the Tribal Advisor	Christina Snider*		X	
Member of the Senate	Ben Hueso	Sarah Smith	X	

Member of the Assembly	Mike Gipson	Victor Ibarra	X	

*Mr. Osborn joined the meeting at 10:05am.
**Ms. Ross joined the meeting at 10:10am. Mr. Barajas filled in for Ms. Ross until she was able to join the meeting

Chair Tong noted the meeting would consist of a recap and update of Action Plan drafting activities since the last Council meeting, a walk through of the most updated version of the draft Action Plan with a focus on the plan's action items, and public comment.

California Department of Technology Deputy Director for Broadband and Digital Literacy Stephanie Tom recognized the Council members and public for their participation in the development of the Action Plan and noted that updates to Action Plan drafts are based on feedback received through Council meetings, listening sessions, public working sessions, meetings, submitted written public comment, and tribal sessions, as well as subject matter expertise from government agencies. Ms. Tom highlighted the overarching themes that have been prominent in the listening sessions. She emphasized that this plan is a starting point and the Council will be reviewing, updating, and augmenting the plan annually. Ms. Tom also reminded everyone that the deadline for public comment is noon PST on Friday, November 20, 2020.

Agenda Item 2 – Action Plan Working Session

California Department of Technology Chief Strategist Justin Cohan-Shapiro prefaced the working session with notations that the Council:

1. Incorporated an aspirational goal around speed within the plan.
2. Highlighted some of the statistics around education and health and the related importance of broadband.
3. Indicated the need for putting broadband data in public hands.
4. Specified adoption goals with respect to demographic groups.
5. Still has ongoing conversation about some items including:
    - Recognizing broadband as a right
    - Ways in which we might want to reconsider state broadband structures to better leverage federal funding
    - Enabling fiber leasing for last mile access

Mr. Cohan-Shapiro explained the way the Council identified requested actions to include in the plan were prioritized based on high impact (to push the needle on the issue) and balancing the level of effort needed. Additional aspects included in decisions about actions that are in the plan include dependencies and ability to execute actions.

Mr. Cohan-Shapiro facilitated the working session and updated the draft Action Plan as the meeting progressed (the updated draft document is attached to these meeting minutes).

- Introduction addresses where broadband is in California is today.
- There is a vision section.

- There is a section about how we can get started and some of the cross-cutting actions needed to support it.
- The Executive Summary and Conclusion will be written later so they are reflective of the final version of the plan.

Note: Edits made during the session are tracked in the attached draft plan

Agenda Item 3 – Public Comment

Chair Tong opened the meeting for public comments.

Submitted written public comments are posted to the Action Plan page of the Council web site.

The deadline to submit public comment for the action plan is noon PST on Friday, November 20 and public comment can be submitted to CABroadbandCouncil@state.ca.gov.

Verbal public comments were made by:

- Ernesto Falcon, Electronic Frontier Foundation
- Jacqueline Kinney, California Cable and Telecommunications Association
- Rochelle Swanson, Crowne Castle
- Sean Taketa McLaughlin (submitted in writing), Access Humboldt
- Wally Siembab, South Bay Cities Council of Governments
- Dr. Blanca Gordo, UC Berkeley
- Susan Santana, AT&T
- Miguel Leon, Michelson 20MM Foundation

Chair Tong thanked Council members/designees, staff, subject matter experts, and stakeholders for their involvement in developing the plan. She reminded everyone that the plan will be refreshed annually.

The meeting adjourned at 11:59am.

Attachments:

- Zoom meeting comments
- Updated (per this meeting) Draft Action Plan

California Broadband Council
November 18, 2020
Zoom Chat

10:03:05 From Sean Taketa McLaughlin : Hawaii folks are adopting native values of "pilina" connection with Digital Equity at the center of the State's updated Strategic Plan 2020 ..

10:20:43 From whughe200 : Here is a great document about all the devices/services that 25/3 can support.

10:20:51 From whughe200 : https://www.cablelabs.com/cable-broadband-from-docsis-3-1-to-docsis-4-0

10:24:17 From Stephanie Tom : Thanks WHughes you for the link to the document! These comments are posted for official public comment.

10:24:39 From Kelly Stephenson : There are 109 federally recognized Indian tribes in CA. Would you consider adding statistics related to CA tribal lands affected by lack of broadband ?

10:26:19 From Michael Pierce CPUC : The bandwidth requirements seem much lower than the aspirational speed goals of 25/3 and 100 Mbps. These diagrams seem to argue against needing 25/3 or more bandwidth.

10:26:32 From Stephanie Tom : Hi Kelly-Thank you for the suggestion. Would love to have additional CA specific data on broadband needs. We can discuss.

10:28:41 From Matthew Rantanen : Thank you @Kelly for mentioning the 109 Federally recognized Tribes in CA. I imagine the data is incomplete, and is one of the arguments for better mapping and assessment to be done in all the areas of CA. Partnering with the Tribes in this effort to get the information to be thorough

10:29:04 From Stephanie Tom : Thank you Michael. Appreciate your perspective on technology sufficiency. We will revisit.

10:29:19 From Sunne Wright McPeak : Christina is right. And, power is often needed to be deployed to deploy broadband.

10:29:36 From Ernesto Falcon, EFF (he/him) : There is a major over assumption on "economic reasons" for our major densely populate cities. Does policy allow providers to look at cities on an individual household basis or in a community wide basis. On a community wide basis there is a lot of under-served in cities that can be served profitably in the aggregate basis.

10:29:45 From Kelly Stephenson : Thank you Christina, Matthew.

10:30:20 From Michael Pierce CPUC : This document looks much more like a "Gap Analysis" than an action plan. It seems like a preliminary document that may possibly in the future lead to an action-oriented plan that could possibly\ lead to construction of infrastructure.

10:32:08 From Jacqueline Kinney : The draft plan has many very broad assertions of fact on the state of broadband today that are not supported by citation. Will more citations be added, and reflect what was accepted or rejected from public input already provided?

10:32:14 From Matthew Rantanen : @Sunne think… And that directly relates to missing middle-mile, which CA has more than 1100 miles of missing middle-mile to get Tribes connected to the rest of the world, let alone the build out to the home.

10:32:19 From Sunne Wright McPeak : My comment was supporting Christina's comment regarding Tribal Lands. There also needs to be the commitment to drive to the most remote rural areas, which includes Tribal Lands, and the poorest urban neighborhoods. Then we need to connect all other unserved and underserved households and anchor institutions along the path of deployment.

10:32:41 From Matthew Rantanen : @Sunne that was supposed to be “Thanks”

10:32:44 From Matthew Rantanen : LOL

10:34:02 From Matthew Rantanen : *If clarity is needed on comments, please feel free to reach out, so that any of us can decipher the typos incurred during the speed of commenting. mrr

10:34:16 From Sunne Wright McPeak : Yes, Matthew, that was supposed to be "Thanks to You" or educating me and all of us. I should have acknowledged the realities you have explained repeated to all of us.

10:34:53 From Joy Sterling : why sole focus on home .

10:35:09 From Matthew Rantanen : @Sunne, Cheers to “it takes a community”

10:35:19 From Joy Sterling : businesses, anchor institutions, working lands

10:35:25 From Kate : in the previous vision, businesses were included in the vision, why have they been removed?

10:38:01 From David Griffith, Alpine County : Higher broadband speeds (symmetric) are critical for some businesses and economic development for some communities. Can business be included as well as homes?

10:38:30 From Joy Sterling : respectfuly disagree with this out of date definition of served

10:38:38 From Stephanie Tom : Thank you Joy, Kate, David for your comments on emphasizing/integrating businesses, anchor institutions, working lands

10:38:50 From Sunne Wright McPeak : Joy raises an important point which I was making about connecting all unserved and underserved HHs and anchor institutions (including fairgrounds) along the path of deployment consistent with "Dig Once, Dig Smart" policies. As Steve Monaghan, Nevada County CIO, will very eloquently explain, middle mile projects without commitments to last-mile (or "first-mile" as CENIC likes to say) to households will not automatically get residents online. We need both. And, then, along the path of deployment to those HHs, we need to connect all other customers and allow uses for functions such as Ag Tech.

10:40:06 From Joy Sterling : A very large and significant gap is ag.

10:42:36 From Joy Sterling : Studies show that connecting ag will cover rural, but not the reverse.

10:43:03 From Robert.Tse : Inclusion of anchor institutions and businesses is important. They are inherently large users of high capacity broadband. This supports the financial model for broadband. High capacity broadband serving anchors and businesses creates nodes that support economic development.

10:44:53 From Geoff Belleau : maybe "at home and in the community"?

10:46:03 From Geoff Belleau : relating to vision 1.

10:49:02 From Matthew Rantanen : +1 Rob Osborn

10:49:10 From Matthew Rantanen : Reliability is key

10:49:36 From Sunne Wright McPeak : Yes, Rob, is right--convergence of telephony and cable to Internet infrastructure is the reality. Reliability is another key factor.

10:49:50 From Matthew Rantanen : Network designs with redundancy and consideration for commonly occurring events would be a key

10:52:21 From Matthew Rantanen : 100/50 Mbps, if we can’t get 100/100 Mbps… Yes we understand the pressure that puts on many platforms, but we are moving data at an exponential rate, and the need to stay in contact with multiple persons in a household using the service simultaneously is demanding us to make a bold statement and learn to make more robust networks.

10:52:28 From Jacqueline Kinney : What is the source of the data for conclusion that 17 up is needed and source of data for related charts on pages 5 and 6?

10:53:15 From Ernesto Falcon, EFF (he/him) : We're either going to spend perpetual subsidies in construction or we're going to get it done with future proofed infrastructure. We know consumption needs have grown year after year consistently and need to think about what 2030 looks like with infrastructure investments made in 2021. Not what 2021 needs.

10:53:43 From Sean Taketa McLaughlin : Local community information and media systems require upload capacity to originate local voices. Anything less than symmetry is not equitable to local voices.

10:54:11 From Matthew Rantanen : +1 Ernesto

10:54:13 From Sherilyn Evans - CENIC : Sunne makes an excellent point — telehealth requires higher resolution video for visual examination of a patient than is required for current business video conferences like this one.

10:55:55 From twest : The Plan needs to stretch not inch up. Too safe in actions.

10:56:02 From Robert.Tse : The 25/3; 10/1 speed standard refers to a definition of unserved. As was mentioned earlier, the state and federal standards have lagged reality on the ground. This is particularly driven by Covid as use of telemedicine, telework and distance learning are expanding radically. In addition combined usage in households has sharply

expanded the overall demand. We should be focused on current and future usage. Latency and upload needs to be recognized.

10:56:38 From Stephanie Tom : Thank you for comments regarding increasing min. speeds - 100/50; symmetrical and the need for future proof infrastructure

10:57:11 From Michael Pierce CPUC : The diagrams on pages 5 & 6 show "Peak Bandwidth Utilization for a Family of Four" is 7/7 Mbps / 15/4 Mbps. The diagram shows that for a "large family" only 24 /7 Mbps is needed. If these diagrams are included in this document, I would expect Industry to argue: the document shows that maximum broadband speeds required would be 15/4 mbps or 24/7mbps.

10:57:37 From Sean Taketa McLaughlin : Action plan needs a comprehensive financial audit of BIAS providers to unravel cross-subsidies hidden in affiliate transactions. This insight can inform efforts to address digital redlining and discriminatory practices embedded in deployment decisions ...

10:57:57 From whughe200 : Since the lockdown Comcast has seen a significant increase in upload traffic (about 30%) and even with that increase downstream traffic remains on average much higher than for upstream traffic by approximately 12:1.

10:58:48 From Ernesto Falcon, EFF (he/him) : I'd be curious if that 12:1 ratio is true for symmetrical services that exist today.

10:59:15 From Ernesto Falcon, EFF (he/him) : or does the service offered result in different end user behavior

10:59:20 From whughe200 : I'm not sure what you mean by "symmetrical services" can you give me an example?

10:59:54 From Ernesto Falcon, EFF (he/him) : symmetrical services as in services that offer the same download and upload speeds.

11:00:08 From Ernesto Falcon, EFF (he/him) : what are we seeing there from user behavior?

11:00:11 From Matthew Rantanen : Apologies, I need to drop, I have a call with Tribal leaders to address networking in COVID restriction to support their people. Great discussion so far.

11:00:43 From whughe200 : I'm not aware of any services or applications that require/need symmetrical service. do you have an example of a service that requires that?

11:01:12 From Sunne Wright McPeak : Walter: When we use the term "symmetrical" (or more symmetrical) refers to the need for increased upload speed that are approaching download speeds.

11:01:13 From Jacqueline Kinney : Permitting barriers delay deployment with private investment AND with CASF grants.

11:01:16 From Ernesto Falcon, EFF (he/him) : no I mean in the broadband offering

11:01:17 From susan santana : It would be helpful to understand the source of the "typical family of 4" data points and whether the assumption is that Netflix binging, ordering Whole Foods from Alexa while checking on your Amazon package delivery from your Nest, are essential components of broadband as a civil right? Curious if that is related to the definition of "high performance broadband"?

11:01:32 From Jeffery Tardaguila : encourage planning and land use to accept wifi as telephone utility service and plan layout for existing and future development .

11:03:08 From whughe200 : That's interesting to hear Sunne as we always assume symmetrical means identical download speed to upload speed. Does that mean you agree that overwhelming use of the network is for download?

11:04:02 From Robert.Tse : The permitting challenge can be viewed as the time it takes. There are numerous reasons for this. Part of it is separate local, state and federal permits required. Stacked end on end this creates a lengthy process.

11:04:02 From Sean Taketa McLaughlin : Consumers need download, producers need upload.

11:04:46 From Sean Taketa McLaughlin : bias toward download is a bias against producers

11:04:57 From whughe200 : Ernesto - - i'm not aware of any data plans where we offer symmetrical (same download speed to upload speed) but I will verify. Also, Ernesto do you agree with Sunne that symmetrical does not neccesarily mean equal download and upload speed?

11:05:16 From David Griffith, Alpine County : One of my constituents is an appraiser, and her beef with broadband service is the slow upload speed for her appraisal reports.

11:06:21 From Martha Van Rooijen : How about the State providing a streamlined statewide permit for broadband that can be adopted by the local agencies??

11:06:22 From whughe200 : Oftentimes your upload performance can be impacted by older equipment. You may want to ask your constituent if they are using an older router for instance.

11:06:26 From Sean Taketa McLaughlin : Redwood Region Broadband Consortium is working on "dig once" policies for local jurisdictions ..

11:08:00 From Stephanie Tom : Please add into chat if you are interested in providing public comment

11:08:03 From Ernesto Falcon, EFF (he/him) : symmetrical means symmetrical, I didn't follow the conversation there arguing it doesn't? Sorry.

My point is, Comcast looking inward only reveals what Comcast customers (I am one of them) do with Comcast broadband offerings, but yields little insight in what end users do with symmetrical broadband offerings. We would need to see what fiber service usage looks like on the upload. Perhaps their users produce more content for the Internet because they have high upload speeds as Sean suggests.

11:08:14 From Ernesto Falcon, EFF (he/him) : I am interested in public comment - Ernesto Falcon w/ EFF

11:08:30 From Jacqueline Kinney : CCTA requests an opportunity to make a comment.

11:08:34 From Rochelle Swanson - Crown Castle : Public comment request - 2 minutes will work for me. Thank you. Rochelle Swanson, Crown Castle

11:08:45 From Sean Taketa McLaughlin : I have a two-minute public comment - Sean Taketa McLaughlin w/Access Humboldt

11:09:05 From Andrea Ball : Yes, interested in public comment. Andrea Ball, Ball/Frost Group on behalf of Central Valley Education Coalition

11:09:51 From David Griffith, Alpine County : Got to sign off, but thank you all. I will be submitting written comments by Friday.

11:09:56 From Roland Ok : question - will there be grant opportunities for local jurisdictions/MPOs to help in implementing or conducting opportunity studies

11:10:06 From Jeff Tyrrell : The Broadband Alliance of Mendocino County is content to just monitor this meeting: Thanks!

11:11:27 From Jeffery Tardaguila : Jeff : disability,universal,floor, min standard , suggesting model and longest distance first ,then nodes for access

11:11:33 From Robert.Tse : What kind of fiber/ tubes does Caltrans already have in some highways? Understand that there is 5.99 MGhz spectrum already available. It could be an asset to support backhaul/ middle mile.

11:11:51 From Jon Walton : This is an interesting presentation. I am hopeful the State will consider collaborating more closely with the Counties for examples of how data has been collected at a more granular level to determine focus areas for addressing the digital divide and creating greater digital equity.

11:12:34 From Geoff Neill : To maximize time for the Council's discussion, I am happy to limit CSAC's input to our forthcoming written comments, which focus on making significant, immediate funding available for middle- and last-mile infrastructure, allowing some amount of overbuild for subsidized projects, strengthened implementation of dig-once policies, limiting challenges to CASF applications, and leveling the playing field for all types of applicants.

11:12:48 From Trish Kelly : We concur with statements of Joy, Sunne and Robert about needs for connectivity for ag tech and for anchor institutions and we will look forward to working with all on deployment of model policies and ordinances through forthcoming resource guide (Valley Vision/Connected Capital Area BB Consortium). Thanks to the Council for all the work on the plan.

11:13:32 From Robert.Tse : OES reliability standard for its Next Gen 911 system is a good example to look at

11:14:46 From Sunne Wright McPeak : Walter: Overall in the networks, there is still more demand for download speeds driven by online streamlining (thanks to the genius of Reid Hastings and others). However, network level data does not tell the story for distance learning

and telehealth in which the upload speeds are very sensitive to the kind of activity being conducted online. Existing ISP affordable offers simply are insufficient with both speeds and data caps to support distance learning as is being experienced throughout California. And, hotspots don't work if the underlying Internet infrastructure is inadequate (which is the case in many rural communities and urban truly poor neighborhoods).

11:15:11 From blancagor066709do : Making information and network technology a public utility is the solution to providing tresources and making access to technology available for the majority of low income populations. I\

11:15:16 From Robert.Tse : For affordable broadband offers, why not work with local educators that know which homes have the school to home (work) digital gap.

11:16:03 From whughe200 : Ernesto - - appreciate the dialogue. I'm just not aware of any ISP that offers a symmetrical broadband service so i'm just not clear on the point you are making. I can only attest for Comcast usage as you said and it's clear that our customers overwhelmingly use our network for download.

11:16:21 From Sunne Wright McPeak : As Former State Senator Martha Escutia, Founding CETF Director says, "We can't hotspot our way out of the Digital Divide". We actually have to invest in improved infrastructure.

11:17:16 From Sean Taketa McLaughlin : Is there a public version of this draft Action Plan that folks can review?

11:17:35 From Yadi : ^^

11:17:50 From blancagor066709do : It has never made sense to focus on devices, must adopt “network technology” as that is indeed what is required or needed to function in real time online.

11:18:04 From Sean Taketa McLaughlin : nice to have prior to comment deadline ...

11:18:06 From Stephanie Tom : Draft Action Plan is posted to the CBC website: https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/11/BB4All-Action-Plan-DRAFT-v15.pdf

11:18:19 From blancagor066709do : yes.

11:18:35 From Stephanie Tom : Final public comment deadline is this Friday, Nov. 20th

11:18:54 From blancagor066709do : Please add my name for public comment

11:18:58 From blancagor066709do : Blanca Gordso

11:19:06 From blancagor066709do : Dr. Blanca Gordo

11:21:28 From Kelly Stephenson : I'd like to suggest wherever you have language listing out entities (state, local, federal gov'ts, etc.) and other entities, to include tribes, tribal governments, tribal entities

11:21:42 From Jeffery Tardaguila : yes PC I am headed to building public comment so i may be slow to unmute and mute other zoom call

11:23:30 From Martha Van Rooijen : How about a categorical exemption being added to CEQA for Broadband Projects (with an explanation of what type of project fits the exemption)? Right now, many broadband projects do fit into the listed CEQA Categorical Exemptions Section 15301, Existing Facilities and 15303, New Construction or Conversion of Small Facilities. However, since broadband or internet is not discussed anywhere in CEQA except for posting CEQA notices, it always requires a staff analysis for CEQA. This can lead to more documentation, more time, and more review that might be needed, if broadband projects are clearly spelled out in CEQA. This could speed up permitting, and stop unnecessary studies, or conducting negative declarations vs. categorical exclusion since there is no specific guidance on broadband.

11:23:52 From Joy Sterling : why is focus explicitly urban?

11:24:18 From Jules : Copy of plan https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/11/BB4All-Action-Plan-DRAFT-v15.pdf and deadline for public comment is noon PST Friday, November 20, 2020 We will post an updated draft (the one Justin is currently editing)

11:25:25 From susan santana : What are the council members thoughts on funding some of these great ideas through the General Fund, given the reports that there will be a budget surplus? So a broader base can contribute to the success of all aspects of an online society. The dwindling base that currently funds the lifeline/universal programs wont be sufficient to secure future consumer consumption/and virtual activities outlined in the plan.

11:26:04 From Ernesto Falcon, EFF (he/him) : Martha that CEQA suggestion is interested if its already in practice exempt but not in statute resulting in some gaps missed.

11:26:11 From Ernesto Falcon, EFF (he/him) : *interesting

11:28:53 From Stephanie Tom : Martha-Than you for your suggestion on how to expedite deployments via CEQA

11:29:18 From Stephanie Tom : Susan - Thank you for your comments regarding a general fund as we are assessing all funding options

11:31:29 From Jules : Order of speakers: Jacqueline Kinney

Rochelle Swanson

Sean Taketa McLaughlin

Andrea Ball

Wally Seiannas

Dr. Blanca Gordo

11:41:04 From Robert.Tse : Here is an example of reality on the ground. This could also be a description of rural California. In Rural ‘Dead Zones,’ School Comes on a Flash Drive https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nytimes.com%2F2020%2F11%2F13%2Fus%2Fwifi-dead-zones-schools.html%3FreferringSource%3DarticleShare&data=04%7C01%7C%7Cceb88eb504f8483f6e4808d88bf988b4%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C1%7C637413

251143294455%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C2000&sdata=Gapb4oSFEhOBGk05hffCxRbu7

11:42:44 From Sean Taketa McLaughlin : Sorry my broadband connection lacks upload capacity - I can still see/hear you! My e-mailed comments can suffice and thanks for the strong work.

11:42:48 From Robert.Tse : Mapping: There are granular broadband maps showing broadband speeds to individual dwellings created by private sector. A similar type map is being used by Washington state. This type of granularity significantly assists in broadband proposals. So, a census block approach may not be needed. Suggest that the Broadband Council look at these existing maps.

11:44:36 From Robert.Tse : Broadband Mapping: USDA does not use the census block approach. It requires that the proposed service area have either 90% or 100% unserved by the USDA speed definition. California could create its own map showing service or lack of service to homes to assist with applications and USDA review process.

11:44:58 From Martha Van Rooijen : Follow up on CEQA suggestion for Categorical Exemption. There are other areas in CEQA that could be used for Broadband--I am listing below. However, my main comment is that the subject project "Broadband" could now merit its own exemption in CEQA to avoid the lengthy review and continual discussion with public agency planners, lawyers, and other staff justifying the selected exemption. Some projects won't be exempt, but the are not the norm. Here are two other CEQA exemption options for broadband projects. CAT EX Sec 15332 Infill Development, and this Exemption Review Section in CEQA: Section 15061(b)(3) "The activity is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA."

11:44:59 From Andrea Ball : The Education Code I mentioned is Section 43503(b)(1). Thank you.

11:45:12 From susan santana : if there is time, i would like a minute for a brief comment.

11:46:07 From Sean Taketa McLaughlin : my only additional comment is that we need to map the broadband cash flow! post-DIVCA, we lost ability to see cable operators revenue allocations to different lines of business - so we see a looming gap in our understanding of cross-subsidies hidden in affiliate transactions - see what NY State is doing … public funds could be paying twice or three times for the same infrastructure!

11:48:10 From Robert.Tse : Yes, why not support demonstration broadband projects led by anchor institutions. These could be anchor education institutions such as community colleges and universities.

11:50:42 From Sunne Wright McPeak : Wally and the South Bay Cities has a great example of "sharing" and it is appropriate to look at the transportation world. As an old Transportation Secretary, I always reminded CTC and Caltrans that the best trip is a "virtual trip"--unload a trip from the physical transportation network to relieve congestion and reduce impacts on the environment. "Broadband is a green strategy" as Valley Vision and CETF have

published. Now, SCAG (Kome) and SANDAG (Hasan) are taking a visionary aggressive lead on this approach in the transportation world. The purpose and outcome of transportation networks is MOBILITY. Broadband is a great strategy to help achieve MOBILITY.

11:53:44 From Miguel Leon : If there is time I'd like to make a quick comment

11:54:00 From Martha Van Rooijen : Dig Once/Smart policies should be recommended for City/County Engineering/Public Works and Planning review and approval of development projects, as well as investment in transportation, parks and infrastructure projects--it should be part of all project development private sector or private.

11:56:33 From Sunne Wright McPeak : Martha van Rooijen raises another key issue to help streamline approvals and permitting. CEQA is a challenge as it is usually pursued to protect the environment and cultural assets. CETF has urged the CPUC to prepare a Statewide Programmatic EIR and we are partnering with Steve Monaghan and Nevada County to develop a Model Countywide Programmatic EIR.

11:56:41 From EVC : Thank you to the Council for your efforts, Economic Vitality Corporation of San Luis Obispo County will be sure to provide comment on behalf of our communities. Appreciate hearing from the public and the Council.

11:56:46 From Robert.Tse : The broadband action plan should explicitly recognize the role of public safety as a critical component. County fairgrounds are a key piece of this approach. Public safety requires resilience and is different rationale and source for funding that is separate from a traditional business model. OES and DHS are examples. Also a fiber system has the capability of capturing massive quantities of very minute ground movement data which can be used for localized disaster risk analysis for earthquakes and floods.

11:57:31 From Rochelle Swanson - Crown Castle : RE: Dig Once. Important to be aware of unintended consequences. The time window needs some flexibility and a post construction moratorium can prevent projects that come up a few years later.

11:57:32 From Stephanie Tom : Thank you everyone for your participation! The next CBC is December 9th.

11:57:32 From Jeffery Tardaguila : sorry please included my chat as public comment

11:57:33 From blancagor066709do : The State must invest in education of planning professionals to infuse knowledge for institutional changes and restructuring where much needed. Drl Blanca Gordo

11:57:58 From Rob Osborn : Here is a link to the CPUC's searchable database of affordable broadband plans: https://www.cpuc.ca.gov/CALowCostInternetPlans/

11:58:08 From Jules : Please send public comments to CABroadbandCouncil@state.ca.gov by noon PST Friday, November 20, 2020

11:58:21 From Jeffery Tardaguila : I will take the draft back to coalitions

11:59:05 From susan santana : Along those lines, wireless BB has been an important component to respond to wildfires, PSPS events and wireless should have a role in the plan. There is no silver broadband bullet.

11:59:25 From Yadi : Folks who are unbanked or unbanked cannot pay for low cost plans. Debit/credit card is a barrier

11:59:25 From Sunne Wright McPeak : Susan Santana is right.

California Broadband for All Action Plan

EXECUTIVE SUMMARY

[ADD WHEN DRAFT IS COMPLETE]

INTRODUCTION

Imagine a family of five, two working parents and three kids, all trying to access online resources required by their school and their jobs, without enough internet bandwidth to keep from knocking each other offline.

Imagine two seniors with medical needs, struggling to find reliable transportation to get to and from weekly medical appointments, losing hours every week and putting themselves at preventable risk, because they can't afford the broadband service required to access telehealth and they lack the digital skills to feel comfortable going online.

Imagine a couple that wants to open a small business in the Central Valley but can't make the numbers work without ability to take online orders—and can't get the reliable Internet access that guarantees it can get online. Consider humanizing to a farmer around getting signal in road to improve optimization of natural resources (e.g., water).

Imagine a twenty-something-year-old, working a full-time minimum wage job by day and attending community college classes at night, trying to stream online learning videos and submit online homework with only a smartphone.

The digital divide reflects and reinforces systemic inequities. Eradicating the digital divide is a foundational step towards making California a place where everyone can thrive regardless of the circumstances of their birth. As individuals, broadband access underlies our ability to work, study, communicate, apply for government services, receive emergency information, access healthcare, and not only survive, but thrive. As a state, broadband is vital for our most critical systems, from our electrical grid, to our water supply systems, public safety and emergency response networks, as well as our ability to attract talent and businesses and compete on the world stage.

Broadband internet access is an essential service. As such, as the state of California, we commit here to a path forward to ensure all people can receive it, regardless of their geography or household income.

BROADBAND TODAY

As the fifth-largest economy in the world—as well as the most concentrated source of the world's online innovations—California runs on the power of high-speed Internet. Broadband powers our ability to be the number one state in the country for remote work, with [xxx million] people working from home.[1] [Add statistics. Example: In 2019, over 13 million Californians were eligible for reimbursed telemedicine.[2] Also include public safety.] We use broadband to scale our digital government services and ensure quick delivery of public safety information. For example, more than one million Californians have used the eight-minute online CalFresh signup to receive Supplemental Nutritional Assistance Program (SNAP) benefits.[3]

High-speed Internet is not a nice-to-have. It is a need-to-have.

Too often, however, our most at-risk Californians face the largest roadblocks to accessing broadband.[4] Income, age, education, disability status and ethnicity all correlate with lower broadband adoption.[5] Californians without a high school degree or with only a high school degree are significantly less likely to subscribe to broadband at home with a computing device (53% and 73%, respectively) compared to 97% of households making $100,000 a year or more. Additionally, the following groups are also under-adopting:

- Spanish-speaking (dominant) Latinos – 57%
- Asian-Americans - 73%
- People 65 and older (65-74: 71% and 75 and older = 62%)
- Disabled - 64%
- Income <20K - 52%
- Renter - 71 %

In 2020 California—and the country—witnessed how vital reliable, affordable, and accessible Internet is to everyday life. As the COVID-19 pandemic swept the nation, 50 million K-12 public school students saw their schools close and started learning from

[1]https://www.forbes.com/sites/alexandratalty/2020/06/26/work-from-home-california-texas-named-as-best-states-for-remote-work/?sh=551e4c1383c9

[2] https://www.securemedical.com/telemedicine/13-million-californians-now-eligible-for-reembursed-telemedicine-services-through-medical/

[3] https://www.codeforamerica.org/programs/getcalfresh

[4]https://www.cetfund.org/action-and-results/statewide-surveys/2019-statewide-surveys/

[5]Refer to the CPUC's Broadband Adoption Gap Analysis, June, 2019, which concluded income was the most significant factor contributing to low adoption rates. https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/UtilitiesIndustries/Communications/Reports_and_Presentations/CDVideoBB/BAGapAnalysis.pdf

home.[6] Sixty-two percent of employed Americans reported working from home by the end of March, double the 31% of Americans working remotely at the beginning of the month.[7] By April, just one month into the pandemic, nearly half (43.5%) of Medicare primary care visits were provided through telehealth compared with less than one percent (0.1%) in February.[8] [Add closing sentences and additional California statistics]

Core Challenges

Californians face several sets of core challenges today when trying to access reliable, affordable, equitable broadband. They include availability (speed and reliability), affordability, devices & digital literacy, and data.

1. Availability: Speed and Reliability

<u>High-performance broadband needs have increased</u>

Broadband usage has changed dramatically over the last twenty-five years. Back in 1996, the FCC defined broadband internet as 200:200 kbps, which was good enough for email. In 2015, when the FCC last updated their definitions to 25:3 mbps, videoconferencing was largely confined to major corporations.[9] Those minimum speeds worked when they were set, when people mainly used broadband to browse the internet, email, and stream movies. But we live in a very different world today, where video conferencing, telemedicine, and other essential applications (e.g., sensors) demand high bandwidth uploads as well. Even the FCC's next tier of service, 50:5, which they call "baseline," would be strained to supply the needed bandwidth.[10] And bandwidth needs are increasing exponentially, so the baseline today will be inadequate tomorrow. For example, Cisco forecasted that average fixed broadband speeds in North America will grow from 56.6 mbps in 2018 to 141.8 mbps in 2023, or 20% per annum.[11]

California's broadband standards have not evolved to reflect these new realities. California currently defines broadband service in its core broadband subsidy program, the California Advanced Services Fund (CASF), as 6:1 or higher, and subsidizes build out at 10:1 or higher. This makes California one of [X number of] other states that define service and subsidize build out below the FCC 2015 benchmark of 25:3, and without

[6] https://www.commonsensemedia.org/sites/default/files/uploads/pdfs/common_sense_media_report_final_7_1_3pm_web.pdf

[7] https://news.gallup.com/poll/306695/workers-discovering-affinity-remote-work.aspx

[8] https://www.hhs.gov/about/news/2020/07/28/hhs-issues-new-report-highlighting-dramatic-trends-in-medicare-beneficiary-telehealth-utilization-amid-covid-19.html

[9] https://docs.fcc.gov/public/attachments/FCC-15-10A1.pdf

[10] https://www.federalregister.gov/documents/2020/03/10/2020-03135/rural-digital-opportunity-fund-connect-america-fund

[11] https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annual-internet-report/white-paper-c11-741490.html

any latency standards. The last several months have made it clear that neither the California, nor the Federal, definitions are sufficient.

Example 1: A household of four with two adults attending occasional virtual meetings, sending e-mail, and doing research, and two kids attending school classes using Zoom, the combined required bandwidth could easily exceed the FCC's minimums.[12]

Peak Bandwidth Utilization for a Family of Four

	PEAK BANDWIDTH UTILIZATION TYPICAL FAMILY OF FOUR (DAYTIME)	DOWNLOAD / UPLOAD
x1	Tele-Work Video Conferencing	1.5 Mbps / 1.5 Mbps
x2	Tele-Learning Remote Classroom	3.0 Mbps / 3.0 Mbps
x1	Streaming Music / Video	2.0 Mbps / 0.1 Mbps
x10	Home Security (Ring, etc.) and other household smart devices (Alexa, Cortona, etc.)	0.3 Mbps / 2.0 Mbps
	TOTAL BANDWIDTH USE (rounded)	**7 Mbps / 7 Mbps**

	PEAK BANDWIDTH UTILIZATION TYPICAL FAMILY OF FOUR (EVENING)	DOWNLOAD / UPLOAD
x1	Online Video Gaming	2.0 Mbps / 1.0 Mbps
x2	Streaming Video Applications (Netflix, Prime, etc.)	10 Mbps / 0.2 Mbps
x3	Surfing Internet	3 Mbps / 1.0 Mbps
x10	Home Security (Ring, etc.) and other household smart devices (Alexa, Cortona, etc.)	0.3 Mbps / 2.0 Mbps
	TOTAL BANDWIDTH USE (rounded)	**15 Mbps / 4 Mbps**

Example 2: A resident runs a business from their home and needs to use their broadband connection to process financial transactions through e-commerce applications (Square, etc.), perform occasional video meetings with customers, transfer files via online cloud storage providers, and send e-mail. During the pandemic this resident's spouse is working from home and at least two children are at home requiring additional bandwidth for homework and entertainment needs. During these times the family would need at least 20 Mbps downstream and 17 Mbps upstream.

[12] Source: https://www.fcc.gov/consumers/guides/broadband-speed-guide?contrast=

Peak bandwidth utilization for a Home Business & Large Family

	PEAK BANDWIDTH UTILIZATION HOME BUISNESS (DAYTIME)	DOWNLOAD / UPLOAD
x1	Home Business Operations	10.0 Mbps / 10.0 Mbps
x1	Tele-Work Video Conferencing	1.5 Mbps / 1.5 Mbps
x1	Streaming Video Applications (Netflix, Prime, etc.)	5.0 Mbps / 0.2 Mbps
x2	Tele-Learning Remote Classroom	3.0 Mbps / 3.0 Mbps
x10	Home Security (Ring, etc.) and other household smart devices (Alexa, Cortona, etc.)	0.3 Mbps / 2.0 Mbps
	TOTAL BANDWIDTH USE (rounded)	**20 Mbps / 17 Mbps**

	PEAK BANDWIDTH UTILIZATION MULTI-GENERATIONAL FAMILY OF ELEVEN (EVENING)	DOWNLOAD / UPLOAD
x2	Online Video Gaming	4.0 Mbps / 2.0 Mbps
x3	Streaming Video Applications (Netflix, Prime, etc.)	15.0 Mbps / 0.3 Mbps
x3	Surfing Internet	3.0 Mbps / 1.0 Mbps
x1	Video Chat (Zoom, etc.)	1.5 Mbps / 1.5 Mbps
x10	Home Security (Ring, etc.) and other household smart devices (Alexa, Cortona, etc.)	0.3 Mbps / 2.0 Mbps
	TOTAL BANDWIDTH USE (rounded)	**24 Mbps / 7 Mbps**

Residential availability today

As of December 31, 2018, 96.3% of Californian households had residential access to broadband at speeds of 25:3 or greater, and 94.9% had access to speeds of 100 mbps down or greater, reflecting widespread cable and fiber access in urban population centers.[13]

There are three core issues with this picture of availability.

First, too many households still lack access to high performance broadband. 94.9% access to speeds of 100 mbps or higher leaves 673,730 households that do not have access to broadband at those speeds. These are largely concentrated in rural areas. As the Governor's Wildfires and Climate Change Strike Force report noted in 2019, "the lack of broadband in rural communities and access to cell services makes it difficult to communicate clear emergency evacuation orders to residents or to locate residents when they are in trouble."[14]

[13] 2019 CASF Annual Report, p 11

[14] "Wildfires and Climate Change: California's Energy Future," A Report from Governor Newsom's Strike Force, April 12, 2020; p 12

Second, this analysis likely over-represents actual availability of high performance broadband at residential addresses.

Third, the high-performance broadband that is available may be prohibitively expensive for households.

Insufficient network resilience and redundancy

Unfortunately, progressively worse fire seasons have shown a spotlight on the limited requirements that broadband providers have to ensure redundancy or hardening in the operations of their infrastructure. Given progressively worsening fire seasons and a changing climate, there is a risk that broadband access may fail due to power shut offs or damage done to fragile, legacy infrastructure.

The market underserves poor, rural, black and brown communities

Poor, rural, black and brown communities are more likely to have poor access to high performance broadband internet. The CPUC's analysis of AT&T and Frontier networks showed a clear inverse relationship between household income and principal service quality metrics such as out of service repair intervals.

There are economic reasons for this. The capital costs are simply too high, and there are too few paying customers to generate a positive return on investment. [EFF - Different economic rationale between dense urban areas can be profitable in aggregate vs. rural areas; question of regulation]

Without public intervention and regulation, for-profit providers do not have a market incentive to provide equivalent service to poor and rural communities. It is unprofitable, and leads to vast inequities in service. This is why California has historically subsidized telephone networks in rural communities, and provided discounts for low-income individuals and continues to do so for broadband networks.

Tribal areas [placeholder to address particular issues, including jurisdictional challenges]

Need to incorporate recognition that need to address furthest out parts of the state.

Multi-billion dollars required to build out statewide fiber

The California Broadband Cost Model (CBCM) being developed by CPUC will estimate the cost for a fiber to the premises (FTTP) connection to every unserved and underserved location in California, including a scenario that calculates the cost to serve the highest cost parts of the state. The CBCM will help the state to target funding and deployment, and to measure progress.

Served status in the CBCM is based on the most recent, validated, census-block level California Broadband Deployment Data. Key assumptions in the engineering-based model include construction parameters around the reuse of existing broadband infrastructure, construction costs (e.g., pole attachment, network sharing, and labor rates), material costs, and regulatory costs including rights of way access.

2. Affordability

Price matters. When we consider what broadband costs for a Californian, we have to account for all of its price tags. The service cost is just one component, with taxes, surcharges, provider fees, rental charges for modems and routers, as well as the cost of actual devices used for getting online – such as laptops and tablets. Each of these is mandatory cost – and barrier – to getting online. There are additional unexpected costs of contractual penalties if a family falls behind and has to catch up, cancel, or switch plans. On a budget where parents work minimum wage jobs, purchasing food take precedence over purchasing Internet services.

More than half of California non-adopters simply can't afford market prices or don't own a computer.[15] Many believe they could pay total monthly bills of $10-$15/month.[16] While some affordable broadband programs offered by providers are within this price range, Lifeline programs are limited to people living just above the poverty line, most broadband providers do not participate in the Lifeline program, providers do not provide truly high performance broadband (only at least 15/2), and more than 70 percent of California non-adopters were unaware that these programs existed.[17] The state LifeLine program does not offer standalone broadband, and the state's five largest Internet service providers, which serve 97% of subscribers in the state, do not participate.

The market price of broadband is high, largely because there is very little fixed-broadband competition, particularly at the speeds and performance required today. Five wireline providers account for more than 90% of the residential broadband subscriptions in the state. Looking at 100:10 is instructive. 8% have no access, the availability problem discussed above. 26% have only one choice. 43% have a duopoly. And only 13% were able to choose between 3 or more providers.[18]

[15] https://www.cetfund.org/action-and-results/statewide-surveys/2019-statewide-surveys/

[16] Sallet, Jonathan. October 2019. Broadband for America's Future: A Vision for the 2020s. Evanston, IL: Benton Institute for Broadband & Society. https://www.benton.org/publications/broadband-policy2020s pg 65-66

[17] https://www.cetfund.org/action-and-results/statewide-surveys/2019-statewide-surveys/

[18] FCC Broadband Map

As a result of this trend, broadband prices not just in California, but nationally, are amongst the highest in the world. This is also an equity issue. Wealthier communities are 2-3x more likely to have more than two choices than lower-than-average household incomes.

Consumers benefit when companies are forced to compete for customers. Research shows that broadband competition reduces prices, and improves service.[19]

But there are high barriers to entry for prospective internet service providers in California, and they require concerted help to overcome them. This is why we need to adopt new models that don't rely exclusively on provider-owned infrastructure and employ a service-based competition model where multiple internet services are available over the same cable or wire entering your home. Separating the primary barrier to market entry, last mile infrastructure, from service provisioning, opens up competition based on service quality and price.

3. Devices and Digital Literacy

Access to the internet through only a smartphone is not a substitute for laptop or tablet with high-speed, reliable broadband. According to the 2019 CETF survey, 10% of Californian households only have access to broadband at home through smartphones. [OVERLAP WITH AT RISK POPULATIONS?] However, phones are not a substitute for adoption. [20] [STATS].

Adoption requires both a device and digital literacy. If people don't have the skills to use broadband, it doesn't matter if they have access—they won't be able to access the Internet and the world of opportunities, benefits, and life-changing support it offers. This takes on added urgency as we reach late adopters, who have missed out on much the last two decades of broadband use, experience, and training. [DIGITAL LIT STATS?]

4. Data

Imagine trying to solve a problem when you don't know exactly who has it, or where it occurs, or how much it will cost to fix it. That is the work of creating broadband policies that solve lived Californian problems today. Data about the costs, gaps, speeds, and access to broadband in California is disparate and subjective.

[19] See Benton's report for a review of the academic literature

[20] See also Appendix re: types of broadband

One data problem is granularity and accuracy. Data about availability is provided at the census block level. Blocks in urban areas might be an actual city block, but in rural areas, they might span miles. Additionally, concerns over the accuracy of California and FCC availability data remain, and can affect communities directly by making them eligible or ineligible for state and federal funds.

A second part of the problem is opacity. Some data that would help significantly in evaluating the quality of availability and adoption data is unavailable. For example, for the affordable broadband programs, what is the take-up rate? How quickly to customers cycle-off? How many people that apply are turned away? What are the prices for the same kind of service in different parts of the state? [Note: explore comparisons to other industries that may be useful]

Finally, broadband subscription data is critical to understanding where people actually have internet service, as opposed to where providers merely claim to offer service. Subscription data by address provides sufficient granularity to accurately map broadband affordability and adoption.

Data is not an end to itself. But without accurate, transparent, and updated data, we can't formulate good policies to solve real problems.

VISION: Digital Equity for All

For California and Californians to thrive, we envision a future in which all Californians have affordable high-performance broadband available at home with the devices and skills to unlock opportunities through digital inclusion.

Specifically, we want to ensure all Californians:

1. **Have high-performance broadband available at home and in the community:** Broadband must be available everywhere in the state, from the most rural areas, including tribal lands, to the most populated urban areas, including all low-income neighborhoods. For the homeless or those without broadband at home, we will continue to ensure anchor institutions provide broadband to meet people where they are. Speeds must be sufficient to meet the growing demand and reliance for access to education, government, public safety, economic prosperity and healthcare via high-speed access to the Internet.
2. **Can afford broadband and the devices necessary to access the internet**: Internet service plans and devices must be affordable for all Californians, regardless of geographic location or household income.

3. **Can access training and support to enable digital inclusion:** Californians must have access to digital skills training to for job opportunities and to thrive in a digital world.

HOW WE CAN GET STARTED

Over a four-month process, the California Broadband Council reviewed hundreds of pieces of public input, reviewed previous plans and goals and spoke with state departments as well subject matter experts across the country. The actions the California Broadband Council proposes exploring fall into four broad categories: policy reviews, program assessments, funding identification, and cross-sector collaboration.

Twelve-Month Action Plan

The California Broadband Council will begin each of these actions in calendar year 2021. The Council will evaluate progress toward the plan's three goals annually, or sooner, in the case of significant state or federal action.

The Office of Broadband and Digital Literacy within the California Department of Technology will continue to support the California Broadband Council in the ongoing assessment and progress of current and future plans.

GOAL 1: All Californians have Access to High-Performance Broadband at Home

1. <u>Modernize speed and performance standards for broadband</u>
   A. Explore shared standards among all state grant-funded programs:
      a. To define "served" as a census block that is 90% served at the current state broadband performance standard. [Sunne – needs 100% service]
      b. To define "broadband" as, at least, matching the FCC standards of 25/3, if not increasing to reflect demonstrated needs (25/17), [incorporate latency and reliability – Rob Osborn].
      c. To prioritize funding for projects that will deliver at least 100 Mbps down/10 Mbps up (100/10). Annually assess speed targets for infrastructure subsidies or grants, or sooner if national goals change.
      d. To fund last-mile projects with explicit local government involvement to address universality and adoption.
      e. To fund middle-mile only investments in areas with limited infrastructure.
      f. To fund connection to anchor institutions and last-mile connection to small businesses.
      g. [Require fiber backhaul]
      h. [Data caps - Geoff]

B. Adopt essential broadband service and affordability standards, and evaluate those standards relative to other essential service costs[21].
C. Explore alternative grant-making models similar to other state models, including additional options to generate competition to serve specific areas.
D. Enable all state grant programs to be leveraged for federal funding matching opportunities prioritizing unserved and underserved areas.
E. Deployments supported by state grant funding should be prioritized in local jurisdictions (county or city or city and county) where the government has streamlined the process for permitting and obtaining land use approvals. [Clarify language to ensure specific to local area receiving grant; don't predicate on having permits in hand]
F. Explore all financing opportunities by partnering with local governments and philanthropies to establish alternative financing mechanisms for broadband deployments in unserved and underserved areas.
G. Promote existing state contractual vehicles to support cost savings and efficient purchasing of broadband services and equipment by local public entities.
H. Modernize state's universal service programs to effectively support the deployment and ongoing maintenance of broadband networks.

2. Simplify and leverage existing assets and construction
A. Implement a Dig Smart policy to install conduit or fiber as part of any appropriate and feasible transportation project in strategic corridors supported by state funding as an incentive for buildouts with priority for middle mile, open access deployments. [Need to define scope of policy – include non-transport infrastructure such as waterways (CNRA); element of posting offer for broadband fiber deployment]
B. Identify how to streamline state permitting processes and rights-of-way management to accelerate broadband deployment giving priority to ISPs who build in unconnected rural communities and high-need under-connected low-income neighborhoods.
C. Begin the process to identify critical assets including state assets (fiber, conduit, and towers) and utility poles available to municipal, tribal, and private partners for lease.
D. Regularly convene broadband providers and local governments to support permitting processes that support the construction of broadband infrastructure and the needs of local governments.
E. Communicate with federal agencies to support prioritization of permits for broadband construction through federal land and when permit holders are experiencing delays.

[21] See CPUC Framework to Assess Affordability of Utility Services, https://www.cpuc.ca.gov/affordability/

3. Set reliability standards
   A. Explore standards around middle mile and/or backhaul resilience / reliability and penalties informed by CalOES recent experiences during wildfires.
   B. Ensure consumer protection and that all consumers are served equitably by providers.

GOAL 2: All Californians can Afford Broadband and the Devices necessary to Access the Internet

1. Promote affordable broadband offers
   A. Partner with providers to promote and track the adoption of affordable Internet offers. Request providers to create multi-language marketing materials for distribution to under-adopting communities by leveraging existing private go to market campaigns and existing public programs, such as: CalFresh, DMV, Cal Works, Covered California, and the National School Lunch Program (NSLP).
   B. Improve the California LifeLine Program through offering high-capacity, stand-alone broadband services, and ensuring all broadband providers participate in the program.

[Devices – include routers and other non-computer devices that are critical for affordable access.

GOAL 3: All Californians can Access Training and Support to Enable Digital Inclusion

1. Provide technical assistance and support
   A. Identify opportunities for technical assistance to include support for local governments, tribes, nonprofits, and their partners to best leverage local, state, federal, and private funding opportunities.
   B. Provide state-level support and coordination for federal and national philanthropic grant applications increasing California's federal and philanthropic broadband funding.

2. Drive synergies across adoption and deployment initiatives through state programs
   A. Explore shared standards among state grant programs to prioritize joint infrastructure and adoption projects.
   B. Convene broadband adoption stakeholders semi-annually to innovate and create new digital literacy tools, curriculum and training programs to meet the needs of the workforce, community and students.

3. Strengthen partnerships and coordinate initiatives

A. Leverage California Broadband Council meetings and the GoBiz broadband funding identification initiative to strengthen partnerships among anchor organizations such as schools, libraries, workforce development boards, county social service departments.
    a. E.g., organizing and leveraging programs and best practices across libraries
B. Convene local government broadband coordinators and managers quarterly to identify barriers to local programming, new actions undertaken and tools developed at the local level and to support intra-state collaboration.

Cross-Cutting Actions that Support All Goals

1. Strengthen broadband data and mapping transparency and usability

A. Collect more granular and accurate broadband data, build out and public broadband deployment maps with explicit focus on low-income urban neighborhoods, and use provider specific data to drive accountability and measure progress.
B. Use feedback from businesses, local governments, tribes, nonprofits and every day Californians, to establish a Broadband for All portal to ensure easy access and navigation of state broadband information to include:
    i. A page to aggregate feedback from the field to validate data in the California Interactive Broadband Map such as broadband speeds, access, easements and rights of way;
    ii. A central repository for resources and toolkits for specific to broadband planning and implementation;
    iii. A central repository of digital inclusion plans, initiatives and best practices;
    iv. Information on affordable Internet Broadband offers, devices and training;
    v. A central repository for state-level broadband funding opportunities using the grants.ca.gov site.
C. Expand California data availability to assist stakeholders by including the following data and visualizations:
    i. Existing assets, asset ownership, geographic boundaries, roads, anchor institutions, fairgrounds and public rights of way.
    ii. Broadband availability and use throughout the state.

2. Leverage the State's convening power

A. Convene local governments and private sector representatives semi-annually to understand broadband goals, priorities, and roadblocks resulting in documentation of priorities and recommendations to integrate into Broadband for All metrics and action plan updates.
B. Require executive branch entities and request constitutional agencies to incorporate broadband into their strategic plans, and submit broadband priorities to the California Broadband Council annually for review and recommendations to ensure effective interagency collaboration.

Conclusion

[ADD WHEN DRAFT IS COMPLETE]